



ANNEX 10

Indicative Territorial Planning

**TECHNICAL EXECUTIVE GROUPS – GTEs, in Spanish
2007**

Results and Project Portfolio - 2007 (Annex)

1.	BACKGROUND AND OBJECTIVES	1
2.	EVOLUTION OF THE IIRSA PROJECT PORTFOLIO (2003-2006 AND 2007)	3
3.	TECHNICAL EXECUTIVE GROUPS (GTEs) – PLANNING 2007	6
3.1	ANDEAN HUB	6
3.2	CAPRICORN HUB	10
3.3	AMAZON HUB	18
3.4	GUIANESE SHIELD HUB	21
3.5	SOUTHERN HUB	21
3.6	CENTRAL INTEROCEANIC HUB	23
3.7	MERCOSUR-CHILE HUB	28
3.8	PERU-BRAZIL-BOLIVIA HUB	33
3.9	PARAGUAY-PARANÁ WATERWAY HUB	36
4	TECHNICAL EXECUTIVE GROUPS (GTEs, IN SPANISH) – IMPLEMENTATION	49
	ANNEX: IIRSA PROJECT PORTFOLIO - 2007	58
A)	ANDEAN HUB	58
B)	CAPRICORN HUB	63
C)	AMAZON HUB	67
D)	GUIANESE SHIELD HUB	71
E)	SOUTHERN HUB	73
F)	CENTRAL INTEROCEANIC HUB	75
G)	MERCOSUR-CHILE HUB	78
H)	PERU-BRAZIL-BOLIVIA HUB	84
I)	PARAGUAY-PARANÁ WATERWAY HUB	86



1. BACKGROUND AND OBJECTIVES

Since its creation in the year 2000, the Initiative for the Integration of the Regional Infrastructure in South America (Iniciativa para la Integración de la Infraestructura Regional Suramericana - IIRSA, in Spanish) has worked with concepts derived from territorial planning, such as the Integration and Development Hubs (Ejes de Integración y Desarrollo – EID, in Spanish), which are a geo-economic reference of territorial planning and management of sustainable development.

Since September 2003, the twelve South American countries have implemented the *methodology of indicative territorial planning* in eight of its ten EIDs, thus succeeding in classifying and streamlining the project portfolio of transport, energy, and communications infrastructure deemed relevant by each country from a national viewpoint as well as from the perspective of the South American integration. The work was essentially qualitative, and the Strategic Vision and the Business Vision of each EID were used as input; moreover, it was based on the convergence of opinions of experts who are aware of the economic, social, and environmental reality of each Hub, allowing the South American countries to have a portfolio of integration infrastructure projects based on consensus.

For the year 2007, the countries that comprise the Initiative agreed to review, within the framework of the Technical Executive Groups (Grupos Técnicos Ejecutivos – GTEs, in Spanish) in each EID, the IIRSA Project Portfolio, taking into account the changes that have occurred since the establishment of the same, the development plans of each country, and the common goal of integration and development of South America. This is why, the GTEs of the Andean, Capricorn, Amazon, Southern, Central Interoceanic, MERCOSUR-Chile, and Peru-Brazil-Bolivia Hubs were conducted throughout the year.

The meeting of the GTEs led each of the countries that comprise each Hub to expand the common understanding on the contribution that each Group of Projects can make, through physical integration, to the sustainable development of the Hub, allowing them:

- a) **To review the Hub's projects included in the Implementation Agenda Based on Consensus (Agenda de Implementación Consensuada – AIC, in Spanish).** Progress and obstacles in the implementation of the Agenda projects and the Strategic Management System (Sistema de Gestión Estratégica – SIGE, in Spanish) were identified.
- b) **To review other projects of the IIRSA Portfolio in course.** Progress in the implementation, sources of financing, and other factors of the implementation of the Initiative's project portfolio were identified.
- c) **To review the Groups of Projects and their respective Strategic Function.** (i) the inclusion of new Groups of Projects or new projects was discussed as well as the exclusion of Groups or Projects related to infrastructure, transportation, energy, and communication; (ii) Integration Sectoral Processes (Procesos Sectoriales de Integración – PSIs, in Spanish) topics and logistics, as well as production integration and socio-environmental issues were considered; and (iii) governmental programs or actions complementary to the projects of each Group were identified in order to widen economic and socio-environmental sustainability in the territory of the Group of Projects.
- d) **To identify Groups of Projects eligible for the implementation of new planning methodologies.**



Also in 2007, the implementation process of the planning methodology in the Paraguay-Paraná Waterway Hub was initiated to identify and classify the Hub's project portfolio, and from the technical, economic, social, and environmental information of the groups, to obtain a wider understanding of the contribution made by each Group of Projects to the physical integration and sustainable development of the area of influence of the Waterway Hub.

This way, the meetings of the GTE of the Paraguay-Paraná Waterway Hub were held in August in Santa Cruz de la Sierra, Bolivia, thus completing the first stage of the planning process, in which the Groups of Projects of the Hub with their respective Strategic Function and Anchor Project were defined; and projects related to transportation, energy, and communications were identified, as well as aspects of the PSIs, relevant to each Group of Projects.

The work that was carried out in all of the GTEs in 2007 was essentially qualitative and based on the updated Business Vision of each EID. Work groups (Grupos de Trabajo – GTs, in Spanish) were formed for each Hub, to generate a space of fundamental technical discussion for the creation, with the help of the countries' experts, of a common vision in the definition of the integration projects and their effects on the sustainable development of the territory. Each GT had representatives from the countries belonging to the Hub: National Coordinators (Coordinadores Nacionales – CN, in Spanish), national government officials linked to the areas of planning and transportation, energy, and communications infrastructure, as well as representatives from the Technical Coordination Committee (Comité de Coordinación Técnica – CCT, in Spanish), experts and consultants. In addition, in some cases, CNs of countries that were not members of the specific Hub participated, as observers.

2. EVOLUTION OF THE IIRSA PROJECT PORTFOLIO (2003-2006 AND 2007)

The Planning Process conducted in the period 2003-2006 resulted in the IIRSA Project Portfolio, which was created from the GTEs of eight of the ten EIDs, carried out between 2003 and 2004 ("IIRSA Book"); from a complementary GTE of the Amazon Hub, which took place in April, 2005 ("Annex to the Project Portfolio"); and from the request of Paraguay to incorporate three new projects into the Portfolio, accepted at the Eighth Meeting of the Executive Steering Committee (Comité de Dirección Ejecutiva – CDE, in Spanish), held in December, 2006 in Quito, Ecuador.

This phase of the IIRSA's work culminated in a portfolio, based on consensus, of 351 infrastructure projects¹, divided into 41 Groups of Projects with an estimated investment of US\$ 38 billion. Table 1, which is presented below, summarizes the distribution of the portfolio by Hub.

Table 1 - IIRSA Project Portfolio, 2003 – 2006

Investment Portfolio by Integration and Development Hub (EID, in Spanish)

EID	No of Groups	No of Proj.	%	Estimated Inv. (US\$ millions)	%
Andean	11	73	20.8 %	4,975.2	13.1 %
Capricorn	4	36	10.3 %	2,030.8	5.4 %
Amazon	7	54	15.4 %	2,381.6	6.3 %
Guianese Shield	4	32	9.1 %	365.9	1.0 %
Southern	2	21	6.0 %	1,070.8	2.8 %

¹ Two of the projects arise in the PSI of TICs (the projects called "Exports through Postal Services for PYMES" and "Agreement on South American Roaming") and were further incorporated into the Portfolio.



Central Interoceanic	5	44	12.5 %	3,306.0	8.7 %
Mercosur - Chile	5	71	20.2 %	12,161.5	32.1 %
Peru - Brazil - Bolivia	3	18	5.1 %	11,587.6	30.6 %
PSI		2	0.6 %	2.9	0.0 %
TOTAL	41	351		37,882.3	

Those numbers remained unchanged until the revision of the portfolio, which took place in 2007. Thus, one of the most important results of the GTEs of 2007 was the update of the information on the 351 projects of the IIRSA Portfolio 2003-2006. After the revision, investment was estimated at a total of US\$ 60 billion (see Table 2), with a sectoral composition where investment in transportation predominates (55%).

Table 2 - **IIRSA Project Portfolio, 2003 – 2006**

Update of investment values after the GTEs - 2007

EID	No of Groups	No of Proj.	%	Estimated Inv. (US\$ millions)	%
Andean	11	73	20.8 %	6,164.6	10.2 %
Capricorn	4	36	10.3 %	2,898.3	4.8 %
Amazon	7	54	15.4 %	3,975.0	6.5 %
Guianese Shield	4	32	9.1 %	5,852.0	9.6 %
Southern	2	21	6.0 %	1,480.8	2.4 %
Central Interoceanic	5	44	12.5 %	4,423.8	7.3 %
Mercosur - Chile	5	71	20.2 %	18,759.0	30.9 %
Peru - Brazil - Bolivia	3	18	5.1 %	17,151.1	28.2 %
PSI		2	0.6 %	2.9	0.0 %
TOTAL	41	351		60,707.5	

Additionally to the work that was carried out to update information, the IIRSA Project Portfolio underwent a major additional expansion during the GTEs of 2007, both in number of projects and in the amount of investment, either by the accomplishment of the first stage of planning of the Paraguay-Paraná Waterway Hub (Hidrovia Paraguay-Paraná - HPP, in Spanish), or by the revision of the portfolio, which resulted in the inclusion of new Groups of Projects in the Hubs and/or new projects in the existing Groups, as well as the exclusion or redefinition of Groups and/or projects in each one of the Hubs.



At the end of the completion of the work, the IIRSA Initiative has a new portfolio of 506 infrastructure projects², based on consensus, grouped in 47 Groups of Projects, with an estimated investment of US\$ 68 billion, as indicated in Table 3.

By comparing Tables 2 (IIRSA Portfolio 2003-2006) and 3 (IIRSA Portfolio 2007), we may observe that the most significant changes occurred in the Paraguay-Paraná Waterway Hub, where five Groups of Projects and 98 projects were identified, and in the MERCOSUR-Chile Hub, where a new Group of Projects was included, as in the Capricorn Hub. There were also important modifications to the Andean Hub, where a Group of Projects was eliminated, whose projects were regrouped within the Hub and in other Hubs of the Portfolio. It is worth emphasizing that, after these changes, the most significant investments are in the MERCOSUR-Chile, Peru-Brazil-Bolivia, and Andean Hubs, as a result of the greater concentration of energy projects, of high unit value.

Table 3 - IIRSA Project Portfolio, 2007

New project portfolio after the GTEs - 2007

EID	No of Groups	No of Proj.	%	Estimated Inv. (US\$ millions)	%
Andean	10	65	12.8 %	6,096.7	8.9 %
Capricorn	5	63	12.5 %	6,083.0	8.9 %
Amazon	7	57	11.3 %	3,208.4	4.7 %
Guianese Shield	4	32	6.3 %	5,847.2	8.6 %
Southern	2	26	5.1 %	2,529.8	3.7 %
Interoceanic	5	49	9.7 %	4,651.3	6.8 %
Mercosur - Chile	6	91	18.0 %	19,464.8	28.5 %
Peru - Brazil - Bolivia	3	23	4.5 %	17,561.1	25.7 %
Paraguay-Paraná Waterway	5	98	19.4 %	2,828.8	4.1 %
PSI	0	2	0.4 %	2.9	0.0 %
TOTAL	47	506		68,274.0	

It is worth mentioning that the numbers presented for the investments of the Paraguay-Paraná Waterway Hub do not reflect reality, since there is a large number of projects for which there is no information on estimated investment. With the launch of the new IIRSA Project Data Bank, these distortions should be reduced.

In the next two sections of this document, the detailed results of the work conducted in each one of the GTEs is presented. In section 3, the changes in the Project Portfolio with the new groups and projects are mentioned. Section 4, in turn, is dedicated to showing the progress in the implementation and financing of the 31 projects of the AIC and the other projects of the IIRSA Portfolio 2003-2006 (portfolio in course).

² They include the projects of sectoral process of TICs (see note 1).

3. TECHNICAL EXECUTIVE GROUPS (GTEs) –PLANNING 2007

In this section of the paper, the main changes of the IIRSA Project Portfolio 2007 are presented: *the Groups of Projects of each EID are redefined* either by the inclusion of new Groups of Projects in each Hub and/or new projects in the existing Groups, or by the exclusion or redefinition of Groups and/or projects of transportation, energy, and communications infrastructure.

The Strategic Function of each Group of Projects is also presented, for those cases where it has been expanded and improved to reflect in a more precise way the economic, social, and environmental effects of the set of projects, as well as the Anchor Project, if it has been revised. For the particular case of the Paraguay-Paraná Waterway Hub, the complete result of the first stage of the planning process is presented (Groups of Projects, Projects, Strategic Functions, and Anchor Projects).

In the annex, the complete list of the IIRSA Project Portfolio 2007 is shown, with the 506 projects identified by the countries in the work carried out in each one of the GTEs of 2007.

3.1 Andean Hub

On the 22nd and 23rd of August, 2007, the meeting of the Technical Executive Group (GTE) of the Andean Hub took place in Santa Cruz de la Sierra, Bolivia. The Hub's updated Business Vision (Visión de Negocios – VN, in Spanish) was presented and the group work was begun.

The update of the VN of the Andean Hub presents an area of influence with a surface of 2.8 million km² (60.7% of the total of the area comprised by the countries) and a population of 90 million inhabitants (76% of the total), in the following countries: Colombia (42.9%), Venezuela (26.6%), Peru (26.2%), Ecuador (13.2%) and Bolivia (9.4%).

The main infrastructure matters presented in the VN are the following:

Transportation

- ✓ There are 385,000 km of roads of which only 17.1% are paved, but the opportune financing of maintenance has not been solved. Investments are required in consolidated corridors to expand the capacity, reliability, and to improve designs.
- ✓ Approximately 50% of the travel time of commercial exchange is lost at the border crossings.
- ✓ Ports present capacity constraints, and productivity is relatively low, although public and private investments are already being made.
- ✓ Airport capacity for passengers is adequate but requires optimization. In terms of air cargo, there are restrictions on capacity and a lack of equipment to ensure reliability and operative safety.
- ✓ The river system is precarious, despite the fact that the major rivers in the area are naturally navigable.
- ✓ The railway network is characterized by mainly private operation, which has shown improvement in infrastructure following the growth in demand. There are socially profitable projects, but these are not financially viable in the short term, which is why it is not easy to link private operators.
- ✓ The accesses between Venezuela and Colombia through the Arauca border crossing are almost completed.
- ✓ Colombia has made significant progress in the *low-altitude corridor*.



- ✓ Many sections of road in the Andean Hub are under concession or projection of concession for secondary roads. Safety in the Colombian main roads has improved substantially.
- ✓ Ecuador has progressed significantly in the Pacific route to the border with Colombia and has simultaneously developed several sections of the low-altitude corridor.
- ✓ Peru has made progress in paving the section from Jaén to Ciruelo port, and the Tarapoto-Juanjuí section is being executed.
- ✓ Bolivia has greatly advanced in the paving of the Potosí-Tarija section.
- ✓ Major ports used by the Andean countries are under total or partial concession: Callao, Manta, Esmeralda, Arica, and Guayaquil.

Energy

- ✓ The hydrocarbon reserves in the countries of the Hub are more than four times those of the United States and eight times those of the MERCOSUR as a whole.
- ✓ There is progress in energy security as well as in interconnection and integration.
- ✓ There is the possibility of having common value-added policies within the integration process.
- ✓ The Andean Community (Comunidad Andina - CAN, in Spanish) foresees for the next fifteen years direct investments in its territories of more than US\$ 150 billion in the industry and in related fields.
- ✓ The construction of the gas pipeline between Colombia and Venezuela is being completed.
- ✓ Projects of interconnection between Venezuela and Colombia have been implemented, and the networks of Ecuador have been integrated with the ones in Colombia and Peru.
- ✓ The assets of the electric distribution networks of Bolivia and Peru in the border area are under concession to the same concessionaire.
- ✓ Within the framework of the CAN, progress has been made in structuring the foundation of the Andean Energy Alliance (Alianza Energética Andina - AEA, in Spanish); there also exists the initiative: Union of South American Nations (Unión de Naciones Suramericanas - UNASUR, in Spanish).
- ✓ There are important rural electrification projects.

Communications

- ✓ At the beginning of the decade, the conditions for the entry of new operators into long distance, domestic, and international markets, as well as local phone services were established.
- ✓ Services such as data transmission, mobile phone services, value-added service, etc., are also open to competition.
- ✓ Fiber optic networks already connect the main lines of all the countries of the Hub.

With regard to the Groups of Projects, the most significant change in the Andean Hub was the elimination of Group 9 (*Connection: Lima - Arequipa - Tacna, Arequipa - Juliaca, Ilo-Desaguadero -La Paz*). The result of the revision of the Portfolio is shown as follows:



Group 5: Connection: Colombia (Tumaco port) - Ecuador (Esmeraldas port - Guayaquil) - Peru (Ica)

The following projects of Group 9 of this same Hub were moved to this Group: (i) "Building of the secondary road in the section: Cerro Azul - Ica" and (ii) "Secondary Road: Ica".

As a result of this change, the name of the Group was modified. Group 5 is now called: "Connection: Colombia (Tumaco port) - Ecuador (Esmeraldas port - Guayaquil) - Peru (Ica)".

Table 4 – Group 5 - Projects (changes)

Project	Total Investment (US\$ millions)
Building of the secondary road in the section: Cerro Azul - Ica	228.6
Secondary road: Ica	15.0

Group 6: Connection: Colombia-Ecuador II (Bogotá - Mocoa - Tena - Zamora - Palanda-Loja)

With regard to the projects of Group 6, the countries of the Hub decided to merge the projects of the "Mocoa - Santa Ana" and "Santa Ana - San Miguel" sections into one project. In addition, the project: "Consideration of environmental aspects and preventive aspects" was eliminated, and it was decided that the Group should be proposed as a candidate for Strategic Environmental Evaluation instead.

Table 5 – Group 6 - Projects (changes)

Project	Total Investment (US\$ millions)
Section: Mocoa - Santa Ana - San Miguel	47.3

Group 7: Connection: Peru-Ecuador II (Quito - Integración bridge - Tingo María)

Two changes were made in the composition of the group: the projects named "Environmental and Preventive Considerations" and "Improvement of Huanuco airport" were withdrawn. With regard to the environmental issue, the Group of Projects became a candidate for the application of the methodology of Strategic Environmental Evaluation.

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

In Group 8, there was a proposal to include the Anchor Project for Group 9 (the original one) as part of the list of projects for this Group: "Railway Connection: Puno - El Alto". In addition, the importance of tourism in the development of the Group was discussed. In line with these two items, it was agreed to modify the strategic function of the Group.

Table 6 – **Group 8 - Projects (changes)**

Project	Total Investment (US\$ millions)
Railway connection: Puno - El Alto	150.0

The new **Strategic Function** of Group 8 is:

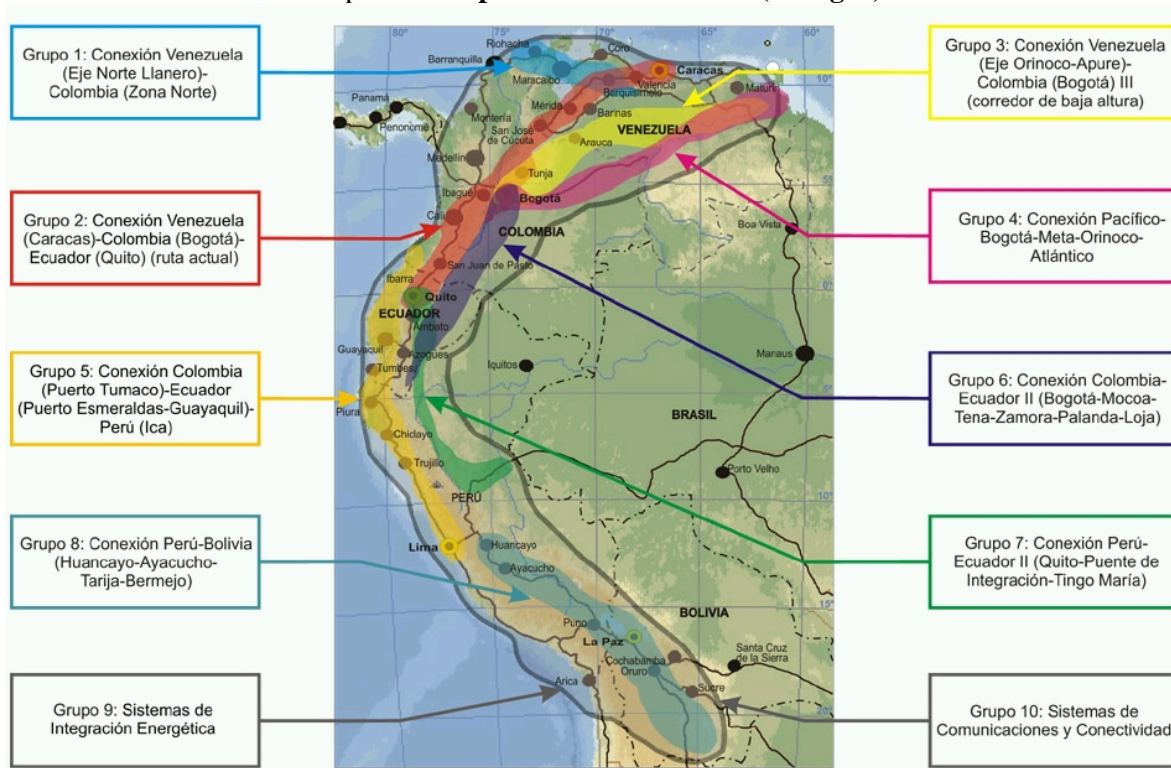
- *“To promote tourism and economic relations between the Andean cities of Peru and Bolivia through existing land roads, and extend them to the Central Andean area of Peru and the Argentine Northwest.”*

Group 9: Connection: Lima - Arequipa - Tacna, Arequipa - Juliaca, Ilo - Desaguadero - La Paz

It was agreed to eliminate Group 9 but maintaining its projects in this or other Hubs. The project called “*Railway Connection: Puno - El Alto*” is transferred to Group 8. The Projects called “*Building of the Secondary Road in the section: Cerro Azul - Ica*” and “*Secondary Road: Ica*” are moved to Group 5. It is proposed that the projects called “*Improvement of Juliaca airport*” and “*Improvement of Arequipa airport*” be moved to the Peru-Brazil-Bolivia Hub, and it was agreed to transfer the projects of “*Improvement of Tacna airport*” and “*Refitting of the South Pan-American road (earthquake)*” to the Interoceanic Hub.

With the elimination of Group 9, the Andean Hub has now 10 Groups of Projects. Map 1, presented as follows, shows where the groups are located.

Map 1 – Groups of the Andean Hub (changed)



In relation to the Integration Sectoral Processes (PSIs) issues and the identification of Groups of Projects eligible for the implementation of new planning methodologies, the work group indicated:

- ✓ The PSI of Air Transportation: the possibility of moving forward with analysis of pre-investment in relation to logistics and air cargo issues was discussed.
- ✓ Application of the methodology of Productive and Logistics Integration and Productive Chains: it was agreed to propose Groups 5 and 8 as candidates.
- ✓ Application of the methodology of Strategic Environmental Evaluation: it was agreed to propose Groups 6 and 7 as candidates.

3.2 Capricorn Hub

On September 26th, 2007, the meeting of the Technical Executive Group (GTE) of the Capricorn Hub was held in the city of Santiago de Chile. The Hub's updated Business Vision (VN) was presented and the group work was begun.

In the update of the VN, the Capricorn Hub presents an area of influence with a surface of 2.1 million km² and a population of 42 million inhabitants.

The Hub encompasses a region with significant and balanced resources of diverse nature (energy, agricultural, industrial, mining, etc.); nevertheless, it is a region with a low population density in most of its sub-regions.



The infrastructure of the Hub’s area of influence is limited (although at the moment important work is being carried out in the area), and it is necessary to connect the various regions that compose the Hub. In addition, the increase in the value of major exports from the region has generated a growth in production and, therefore, it has increased demand and the need to improve the Hub’s infrastructure.

In the medium term, the dynamics of the activities will be determined by:

- ✓ The energy integration among the regions.
- ✓ The growth of incorporation of marginal land to the production.
- ✓ The increase of freight services.
- ✓ The pressure that will be exerted on the environment by the new projects in slightly affected areas (large unpopulated areas) to date.
- ✓ New businesses: Biofuel, transportation logistics.

In relation to the revision of the Hub’s Groups of Projects, the main change was proposed by the delegation from Argentina who requested the incorporation of a new group, which was called Group 5 “*Camino Real*”. Several new projects were also included into the other Groups, as detailed as follows:

Group 1: Antofagasta - Jama border crossing - Jujuy-Resistencia - Formosa - Asunción

It was agreed to incorporate 11 new projects into this Group, especially in railway transportation. In addition, the project called “*Refitting of the Belgrano Cargas Railway - Ferronor (North Trans-Andean)*” included five new sections and operative material, thereafter called “*Operative Refitting of the Belgrano Cargas Railway - Ferronor (North Trans-Andean)*”. Table 7 shows the projects incorporated into the Group.

Table 7 – **Group 1 - Projects (changes)**

Project	Total Investment (US\$ millions)
Operative refitting of Belgrano Cargas railway - Ferronor (North Trans-Andean)	210.0
Refitting of railway section: C3 Resistencia - Avía Terai - Pinedo (AR)	104.0
Refitting of Railway Section: C12 Avía Terai - Metan (AR)	212.0
Refitting of railway section: C14 Salta - Socompa (AR)	60.0
Refitting of railway section: C25 Embarcación - Formosa (AR)	64.0

Project	Total Investment (US\$ millions)
Refitting of railway section: C18 Joaquín V. González - Pichanal (AR)	50.0
Refitting of National Road N° 16: Intersection NR 11 to Intersection NR 34 (AR)	300.0
Paving of NR 86: Gral. Güemes - Pozo Hondo (AR)	184.0
Paving of NR 95: Intersection NR 81 - Villa Ángela (AR)	82.0
Border post: Jama (CH)	7.0
Enlargement of Road N° 25 (CH) - Initiative 1	150.0
Enlargement of Road N° 24 (CH) - Initiative 2	150.0

It was also agreed to change the Strategic Function in order to improve it. Thus, the new **Strategic Function** of the Group 1 is:

- *To improve supply options in Northwest Argentina, the south of Bolivia, and Paraguay.*
- *To open an outlet for the production of Northwest Argentina, the south of Bolivia, and Paraguay to the Pacific.*
- *To increase competitiveness of the Hub's products.*
- *To establish the connectivity of Northwest Argentina and the north of Chile towards the Paraguay Paraná Waterway.*

Group 2: Salta - Villazón - Yacuiba - Mariscal Estigarribia

In this Group, the Project called “*Paving of the section: Tartagal - Misión La Paz - Pozo Hondo - Mariscal Estigarribia*” was modified through the elimination of the *Pozo Hondo - Mariscal Estigarribia* section. Four new projects were also incorporated. Table 8 shows the modifications carried out in this Group of Projects.



Table 8 – **Group 2 - Projects (changes)**

Project	Total Investment (US\$ millions)
Paving: Tartagal - Misión La Paz - Pozo Hondo	190.0
Refitting: Belgrano Cargas, Section: C15 Perico - Pocitos (AR)	60.0
Duplication and refitting of Road N° 50, Section: Pichanal - Oran (AR)	30.0
Paving of road N° 40: Mining Corridor (Bolivian border) (AR)	100.0
Border center: Pozo Hondo (Paraguay)	1.5

Group 3: Asunción - Paranaguá

In Group 3, the inclusion of four new projects and the exclusion of a Project that was moved to Group 1 of the MERCOSUR-Chile Hub (“*Modernization of Asunción international airport*”) were discussed. In addition, two projects of Group 5 of the MERCOSUR-Chile Hub were incorporated into this Group, namely, the projects called “*Transmission Line 500 KW Yacyretá - Ayolas-Carayao*” and “*Installation of Machinery in the Iguazú reservoir*”. Table 9 shows the modifications.



Table 9 – **Group 3 - Projects (changes)**

Project	Total Investment (US\$ millions)
Railway bridge with freight yard (Pte. Franco - Foz do Iguazú)	N/A
New railway corridor: Corredor Ferroviário do Oeste do Paraná	270.0
Enlargement: Puerto Villeta	N/A
Transmission line: 500 KW (Itaipú - Asunción)	N/A
Transmission Line: 500 KW (Yacyretá - Ayolas - Carayao)	130.0
Installation of machinery in the Iguazú reservoir	N/A

The Strategic Function was also revised, and the participants determined to modify the support function to tourism, confining it to the Pantanal region. In this way, the **Strategic Function** of Group 3 is defined as follows:

- *To consolidate a high-capacity, low-cost system for moving what is produced in the region as bulk cargo to international markets.*
- *To promote socio-economic regional development.*

Group 4: Presidente Franco - Iguazú port - Pilar - Resistencia

Two new projects were incorporated into this Group. In addition, three projects of this Group were moved to Group 3 and 4 of the Paraguay-Paraná Waterway Hub: the projects “*Building of Railway: Asunción - Posadas*” and “*Railway: Asunción - Montevideo*” (Group 3) and the project “*Paving of road system to access ports over Paraná river*” (Group 4). The name of the Anchor Project was also modified, which thereafter was called “*Optimization of the Node: Ñeembucú bridge - Bermejo river*”. Table 10 shows the modifications.

Table 10 – **Group 4 - Projects (changes)**

Project	Total Investment (US\$ millions)
Optimization of the node Bermejo river - Ñeembucú (Anchor Project)	40.0
Rebuilding of railway: Garupá - Posadas	100.0



Project	Total Investment (US\$ millions)
Building of detour NR 12 through Posadas city (Province of Misiones)	35.0

Anchor Project:

- *“Optimization of the Node: Ñeembucú bridge - Bermejo river”.*

Group 5: Camino Real

The incorporation of a new Group 5 into the Capricorn Hub, which was called “*Camino Real*”, was the main change in the Hub. Since it was a new Group, a Strategic Function was defined, and an Anchor Project was chosen.

Strategic Function:

- *Intermodal articulation among the Groups of the Capricorn, MERCOSUR-Chile, Central Interoceanic, and Paraguay-Paraná Waterway Hubs.*

Anchor Project:

- *“Tucumán Multimodal Transfer Center”.*

The area of influence of the new Group may be observed in Map 2, as was presented by the Argentine Delegation.

Map 2 – Area of Influence of Group 5 of the Capricorn Hub (New Group)



Table 11 summarizes, in turn, the nine projects that were incorporated into the group, basically corresponding to the transportation sector.

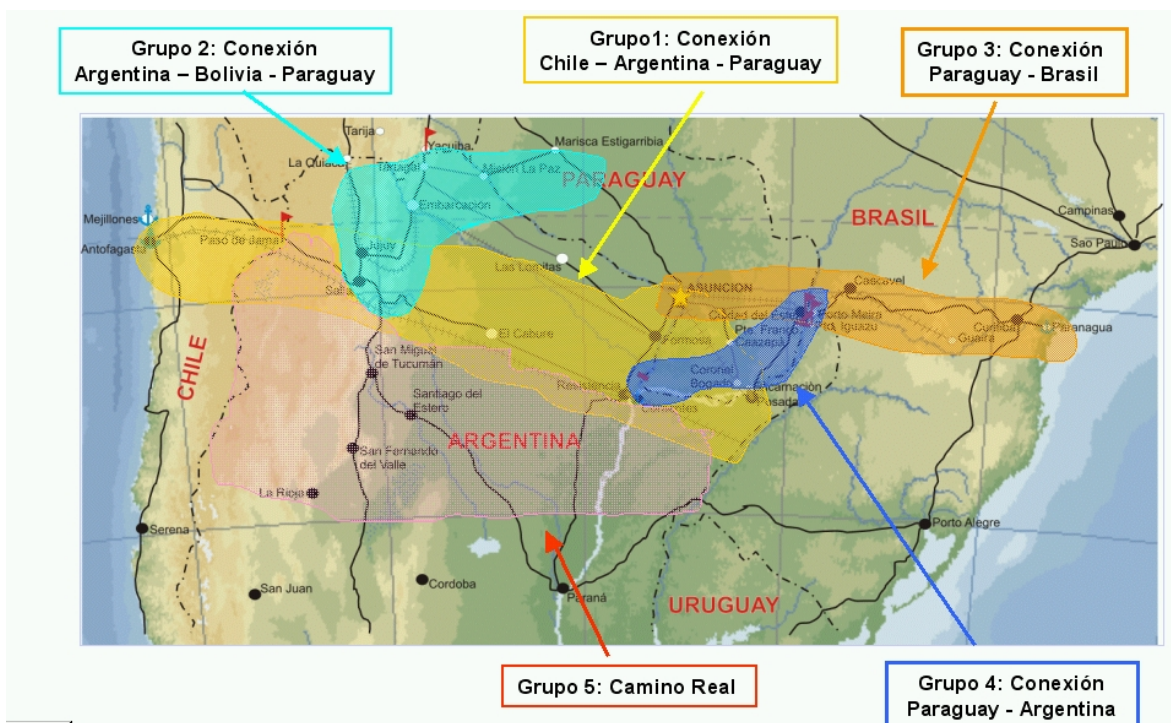
Table 11 – Group 5 - Projects (New Group)

Project	Total Investment (US\$ millions)
Refitting of railway section: C6 Pinedo - Tostado	100.0
Refitting of railway section: C Santa Fe - San Salvador de Jujuy	270.0
Road bridge: Reconquista - Goya	N/A
Paving of NR 95, border with Chaco, Intersection PR 286, Santa Fe	45.0
Duplication of road NR 34, border with Salta - San Pedro de Jujuy	20.0
Paving of NR 38: Marapa river - Beginning of Highway	160.0
Paving of NR 40: San Carlos - Cachi	80.0

Project	Total Investment (US\$ millions)
Paving of NR 89: Intersection NR 11, Chaco Intersection: NR 34 Taboada	107.0
Multimodal transfer center: San Miguel de Tucumán (Anchor Project)	20.0

As a result of the revision work carried out in the Capricorn Hub, especially in terms of the creation of the new Group 5, a new Group map is presented.

Map 3 – Groups of the Capricorn Hub (changed)



With regard to the PSIs issues and the identification of Groups of Projects eligible for the implementation of new planning methodologies, the work group indicated:

- ✓ PSI of Border Crossings: Analysis and definition of the use of bridges (freight and/or passenger) to design the new border centers and access roads in Group 3.
- ✓ Implementation of the methodology of Productive and Logistics Integration and Productive Chains: it was agreed to propose Groups 1 and 3 as candidates.
- ✓ Implementation of the methodology of Strategic Environmental Evaluation: it was agreed to propose Group 2 as candidate.

3.3 Amazon Hub

On June 5th, 2007, the meeting of the Technical Executive Group (GTE) of the Amazon Hub took place in the city of Bogotá, Colombia. The Hub's updated Business Vision (VN) was presented and the group work was begun.

In the update of the VN, the Amazon Hub presents an area of influence with a surface of 4.5 million km² and a population of 53 million inhabitants, indicating a very low demographic density. Some of the Hub's strengths are:

- ✓ DIVERSITY: ecologic, cultural, economic, social, and with countless tourist attractions;
- ✓ GLOBAL RELEVANCE: it possesses 1/3 of the biodiversity, 1/5 of the fresh water, 2/5 of the surviving tropical forests in the planet, as well as a significant degree of endemism;
- ✓ RIVER SYSTEM with 20,000 km of navigable waterways;
- ✓ Potential of the AMAZON BIOME: environmental services, eco-tourism, genetic resources, certified wood and non-wood products, aquaculture, knowledge of traditional populations, petroleum and gas; and
- ✓ The name AMAZONÍA / AMAZONAS is recognized worldwide.

On the other hand, special attention must be paid to some of the most significant difficulties of the Region, namely:

- ✓ INFRASTRUCTURE AND MARKET: inadequate conditions for scale, very poorly articulated network of cities, dispersed markets, long distances to cross, isolated energy and communications systems;
- ✓ LAND USE: poor soils, conflicts of use, predominance of a historical pattern of conversion of forest into an oil frontier, or a disorganized forest – mining one, or an extensive cattle frontier. Difficulties to make a paradigm of sustainable development real;
- ✓ TRAINING, TECHNOLOGY, AND CAPACITY TO UNDERTAKE NEW BUSINESS: Low level of training, low technological content, very high marketing and logistics costs, a historical culture of subsidies and incentives affects the propensity to undertake new commercial activities;
- ✓ GENERAL ENVIRONMENT: economic disintegration, isolation, poverty, crime, and insecurity.

To sum up, the VN notes that there is a potential for economic complementariness among the denser areas to be integrated; on the one hand, the coast and the Andean highlands, and on the other, the central Amazon area of the Hub (food, construction materials, textiles, garments, ethanol, and phosphates in the direction to the Atlantic, as well as electronic products, motorcycles, aluminum, and soybeans in the direction to the Pacific).

It is also true that there is an Amazon identity common to all the countries in this jungle area, which can provide a platform for development from the inside out, based on innovative activities that focus on the global market of environmental services, eco-tourism, fish farming, and genetic knowledge, in addition to certified wood and non-wood products.



In the long term, there could be long-distance trade flows of Asian products and supplies, of lesser value or greater volume and density, for the north of Brazil and, eventually, for all the South Atlantic area and vice versa. Nevertheless, the feasibility of these flows would be subject to prior consolidation of the two previous dynamics.

The great challenge is to provide an infrastructure compatible with the environmental fragility that frames a large part of the Hub. For this reason, the “friendlier” alternatives focus on river and air transportation.

The rivers of the Amazon are, in general, “new” rivers, which are framed by meanders and possess a natural geological instability. The deforestation in the banks, particularly in the high river basins, increases the amount of sediment in water and causes the instability of the courses. For this reason, the challenges for river transportation are immense. On the one hand, there is a need for proper management of these basins, including reforestation of the banks to stop the process of sedimentation. On the other hand, it is necessary to invest in the adaptation of the waterways (bad pathways) and of the river terminals, in addition to providing the adequate signaling and maintenance of these waterways.

Finally, the relevant businesses, such as eco-tourism and logistics of higher value (and/or perishable) products, stress the importance of the operating systems of regional air transportation, for both freight and passengers.

With regard to the revision of the Groups of Projects of the Hub, some modifications were proposed (separation and fusion of projects), and new projects arose, as detailed below:

Group 1: Access to the Putumayo Waterway

In this grouping, a new project was included. Also, there was a change in the scope and name of the project “*Access and adaptation of the port of Puerto Asís (La Esmeralda dock)*” and of the Anchor Project, to which the project “*Road section: Santa Ana - Puerto Asís*” was incorporated, and eliminated from the Portfolio. In addition, the Strategic Function was modified, as it is subsequently described. The “*Electrification Project: PCH Leticia and Leticia - Tabatinga interconnection*” was moved to Group 6 of this same Hub.

Table 12 - **Group 1 - Projects (changes)**

Project	Total Investment <i>(US\$ millions)</i>
Road: Pasto - Mocoa - Puerto Asís (Anchor Project)	308.0
Access and adaptation of the port of Puerto Asís (La Esmeralda Dock)	3.0
Electric interconnection: Yavaraté (Mitu) - Brazilian Border	N/A

The new **Strategic Function** of the Group is:

- *To improve the logistics of national integration among productive areas in the South of Colombia, department of Nariño, and the Amazon departments of Putumayo and Amazonas, and their integration with the North of Ecuador (particularly, the province of Sucumbios).*
- *To improve the logistics of integration with Brazil and Peru.*
- *To reinforce the interconnection of the continent’s hinterlands with the Pacific basin.*

Anchor Project:

- *“Road: Pasto - Mocoa - Puerto Asís”*

Group 3: Access to the Huallaga - Marañón Waterway

In this Group, the only change occurred in the name of the project called “*Road: Bagua - Rioja*” to make it more compatible with the AIC. This way, the Portfolio project is thereafter called “*Road: Paíta - Tarapoto*”.

Group 6: Amazon Waterway Network

With regard to projects of Group 6, the countries of the Hub decided to separate the project “*Modernization of Iquitos port*” from “*Iquitos Logistics Center*” and to incorporate into Group 6 the “*Electrification Project: PCH Leticia and Leticia - Tabatinga interconnection*”, that was previously in Group 1 of the same Hub. In addition, a new project called “*Network of River Terminals in the Amazon Region*” was included as a new project.

Table 13 – **Group 6 - Projects (changes)**

Project	Total Investment <i>(US\$ millions)</i>
Modernization of Iquitos port	15.0
Logistics Center: Iquitos	3.0
Electrification project: PCH Leticia and interconnection: Leticia - Tabatinga	5.0
River terminal network in the Amazon region	N/A

It was also agreed to make a change in order to improve the Strategic Function. So, the new **Strategic Function** of Group 6 is:

- *To improve navigability conditions of the Amazon basin's rivers to promote the region's sustainable development in its economic, social, and environmental dimensions and gradually generate long distance and bioceanic transportation flows.*

In relation to the PSIs issues and the identification of Groups of Projects eligible for the implementation of new planning methodologies, the work group indicated:

- ✓ The study of the possibility of implementing a complementary program for the conservation of the river basins in relation to Group 6 and accesses to navigable rivers, in order to provide sustainability to navigability.
- ✓ The analysis of the feasibility of a program to support the transportation services in the Amazon region (especially related companies and services).
- ✓ Studies of production in homogenous regions (ecotopes) from different countries, in order to add volume and value to the production. To consider conducting a Regional Workshop to gather experiences and organize potential common tasks.
- ✓ Regional air transportation: to promote an agreement for “shuttle” services between countries of the Amazon region.
- ✓ Systems of satellite control and TICs. An initial program of cooperation between Brazil and Peru is being carried out, which could be useful as reference for future work of horizontal cooperation among all the countries in the Amazon region.
- ✓ The inclusion of Group 6 as a candidate for the implementation of the complete Strategic Environmental Evaluation, under the leadership of Brazil.

3.4 Guianese Shield Hub

The meeting of the Technical Executive Group (GTE) of the Guianese Shield Hub will take place in the first semester of 2008.

3.5 Southern Hub

On September 27th, 2007, the meeting of the Technical Executive Group (GTE) of the Southern Hub was held in the city of Santiago de Chile. The Hub's updated Business Vision (VN) was presented and the group work was begun.

In the update of the VN, the Southern Hub presents an area of influence with a surface of 500,000 km² and a population of 6.6 million inhabitants, representing, respectively, 14% of the surface of the countries of the Hub and 12% of their population.

As regards transportation issues, the Andes mountains and lake crossings condition transportation between the two countries. The road network in the Hub represents 15%, approximately, of the total road network of the two countries, which has a length of 315,000 km. Nearly 10% of the vehicles in both countries are registered in the Hub. There are railway lines on both sides of the border, but



they are not connected. In the Atlantic, as well as in the Pacific, there are maritime terminals directed towards exports.

In the territory of the Southern Hub, there are large reserves of energy, especially in the provinces of Neuquén and Río Negro, in Argentina, as shown in Table 14.

Another important aspect of the territory of the Southern Hub is the presence of national parks, on both sides of the border, areas of environmental protection, forests, and sanctuaries of flora and fauna. Additionally, there are lakes that allow the development of tourism and transportation. In summary, the area has a strong potential for tourism, activity that can be developed without disturbing the existing ecosystems.

Table 14 – **Energy Infrastructure in the Southern Hub**

<ul style="list-style-type: none"> <input type="checkbox"/> Argentina: <ul style="list-style-type: none"> <input type="checkbox"/> Province of Neuquén: <ul style="list-style-type: none"> <input type="checkbox"/> It produces the 26% of electrical power in Argentina (5 hydroelectric power stations) <input type="checkbox"/> 28% of the national oil <input type="checkbox"/> 54% of the national gas (national consumption and exports) <input type="checkbox"/> Province of Río Negro: <ul style="list-style-type: none"> <input type="checkbox"/> Electric power generated by four growing hydroelectric power stations (9.7 % GGP) <input type="checkbox"/> 1.4% of the national gas <input type="checkbox"/> 5% of the national oil <input type="checkbox"/> Chile: <ul style="list-style-type: none"> <input type="checkbox"/> The energy generated in the four regions is part of the Central Integrated System (SIC, in Spanish). This system has an installed generation capacity of 8,600 MW, from which 55% is corresponds to hydroelectric generation. <input type="checkbox"/> There is a potential for the generation of hydroelectric power. Alternating sources are being studied to guarantee energy security.

With regard to the Groups of Projects, some new projects were incorporated into Group 1 and one new project into Group 2. The result of the revision of the Portfolio of the Southern Hub is presented as follows:

Group 1: Concepción - Bahía Blanca - San Antonio Este port

Table 15 - **Group 1 - Projects (changes)**

Project	Total Investment <i>(US\$ millions)</i>
Beltway and railway accesses to the Bahía Blanca port	250.0
Railway section: Buenos Aires- Bahía Blanca - Neuquén	180.0
Railway: Zapala - Las Lajas (AR)	70.0
Enlargement: Bahía Blanca Port (AR)	15.0

Group 2: Lake Area Binational Touristic Circuit

Table 16 - **Group 2 - Projects (changes)**

Project	Total Investment <i>(US\$ millions)</i>
Railway section: Bahía Blanca - San Carlos de Bariloche	400.0

In relation to the PSIs issues and the identification of Groups of Projects selected for the implementation of new planning methodologies, the work group indicated Group 2 for the application of the methodology of Strategic Environmental Evaluation.

3.6 Central Interoceanic Hub

On April 24th and 25th, 2007, the meeting of the Technical Executive Group (GTE) of the Central Interoceanic Hub took place in the city of Lima, Peru. The Hub's updated Business Vision (VN) was presented and the group work was begun.

In the updated VN, the Central Interoceanic Hub presents an area of influence with a surface of 3.3 million km² and a population of approximately 87 million inhabitants. The main cities of the Hub are: São Paulo (11 million), Rio de Janeiro (6.1 million), Campo Grande, (765,000), Corumbá (100,000), Cuiabá (542,000), Santos (418,000), Campinas (1.1 million), Asunción (520,000), Santa Cruz (1.3 million), Cochabamba (578,000), La Paz - El Alto (1.6 million), Oruro (217,000), Tarija (165,000), Potosí (184,000), Moquegua (55,000), Tacna (282,000), Puno (108,000), Juliaca (161,000), Iquique (226,000), and Arica (185,000).

The VN provided some insight on the importance that the set of projects must have for the socio-environmental sustainability and economic complementarity among the regions belonging to the Hub, thus improving the competitiveness of the exportable production of the Mediterranean

countries, increasing intra and interregional trade, and providing access to the ports of the Pacific and the Atlantic to facilitate foreign trade in the countries of the Hub.

Additionally, some areas with great potential for development were identified: (i) energy integration through the transformation of the Bolivian gas into electrical energy in order to supply it to regions that are lacking; (ii) exit of the mining production of Bolivia through Pacific ports (San Cristóbal); (iii) alternative exit of the production of grains and derivatives of the western region of Mato Grosso and Mato Grosso do Sul to the Pacific ports, as well as the ports of the Paraguay-Paraná Waterway; (iv) development of adventure or eco-tourism in the regions of the Pantanal, Chaco, Mesothermic Valleys (Chapare), and the Bolivian, Chilean, and Peruvian Altiplano (high plateau); (v) development of Puerto Suárez - Busch port (Mutún) pole; and (vi) integration of the Brazilian Southwest, North of Paraguay with the South of Bolivia.

With regard to the revision of the Groups of Projects of the Hub, some modifications were proposed (separation and fusion of projects) as well as the inclusion of new projects, as detailed below:

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

The Bolivian delegation announced the change of profile of the “*Thermoelectric Gas Project: Bolivia - Paraguay*”. Additionally, the Bolivian delegation submitted for consideration of the GTE, the possibility of including a geothermoelectric project in the region of Laguna Colorada, at the border with Chile. Considering that the goal of the project is consistent with the Strategic Function of the Group, the GTE agreed to its inclusion within this Group. A new road project was also incorporated into Group 1.

Table 17 - **Group 1 - Projects (changes)**

Project	Total Investment (US\$ millions)
Geothermal project: Laguna Colorada	160.0
Improvement road: Santa Cruz - Villamontes	N/A

The Strategic Function of the group was modified by broadening the spectrum of the interconnection of productive areas in terms of transportation, energy, and communications, instead of telecommunications as was originally planned. This way, the **Strategic Function** of the group is defined as follows:

- *Interconnection of regional productive areas (transportation, energy, and communications).*
- *New access from the hinterlands to the Pacific, articulating isolated territories.*

Group 2: Connection: Optimization of the Corumba - São Paulo - Santos-Rio de Janeiro corridor

The Brazilian delegation proposed the creation of one project called “*Modernization Program: port of Santos*” to encompass the projects (i) “*Modernization: port of Santos*” and (ii) “*Beltway: port of Santos*”. The fusion of two projects was also established: (i) “*Road Beltway: Rio de Janeiro*” and

(ii) “Access to Itaguaí port (Sepetiba)”, thus creating one project called “Road Ring: Rio de Janeiro”.

Table 18 - Group 2 - Projects (changes)

Project	Total Investment (US\$ millions)
Modernization program: Port of Santos	221.20
Road ring: Rio de Janeiro	160.00

The Strategic Function of the Group was also revised and the function of support to tourism was modified, confining it to the region of the Pantanal (Swampland).

In this way, the **Strategic Function** of Group 2 is defined as follows:

- *To significantly reduce cargo transportation costs from Brazil, Bolivia, and Paraguay to the Atlantic, and among the countries themselves.*
- *To increase the countries’ economic complementariness.*
- *To increase the railway component of the regional transportation matrix.*
- *To support tourism in the region: Pantanal (Swampland).*

Group 3: Connection: Santa Cruz - Puerto Suárez - Corumbá

Modifications or new projects were not identified within the Group. Nevertheless, there were changes in the Strategic Function, which eliminated the phrase “connections to the Ichilo Mamoré and Paraguay - Paraná waterways” since there were no projects pointing to their implementation. It was agreed to add a note in reference to this point, by saying that “in the future, the possibility of generating a multimodal connection between the Ichilo Mamoré and Paraguay - Paraná waterways will be analyzed”. This way, the **Strategic Function** of the Group is defined as follows:

- *To complete the road and railway connection throughout the Hub.*
- *To significantly reduce transportation costs for cargo from Brazil, Bolivia, Chile, Paraguay, and Peru, to the Atlantic and Pacific oceans, and among the countries themselves.*
- *To increase economic complementariness among the countries.*
- *To support tourism in the region: Pantanal (Swampland).*

Note: The possibility of generating a multimodal connection between the Ichilo Mamoré and Paraguay - Paraná waterways will be analyzed.

Group 4: Connection: Santa Cruz - Cuiabá

Modifications or new projects were not identified within the Group. Nevertheless, there were changes in the **Strategic Function**, which is defined as follows:

- *To connect Eastern Bolivia with Mato Grosso, facilitating access for both regions to the ports of the Atlantic and Pacific.*
- *To support the development of the agricultural potential of the central region of Eastern Bolivia.*

Group 5: Hub’s Connections to the Pacific

The Chilean delegation reported that the work of “*Improvement of Arica port services*” was completed. A new program of improvements is being developed. Therefore, it was decided to modify the project to incorporate this new scope and change the name of the project to “*Improvement of Arica port*”. Additionally, the delegation from Chile proposed to incorporate two new projects into the Group: (i) “*Improvement of Iquique port*” and (ii) “*Refitting of the Railway: Arica - La Paz (Chilean section)*”. The work group approved the incorporation of these projects.

The Peruvian delegation proposed the division of the project “*Improvement of Ilo and Matarani ports*” into two independent projects: (i) “*Modernization of Ilo port*” and (ii) “*Improvement of Matarani port*”. Also, the Peruvian delegation proposed to modify the name of the project called “*Paving: Tacna - Mazocruz*” to “*Paving: Tacna - Candarabe - Humajalzo*” and reported to be currently analyzing the design of the highway plans.

Two projects were also incorporated into Group 5 of this Hub, namely, “*Improvement of Tacna airport*” and “*Refitting of the South Pan-American Road (earthquake)*”, which were transferred from Group 9 of the Andean Hub.

Table 19 - **Group 5 - Projects (changes)**

Project	Total Investment <i>(US\$ millions)</i>
Improvement: Tacna airport	10.0
Refitting: South Pan-American road (earthquake)	16.5
Improvement: Arica port	N/A
Paving: Tacna - Candarabe - Humajalzo (change of name)	N/A
Modernization: Ilo port	97.0
Improvement: Matarani port	7.3

Project	Total Investment (US\$ millions)
Improvement: Iquique port	N/A
Refitting of railway: Arica - La Paz (Chilean section)	N/A

It was agreed to change the strategic function of “*To increase reliability and reduce corridor risk*” to “*Increase reliability and raise the Group’s transportation standards*”. Thus, the **Strategic Function** of the Group is defined as follows:

- *To increase trade among the countries and towards international markets.*
- *To reduce the Hub’s transportation costs to the Pacific.*
- *To reduce imports costs from the Pacific.*
- *To increase the synergy among the groups of projects.*
- *To increase reliability and raise the Group’s transportation standards.*
- *To promote development and consolidation of border markets.*
- *To provide a physical connection to the MERCOSUR.*

In relation to the PSIs issues and the identification of Groups of Projects eligible for the implementation of new planning methodologies, the possibility was mentioned of carrying out a series of activities designed to catch the vision of the private sector in relation to investment and productive integration opportunities, as well as to identify the need for regulatory articulation and other complementary actions to favor the development and deepening of regional integration within the Hub.

As regards the Border Crossings matter, a proposal (with the support of the Chilean delegation) will be made for the purpose of organizing a workshop to exchange experience among Chile, Bolivia, Brazil, and Paraguay on this specific subject for Group 1 of the Central Interoceanic Hub, in order to unify criteria and agree on actions to improve the effectiveness and efficiency of border crossings.

The possibility of further studies corresponding to the PSI of Air Transportation over the area of Peru, Bolivia, and Chile was identified, focusing on the facilitation of intra-regional Andean tourism.

It was deemed appropriate to apply the methodology of Strategic Environmental Evaluation in Groups 1, 3, and 4, as well as the methodology of Productive and Logistics Integration and Productive Chains in Group 3.

3.7 MERCOSUR-Chile Hub

On September 25th, 2007, the meeting of the Technical Executive Group (GTE) of the MERCOSUR-Chile Hub took place in the city of Santiago de Chile. The Hub's updated Business Vision (VN) was presented and the group work was begun.

In the updated VN, the MERCOSUR-Chile Hub presents an area of influence with a surface of 3.1 million km² and a population of 133 million inhabitants, representing 25% of the surface of the countries of the Hub and 53% of their population.

The road network in the Hub has a length of 2.1 million km of which 9.3% are paved (192,000 km). Nearly 70% of the vehicles in the countries are registered in the Hub. The transportation infrastructure has a high degree of consolidation. Nevertheless, there are limitations (capacity and state of infrastructure) in specific sectors and at the entrances to the main urban centers. International transportation is also affected at the border crossings due to normative, operative, and infrastructure constraints, which delay the crossing.

The railway network in the countries of the Hub amounts to 75,000 km with a high concentration in Argentina and Brazil. There are railway lines throughout the Hub. However, there are also different gauges, which hinders operation. In addition, there are areas in regular or bad condition.

The railways have undergone diverse transformations. Their use for moving essential cargo, which is particularly suited for railway transportation (due to high volume, low unit value, use of containers, etc.), is increasingly evident, whereas passenger transportation has received practically no attention. In intra-regional transport, the railways play a limited role, but there are great expectations for greater use.

The ports located in the Hub are a basic element to facilitate foreign trade. A significant percentage of the movement in the Hub takes place through waterways. Port operations have improved at regional level, but according to the existing data on competitiveness, this operation still offers much room for improvement, especially in terms of access channels and land access to port terminals.

In reference to energy issues, some aspects stood out in the VN. Energy consumption is growing in the area of influence of the Hub, although the installed capacity of electrical generation also shows an increasing trend, mainly the generation of hydroelectric energy. The countries of the Hub have long experience in coordinating actions for projects of energy integration. In this regard, there still is opportunity to develop projects of electrical integration, as well as potential for development of regional pipelines. Another activity that emerges as an economic alternative of great potential is the production of biofuels.

In the field of communications, the recent trend has led to the penetration of the Internet to conduct business and the increase in mobile phone use, which is similar in all of the countries. In Brazil, there are 38.8 million phone lines and 99.9 million mobile phone lines. In Paraguay, there are 331,000 phone lines and 3.2 million mobile phone lines.

During the revision of the projects of the MERCOSUR-Chile Hub, an important modification was decided: the incorporation of a new Group of Projects submitted by the Delegation from Argentina. Thus, Group 6, *Pehuenche*, was formed. The following is the result of the revision of the Portfolio of the MERCOSUR-Chile Hub.

Group 1: Belo Horizonte - Argentina/Brazil border - Buenos Aires

Two new projects were incorporated into the Group (“*Enlargement: Pedro Juan Caballero airport*” and “*Guarani airport - Regional Cargo Hub*”), and two others were moved from the Capricorn Hub (“*Asunción airport*”) and from the Paraguay-Paraná Waterway Hub (“*Encarnación airport*”) to form a cluster of airports in Paraguay with the purpose of meeting the regional demand.

Table 20 – **Group 1 - Projects (changes)**

Project	Total Investment (US\$ millions)
Modernization: Asunción international airport	60.0
Enlargement: Pedro Juan Caballero airport	N/A
Airport: Guaraní - Regional Freight Hub	N/A
Airport: Encarnación	N/A

Group 2: Porto Alegre - Argentina/Uruguay border - Buenos Aires

Group 2 underwent some important changes, among these the inclusion of nine new projects. One project was moved to Group 5 of the Paraguay-Paraná Waterway Hub (“*Nueva Palmira area - port*”) and the project “*Bridge: Buenos Aires – Colonia*” was eliminated from the group. Additionally, the project called “*Combined-cycle thermal power station: San José*” was substituted by “*Combined-cycle thermal power station: Puntas del Tigre*”, already completed. Table 21 shows the modifications.

Table 21 – **Group 2 - Projects (changes)**

Project	Total Investment (US\$ millions)
Combined-cycle thermal power station: Puntas del Tigre	170.0
Multimodal transportation in Laguna Merín and Laguna de los Patos system	N/A
Enlargement: Colonia port (docks, dredging and incorporation of areas)	46.0
Puerto Sauce de Juan Lacaze	10.0
Montevideo port (complementary works)	44.0

Project	Total Investment (US\$ millions)
Movement: Fishing Terminal - Montevideo	35.0
Building of a dry port near the Montevideo port	40.0
Refitting of railway: Sudriers - La Paloma	12.0
International station: Rivera - Santana do Livramento	N/A
Railways for integration	247.0

Group 3: Valparaíso - Buenos Aires

In Group 3, it was agreed to transfer four projects to the new Group 6 of the same MERCOSUR-Chile Hub (“*Implementation of Integrated Control at Pehuenche border crossing*”, “*Paving of National Road No. 40 South, Section: Malargüe - border with Neuquén*”, “*Paving of National Road No. 145, Intersection: National Road No. 40 South - Access to Pehuenche border crossing*”, and “*Paving of the section: Puente Armerillo - Pehuenche border crossing. Road CH115*”). Additionally, it is worth mentioning the elimination of the project “*Detour: shed-tunnel, complex: Los Libertadores - Argentinean border*”.

Group 4: Mercedes - Santa Fe - Salto - Paysandú

Seven new projects were incorporated into this Group. Table 22 shows the modifications.

Table 22 – **Group 4 - Projects (changes)**

Project	Total Investment (US\$ millions)
Improvement of National Road 38, section: Córdoba - Patquia	100.0
Paving of National Road 150. Province of San Juan	100.0
Paving of National Road 76, Vinchina (Chilean border), Province of La Rioja	100.0
Restoration and refitting of sections: A2, A10, A7 of Belgrano railway (freight)	225.0
Extension and adaptation of the airport in Salto	N/A

Project	Total Investment (US\$ millions)
Improvement: Border Crossing in Paysandú	0.8
Duplication National Road 19: Section National Road 11 - Córdoba	S/D

Group 5: Energy Group

Four new projects were included in this Group. In addition, two projects were moved to and incorporated into Group 3 of the Capricorn Hub (“*Transmission Line 500 KW: Yacyretá - Ayolas - Carayao*” and “*Installation of Machinery in Iguazú Reservoir*”). Table 23 shows the projects incorporated into the Group.

Table 23 – **Group 5 - Projects (changes)**

Project	Total Investment (US\$ millions)
Nuclear power station: Atucha 2 (Argentina)	500.0
Installation of a LNG regasification plant in Uruguay	600.0
Base thermal station for Uruguay - 400 MW	N/A
Small hydroelectric stations: Centurión and Talavera, 65 MW, Jaguarão river	60.0

Group 6: Pehuenche

The main change in the MERCOSUR-Chile Hub was the addition of the new Group 6, called “*Pehuenche*”. As it was a new group, a Strategic Function was defined, and an Anchor Project was selected.

Strategic-Function:

- *To provide connectivity alternatives and services to the trade flows among the countries of the MERCOSUR and Chile.*

Anchor Project:

- *“Paving of the access roads to the Pehuenche border crossing” (“Paving of National Road No. 145, Intersection: National Road No. 40 South - Access to Pehuenche border crossing” and “Paving of the section: Puente Armerillo - Pehuenche border crossing. Road CH115”).*

To form this Group, four projects migrated from Group 3 of the same MERCOSUR-Chile Hub (“*Implementation of Integrated Control at Pehuenche border crossing*”, “*Paving of National Road*”).

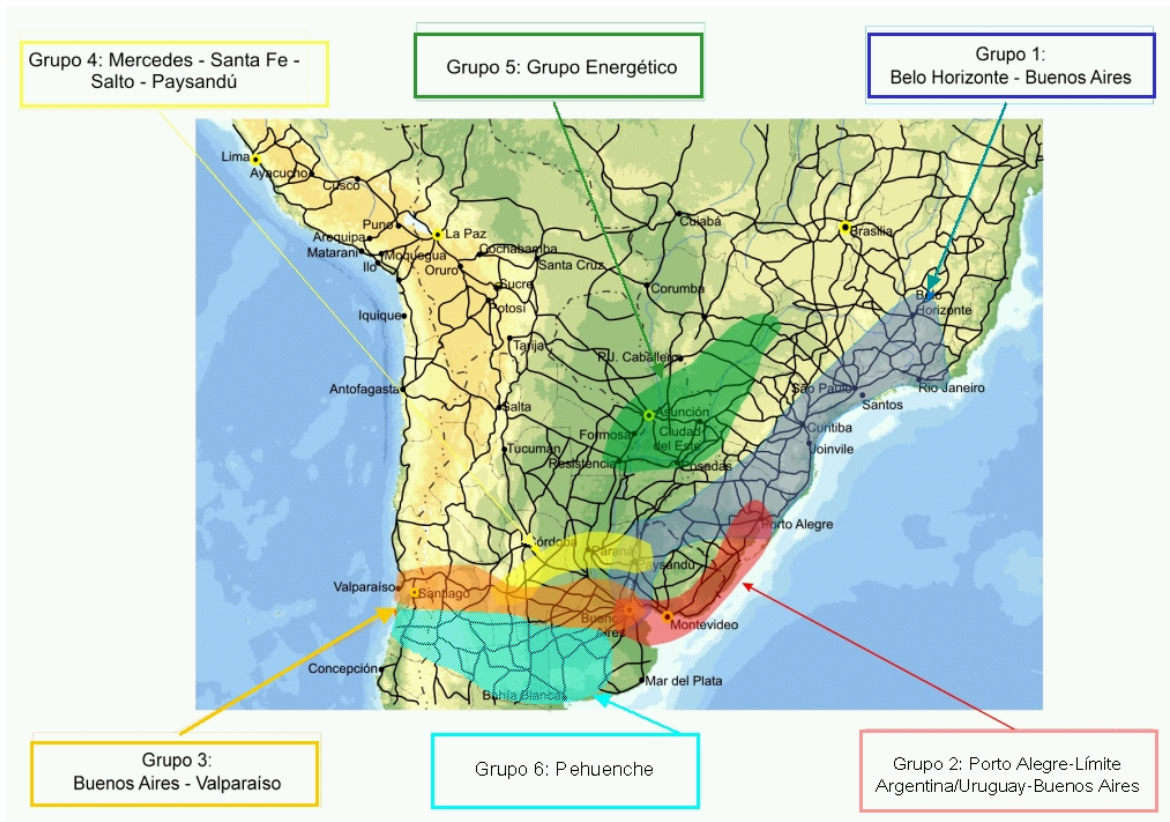
No. 145, Intersection: National Road No. 40 South - Access to Pehuenche border crossing”, “Paving of the section: Puente Armerillo - Pehuenche border crossing, Road CH115” and “Paving of National Road No. 40 South, Section: Malargüe - border with Neuquén”), and four new projects joined the Group. Table 24 shows the projects of Group 6.

Table 24 – **Group 6 - Projects (New Group)**

Project	Total Investment (US\$ millions)
Implementation of the Integrated Control in Paso Pehuenche	N/A
Paving of South National Road 40, Section: Malargüe - Neuquén border	110.0
Paving of National Road 145: Intersection South National Road 40 - Access to Pehuenche crossing (Anchor Project)	80.0
Paving of the section: Puente Armerillo - Pehuenche. Road: CH 115 (Anchor Project)	60.0
Road corridor: San Nicolás /Zárate - Pehuenche crossing	N/A
Railway corridors: Access to Mar del Plata and Quequén ports	N/A
Enlargement: Mar del Plata port	N/A
Improvement: Quequén port	N/A

The following map shows the modified Groups with the addition of Group 6, after the meeting of the GTE of the MERCOSUR-Chile Hub.

Map 4 - Groups of the MERCOSUR-Chile Hub (changed)



With regard to the PSIs issues and the identification of Groups of Projects eligible for the implementation of new planning methodologies, the work group indicated:

- ✓ In the PSI of Air Transportation, the possibility was discussed of moving forward with the analysis of two specific cases: “*Cargo Hubs*” in Guaraní and “*Passenger Hubs*”.
- ✓ In the PSI of Multimodal Transportation, there were proposals to study the Bahía Blanca and Sauce ports.
- ✓ In the PSI of Energy Integration, the possibility was discussed of analyzing the energy market, through a particular case: “*Marketing of Energy between Paraguay and Uruguay*”.
- ✓ In the PSI of facilitation of Border Crossings, it was agreed to continue with the work in the *Cristo Redentor system*.

3.8 Peru-Brazil-Bolivia Hub

On the 25th April 2007, the meeting of the Technical Executive Group (GTE, in Spanish) of the Peru-Brazil-Bolivia Hub took place in the city of Lima, Peru.

The Peru-Brazil-Bolivia Hub has an area of influence with a surface of 3.5 million of km² and a population of 13.3 million of inhabitants.

The projects of the Hub are concentrated in emerging territorial spaces. The potential of these projects is especially conditioned by the development of productive activities that generate relevant

flows. Nevertheless, as the Hub is located in the Amazon territory, a place of great value and ecologic vulnerability, it is urgent to favor a new paradigm of sustainable economy as opposed to the traditional paradigm of expansion of the agricultural border. In this way, the projects of the Hub and the complementary actions shall be planned to enlarge the presence of the State and the regulation of the economic activities in general as well as to support the new Amazon region economy.

Three different dynamics may be observed for the future of the Hub and especially for the territory of Group 1. Shorter-term primary Dynamics: Madre de Dios - Acre - Pando (MAP, in Spanish), with a basic improved supply, increase of scale for the development of a sustainable Amazon region economy. Short-medium term secondary Dynamics: coast-mountain range-jungle complementarity, with extension of the inter-regional commerce, arising of more complex productive chains, with higher added value and more advanced logistics. Finally, longer-term tertiary Dynamics: restructuring of the logistics of the great agricultural-industrial flows from Brazil to the Pacific Basin.

As regards the revision process of the Groups of Projects of the Hub, some modifications were proposed (separation and fusion of projects) as well as the inclusion of new projects, as detailed below.

Group 1: Corridor: Porto Velho - Río Branco - Puerto Asís - Puerto Maldonado - Cuzco / Juliaca - Pacific ports

In Group 1, two new energy projects were incorporated to the portfolio of the Group, the projects “Transmission Line: San Gabán - Puerto Maldonado”, currently in the tender phase, and “Transmission Line: Puerto Maldonado - Brazil Border”, under profile phase. The following projects were also included: “Improvement: Juliaca airport” and “Improvement: Arequipa airport”, which were transferred from Group 9 of the Andean Hub.

Table 25 - Group 1 - Projects (changes)

Project	Total Investment (US\$ millions)
Transmission line: San Gabán - Puerto Maldonado	N/A
Transmission line: Puerto Maldonado - Brazilian border	N/A
Improvement: Juliaca airport	12.0
Improvement: Arequipa airport	18.0

Group 2: Corridor: Río Branco - Cobija - Riberalta - Yucumo - La Paz

The first agreed change was the separation of the Anchor Project into two independent projects (i) “Road: Guayaramerín - Riberalta-Yucumo - La Paz” and (ii) “Binational Bridge over Mamoré river between Guayaramerín and Guajara-Mirin”. With this modification, the Anchor Project becomes a new project: “Binational Bridge over Mamoré river between Guayaramerín and Guajara-Mirin”. The Strategic Function was also modified, as detailed as follows.

Table 26 - Group 2 - Projects (changes)

Project	Total Investment (US\$ millions)
Road: Guayaramerín - Riberalta - Yucumo - La Paz	N/A
Binational bridge over Mamoré river, between Guayaramerín and Guajara-Mirin	N/A

Strategic Function:

- *Opening new possibilities for the socio-economic development of the MAP region through its link with the Central Bolivian Hub.*

Anchor Project:

- *“Binational Bridge over Mamoré river between Guayaramerín and Guajara-Mirin”.*

Group 3: River Corridor: Madeira - Madre de Dios - Beni

Two important modifications were agreed in existing projects in the Group: (i) The project “Navigation of Madeira river between Porto Velho and Guayaramerín” was modified to “Navigation of Madeira river between Porto Velho and Guayaramerín including locks for navigation in hydroelectric stations”; (ii) the project “Hydroelectric Complex of Madeira river including locks for navigation” was modified to “Hydroelectric Complex of Madeira river (1^o Hydroelectric station ‘Santo Antonio’)”. This modification was incorporated in order to separate the sectoral costs and responsibilities (energy and transportation) of the two components of the original project - Hydroelectric Station and Waterway.

Table 27 – Group 3 - Projects (changes)

Project	Total Investment (US\$ millions)
Navigability of Madeira river, between Porto Velho and Guayaramerín, including locks for navigation in hydroelectric stations	800.0
Hydroelectric station: Madeira river (Hydroelectric stations in Santo Antonio - 3,326 MW and Jirau - 3,168 MW)	10,500.0

In relation to Strategic Function of the Group of Projects, it was proposed to include an additional function; so, the **Strategic Function** of Group 3 stays as follows:

- *To consolidate a way of international river integration affecting mainly the transportation logistics and the socio-economic development of the regions: Madre de Dios, in Peru, Rondônia, in Brazil, and Pando and Beni in Bolivia.*
- *To facilitate the change of the energy matrix increasing the offer of renewable energy in the region.*

In relation to the issues of the PSIs (in Spanish) and to the identification of the Groups of Project selected to apply the new planning methodologies, the work group identified some relevant aspects for the Hub.

- ✓ It was agreed that the facilitation of the border crossings shall be a key issue for the development of the Hub. To this aim, it was agreed that, with the support of the Brazilian delegation, it shall be prepared a proposal for the organization of a workshop on exchange of experience about this issue, focusing the attention on the specific dynamics of Group 1 of the Hub, so as to make possible the unification of criteria and to promote actions tending to improve the efficacy and efficiency of the border crossings. This activity could be coordinated with other EIDs (in Spanish).
- ✓ The Brazilian delegation, in turn, showed interest in re-examining the possibilities of a regional electrical interconnection. According to this purpose, it shall elaborate a proposal to be considered by the National Coordination of the IIRSA.
- ✓ Like in the Central Interoceanic Hub, in this Hub, it is especially important the development of the systems of regional air transport. As a consequence, it would be convenient to coordinate this issue with the works carried out within the scope of the Central Interoceanic Hub.
- ✓ Finally, it was considered convenient to explore the possibility of applying the methodologies of productive and logistics integration in Group 1 or Group 2, focusing on the development of productive complements between the mountain range and the jungle.

3.9 Paraguay-Paraná Waterway Hub

On 21st and 22nd August 2007, the meeting of the Technical Executive Group (GTE, in Spanish) of the Paraguay-Paraná Waterway Hub took place in the city of Santa Cruz de la Sierra, Bolivia, with the aim of initiating the process of indicative territorial planning of the IIRSA for the Hub.

In this meeting of the GTE (in Spanish), regarding the Waterway Hub, the first stage of the planning process was completed, where the projects of transportation, energy and communication were identified; the Project Group of each Hub with their corresponding Strategic Function and Anchor Project were defined; and the aspects of the PSIs (in Spanish) which are relevant for each group of project were identified. In a later GTE, the planning process of this Hub will be completed in order to obtain a wider comprehension of the Groups of Project contribution to the physical integration and the sustainable development of the countries.

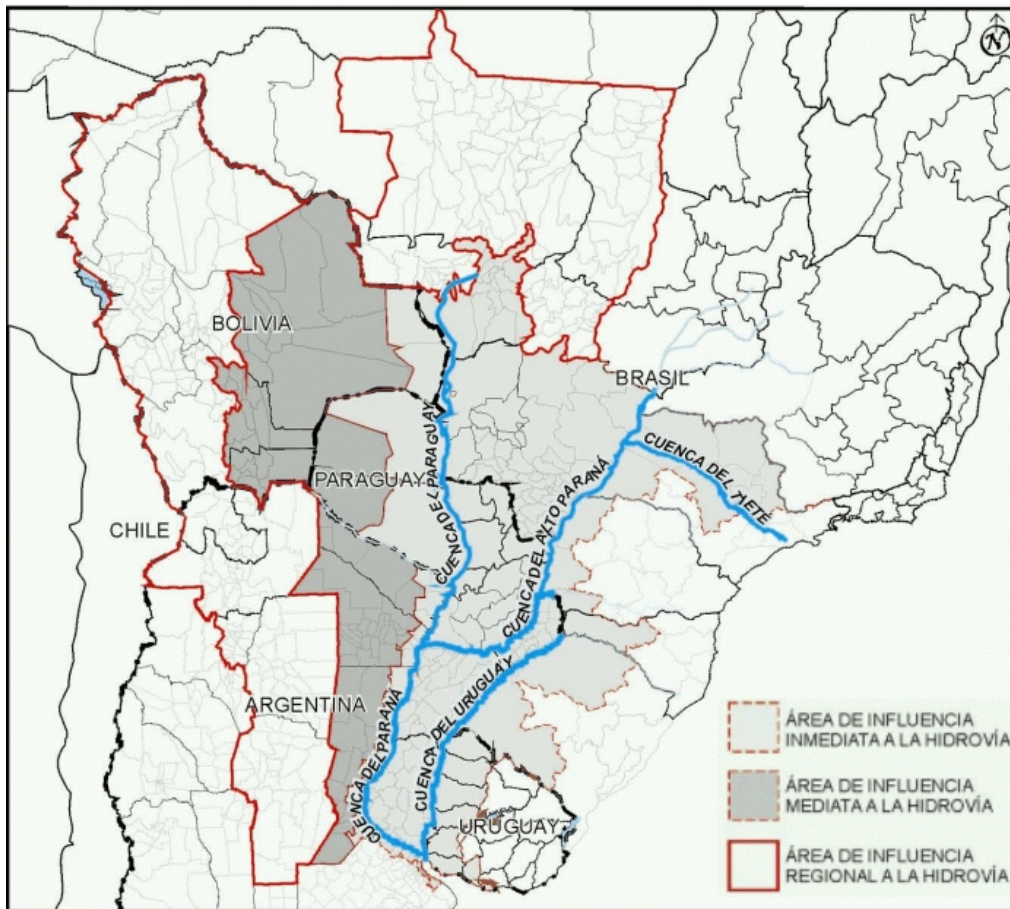
In accordance with the methodology of indicative planning of the IIRSA, the works were begun with the presentation of the updated Business Vision of the Hub (VN, in Spanish). For this purpose, it was used an extension of the work carried out during the year 2005, which was presented in the First GTE of the HPP.



The territory considered as part of the Hub includes the areas of influence of the basins of the following rivers: Paraguay, Paraná, Tieté and Uruguay. The immediate surface is: 691,065 km²; however, the Groups of Projects defined by the countries of the Hub are formed within the area that covers the nearby surface. The area covers 2.2 million of km² and reaches the 16.3 % of the total area of the five countries. The population of the nearby area of influence reaches to 38.5 million of inhabitants, which accounts for the 15.9 % of the total population of the 5 countries that represent the HPP Hub.

The Hub could have an influence over a wider area in the region. So, the regional surface would reach 4 million of km², which accounts for 28.7% of the total area of the five countries with a population of 97.6 million of inhabitants.

Map 5 – Influence Area of the Paraguay-Paraná Waterway Hub



The first remark that arises from the analysis of the enlarged area of the Hub is that the West region of the Hub is the area of main economic density (greater weight of the PIB and of the population) although, from the point of view of river transportation as an articulating element, it is much less developed by the presence of Itaipú. In this way, as Tieté river, as Alto Paraná and Uruguay river, have less traffic density with Paraguay-Paraná system. This aspect was important to form Groups 2, 4 and 5, as it shall be further appreciated.

The VN clearly shows that the importance of river transportation in the area of influence of the Hub shall be specially increased as far as the projects that allow the continuous development of these ways of transportation shall be executed (dredging of critical crossings, accesses and improvements

of the ports, beltways in port cities, etc.). On the other hand, there is a challenge in the recovering of the networks of road and railway infrastructure since they show, in the entire Hub, an increasing level of obsolescence and insufficiency. This situation is leading to real “bottlenecks” in many accesses to ports in the Region, as well as to slower speed of the vehicles, sensibly increasing the cost of transportation.

The Paraguay-Paraná Waterway Hub has the great potential to become the articulating North-South Hub of the transverse Hubs (Central Interoceanic, Capricorn and MERCOSUR-Chile hubs), being necessary to adapt the transference nodes to railways, roads and ports, especially those that have essential importance: Puerto Suárez - Corumbá; Asunción - Clorinda; Resistencia - Corrientes and Rosario Victoria and the Transposition of Itaipú.

In the area of the Hub, there is a concentration of an important contingent of binational hydroelectric stations. However, there exists a potential of energy integration in the area of influence of the Hub, not only of electric power, but also of gas, as well as the increasing of the production and the use of biofuels.

In relation to the environmental issues, the VN aims to some sensibilities in the area of influence of the HPP Hub, such as: floods due to the overflow of big rivers, lack of networks of drinking water and systems of excreta, pollution of riverbed of superficial and underground water, regional hydric stress, deviation of water of big rivers, sedimentation of rivers with overflow and floods, overexploitation of the Guaraní Aquifer, soils washing - lixiviation due to excess of rain and friable soils, drying of marshy areas (wet), deforestation of native woods, lost of biodiversity due to the widening of the agricultural border. Therefore, the socio-environmental matters are present in the development of the projects of the Hub making it necessary the application of appropriate mechanisms of evaluation, mitigating and monitoring of the projects.

In the Planning Group of Work, the representatives from Argentina, Bolivia, Brazil, Paraguay and Uruguay agreed the territorial division of the HPP Hub into five Groups. The Groups of Projects were established in relation to the basins of the Uruguay, Tieté, Paraná and Paraguay rivers, which are part of the territory; in this way, the five established groups were identified as follows:

- ✓ **Group 1:** Paraguay river, Asunción - Corumbá
- ✓ **Group 2:** Tieté - Paraná (Itaipú)
- ✓ **Group 3:** Paraguay - Paraná rivers, Asunción – Paraná Delta
- ✓ **Group 4:** Paraná river, Itaipú - Confluencia
- ✓ **Group 5:** Uruguay river

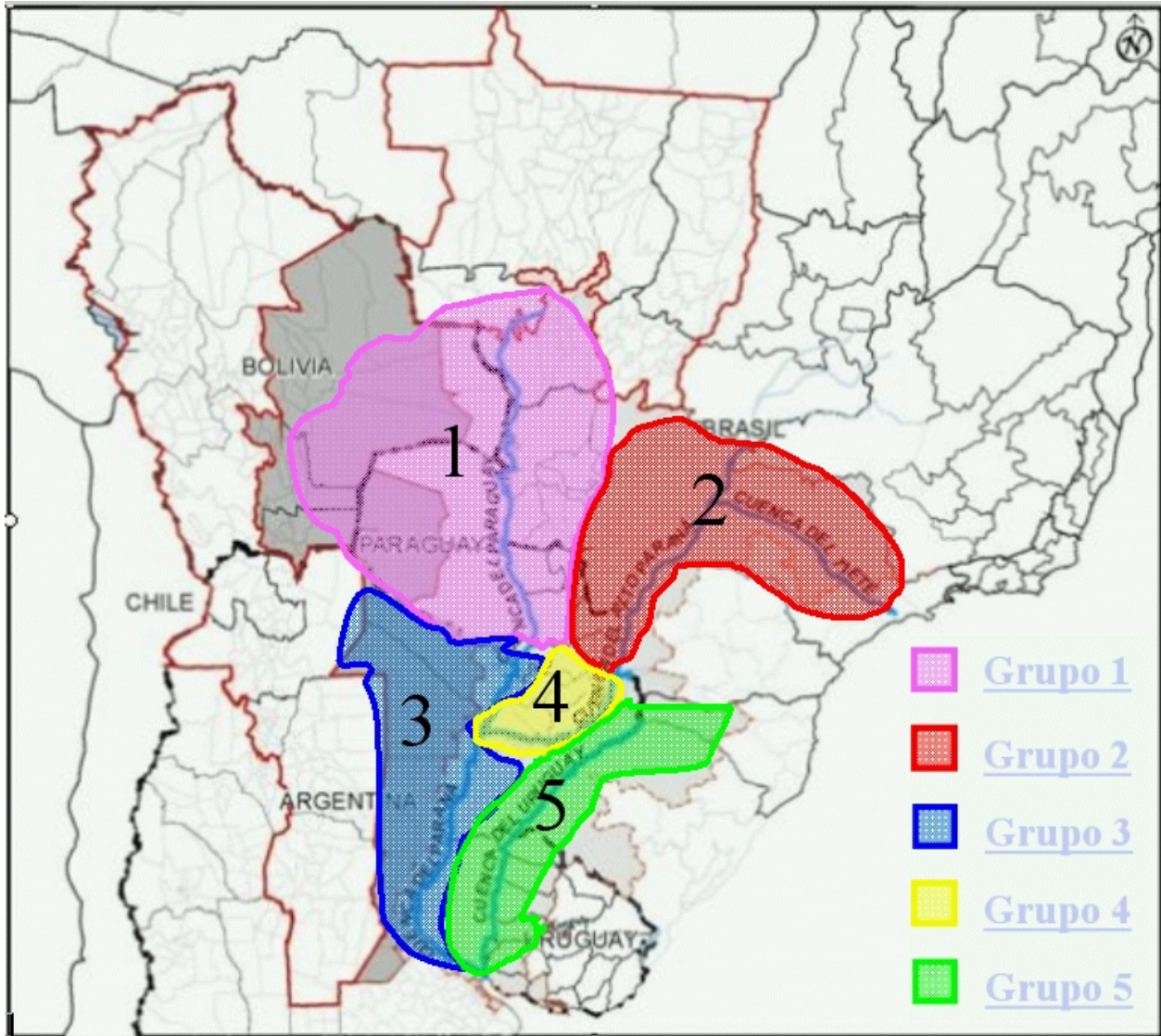
The definition of the Groups of Projects was carried out in a simpler way - and before the definition of the projects that should be the basis for the definition of the Groups - according to the geographic characteristics of the Hub, due to the existence of the five principal basins mentioned before.

For each of the five identified Groups, the following items were established: (i) the Strategic Function; (ii) the set of projects that according to their synergies should belong to the pre-selected Group; and (iii) the Anchor Project of each Group.

Map 6 shows, approximately, the area of the Project Groups of the Paraguay-Paraná Waterway Hub.



Map 6 – Groups of the Paraguay-Paraná Waterway Hub



The final composition of the projects of the Paraguay-Paraná Waterway Hub was the result of the selection of new projects, the transfer of projects from other Hubs of the Initiative to this Hub, as well as the later removal of projects from this Hub that became part of the MERCOSUR-Chile Hub. After the work was completed, 98 projects were identified.

Table 28 shows the total number of projects identified per each Group of Project of the Hub and per each type and subtype of project.

Table 28 - Synthesis of the Projects of the Paraguay-Paraná Waterway Hub

Group	N° Projects	TICs	Energy	Railway	River	Multi-modal	Port	Road
Group 1: <i>Paraguay river, Asunción-Corumbá</i>	11	1	0	1	4	0	1	4
Group 2: <i>Tieté-Paraná (Itaipú)</i>	21	0	1	5	3	1	6	5
Group 3: <i>Paraguay-Paraná rivers, Asunción-Paraná Delta</i>	36	2	3	8	3	0	12	8
Group 4: <i>Paraná river, Itaipú-Confluencia</i>	14	0	0	1	3	0	7	3
Group 5: <i>Uruguay river</i>	16	0	1	3	4	0	7	1
Total	98	3	5	18	17	1	33	21

Below, there is a detail of the Groups of Projects of the Paraguay-Paraná Waterway Hub.

Group 1: Paraguay river, Asunción - Corumbá

Strategic Function:

- *To improve the economic and social integration of the regions of Paraguay, Bolivia and Brazil that share the basin.*
- *To strengthen and stimulate the integration of the productive chains along the Hub.*
- *To strengthen the competitiveness of the countries and Mediterranean regions through an efficient connection with the Atlantic.*

Anchor Project:

- *“Binational Project: Improvement of Navigability of Paraguay river, Asunción - Apa”.*

Table 29 - Group 1 - Projects

Project	Total Investment (US\$ millions)
Binational project: Improvement of Navigability of Paraguay river, Asunción - Apa (Anchor Project)	N/A
Building of the project: Motacucito – Mutún - Busch port (railway and port)	138.0

Project	Total Investment (US\$ millions)
Artificial channel: Mutún - Busch port	136.0
Paving: Puerto Suárez - Mutún	18.8
Development of the infrastructure of the future Bolivian Tax Free Zone in Zárate(*)	N/A
System for the prediction of levels for navigation in Paraguay river (Apa - upstream)	N/A
Improvement in the navigability of Paraguay river between Apa and Corumbá	N/A
Communication system of Paraguay river (Asunción - upstream)	N/A
Paving of the Road Section: San Estanislao - Puerto Rosario (Puerto Rosario Road)	N/A
Paving of the road section: Santa Rosa - Puerto Antequera (Road 11)	N/A
Paving of road: Concepción Vallemí	N/A

(*) The definitive inclusion of the Project will depend on the results of the bilateral discussions.

Note: The project “*Dredging of the Tamengo Hydrologic System*” could be included in this group once the bilateral discussions between both countries have been concluded.

Group 2: Tieté - Paraná (Itaipú)

Strategic Function:

- *To strengthen the socio-economic dynamics of the area of influence of the group.*
- *To improve the integration of the productive and consumption area of the Tieté and Paraná basins.*
- *To strengthen the competitiveness of the countries and Mediterranean regions through an efficient connection with the Atlantic.*

Anchor Project:

- *“Binational Project: Transposition of Itaipú”.*



Table 30 - **Group 2 - Projects**

Project	Total Investment <i>(US\$ millions)</i>
Binational project: Movement of Itaipú (Anchor Project)	N/A
São Paulo hydroelectric reservoir (Paraná river)	N/A
Railway access to the Multimodal Terminal in Sta. Terezinha de Itaipú	N/A
Railway between Guaíra and Cianorte	N/A
Railway between Panorama and Adamantina	N/A
Railway between Presidente Epitácio and Presidente Prudente	N/A
Improvement in the navigability of Alto Paraná river (Itaipú, upstream)	N/A
Building of the railway: Cascavel - Foz de Iguazú and Cascavel - Guaira <i>(Hinge Project (Proyecto “Rótula”) with Group 4 of the Capricorn Hub)</i>	N/A
Improvement of navigability: Tieté river	N/A
Enlargement: Bataguazú port (MS) in Alto Paraná river	N/A
Puerto del Mundo Novo (Alto Paraná river)	N/A
Port terminal: Santa Teresina, in the Itaipú lake	N/A
State port terminal in the region of Alto Paraná, in the Itaipú lake	N/A
Road access to the terminal in Santa Terezinha de Itaipú	N/A
BR-277: Santa Terezinha de Itaipú - Cascavel	N/A
Puente Epitácio: Enlargement of port and canal	N/A
SP-270: Ourinhos - Presidente Epitácio	N/A

Project	Total Investment (US\$ millions)
Navigability of Paraná river	N/A
Enlargement: Puerto Indio	N/A
Refitting: Saltos del Guairá port	N/A
Paving: Section II	N/A

Group 3: Paraguay - Paraná rivers, Asunción - Paraná Delta

Strategic Function:

- *To strengthen and stimulate the integration of the productive chains along the Hub.*
- *To make easier the integration of the countries and Mediterranean regions to the global markets through an efficient connection with the Atlantic.*
- *To improve the efficiency of the productive system in the region and the quality of life of the populations in the area of influence of the group.*

Anchor Project:

- *“Binational Project: Improvement of Navigability of Paraná river from Santa Fe to Asunción”.*

Table 31 - Group 3 - Projects

Project	Total Investment (US\$ millions)
Binational project: Improvement of navigability of Paraná river, from Santa Fe to Asunción (Anchor Project)	N/A
Improvement of the communication system in Paraná river (between Santa Fe and Confluencia)	N/A
Belgrano Thermoelectric Station in Campana	650.00
San Martín Thermoelectric Station in Timbúes	500.00
Transforming station in Mercedes	25.00



Project	Total Investment (US\$ millions)
Recovery of the section: Paraná - Curuzú Cuatiá	N/A
Recovery of the section: Tucumán - Rosario	N/A
Recovery of the section: Zárate - Rosario	N/A
Recovering and dual gage of the railway section: Corrientes - Monte Caseros	N/A
Reordering of railway accesses: city of Rosario	N/A
Reordering of railway accesses: city of Santa Fe	N/A
Paving of the road system to access to the ports in Paraná river	N/A
Deepening of the draft of Paraná river, from Santa Fe to the river mouth of the Río de la Plata	110.00
Enlargement: Baradero port	N/A
Enlargement: Ibicuy port	N/A
Enlargement: San Pedro port	N/A
Enlargement: Diamante port	N/A
Enlargement and modernization: Corrientes port	10.00
Master Plan: Rosario port	N/A
Refitting: Bella Vista port	10.00
Refitting: Esquina port	7.00
Refitting: Formosa port	N/A



Project	Total Investment <i>(US\$ millions)</i>
Restructuring: Santa Fe port	N/A
Fender system: Barranqueras port	N/A
Beltway: city of Formosa	N/A
Beltway: city of Santa Fe	N/A
Building of a beltway in Rosario	600.00
Paving of National Road: 11, section: Intersection: National Road: 89 - M. Belén	N/A
Paving of National Road: 11, section: Santa Fe - San Justo	N/A
Paving of Provincial Road: 13, intersection: National Road 11 - Villa Ángela	90.00
Paving of Provincial Road: 19, Colonia Cano - El Colorado	N/A
Communication system in Paraguay river (Asunción - Confluencia)	N/A
Optimization of the port terminal system in Asunción (land and river accesses; location of terminals)	N/A
Paving: Villeta - Alberdi	N/A
Refitting and improvement of the railway corridor: Asunción - Montevideo	N/A
Building of the railway: Asunción - Posadas	N/A

Group 4: Paraná river, Itaipú - Confluencia

Strategic Function:

- *To strengthen the socio-economic dynamics of the area of influence of the group.*
- *To improve the integration of the productive and consumption areas of the Tieté and Paraná basins.*
- *To strengthen the competitiveness of the countries and Mediterranean regions through an efficient connection with the Atlantic.*

Anchor Project:

- *“Binational Project: Improvement of Navigability in the Alto Paraná”.*

Table 32 – **Group 4 - Projects**

Project	Total Investment <i>(US\$ millions)</i>
Binational project: Improvement in the navigability of Alto Paraná (Anchor Project)	N/A
Enlargement: El Dorado port	N/A
Enlargement: Ituzaingó port	27.0
Enlargement: Ita-Ibaté port	9.0
Modernization: Iguazú port	N/A
Restructuring: Posadas and Santa Ana ports	N/A
Locks in Corpus (binational project)	N/A
Road accesses to Encarnación (*)	1.0
Encarnación port (*)	6.0
Relocation of the railway network (*)	3.0
Diverting: Aguapey river (*)	64.0



Project	Total Investment (US\$ millions)
Building of the Kaarendy port, Paraná river	N/A
Paving of road section: Pte. Franco - M. Otaño - Natalio and access to 9 ports, Paraná river	N/A

(*) Works that are complementary to Yacyretá

Group 5: Uruguay river³

Strategic Function:

- *To strengthen the socio-economic dynamics of the area of influence of the group.*
- *To implement an efficient regional system of river and port activities in relation to the outfall to the Atlantic Ocean.*

Anchor Project:

- *“Binational Project: Improvement of Navigability of Uruguay river”.*

Table 33– **Group 5 - Projects**

Project	Total Investment (US\$ millions)
Binational project: Improvement of navigability in Uruguay river (Anchor Project)	40.0
Recovery of railway section: Zárate - Posadas	N/A
Improvement in river accesses to ports in Uruguay river	N/A
Enlargement: San Javier port	N/A
Landing place: Alvear port	N/A
Improvements: Concepción del Uruguay port	N/A

³ The mention of Group 5 Projects is temporary. The definitive inclusion of those projects is subject to analysis and revision by the countries involved in the group.

Project	Total Investment (US\$ millions)
Building of lock in Salto Grande (Binational Project)	300.0
Gas pipeline: Paysandú - Colonia	N/A
Building of the railway section: Mercedes - Nueva Palmira port	50.0
Refitting of the railway section: Algorta - Paysandú - Salto	10.0
Design and building of the alternative canal: Casa Blanca	3.0
Enlargement of the port facilities in Fray Bentos	N/A
Improvement of port accesses and infrastructure in Nueva Palmira port	10.0
New start-up of the Paysandú ports, accesses and storage area	5.0
New start-up of the Salto ports, accesses and storage area	N/A
Road beltway: Nueva Palmira and land access system to the ports	6.0

In relation to the Integration Sectoral Projects (PSIs, in Spanish) some issues were identified, which are detailed in the following table:

Table 34 - **Integration Sectoral Processes**

ID	Integration Sectoral Processes	From a Group of Projects debate
PSI - Multimodal Transportation		
1	<i>Study on the feasibility of Bolivian operator/s - freight</i>	1
2	<i>Learning of the rules of the HPP Agreement</i>	1, 3, 5
3	<i>To develop a regulatory system for the operation of the waterways of the group among: AR, BR and PY</i>	2, 4
4	<i>Optimum design of ships for the navigation over Uruguay river</i>	5
5	<i>Optimum design of ships for the navigation over the HPP</i>	3



ID	Integration Sectoral Processes	From a Group of Projects debate
PSI - Border Crossings		
6	Border facilitation for river transportation	1, 3, 4, 5

4. TECHNICAL EXECUTIVE GROUPS (GTES, IN SPANISH) - IMPLEMENTATION

This part of the document is devoted to show the progress in the implementation and financing of the 31 projects of the Implementation Agenda Based on Consensus (AIC, in Spanish) and of the other projects of the portfolio: 2003-2006 (*portfolio in course*). The tables and maps presented as follows, illustrate the results of the countries effort to implant the 351 projects of the IIRSA Portfolio: 2003-2006.

The following important aspects must be highlighted:

- ✓ From the 31 projects that make up the AIC, 24 of them will be completed or in advanced progress by 2010 (the Initiative will be finished in this year).
- ✓ Four of the eight remaining projects would progress similarly to the previous ones, whenever during the year 2008 the necessary decisions and actions are made in order to make progress with the implementation of the investment planned in each project.
- ✓ On the contrary, and according to the current information, three of the projects of the AIC are not expected to be implemented by 2010.

Tables 35 and 36 present the situation of the 31 projects, according to the data of the System of Strategic Management (SIGE, in Spanish) of the AIC and Map 7 shows the projection of the progress of the AIC by 2010.

Table 35 – Progress in the Implementation of the Projects of the AIC by Hub

	No Projects	Completed	Under Execution	Bidding/ Concession	Under Prep.
Amazon	4	0	1	1	2
Andean	3	0	0	1	2
Capricorn	2	0	0	0	2
Guianese Shield	4	0	1	0	3
Central Interoceanic	7	0	4	0	3
Mercosur - Chile	7	0	3	1	3
Peru-Brazil-Bolivia	2	1	1	0	0
PSI	2	0	1	0	1
TOTAL	31	1	11	3	16

Table 36– Progress in the Implementation of the Projects of the AIC

	Project	Amount				
1	Duplication: Road 14	370.0				
2	Adaptation: Río Branco-Montevideo-Colonia–Nueva Palmira corridor	176.8				
3	Building of the International Bridge: Jaguarão-Río Branco	12.0				
4	Duplication of the section: Palhoça-Osorio (Mercosur road)	1,200.0				
5	Railway project: Los Andes-Mendoza	251.0				
6	International road: 60 CH (sector: Valparaíso-Los Andes)	286.0				
7	Argentinean Northeast Gas Pipeline	1,000.0				
8	Building of the Binational Bridge: Salvador Mazza-Yacuiba	10.0				
9	New Bridge: Presidente Franco-Porto Meira and Border Center	55.0				
10	Building of the road: Pailón-San José-Puerto Suárez	444.8				
11	Railway ring: São Paulo (North and South)	400.0				
12	Border crossing: Infante Rivarola-Cañada Oruro	1.2				
13	Road: Cañada Oruro-Villamontes-Tarija-Estac. Abaroa (1° stage)	60.0				
14	Road: Toledo-Pisiga	93.0				
15	Refitting of the road: Iquique-Colchane	37.0				
16	Refitting of the section: El Sillar	2.5				
17	Border Center: Desaguadero	7.5				
18	Border crossing: Cúcuta-San Antonio del Táchira	2.0				
19	Recovery of navigability along Meta river	108.0				
20	Road: Pasto-Mocoa–Puerto Asís	183.0				
21	Road: Paita-Tarapoto-Yurimaguas. Ports and logistics center	338.0				
22	Road. Lima-Tingo María-Pucallpa. Ports and logistics center	589.0				
23	Francisco de Orellana port	105.3				
24	Paving: Iñapari-Puerto Maldonado-Inambari	1,055.0				
25	Bridge over Acre river	12.0				
26	Road: Boa Vista-Bonfim-Lethem-Georgetown (1° stage: under study)	3.3				
27	Bridge over Takutu river	10.0				
28	Road: Venezuela (Ciudad Guayana)-Guyana (Georgetown)-Suriname (Paramaribo) (1° stage)	0.8				
29	Improvement in: New Nickerie-Paramaribo-Albina	105.0				
30	Exports through Postal Services for PYMES	2.5				
31	Implementation of the <i>Roaming</i> Agreement in South America	0.4				
		6,921.1				

Map 7 - Implementation Perspective of the AIC by 2010



Reference:

- Proyecto terminado o con avances significativos en 2010
- Proyecto pendiente de decisión política en la actualidad
- Proyecto con escaso avance o sin avances en 2010

Other relevant aspect is to ascertain whether the IIRSA is progressing in its aim of physically integrate the subcontinent. More than the 40% of the IIRSA Project Portfolio identified between 2003 and 2006 (in the first phase of the planning process) is being performed and with a defined financing.

The following two Tables show the progress of the Portfolio and the way its financing is composed of. Particularly, there is an issue that attracts attention: the effort of the National Treasures that are contributing to more than the 60% of the resources, while the private sector and the international financial institutions of the CCT are representing almost the 40% of the contribution.

Table 37 - **Implementation Progress of the IIRSA Portfolio, 2003-2006** ⁴

EID	IIRSA Portfolio, 2003-2005		Implementation (promised investment)		
	No of Proj.	Inv. (M USD)	No. of Proj.	% of Impl.	Estimated Inv. (US\$ millions)
Andean	73	6,164.6	29	39.7 %	2,617.4
Capricorn	36	2,898.3	18	50.0 %	1,643.6
Amazon	54	3,975.0	8	14.8 %	1,884.3
Guianese Shield	32	5,852.0	8	25.0 %	657.4
Southern	21	1,480.8	13	61.9 %	1,123.3
Central Interoceanic	44	4,423.8	21	47.7 %	3,077.2
Mercosur - Chile	71	18,759.0	39	54.9 %	8,647.4
Peru - Brazil - Bolivia	18	17,151.1	7	38.9 %	1,541.1
PSI	2	2.9	2	100.0 %	2.9
TOTAL	351	60,707.5	145	41.3%	21,194.6

Table 38 –**Sources of Financing for the Implementation of the IIRSA Portfolio**

EID	Investment (USD M)		Sources of Financing (USD M)				
	Amount	%	Treasure	Private	BID	CAF	FONPL.
Andean	2,617.4	12.3%	1,599.2	944.7	23.0	50.5	0.0
Capricorn	1,643.6	7.8%	812.4	12.0	540.0	144.2	135.0
Amazon	1,884.3	8.9%	1,313.6	410.7	160.0	0.0	0.0
Guianese Shield	657.4	3.1%	390.9	0.0	120.5	96.0	0.0
Southern	1,123.3	5.3%	1,104.3	0.0	0.0	0.0	0.0
Central Interoceanic	3,077.2	14.5%	2,379.8	114.3	77.0	506.1	0.0
Mercosur - Chile	8,647.4	40.8%	5,398.0	2,371.0	539.0	199.3	10.0
Peru-Brazil-Bolivia	1,541.1	7.3%	203.3	554.6	208.7	546.5	28.0
PSI	2.9	0.0%	1.0	0.0	1.9	0.0	0.0
Total	21,194.6		13,202.5	4,407.3	1,670.1	1,542.6	173.0

Finally, it is important to highlight that, during the last two years, new instruments to support the projects of the IIRSA Portfolio were created in the three institutions that are part of the CCT. The funds that were created allow non-refundable technical cooperations for the preparation of the projects, and the results, up to date, are highly positive, as it shall be appreciated in tables 39 to 41.

⁴ Updated based on the information generated during the GTEs in 2007.

Table 39 - **Support to pre-investment through the BID Integration Fund (FIRII)**

Operations Approved and Under Preparation		Total Investment (US\$,000)
1	Modernization program: Montevideo port	900
2	Final design and EIA Caranavi - Quiquibey - Yucumo	1,145
3	Access to Presidente Franco - Porto Meira port	1,200
4	Connectivity study: Chile - Argentina	960
5	Preparation of the Program: Pasto - Mocoa road	1,300
6	Pre-investment: Georgetown - Boa Vista road	900
7	Waterway System: Amazon river	640
8	Navigability studies: Napo river	800
9	Refitting studies: Meerzog - Albina road	1,500
10	Feasibility studies: Tieté - Paraná - Plata Waterway	165
11	Optimization of the Border Crossing: Cristo Redentor	482
12	Sustainable development: Metropolitan Arch, Rio de Janeiro	1,040
13	Pre-feasibility: expansion plan of Port of Santos	1,000
Total of operations - FIRII		12,032

Table 40 – Support to pre-investment through the Pro-Infrastructure Fund - CAF

Operations Approved and Under Preparation		Total Investment (US\$,000)
1	Update of studies on: Buga - Buenaventura	134
2	Preliminary study: Concession of Manta airport	10
3	Feasibility: Ravelo - Uncía - Llallagua road	1,000
4	Studies on geothermal generation: Laguna Colorada	419
5	Situation diagnosis: Border Crossings - Bolivia	25
6	Studies to improve the rendering of services in the border towns: Villa del Rosario and San Antonio - Ureña Hub	200
7	Evaluation model of transnational projects	150
8	Pre-feasibility: modernization: Patagonia Train	250
9	Pre-investment studies: Busch port project	2,500
10	Pre-investment: Nueva Independencia road - Colombia	300
11	Studies on the access roads to the new airport in Quito	300
12	Plan for the development of the border: Argentina - Bolivia	350
Total of operations - Pro-Infra		5,638

Table 41 – Support to pre-investment - FONPLATA

Operations Approved and Under Preparation		Total Investment <i>(US\$,000)</i>
1	Optimization study of the node: Ñeembucu - Bermejo river	603
2	Optimization study of the node: Clorinda - Asunción	603
3	Transposition study: Itaipú	400
Total of operations		1,606



ANNEX
IIRSA PROJECT PORTFOLIO - 2007



ANNEX: IIRSA PROJECT PORTFOLIO - 2007**A) ANDEAN HUB****Group 1: Connection: Venezuela (Northern Plains Hub) - Colombia (North Zone)**

	Project	Total Investment <i>(US\$ millions)</i>
1	Road corridor: Santa Marta - Paraguachón - Maracaibo - Barquisimeto - Acarigua (existing) (Anchor Project)	14.0
2	CEBAF of Paraguachón	2.0
		16.0

Group 2: Connection: Venezuela (Caracas) - Colombia (Bogotá) - Ecuador (Quito) (current road)

	Project	Total Investment <i>(US\$ millions)</i>
1	Implementation of the CEBAFs in the border crossings: Cúcuta - San Antonio and Tulcán - Ipiales (Rumichaca) (Anchor Project)	4.0
2	Connection: Cúcuta - Maracaibo	20.0
3	Refitting of the road: Cúcuta - Bucaramanga	72.0
4	Outlying corridor: Bogotá	58.0
5	Improvement: Bogotá - Girardot - Ibagué	528.0
6	Refitting: Popayán - Pasto - Rumichaca and improvement of crossing through Pasto	92.0
		774.0



Group 3: Connection: Venezuela (Orinoco Apure Hub) - Colombia (Bogotá) III (low-height corridor)

	Project	Total Investment (US\$ millions)
1	Border crossing: Saravena (Anchor Project)	3.3
2	Road section: Saravena - El Nula	16.0
3	Completion of paving: Tame - Villavicencio	9.9
4	Bridge: José Antonio Páez	1.5
5	Completion of paving: Tame - Arauca	65.0
6	Border crossing: Arauca	2.0
7	Road project: El Piñal - Saravena	6.8
		104.5

Group 4: Connection: Pacífico - Bogotá - Meta - Orinoco - Atlántico

	Project	Total Investment (US\$ millions)
1	Navigability of Meta river (Anchor Project)	108.0
2	Paving sections to be completed between Villavicencio and Puerto López	26.0
3	Border crossing: Puerto Carreño	1.0
4	Bogotá - Buenaventura / Section: Buga - Buenaventura	278.0
		413.0

Group 5: Connection: Colombia (Tumaco port) - Ecuador (Esmeraldas port - Guayaquil) - Peru (Ica)

	Project	Total Investment (US\$ millions)
1	Binational Border Service Center (CEBAF): Huaquillas - Aguas Verdes (Anchor Project)	12.1
2	CEBAF Mataje river	3.0

	Project	Total Investment (US\$ millions)
3	Project: La Espriella - Mataje river; it includes a bridge over Mataje river (Colombia)	15.7
4	Section: Espriella - Mataje (Colombia)/Borbón - San Lorenzo (Ecuador)	7.0
5	Regional Airport, Border Integration and International Transfer of Load, Santa Rosa	65.0
6	Inca-Huaquillas port and International Bridge in Huaquillas-Aguas Verdes, lateral crossing in Huaquillas	82.5
7	Road network No. 5 (under concession)	73.1
8	Road networks No. 1 (include secondary road - Piura)	87.9
9	Road networks No. 4 (include secondary road - Chimbote)	62.0
10	Road networks No. 2 and 3 (include secondary road - Chiclayo and Trujillo)	203.0
11	Building of the secondary road in the section: Cerro Azul - Ica	228.6
12	Secondary road: Ica	15.0
		854.9

Group 6: Connection: Colombia - Ecuador II (Bogotá - Mocoa - Tena - Zamora - Palanda - Loja)

	Project	Total Investment (US\$ millions)
1	CEBAF San Miguel and its accesses (Anchor Project)	2.0
2	Section: Mocoa - Santa Ana - San Miguel	47.3
3	Enlargement: Zamora airport	40.0
4	Section: Bella Unión - Plan de Milagro - Gualaquiza	2.8
5	Building of road: Zamora Palanda	146.6
6	Section: Narupa Guamaniyacu	15.0



Project	Total Investment <i>(US\$ millions)</i>
	253.7

Group 7: Connection: Peru - Ecuador II (Quito - Puente de Integración - Tingo María)

Project	Total Investment <i>(US\$ millions)</i>
1 Paving: Vilcabamba - Puente de Integración - Jaén (Anchor Project)	78.9
2 Improvement of the road: Tocache - DV - Tingo María, National Road: 5N	45.6
3 Improvement of the road: Juanjui - Tocache. National Road: 5N	72.3
4 Improvement of the road: Tarapoto - Juanjui. National Road: 5N	106.5
5 CEBAF Puente de Integración	2.5
6 Improvement: Tarapoto airport	6.9
	312.7

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

Project	Total Investment <i>(US\$ millions)</i>
1 Binational Border Service Center (CEBAF): Desaguadero (Anchor Project)	7.5
2 Paving completion: Potosí - Tarija	144.6
3 Improvement of road: Ayacucho - Abancay	240.6
4 Paving completion: Huancayo - Ayacucho	168.4
5 Refitting of the road: Juliaca - Desaguadero	33.0
6 Building of the secondary road - Urcos	7.0
7 Railway connection: Puno-El Alto	150.0
	751.1



Group 9: Energy Integration Systems

	Project	Total Investment <i>(US\$ millions)</i>
1	Regulatory harmonization: Electricity, Gas and Oil (Anchor Project)	N/A
2	Strengthening of the interconnections: Cuatricentenario - Cuestecitas and Corozo - San Mateo	125.0
3	Interconnection Electric Project: Colombia - Ecuador. Line 230 KW between sub-stations: Pasto (Colombia) and Quito (Ecuador)	56.0
4	Two micro-stations in Chinchipe and Taguien	5.0
5	Microstation in the province of Sucumbios	N/A
6	Extension of the Oleoducto Nor Peruano (oil pipeline)	800.0
7	Gas Interconnection Projects	335.0
8	Carboelectric plant: Santo Domingo	625.0
9	Project: Uribante Caparo (transmission networks and generation)	N/A
10	Electric Interconnection Project: Colombia - Venezuela, Puerto Nuevo - Puerto Páez - Puerto Carreño	4.5
11	Electric interconnection: Ecuador - Peru	76.3
12	Electric Interconnection Project: Colombia - Ecuador, second stage	N/A
13	Electric transmission to the West	590.0
		2,616.8

Group 10: Communications Systems and Connectivity

	Project	Total Investment <i>(US\$ millions)</i>
1	The existing infrastructure and the new connections are used to enhance the communications infrastructure (Anchor Project)	N/A
2	Optical fiber cable for telecommunications in transmission networks	N/A
		N/A



B) CAPRICORN HUB**Group 1: Antofagasta - Paso de Jama - Jujuy - Resistencia - Formosa - Asunción**

Project		Total Investment <i>(US\$ millions)</i>
1	Accesses to Paso de Jama (NR N° 52 - Intersec. NR N° 9 - Chilean border) (Anchor Project)	54.0
2	Paso de Jama: Border Center, Argentina	4.0
3	Electric interconnection: NOA - NEA	605.0
4	Operative refitting of the Belgrano Cargo railway - Ferronor (North Trans-Andean)”	210.0
5	Refitting: National Road N° 16, Coronel Olleros - Chaco border - El Caburé	16.6
6	NR N° 81. Paving: Las Lomitas - Intersec. National Road N° 34	126.2
7	Optimization of the node: Clorinda - Asunción	15.0
8	Enlargement: Deep-Water Port, Mejillones	120.0
9	Adaptation works: Antofagasta port	18.0
10	Refitting: railway section C3, Resistencia - Avía Terai - Pinedo (AR)	104.0
11	Refitting: railway section C12 Avía Terai - Metan (AR)	212.0
12	Refitting: railway section C14 Salta - Socompa (AR)	60.0
13	Refitting: railway section C25 Embarcación - Formosa (AR)	64.0
14	Refitting: railway section C18 Joaquín V. González - Pichanal (AR)	50.0
15	Refitting National Road N° 16. Intersec. NR 11 to Intersec. NR 34 (AR)	300.0
16	Paving: NR 86 Gral. Güemes - Pozo Hondo (AR)	184.0
17	Paving: NR 95, Intersec. NR 81 - Villa Ángela (AR)	82.0
18	Border complex: Jama (CH)	7.0
19	Enlargement: Road N° 25 (CH) - Initiative 1	150.0

Project		Total Investment (US\$ millions)
20	Enlargement: Road N° 24 (CH) - Initiative 2	150.0
		2,531.8

Group 2: Salta - Villazón - Yacuiba - Mariscal Estigarribia

Project		Total Investment (US\$ millions)
1	Building of the Binational Bridge: Salvador Mazza - Yacuiba and border center (Anchor Project)	10.0
2	Refitting: Jujuy - La Quiaca Railway	62.0
3	Paving: Tartagal - Misión La Paz - Pozo Hondo	190.0
4	Complementary project: Road: Abapó - Camiri (connection: Santa Cruz - Yacuiba)	104.5
5	Paving of a section in Road 9 - Neuland - Pozo Hondo	N/A
6	Refitting: Belgrano Cargas railway, Section: C15 Perico - Pocitos (AR)	60.0
7	Duplication and refitting of Road N° 50, Section: Pichanal - Oran (AR)	30.0
8	Paving of National Road N° 40, Minino Corridor (Bolivian border) (AR)	100.0
9	Border center: Pozo Hondo (PY)	1.5
		558.0

Group 3: Asunción – Paranaguá

Project		Total Investment (US\$ millions)
1	New Bridge: Puerto Presidente Franco - Porto Meira, with Border Center: Paraguay - Brazil (Anchor Project)	55.0
2	Enlargement of port infrastructure in Paranaguá port	84.6
3	Completion: Curitiba Road ring	N/A

	Project	Total Investment (US\$ millions)
4	Building: Curitiba Railway ring	68.5
5	Concession for the improvement of roads: 2 and 7 (Asunción - Ciudad del Este)	136.0
6	Railway: Asunción - Ciudad del Este	297.5
7	Railway: Cascavel - Foz de Iguazú and Cascavel - Guaira (<i>Hinge Project (Proyecto “Rótula”) of Group 2 - HPP Hub</i>)	N/A
8	Relocation: Asunción port	N/A
9	Installation of machinery in the Iguazú hydroelectric station	260.0
10	Transmission line: 500 KW (Itaipú - Asunción)	125.0
11	Enlargement: Villeta port	N/A
12	Railway bridge with a freight yard (Presidente Franco - Foz de Iguazú)	N/A
13	New railway corridor, west of Paraná river	270.0
14	Transmission line 500 KW (Yacyretá - Ayolas - Carayao)	150.0
		1,426.6

Group 4: Presidente Franco - Puerto Iguazú - Pilar - Resistencia

	Project	Total Investment (US\$ millions)
1	Optimization of the node Bermejo river - Ñeembucú (Anchor Project)	40.0
2	Railway: Corrientes - Brazilian border	N/A
3	Building of the multimodal complex: Resistencia - Corrientes	N/A
4	Border center: Puerto Iguazú (AR - BR)	4.0
5	Improvement: Posadas - Encarnación bridge (Bridge: San Roque González de la Santa Cruz)	15.0
6	Railway: Presidente Franco - Pilar	438.6



	Project	Total Investment (US\$ millions)
7	Building: Presidente Franco - Puerto Iguazú bridge, with a border center: PY - AR	30.0
8	Building of a Southern Multimodal Port (Paraguay river)	N/A
9	Building of Road 8, section: Caazapá - Coronel Bogado	90.0
10	Improvement and concession of Road 6 (Ciudad del Este - Encarnación)	12.0
11	Rebuilding: Garupá - Posadas Railway	100.0
12	Building of detour NR 12, through the city of Posadas (Province of Misiones)	35.0
		764.6

Group 5: Camino Real

	Project	Total Investment (US\$ millions)
1	Multimodal Transfer Center: Tucumán (Anchor Project)	20.0
2	Refitting: Railway Section C6 Pinedo - Tostado	100.0
3	Refitting: Railway Section C Santa Fe - San Salvador de Jujuy	270.0
4	Road bridge: Reconquista - Goya	N/A
5	Paving of NR 95, border with Chaco, Intersec. PR 286, Santa Fe	45.0
6	Duplication of road in NR 34, border with Salta - San Pedro de Jujuy	20.0
7	Paving of NR 38: Marapa river - Beginning of Highway	160.0
8	Paving of NR 40: San Carlos - Cachi	80.0
9	Paving of NR 89, Intersec. NR 11, Chaco, Intersec. NR 34 Taboada	107.0
		802.0



C) AMAZON HUB

Group 1: Access to the Putumayo Waterway

	Project	Total Investment <i>(US\$ millions)</i>
1	Road: Pasto-Mocoa - Puerto Asís (Anchor Project)	308.0
2	Access and adaptation of the port of Puerto Asís (La Esmeralda dock)	3.0
3	Beltway: Túquerres	3.0
4	Adaptation: El Carmen port	3.0
5	Adaptation: San Lorenzo port	6.0
6	Adaptation: Tumaco port	5.0
7	Section: San Lorenzo - El Carmen: Refitting and Paving	8.0
8	Electric interconnection: Yavaraté (Mitú) - Brazilian border	N/A
		336.0

Group 2: Access to the Napo Waterway

	Project	Total Investment <i>(US\$ millions)</i>
1	Francisco Orellana port (Anchor Project)	105.3
2	Freight airport: El Tena	50.0
3	New Tourism and Freight Transfer Airport: Nuevo Rocafuerte	40.0
4	CEBAF Nuevo Rocafuerte - Cabo Pantoja	2.0
5	Esmeraldas port	23.0
6	Manta port	132.0
		352.3

Group 3: Access to the Huallaga - Marañón Waterway

	Project	Total Investment (US\$ millions)
1	Road: Tarapoto-Yurimaguas and Yurimaguas port (Anchor Project)	88.1
2	Refitting: Piura airport	10.0
3	Yurimaguas airport	5.0
4	Building and improvement of the road: El Reposo - Sarameriza. National Road: 4C	189.0
5	Logistics center: Paita	3.0
6	Logistics center: Yurimaguas	2.0
7	Bayóvar port	100.0
8	Sarameriza port	6.0
9	Paita port	80.0
10	Road: Paita - Tarapoto	19.6
		502.7

Group 4: Access to the Ucayali Waterway

	Project	Total Investment (US\$ millions)
1	Road: Tingo María-Pucallpa and Pucallpa port (Anchor Project)	192.3
2	Energy interconnection: Pucallpa - Cruzeiro do Sul	40.0
3	Road interconnection: Pucallpa - Cruzeiro do Sul	247.0
4	Pucallpa airport	6.3
5	Intermodal Logistics Center: Pucallpa	2.0
6	Modernization: El Callao port (new containers dock)	617.0
7	Highway: Lima-Ricardo Palma	77.0



	Project	Total Investment (US\$ millions)
8	Road connection: Rfo Branco - Cruzeiro do Sul	N/A
		1,181.6

Group 5: Access to the Solimões - Amazonas Waterway

	Project	Total Investment (US\$ millions)
1	Road: Cuiabá - Santarém (Anchor Project)	253.0
2	Environmental and Territorial Management Program (Road: Cuiabá - Santarém)	12.0
3	Santarém and Itaituba ports	20.0
		285.0

Group 6: Network of Waterways in the Amazon Region

	Project	Total Investment (US\$ millions)
1	Navigability of the system: Solimões - Amazonas and environmental and social aspects in the high basins of the Amazon region rivers (Anchor Project)	50.0
2	Navigability of Iça river	8.0
3	Navigability of Putumayo river	15.0
4	Navigability of Morona river. Ecuadorian sector	1.0
5	Navigability of Huallaga river waterway, Section: Yurimaguas to the confluence with Marañon river	8.0
6	Navigability of Marañon river waterway, Section: Sarameriza - confluence with Ucayali river	25.7
7	Navigability of Napo river	30.0
8	Navigability of Ucayali river waterway, Section: Pucallpa to the confluence with Marañon river	20.0

	Project	Total Investment (US\$ millions)
9	Modernization: Iquitos port	15.0
10	Logistics center: Iquitos	3.0
11	Network of river terminals: Amazon region	N/A
12	Electrification Project: PCH Leticia and interconnection: Leticia - Tabatinga	5.0
		180.7

Group 7: Access to the Morona-Marañón-Amazonas Waterway

	Project	Total Investment (US\$ millions)
1	Freight transfer port: “Morona” (Anchor Project)	51.0
2	Improvement of the road: Guayaquil - El Triunfo - La Troncal - Zhud - El Tambo - Cañar - Azoges - Paute - Amaluza - Méndez; improvement and enlargement of the section: Méndez - Morona port	142.4
3	Improvement: Puerto Bolívar - Santa Rosa - Balsas-Chaguarpamba - Loja-Zamora - Yantadaza - El Pangui-Gualaquiza - Gral Leonidas - Plaza Mendez	87.0
4	Improvement: Puerto Bolívar-Pasaje-Santa Isabel - Girón - Cuenca - Paute - Amazula - Méndez - Morona port	26.8
5	International Tourism and Freight Transfer Airport: Morona	40.0
6	Extension of the Electric Network (22 KW), from Santiago Hydroelectric Project (400 KW)	0.3
7	Hydroelectric Project: Morona	2.0
8	Hydroelectric Project: Río Luis	15.5
9	Project K4 "South Border" (Access to Telecommunications Services)	3.1
10	River CEBAF over Morona river in Remolinos (Ecuador) and Vargas Guerra (Peru)	2.0
		370.10

D) GUIANESE SHIELD HUB**Group 1: Interconnection: Venezuela - Brazil**

Project		Total Investment <i>(US\$ millions)</i>
1	Caracas - Manaus (existing road) (Anchor Project)	168.0
2	Two-river waterway (Branco and Negro), which connects Manaus and Boa Vista	N/A
3	Deep-water port in the Northeast of Caribbean Coast in Venezuela or the improvement of the current Guanta port	1,203.0
4	Railway to connect the deep-water port or the Guanta port with Ciudad Guayana	573.3
5	Second bimodal bridge over Orinoco river	601.7
6	Support system to navigation along Orinoco river	14.3
7	Extension of the current transmission line: Guri - Boa Vista	N/A
8	Fiber optic lines or other suitable technology that interconnects Caracas and the North of Brazil	N/A
		2,560.3

Group 2: Interconnection: Brazil - Guyana

Project		Total Investment <i>(US\$ millions)</i>
1	Boa Vista - Bonfin - Lethem - Liden - Georgetown road (Anchor Project)	250.0
2	Bridge over Arraia river	1.6
3	Bridge over Takutu river, border: Brazil - Guyana	10.0
4	Deep-water port in Guyana (pending for further study)	N/A
5	Amaila Hydroelectric Power Station	300.0
6	Tortruba 1000 MW hydroelectric power station and transmission line to	1,850.0

Project		Total Investment (US\$ millions)
	Boa Vista and Manaus	
7	Fiber optic lines or another technology appropriate to connect Boa Vista and Manaus to existing international undersea cables	N/A
8	Improvements to Georgetown's access	N/A
9	Industrial Investment in Boa Vista : cellulose plant (underway); processing plants: soybeans, instant coffee and meat packing	N/A
		2,411.6

Group 3: Interconnection: Venezuela (Ciudad Guayana) - Guyana (Georgetown) - Suriname (Paramaribo)

Project		Total Investment (US\$ millions)
1	Road connection between Venezuela (Ciudad Guayana) - Guyana (Georgetown) - Suriname (Paramaribo), studies (Anchor Project)	110.8
2	Bridge or improved crossing of Cuyuní River	N/A
3	Bridge or improved crossing of Mazaruni River	N/A
4	Essequibo River Crossing	N/A
5	Demerara River Crossing	N/A
6	Berbice River Crossing	N/A
7	Corentine River International Crossing	N/A
8	Bridge or improved crossing of the Coppename River	N/A
		110.8

Group 4: Interconnection: Guyana - Suriname - French Guayana - Brazil

Project		Total Investment (US\$ millions)
1	Improvement of road: Georgetown - Albina	108.5

	Project	Total Investment (US\$ millions)
2	Improvement: Marowijne River international crossing	50.0
3	500 MW Hydroelectric Power Station	500.0
4	Improvement of way: Nieuw Nickerie - Paramaribo - Albina and International Crossing over Marowijne river	105.0
5	Electrical power interconnection Suriname -French Guyana	N/A
6	High voltage transmission line from Paramaribo - Nieuw Nickerie (South Drain) - Guyana (Corriverton)	N/A
7	300 MW Hydroelectric Power Scheme (Tapanahoni Diversion)	0.9
		764.4

E) SOUTHERN HUB

Group 1: Concepción - Bahía Blanca - San Antonio Este port

	Project	Total Investment (US\$ millions)
1	Implementation of the integrated control in Pino Hachado border crossing	13.0
2	Enlargement: San Antonio Este port (AR)	40.0
3	Building of detours and increase of capacity of the National Road N° 22, between Villa Regina and Zapala (AR)	150.0
4	Building of a beltway in Bahía Blanca (AR)	12.0
5	Building of railway: Choele Choel - San Antonio Este port	40.0
6	Building of interconnection at 500 KW, Region: Comahue - Cuyo	400.0
7	Building of interconnection at 500 KW, section: Choele Choel - Puerto Madryn (AR)	90.0
8	Improvement of National Road N° 22, between Bahía Blanca and border with La Pampa (AR)	20.0



	Project	Total Investment (US\$ millions)
9	Improvement of National Road N° 3, between Bahía Blanca and Carmen de Patagones	18.0
10	Paving: National Road N° 23, Valcheta - Intersection National Road N° 237 (AR)	310.0
11	Paving of the section that is missing up to the border with Argentina, access to Pino Hachado, Road 181 CH (CH)	5.0
12	Modernization: Talcahuano port (CH)	25.0
13	Reconditioning of tunnel: Las Raíces (CH)	5.3
14	Building of railway: San Antonio Oeste - Pto. Madryn - Trelew (AR)	48.0
15	Building of railway: San Antonio Este - San Antonio Oeste (AR)	8.5
16	Beltway and railway accesses to Bahía Blanca port	250.0
17	Railway section: Buenos Aires - Bahía Blanca - Neuquén	180.0
18	Railway: Zapala - Las Lajas (AR)	70.0
19	Enlargement: Bahía Blanca port (AR)	15.0
		1,699.8

Group 2: Binational Touristic Circuit of the Lakes Area

	Project	Total Investment (US\$ millions)
1	Adaptation and maintenance of the roads that belong to the circuit of the lakes in Chile	175.0
2	Implementation of the integrated control in Cardenal Samoré border crossing	2.0
3	Improvement: Interlagos road (AR)	200.0
4	Paving of the access to Icalma crossing (AR)	13.0
5	Paving of the access to Tromen - Mamuil Malal crossing	27.0



Project		Total Investment (US\$ millions)
6	Paving of the access to Hua Hum crossing	13.0
7	Railway section: Bahía Blanca - San Carlos de Bariloche	400.0
		830.0

F) CENTRAL INTEROCEANIC HUB

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

Project		Total Investment (US\$ millions)
1	Paving: Carmelo Peralta - Loma Plata and Building of the bridge: Carmelo Peralta - Porto Murtinho (Anchor Project)	85.0
2	Building of road: Cañada Oruro - Villamontes - Tarija - Estación Abaroa	366.0
3	Border crossing: Ollagüe - Estación Abaroa	1.8
4	Paving: Potosí - Tupiza - Villazón	642.0
5	Building of road: Ollagüe - Collahuasi	20.0
6	Fiber optic connection: Porto Murtinho - Loma Plata	2.0
7	Improvement: Mariscal Estigarribia airport	30.0
8	Border crossing: Carmelo Peralta - Porto Murtinho	1.2
9	Border crossing: Infante Rivarola - Cañada Oruro	1.2
10	Thermoelectric Gas Project: Bolivia - Paraguay	161.0
11	Geothermal Project: Laguna Colorada	160.0
12	Improvement of road: Santa Cruz - Villamontes	N/A
		1,470.2

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

Project		Total Investment (US\$ millions)
1	Ferroanel of Sao Paulo (section: North and South) (Anchor Project)	511.5
2	Road ring: Rio de Janeiro	160.0
3	Railway beltway: Campo Grande	34.1
4	Road beltway: Campo Grande	4.0
5	Road beltway: Corumbá	1.2
6	Recovering of the railway section: Bauru - Santos(SP)	41.4
7	Recovering of the railway section: Corumbá (MS) - Bauru (SP)	340.7
8	Modernization Program: Port of Santos	305.6
9	Recovering of railway section: Corumbá-Campo Grande (Ferrovia do Pantanal)	63.9
		1,462.4

Group 3: Connection: Santa Cruz - Puerto Suárez - Corumbá

Project		Total Investment (US\$ millions)
1	Building of the road: Pailón - San José - Puerto Suárez (Anchor Project)	444.8
2	Concession: Railway / Road: Motacucito - Busch port, with port operation	84.0
3	Installation of fiber optic along the road: Pailón - Puerto Suárez	2.5
4	Border crossing: Puerto Suárez - Corumbá (Bolivian side)	2.0
		533.3

Group 4: Connection: Santa Cruz - Cuiabá

Project		Total Investment (US\$ millions)
1	Road: Concepción - San Matías (Anchor Project)	256.0

Project		Total Investment (US\$ millions)
2	Banegas bridge	25.0
3	Paving of the bridge: Banegas - Okinawa	N/A
4	Border crossing: San Matías - Porto Limão	2.0
5	Paving: Porto Limão - San Matías	14.3
		297.3

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

Project		Total Investment (US\$ millions)
1	Refitting of the section: El Sillar (Anchor Project)	30.0
2	Road: Toledo-Pisiga	93.0
3	Border crossing: Pisiga - Colchane	2.0
4	Concession: Arica airport	10.0
5	Improvement: Arica port	50.0
6	Refitting of the road: Iquique - Colchane	37.0
7	Railway: Aiquile - Santa Cruz	400.0
8	Paving of the old road: Santa Cruz - Cochabamba	36.0
9	Refitting: Puente de la Amistad (Eisenhower bridge)	4.4
10	Refitting of the road: Arica - Tambo Quemado	15.0
11	Paving: Tacna - Candarabe - Humajalzo	80.0
12	Refitting: Ilo - Matarani (South coastal ring road)	N/A
13	Improvement: Matarani port	97.0

Project		Total Investment (US\$ millions)
14	Modernization: Ilo port	7.3
15	Improvement: Ilo airport	N/A
16	Improvement: Iquique port	N/A
17	Refitting of railway: Arica - La Paz (Chilean section)	N/A
18	Improvement: Tacna airport	10.0
19	Refitting: South Pan-American road (earthquake)	16.5
		888.2

G) MERCOSUR-CHILE HUB

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

Project		Total Investment (US\$ millions)
1	Duplication of the Road 14, between Paso de Los Libres and Gualeguaychú (Anchor Project)	370.0
2	Building and implementation of the freight integrated control in Paso de Los Libres	10.0
3	Completion of the duplication works of the road section: Belo Horizonte - São Paulo	1,300.0
4	Adaptation of the section: Navegantes - Río do Sul	1,000.0
5	Enlargement: Campinas airport	N/A
6	Enlargement: Guarulhos airport	165.0
7	Improvement and enlargement of the port infrastructure in São Francisco do Sul port	53.0
8	Improvement of the infrastructure in Itajaí port (SC)	31.0

	Project	Total Investment (US\$ millions)
9	Building of the North road ring in the Metropolitan region of Belo Horizonte (BR-381/MG adaptation)	395.0
10	Completion of the duplication works in the section: São Paulo - Curitiba	200.0
11	Building of the road ring: São Paulo (South section)	1,800.0
12	Building and paving of the road: BR-282/SC Florianópolis - Border with Argentina	90.0
13	Building of the section: Santa María - Rosario do Sul (BR-158 RS)	33.0
14	Duplication of the section: Palhoça - Osorio (BR-101/SC)	1,200.0
15	New bridges: Argentina - Brazil (Uruguay river)	10.0
16	Recovering of the facilities and docks in Laguna port (SC)	25.0
17	Recovering: Porto Alegre - Uruguiana (BR-290/RS)	30.0
18	Modernization: Asunción airport	60.0
19	Airport: Pedro Juan Caballero	N/A
20	Airport: Guaraní - Regional Freight Hub	N/A
21	Airport: Encarnación	N/A
		6,772.0

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

	Project	Total Investment (US\$ millions)
1	Adaptation of the corridor: Río Branco - Montevideo - Colonia - Nueva Palmira: Roads 1,11,8,17,18 and 21 (Anchor Project)	176.8
2	Adaptation of the section: Río Grande - Pelotas (BR-392/RS)	520.0
3	Enlargement of the docks in Río Grande port	160.0
4	Building of the International Bridge: Jaguarao Río Branco	12.0

	Project	Total Investment (US\$ millions)
5	Border crossing in the Corridor: Montevideo - Chuy	3.0
6	Enlargement: La Paloma port	250.0
7	Combined-cycle thermal station: Puntas del Tigre	170.0
8	Refitting of the road: Montevideo - Rivera	39.0
9	Road 26: refitting of the section: Río Branco - Paysandú	35.8
10	Refitting of the road: Montevideo - Fray Bentos 1, 3, 11, 23, 12 and 2	40.3
11	Refitting of the railway between Montevideo and Rivera	150.0
12	Refitting of the railway between Salto and Paysandú	N/A
13	Modernization: Montevideo port	70.0
14	Connection alternatives: Argentina - Uruguay	N/A
15	Multimodal Transportation in the System: Laguna Merín and Laguna de los Patos	N/A
16	Expansion: Colonia port (docks, dredging and incorporation of areas)	46.0
17	Puerto Sauce de Juan Lacaze	10.0
18	Montevideo port (complementary works)	44.0
19	Moving of the Montevideo Fishing Terminal	35.0
20	Building of a dry port near Montevideo port	40.0
21	Refitting of railway: Sudriers - La Paloma	12.0
22	International station: Rivera - Santana do Livramento	N/A
23	Railway for Integration	247.0
		2,060.9



Group 3: Valparaíso - Buenos Aires

	Project	Total Investment (US\$ millions)
1	Railway Project: Los Andes (Chile) - Mendoza (Argentina) (Central Trans-Andean railway) (Anchor Project)	251.0
2	Border center (freight): Cristo Redentor	7.0
3	Building of sheds in the crossing: Cristo Redentor	N/A
4	Repaving of National Road 7 Potrerillos - Border with Chile	14.0
5	National Road 7: building of the road detour: Laguna La Picasa	22.0
6	National Road 7: building of the railway detour: Laguna La Picasa	100.0
7	National Road 7: building of the detour: Palmira - Intersection: National Road 40 S	26.0
8	National Road 7: duplication of the section: Luján - Intersection National Road 188 (Junín)	N/A
9	Shed: Caracoles	N/A
10	International Road 60-CH (section: Valparaíso - Los Andes)	180.0
11	Improvement: Valparaíso port	165.0
12	Land port: Los Sauces (Los Andes)	13.0
13	Project: San Antonio - San Fernando (road of the fruits)	100.0
14	Improvement: San Antonio port	34.5
		912.5

Group 4: Mercedes - Santa Fe - Salto - Paysandú

	Project	Total Investment (US\$ millions)
1	Rebuilding and enlargement of the National Road 168: sub fluvial tunnel between Paraná and Santa Fe (Anchor Project)	48.0
2	Enlargement of Provincial Road 26: section: Victoria - Nogoyá	6.0



	Project	Total Investment (US\$ millions)
3	Building of connection: Nogoyá - Intersection: National Road 14	N/A
4	Building of the Binational Bridge: Salto - Concordia	12.0
5	Duplication and repaving of National Road 158, section: San Francisco - Río Cuarto	519.5
6	Repaving of National Road 18, section: Intersection National Road 32 - Villaguay	15.0
7	Paving: National Road 150. Province of San Juan	100.0
8	Paving National Road 76, Vinchina (Border with Chile), Province of La Rioja	100.0
9	Improvement of National Road 38, section: Córdoba - Patquia	100.0
10	Renewal and refitting of sections: A2, A10, A7 of Ferrocarril Belgrano (freight)	225.0
11	Enlargement and adaptation: Salto airport	N/A
12	Improvement: Border crossing in Paysandú	0.8
13	Duplication National Road 19: Section National Road 11 - Córdoba	S/D
		1,126.3

Group 5: Energy Group

	Project	Total Investment (US\$ millions)
1	Itaipú system (existing) (Anchor Project)	N/A
2	Transmission line: Yacyretá – Buenos Aires	150.0
3	Building of a hydroelectric station: Corpus Christi	3,000.0
4	Building of a hydroelectric station: Garabí	1,300.0
5	Hydroelectric reservoir: Yacyretá. Elevation filling 83	1,074.0



	Project	Total Investment (US\$ millions)
6	Gas Pipeline: Aldea Brazileira (Argentina) - Uruguaiana - Porto Alegre (Brazil)	510.0
7	Transmission line: Itaipú - Londrina - Araraquara	149.1
8	Argentinean Northeast Gas Pipeline	1,000.0
9	Nuclear Power Station: Atucha 2 (Argentina)	500.0
10	Installation of a regasification plant LNG in Uruguay	600.0
11	Base Thermal Station for Uruguay, 400 MW	N/A
12	Small hydroelectric stations: Centurión and Talavera, 65 MGW over the Jaguarão river	60.0
		8,343.1

Group 6: Pehuenche

	Project	Total Investment (US\$ millions)
1	Implementation of the Integrated Control in Pehuenche crossing	N/A
2	Paving of National Road 40 South, Section: Malargüe - Border with Neuquén	110.0
3	Road corridor: Vial San Nicolás /Zárate - Pehuenche crossing	N/A
4	Railway corridors, Access to the ports of: Mar del Plata y Quequén	N/A
5	Enlargement: Mar del Plata port	N/A
6	Improvement: Quequén port	N/A
7	Paving of National Road 145: Intersection: National Road 40 South - Access to Pehuenche crossing (Anchor Project)	80.0
8	Paving of the section: Puente Armerillo - Pehuenche crossing. Road CH 115 (Anchor Project)	60.0



Project	Total Investment (US\$ millions)
	250.0

H) PERU-BRAZIL-BOLIVIA HUB

Group 1: Corridor: Porto Velho - Río Branco - Puerto Asís - Puerto Maldonado - Cuzco / Juliaca - Ports in the Pacific

Project	Total Investment (US\$ millions)
1 Paving: Iñapari - Puerto Maldonado - Inambari, Inambari - Juliaca / Inambari - Cuzco (Anchor Project)	1,055.0
2 Border crossing and building of CEBAF (Peru - Brazil)	384.0
3 Bridge over Acre river	12.0
4 Airport: Puerto Maldonado	4.1
5 Transmission line: Puerto Maldonado - Brazilian border	N/A
6 Transmission line: San Gabán - Puerto Maldonado	N/A
7 Improvement: Juliaca airport	12.0
8 Improvement: Arequipa airport	18.0
	1,485.1

Group 2: Corridor: Río Branco - Cobija - Riberalta - Yucumo - La Paz

Project	Total Investment (US\$ millions)
1 Binational bridge over Mamoré river (Guayamerín - Guajará Mirin) (Anchor Project)	N/A
2 Road: Guayaramerín - Riberalta / Yucumo - La Paz	387.0
3 Road: Cobija - El Chorro - Riberalta	80.0

Project		Total Investment (US\$ millions)
4	Road: Yucumo - Trinidad	50.0
5	Cobija - Extrema	28.0
6	Border crossing: Bolivia - Peru (Extrema)	2.0
7	Border crossing: Brazilian border - Cobija	2.0
		549.0

Group 3: River Corridor: Madeira - Madre de Dios - Beni

Project		Total Investment (US\$ millions)
1	Navigation of Madeira river, between Porto Velho and Guayaramerín including locks for navigation in hydroelectric stations	800.0
2	Hydroelectric station: Cachuela - Esperanza (Madre de Dios river - Bolivia)	1,200.0
3	Waterway: Ichilo - Mamoré	20.0
4	Navigability: Beni river	N/A
5	Waterway: Madre de Dios and River port	6.0
6	Hydroelectric complex: Madeira river (1° Hydroelectric station: Santo Antonio)	10,500.0
7	Binational Hydroelectric Station: Bolivia - Brazil	2,000.0
8	Transmission line between the two Hydroelectric Stations of Madeira river and the central system	1,000.0
		15,526.0



I) PARAGUAY-PARANÁ WATERWAY HUB

Group 1: Paraguay river, Asunción - Corumbá

	Project	Total Investment (US\$ millions)
1	Binational Project: Improvement of Navigability in Paraguay river, Asunción - Apa (Anchor Project)	N/A
2	Building of the railway-port Project: Motacucito - Mutún - Busch port	138.0
3	Artificial canal: Mutún - Busch port	136.0
4	Paving: Puerto Suárez - Mutún	18.8
5	Development of the infrastructure of the future Bolivian Tax-Free Zone in Zárate(*)	N/A
6	System for the prediction of levels for navigation in Paraguay river (Apa - upstream)	N/A
7	Improvement of navigability in Paraguay river, between Apa and Corumbá	N/A
8	Communication system of Paraguay river (Asunción - upstream)	N/A
9	Paving of the road section: San Estanislao - Rosario port (Road: Rosario port)	N/A
10	Paving of the road section: Santa Rosa - Puerto Antequera (Road 11)	N/A
11	Paving of road: Concepción Vallemí	N/A
		292.8

(*) The definitive inclusion of the Project will depend on the results of the bilateral discussions.

Note: The project “*Dredging of the Tamengo Hydrologic System*” could be included in this group once the bilateral discussions between both countries have been concluded.

Group 2: Tieté - Paraná (Itaipú)

	Project	Total Investment (US\$ millions)
1	Binational project: Transposition of Itaipú (Anchor Project)	N/A

	Project	Total Investment (US\$ millions)
2	Hydroelectric reservoir: São Paulo (Paraná river)	N/A
3	Railway accesses to the Multimodal Terminal: Sta. Terezinha de Itaipú	N/A
4	Railway: Guaíra - Cianorte	N/A
5	Railway: Panorama - Adamantina	N/A
6	Railway: Presidente Epitácio - Presidente Prudente	N/A
7	Improvement of navigability in Alto Paraná river (upstream, Itaipú)	N/A
8	Building of railway: Cascavel - Foz de Iguazú and Cascavel - Guaira (Hinge Project (Proyecto “Rótula”) with Group 4 of the Capricorn Hub)	N/A
9	Improvement of navigability in Tieté river	N/A
10	Enlargement: Bataguazú port (MS) in Alto Paraná river	N/A
11	Puerto del Mundo Novo (Alto Paraná river)	N/A
12	Port terminal: Santa Teresina, in Itaipú Lake	N/A
13	State port terminal: in the Region of Alto Paraná, in Itaipú Lake	N/A
14	Road access to terminal: Santa Terezinha de Itaipú	N/A
15	BR-277: Santa Terezinha de Itaipú - Cascavel	N/A
16	Puente Epitácio: Enlargement of bridge and canal	N/A
17	SP-270: Ourinhos - Presidente Epitácio	N/A
18	Navigability of Paraná river	N/A
19	Enlargement: Puerto Indio	N/A
20	Refitting: Saltos del Guairá port	N/A
21	Paving: Section II	N/A
		0.0



Group 3: Paraguay - Paraná rivers, Asunción - Paraná Delta

	Project	Total Investment (US\$ millions)
1	Binational project: Improvement of navigability in Paraná river from Santa Fe to Asunción (Anchor Project)	N/A
2	Improvement: communication system in Paraná river (between Santa Fe and Confluencia)	N/A
3	Belgrano Thermoelectric Station in Campana	650.0
4	San Martín Thermoelectric Station in Timbúes	500.0
5	Converter station in Mercedes	25.0
6	Recovering of the section: Paraná - Curuzú Cuatiá	N/A
7	Recovering of the section: Tucumán - Rosario	N/A
8	Recovering of the section: Zárate - Rosario	N/A
9	Recovering and dual gage of the railway section: Corrientes - Monte Caseros	N/A
10	Reordering of railway accesses to the city of Rosario	N/A
11	Reordering of railway accesses to the city of Santa Fe	N/A
12	Paving: road system to access ports in Paraná river	N/A
13	Deepening of the draft of Paraná river, from Santa Fé to the river mouth of the Río de la Plata	110.0
14	Enlargement: Baradero port	N/A
15	Enlargement: Ibicuy port	N/A
16	Enlargement: San Pedro port	N/A
17	Enlargement: Diamante port	N/A
18	Enlargement and modernization: Corrientes port	10.0
19	Master Plan: Rosario port	N/A

	Project	Total Investment (US\$ millions)
20	Refitting: Bella Vista port	10.0
21	Refitting: Esquina port	7.0
22	Refitting: Formosa port	N/A
23	Restructuring: Santa Fe port	N/A
24	Fender system: Barranqueras port	N/A
25	Beltway: city of Formosa	N/A
26	Beltway: city of Santa Fe	N/A
27	Beltway: Rosario	600.0
28	Paving of National Road 11, section: Intersection National Road 89 - M. Belén	N/A
29	Paving of National Road 11, section: Santa Fe - San Justo	N/A
30	Paving of Provincial Road 13, Intersection National Road 11 - Villa Ángela	90.0
31	Paving of Provincial Road 19, Colonia Cano - El Colorado	N/A
32	Communication system in Paraguay river (Asunción - Confluencia)	N/A
33	Optimization of port terminal system in Asunción (land and river accesses; location of terminals)	N/A
34	Paving: Villeta - Alberdi	N/A
35	Refitting and improvement of the railway corridor: Asunción - Montevideo	N/A
36	Building of railway: Asunción - Posadas	N/A
		2,002.0

Group 4: Paraná river, Itaipú - Confluencia

	Project	Total Investment (US\$ millions)
1	Binational project: Improvement of navigability in Alto Paraná (Anchor Project)	N/A
2	Enlargement: El dorado port	N/A
3	Enlargement: Ituzaingó port	27.0
4	Enlargement: Ita-Ibaté port	9.0
5	Modernization: Iguazú port	N/A
6	Restructuring: Posadas and Santa Ana ports	N/A
7	Locks in Corpus (binational project)	N/A
8	Road accesses to Encarnación (*)	1.0
9	Encarnación port(*)	6.0
10	Relocation of the railway network (*)	3.0
11	Diverting: Aguapey (*)	64.0
12	Building of the Kaarendy port on Paraná river	N/A
13	Paving of road section: Pte. Franco - M. Otaño - Natalio and Access to 9 ports on Paraná river	N/A
14	Paving of the road system to access ports over the Paraná river.	N/A
		110.0

(*) Works that are complementary to Yacyretá

Group 5: Uruguay river⁵

	Project	Total Investment (US\$ millions)
1	Binational project: Improvement navigability Uruguay river (Anchor Project)	40.0
2	Recovering of the railway section: Zárate - Posadas	N/A
3	Improvement: river accesses to ports in Uruguay river	N/A
4	Enlargement: San Javier port	N/A
5	Landing place: Alvear port	N/A
6	Improvements: Concepción del Uruguay port	N/A
7	Building of lock in Salto Grande (Binational Project)	300.0
8	Gas pipeline: Paysandú - Colonia	N/A
9	Building of the railway section: Mercedes - Nueva Palmira port	50.0
10	Refitting of the railway section: Algorta - Paysandú - Salto	10.0
11	Design and building of the alternative canal: Casa Blanca	3.0
12	Enlargement of the port facilities in Fray Bentos	N/A
13	Improvement of port accesses and infrastructure in Nueva Palmira port	10.0
14	New start-up of the Paysandú ports, accesses and storage area	5.0
15	New start-up of the Salto ports, accesses and storage area	N/A

⁵ The mention of Group 5 Projects is temporary. The definitive inclusion of those projects is subject to analysis and revision by the countries involved in the group.

	Project	Total Investment <i>(US\$ millions)</i>
16	Road beltway: Nueva Palmira and land access system to the ports	6.0
<hr/>		424.0