Pushing the PPP Envelope: Promoting Private Sector Investment to Benefit the Poor in Perú

Contents

Abbreviations

ADEX	Asociación de Exportadores
FP	Peruvian Pension Fund
AMIG	Annual Minimum Income Guarantee
APAM	Asociación Peruana de Agencias Marítimas
APN	National Ports Authority
ASSPORT	Asociación de Operadores Portuarios
CAF	Andean Development Corporation
CAI	Capital Access Index
COFOPRI	Organism of Formalization of Informal Properties
COMEX	Sociedad de Comercio Exterior del Peru
CONFIEP	Confederación Nacional de Instituciones Empresariales Privadas
COPRI	Committee for Private Sector Investment
CRPAO	Certificate of reconocimiento de PAO
DSCR	Debt Service Coverage Ratio
EMBI	Emerging Markets Bond Index
ENAPU	National Ports Company of Perú
ESC	Economic Service Centers of PRA Project
GOP	Government of Perú
HDM	Highway Design Maintenance
IADB	Inter-American Development Bank
IIRSA	South American Infrastructure Integration Initiative
INRENA	National Institute for Natural Resources
LICs	Low Income Country
LMICs	Lower Middle Income Country
MEF	Ministry of Economy and Finance
MTC	Ministry of Transport and Communication
OECD	Organisation for Economic Cooperation and Development
OSITRAN	Supervisor Organism of Public Use Transport Infrastructure Investment
PAMO	Annual payment for maintenance and operation
PAO	Annual payment for construction
PCG	Partial Credit Guarantee
PPP	Public Private Partnerships
PRA	USAID Poverty Reduction and Alleviation Project
PSC	Public Sector Comparator
SEE	Strategic Environmental Evaluation
USAID	United States Agency for International Development
UPIC	Upper Middle Income Country

Foreword

Globalization and the increase in trade has greatly expanded the integration of markets. These markets are dramatically improving the lives and welfare of people throughout the world. However, in order to access these markets many of the worlds poor need the support of responsible institutions and the supply of basic services. Within this context, reliable infrastructure becomes a critical prerequisite for the expansion of markets and broad-based economic growth; economic growth which provides opportunities to the poor, spurs growth of non-traditional exports and integrates poor and isolated regions of the country.

Investment in infrastructure always takes place within a complex political and economic environment. In the Low and Lower Middle Income countries in which USAID works around the world, this environment is particularly prone to inefficiencies. And yet, the choice of waiting until the environment is perfect is not an option. The poor can not wait. Transaction costs need to be reduced, investment needs to be facilitated and basic services need to be available (electricity, transportation, water) so that the poor can be more productive. Governments throughout the world face the political imperative to help the poor and they will do so in a populist-unsustainable manner (benefiting themselves along the way) or they will do so in a manner which partners with the private sector, appropriately sharing risks and utilizing capacities and incentives.

The Low and Lower Middle Income Countries (LMICs) in which USAID works almost universally suffer from poor infrastructure, antiquated ports, poorly maintained or non existent roads, and unreliable electricity and water. In Peru alone, there is an infrastructure investment deficit of over $23 billion, a deficit which has left the poor of Peru isolated and all of the people of Peru facing logistical costs that are among the highest in the region. The challenge is clear - how to help the GOP to reduce transaction costs and expand services for the poor in a sustainable manner.

USAID Peru worked with the Peruvian Agency for the Promotion of Private Investment (PROINVERSION), the Ministry of Economy and Finance (MEF), the Ministry of Transport and Communications (MTC) and the regulator of transport (OSITRAN) to design and implement three major infrastructure projects, two roads (IIRSA North and Central) and the New South Container Terminal in the Port of Callao.

Like many (LMICs), Peru does not have an investment grade credit rating, it suffers from weak governance indicators, and it faces market failures including high perceptions of risk. Despite these constraints common to LMICs, the project has been able to close two PPP in roads, totaling 1.800 km, and the new Container Terminal in the Callao port. The closure of these three PPPs with a modest amount of USAID resources for technical assistance has leveraged approximately US$700 million dollars of private investment. More importantly, these PPPs will expand markets and reduce logistical costs and other risks for businesses, thus helping those businesses operating in the poorest regions of the country to compete in international markets and to mitigate poverty.

Our work has not been without problems and we have learned important lessons along the way. This paper draws conclusions based on the specific work we have completed in Peru. We are proud to have supported Peruvian efforts to improve infrastructure for the poor and hope that the lessons that we have learned, both positive and negative, will serve to inform strategies in other LIC/LMICs where USAID is working.

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Executive Summary

USAID Peru is committed to trade-led economic growth; economic growth which expands access to licit markets for all Peruvians. The mountainous and jungle areas of Peru suffer rates of poverty averaging 67,7% and 59,5% respectively and extreme poverty averaging 36,5% and 26,4%.[1] The limited coverage and poor quality of roads is a fundamental constraint to expanding access to markets for Peru's poor. Moving goods through Peru's mountains and jungle, when possible, is very expensive and time consuming; greatly hampering the productivity of enterprises and limiting exports and local consumption. The poor inevitably suffer the brunt of these costs. Huge amounts of investment are needed to rehabilitate, repair, and expand the existing transport infrastructure and with limited public resources, the involvement of the private sector is essential to resolving this fundamental challenge.

In the case of the Port of Callao for example, one study prepared by the USAID/Crecer project in 2005 concluded that the cost overruns in the port are over US$217 million. Cost overruns comprising; waiting time to dock, slow loading and unloading, excessive inventory costs, and high administrative costs called for urgent investment in modernizing the port.

In August of 2003, USAID established a contract with Chemonics to spur economic growth in high poverty regions by closing four to six PPP projects though comprehensive design and implementation support to the Government of Peru (GOP). By June of 2007, the activity had achieved significant results in a challenging environment. More than $700 million in private investment had been secured for the development of three transport infrastructure projects crucial to promoting enterprise development, improving productivity and competitiveness, and spurring economic growth in isolated regions of Peru.

The PPP activity faced constraints common to many LIC/LMICs. Peru does not have an investment grade credit rating, it suffers from weak governance indicators, and it faces market failures including high perceptions of risk. The project responded to these negative factors by helping to build the confidence of international investors and assisting the GOP to develop business models which facilitate the participation of multilateral banks such as The World Bank, the Interamerican Development Bank and the Corporacion Andina de Fomento (CAF) to reduce risks and expand access to financial markets.

Another set of constraints could be described as institutional constraints which include weak coordination and often conflicting interests between GOP agencies, lack of GOP resources to support feasibility studies, weak competition (Callao Port was an exception), and the lack of a serious bidding schedule and process. USAID provided international consultants to execute the required studies, developed several contracts and financial models and helped to establish execute aggressive promotion strategies.

The modernization of both the road that connects the jungle with Lima and the Port of Callao itself, will greatly improve the productivity and competitiveness of Peru's exports ($17 billion of which 93% are moved through the Port of Callao) leading to increased market access for the poorest regions of Peru.

1. Introduction

Lack of access to adequate economic and social infrastructure is one of the principal obstacles that developing countries face in their efforts to improve economic growth and reduce poverty. This problem is aggravated by the lack of resources to build and maintain infrastructure.

[1] According to the INEI (Statistics and Informatics National Institute) information. 2004.

It is largely accepted that appropriate investment in transport infrastructure indirectly reduces. Moreover, Kwon (2005) discovered a positive relationship between investment in roads and the direct reduction of poverty in China.

In practical terms, transport infrastructure investment has the power to increase the income of the poor by increasing their productivity, improving access to economic activities, and reducing input, transportation and transaction costs. At the same time, transport infrastructure investment also improves access to social services like health and education.

In 2003, Perú faced a road infrastructure investment gap calculated by the Instituto Peruano de Economía of approximately US$6,8 billion (out of a total of US$22,8 billion gap). Just 12% of the Peruvian road network was asphalted and Peru had among the least dense road networks in Latin America. These limited assets coupled with weak institutions and poor social services contributed to national poverty rates of 52%, and even higher rates of 69% in the mountainous regions and 64% in jungle regions.

Peru shares many challenges with other LMICs; low income levels, poverty, lack of public resources and big infrastructure gaps. For instance, Kazakhstan has a rural poverty rate of 24,8% and according to the US-Kazakhstan business association, although the National Income of Kazakhstan was the highest of the ex-soviet union component growing in average 10% between 2000 and 2005, its infrastructure investment needs in roads are approximately US$6 billion (out of a US$25 billion total). For South Africa the figures are US$5.5 billion and US$26 billion, respectively.

Not only does Peru share the need to improve infrastructure with many LIC/LMICs, it also shares many of the typical problems related to constructing and maintaining infrastructure in a publicly responsible manner. The recognition of the need to involve the private sector in public infrastructure in increasing but this involvement faces many challenges specific to LIC/LMICs.

We will show in this document that many of the challenges can be adequately addressed through the appropriate support of donors and multilateral agencies. However, despite having to resolve numerous constraints, it should be noted that the activity took place against the backdrop of favorable political support. The President of Peru firmly believed in the advantages of private participation in infrastructure development. Without this basic political will and support, the project would not have been able to resolve the constraints that it did.

Since its inception in September of 2003, the USAID PPP activity has worked closely with the Peruvian Agency for the Promotion of Private Investments (PROINVERSION) and the Ministry of Transport and Communications (MTC) in the design, structuring and implementation of PPP to finance, build, rehabilitate, operate and maintain three major highways that are part of the South American Infrastructure Integration Initiative (IIRSA), and a new container terminal in the country's main port. This support, along with the coordinated assistance of Inter-American Development Bank and CAF, has leveraged more than $700 million in critical pro-poor investment in Peru.

The results of USAID's assistance to the GOP are noteworthy:

- ***IIRSA Amazon North Road PPP***: This is a 25-year PPP agreement signed in June 2005, between the Ministry of Transport and Communications (MTC) and a consortium composed by the brazilian companies Odebrecht and Andrade y Gutierrez and the Peruvian company Graña y Montero. The company will finance, construct, rehabilitate, operate and maintain 964 km of national road between the cities of Paita,[2] and the river port of Yurimaguas,[3] This PPP transaction considers an initial investment around of US$220 million over the first four years of the concession.

[2] In the department of Piura on the Pacific coast
[3] In the eastern department of Loreto

- ***South Container Terminal of the Port of Callao***: This is a 30-year PPP, with $344 million in investments to build and operate a new, state-of-the-art, container terminal that will add more than 600,000 TEU[4] per year in capacity to the Port of Callao, the largest and most important port serving Peru. The PPP contract was successfully awarded in June of 2006 to a consortium led by P&O/Dubai Ports that offered the lowest tariff and US$144 million in additional investments over the PPP period.

- ***IIRSA Amazon Central Highway PPP****:* This is a 30-year PPP, with US$88 million in investments to finance, rehabilitate, construct, operate and maintain 847 km of national highway between the cities of Lima and Pucallpa in the eastern department of Ucayali, and the city of Huancayo. The technical, legal and financial design has been completed and the transaction is in its final implementation stage. The PPP was awarded in June of 2007.

This paper will outline some of the lessons learned by USAID in implementing its PPP program in Peru. While all LIC/LMIC are different, with varying policies, economies and capacity to foster investment in infrastructure, we believe that many of the constraints that LIC/LMICs face are similar and we hope that the reader will be able to take advantage of the lessons and recommendations that are described in this report.

Chapter 2 shows the importance of PPP to accelerate and leverage resources to invest in infrastructure. Chapter 3 describes the main activities implemented by USAID in the three projects and the results of the PPP process.

Chapter 4 describes the principal constraints that USAID and the GOP faced in the implementation phase of the PPP projects and how the were solved or how they could be solved.

In Chapter 5 this document analyzes the principal characteristics of the transport projects adjudicated by the Government of Peru in the third phase of PPP in Peru, in the period 2004-2007.

Finally in Chapter 6 we present general recommendations for the Peruvian Government. I think this should also be an annex.

The annex presents the institutional framework of PPP in Peru, to help the reader to understand the institutions participating in Peru and also the PPP project cycle.

2. The case for PPP as a powerful tool to facilitate infrastructure development

Every fiscal year, countries around the world face tough decisions on how to spend limited resources. Investment in and maintenance of key economic infrastructure is often a critical need which is not met. In the case of Peru, investment in transport infrastructure is US$382 million[5], less than 20% of the need as estimated by the Interamerican Development Bank – not to mention maintenance costs in a particular year. There are different ways to address this gap from direct public investment, to PPP, to full privatization infrastructure.

Generally speaking the options for improving infrastructure in the poor mountainous and jungle areas of Peru are limited to direct public investment. Options for private sector investment along the more dynamic and profitable coast are much broader due to

[4] Twenty-foot equivalent units
[5] According to the IPE (Instituto Peruano de Economía)

population concentrations near the capital city Lima and along the coast which generate significantly greater flows of traffic and benefit form improved governance and security.

Several macroeconomic authors have proved that one dollar invested in infrastructure by the users of the infrastructure generates less distortions in the economy than a dollar derived from national taxes and that that investment has a higher multiplier effect on economic growth.

It has further been cited that public funds have an alternative cost principally related with social projects like education, health and housing that every year compete with infrastructure projects in a pareto-efficient resource allocation situation in which the position of an economic agent can not be improved without worsening the position of the other economic agents.

Government expenditure in public service provision primarily impacts economic growth in two ways. It creates new opportunities for growth by fostering production with positive externalities and increasing endogenous economic growth; Barro (1990) and Lucas (1988). And it creates distortions and inefficiencies within the economy by applying specific taxes (as opposed to general taxes such as income tax or value added tax). So, while there is a positive economic effect caused by public service provision through investments such as public highways, public hospitals, and public schools, policy makers should ensure that inefficiencies in choosing investments and the delivery of services should be minimized so as to ensure a lower tax burden (Alfonso and Gaspar (2006), limiting its impact on long-term economic growth.

PPP programs enable the state to attract resources from the private sector so that it can provide more services (more roads, airports and improved maintenance) while not increasing the tax burden or, where there is a compelling argument for support with public funds, that support is minimized. The fact that users pay for all or a part of service means that PPP are equitable from a number of perspectives; vertically equitable because those that use the service more pay more, horizontally equitable because tariff amounts are based on the classification of users (e.g. cars vs three-axel trucks) and regionally equitable because different demands for services in different part of the region lead to some level of cross subsidy.

Two other positive factors accompany PPP, social and institutional accountability. Social accountability refers to the fact that users paying for the service will demand decent service and will inform the regulator if the concessionaire is not delivering the agreed-to service. Institutional accountability refers to the checks and balances that most PPP face due to the multitude of government agencies that are involved in there issuance and monitoring- thus contributing to good governance.

One international experience coming directly from South America country is Chile that started a PPP program in the 90´s decade and according to the Instituto Peruano de Economía, Chile reached in average US$1480 million investments in transport infrastructure between the year 1995 and the year 2004 explained basically because of the successful PPP program. In comparison with Peru that in the same period got just US$335 million in average with scarce PPP projects implemented.

In summary, it is very clear the power of the PPP as an instrument to facilitate the infrastructure development of LIC/LMICs countries.

3. Evolution of PPP in Transport Infrastructure Investment in Peru

Although Perú, in the 90´s, was one of the first countries in South America to pass legislation on concessions[6], the systematic participation of the private sector in the transport sector has only been achieved over the past four years.

In 1991, the Law for the Promotion of Private Investment in State-Owned Companies (Legislative Decree Nº 674) established the legal and institutional framework for privatization. This new law created an inter-ministerial Committee for Private Sector Investment (COPRI).

COPRI, which later became PROINVERSION, was responsible for designing and implementing the private investment promotion process and the strategy for privatizations and concessions. In 1996, the Law for Private Investment Promotion in Infrastructure and Public Utilities (Legislative Decree No. 839) established the framework for infrastructure concessions and public utilities works.

To better understand the difficulties in developing infrastructure through public-private alliances it is important to look into the evolution of concessions in Peru. We can distinguish three main phases in this industry. The first phase began at the end of the 90´s with the implementation of 3 infrastructure concessions: the Arequipa-Matarani road concession (1994), the Matarani port concession (1999) and the Jorge Chavez/Lima Airport concession (1999).

The second phase, covering the 2000-2003 period, was slow and just one concession was implemented; the Red Vial 5 (Ancón-Huacho-Pativilca). It was adjudicated, in a project finance structure to Norvial, owned by Graña y Montero. The Ministry of Transport is still having difficulties in transferring control of the land in the concession to the concessionaire which has impeded the financial closure for this concession. In July of 2001, the newly elected Toledo Administration strongly committed to investment promotion (creating an agency to do so – PROINVERSION) but suffered a major blow when the privatization of the Arequipa electrical grid was stopped by public demonstrations.

The third phase, covering the 2004-2007 period, is characterized by much greater involvement and commitment by GOP authorities. PPPs during this period can be divided into two groups; the normal project finance group, in which the projects are totally paid by the revenues coming from the users, and the second group where the government augmented concession revenues to make the project financially feasible.

In the table we can distinguish clearly the kind of projects that belong to each group.

TABLE I Third Phase of Transport Peruvian PPP

Normal Project Finance Group	Investment (Million US$)	Public Support Group	Investment (Million US$)
1. Road 6 (Lima-Cañete-Ica)	US$228	1.IIRSA Road Amazon North*	US$218
2. South Container Terminal Callao Port*	US$334 (initially US$220 plus US$144 offered by the concessionaire)	2.IRSA South segment 2 (Urcos-Inambari)	US$205
		3.IIRSA South segment 3 (Inambari-Iñapari)	US$317
		4. IIRSA South Segment 4	US$172

[6] In 1991, with the approval of the Juridical Stability System for Foreign Investment (Legislative Decree Nº 662), the Peruvian Government opened up the economy to foreign investment by creating a favorable environment for foreign investment in all sectors of economic activity; removing obstacles and restrictions to foreign investment and guaranteeing equal rights and obligations among foreign and local investors.

		(Inambari-Azángaro)	
3. IIRSA Road Amazon Central*	US$88	5. Costa-Sierra Road (Buenos Aires-Canchaque)	US$31
		6. North Regional Airports (9 airports)	US$115

*USAID Support

Investment in the 5 roads shown above is over US$1,300 million. Once we add investments in the port and airport projects, total investment in transport infrastructure over the 2005-2010 Should we not limit this to 2007period surpasses US$1,700 million, representing the biggest investment ever committed in the Peruvian history. In the case of the five roads, concessionaires will be required to maintain and operate, over the next 25 years, more than 3000 kilometers of highway according to international service standards. The USAID Program supported three of the seven projects mentioned above, helping to facilitate 42% of the total investment committed during the period.

The third phase has coincided with strong economic growth, over 8% in 2006, and Peru enjoys reserves of US$18.000 million with an inflation rate of just 1%. It is expected that GDP will pass the US$100.000 million this year. In the near future Peru's economic performance will enable it to pass from lower middle income[7] country (LMIC) to an upper middle income[8] country (UPIC). Despite these positive indicators there remain large areas of the country with high rates of poverty – making a compelling argument for increased use of PPPs.

Normal Project Finance Group I think this should also be in an appendix

The projects that not require public resources from the government were the first launched by the GOP to attract private investment. In the first three phases we have the Jorge Chavez International Airport in Lima, the Road 5, the Road 6, Callao Port and the Amazon Central.

All of them show an important pattern, the competition for the adjudication of the project. Especial recognition receives the Callao Port PPP that attracts around 7 pre qualified companies and finally 4 bidders.

Competition is so important in the bidding process because it has the advantage of replace the lack of competition in the business during the operation time of the concession. In addition, competition can bring lower tariffs and higher payments to the Government for the monopoly.

Despite of the South Container Terminal in the Peruvian Callao Port, will face the competition of ENAPU (Empresa Nacional de Puertos) that manage the remainder 5 wharf in the port, the concessionaire offered tariffs reduction and additional investments for the Callao Port. The business is so attractive and competition was strong.

In the case of Lima Airport Partners (LAP), the concessionaire of the Jorge Chavez Airport, offered around 48% of the total annual revenues for the Government and at the same time offered investments during the first 42 months for US$109 million, accumulating US$193 million in the first eight years and US$1.214 million in the thirty years of the concession.

[7] Lower middle income countries are defined by the World Bank , as those countries with GDP per capita between US$876 and US$3,465. Low income countries has per capita GDP under US$875.

[8] Upper middle income countries are defined by the World Bank, as those countries with per capita GDP between US$3,466 and US$10,725. (Argentina, Chile, Costa Rica, Mexico, Panama, Uruguay and Venezuela). High income countries are those with per capita GDP over US$10,726.

Roads can also face competition with alternative roads through the all pair origin-destination or just in a segment of it. As well as the road could not have competition at all and it can be considered as a monopolistic infrastructure. In the case of Mexican roads a couple of PPP face alternative competition and in the case of Chile although there exists a law that indicates that road PPP face alternative public competition, in the practice the Panamerican road does not have competition being a monopolistic road.

In the Peruvian case, neither Road 6 nor Road 5 faced alternative competition with other roads.

The Consortium Peruvian-Ecuatorian in Road 6 offered 18,61% of the total annual revenues to the Peruvian government for the monopoly of the road that connects Lima, Cañete and Ica.

TABLE II Third Phase of Transport Peruvian PPP
Project Finance Group

Characteristics	Road 6	Callao Port	Amazon Central
Number of bidders	1.Consorcio Binacional Andino Perú, composed by Hidalgo & Hidalgo (Ecuador) and Casa (Perú) **Winner** 2. Graña y Montero (Perú) 3. Planova (Brasil)	1.Consorcio Terminal Internacional de Contenedores del Callao (formed by P&O of England and Uniport from Spain). **Winner** 2.Consorcio Dragados-Ransa (from Spain and Peru, respectively) 3.HC Limited (Hutchinson from Hong Kong) 4.International Container Terminal Services (ICTS from the Philippines)	18 registered firms and 7 pre qualified firms
Bidding Mechanism	Higher payment to GOP through a toll revenue percentage. The winner offered 18.61%.	First Phase: reduction of tariffs. Second Phase: higher level of investments committed over the minimum pre-established. The winner offered the minimum level of tariffs and passed to the second phase offering US$144 million in addition to the minimum US$220 million	Lowest Minimum Income Guarantee.

One important guarantee for the project finance group has been the Minimum Income Guarantee used to reduce the revenues risk it has been implemented in most of these projects. In the Amazon Central road is considered as a bidding mechanism, winning the concession the company which is willing to deal with and accept more revenues risk.

In the case of regulation of these group of project we can indicates that all of them have maximum tariffs and in the case of Amazon Central once the concessionaire received the total amount for the Construction, Operation and Maintenance costs and if the revenues are over the minimum revenues and the cap, the concessionaire will receive 20% of the excess.

Financial Closure is not a problem for this group of projects. The Airport and the Port have enough cash flow and high Debt Service Coverage Ration. The problem in the case of roads 5 and 6 has been that the Ministry of Transport did not have the agility to transfer the land without legal pending aspects to the concessionaire.

TABLE III Third Phase of Transport Peruvian PPP
Project Finance Group

Characteristics	Road 6	Callao Port	Amazon Central
Guarantees	Yes. Annual Minimum Income Guarantee (AMIG) The AMIG operates according to the following scheme: *9.200.000 axis multiplied by the toll road, from the subscription contract date until for years after it. *10.000.000 axis multiplied by the toll road, from the beginning of the fifth year until the 16th year of PPP. *12.000.000 axis multiplied by the toll road, from the beginning of the 17th year until the end of PPP.	Yes. Minimum Income Guarantee. The AMIG operates according to the following scheme:	Yes. Minimum Income Guarantee for 20 years. The AMIG operates according to the following scheme: It begins once the construction period has finished. The GOP with the funds coming from toll roads will pay annually the PAO until year 20. If the funds are not enough to cover the PAO. The GOP guarantee 100% the difference to reach the PAO value
Regulation	Monopoly. 18. 61% of the total revenues	Competition with ENAPU container terminal. Regulated just for the investments leave in the port.	Monopoly. 20% of the total toll revenues for the Government between a cap and the Minimum Income Guarantee. Over the cap, 100% of the total revenues are of GOP.
Financial closure	Financial closure for this concession will not be a problem because just in the years 3 and 4, but after MTC transfer the land to the Concessionaire, it means that the investments can be delayed until this problem be solved, the Concessionaire will need around US$58 million to invest. It can be covered by a DSCR of 2.5 in average and 1.4 in a pessimistic scenario.	In process	After finish the adjudication of PPP

Second Group: PPP with Public Resources Support

We have a second group of PPP projects that use public resources support as the most important source of revenues for the Concessionaire. Obviously in these projects and at least for the first half of the concession period, the revenues collected from the users of infrastructure are a small portion of the total revenues.

Among the total six biddings adjudicated under the concept of public resource support, half of them had just one bidder and the other half two bidders. Undoubtedly, this group of projects does not have so strong competition and it is one of the principal weaknesses to jump for the future PPP projects in Peru.

In this context, savings costs coming from the bidding process were not totally enough for this group of projects.

Lack of competition can have several explanations. The design of the projects can be not so attractive. For example the length of the road projects is over the average in the case of IIRSA North and IIRSA South. It can be considered too risky by the bidders.

Lack of adequate studies can be another difficulty especially when the concession design will pay to the concessionaire the exact amount of costs of investments, maintenance and operation.

In the case of the airports, it was a paradox case, because the Authority said that to group airports will increase the interest for the bidding instead of launch each airport alone.

However, the Peruvian north regional airports is a case of bundling where 10 regional airports where adjudicated to one bidder.

Bundling projects is useful when the policy is the application of cross subsidies between the projects involved but it is necessary to prepare the complete study package to avoid costs sub or over estimation and obviously, always that competition is strong.

It is necessary to think in two additional risks that can appear especially in the group of projects supported by the government. They are "white elephants" and continual renegotiation of contracts. When the economic resources come principally from the governments instead of the toll roads the private sector that can be a safeguard estimating demands to check is the revenues can pay the investment and operation and maintenance costs will not be interested in cost model to estimate demand. The question for the private sector will be if the payments established by the government are enough to built and maintenance with an adequate profit. In this sense the "market test" loose slightly his power and it is necessary that PPP projects with public support have adequate studies and a strong public control with socioeconomic evaluation and public sector comparator measures.

By other hand, in some sense in a project finance the public sector can have more access to avoid renegotiations of contracts because any cost overruns can be paid with future revenues during the concession period. However, in the model of costs it is not totally true because any increase in costs will affect immediately the profitability of the concessionaire business.

TABLE IV Public Support Group

Characteristics	IIRSA Road Amazon North	IIRSA South Road (Segments 2,3 and 4)	Costa-Sierra Road (Buenos Aires-Canchaque)	North Regional Airports
Number of Bidders	1.Concesionaria IRSA Norte composed by Odebrecht (Brazil), Andrade y Gutierrez (Brazil) and Graña y Montero (Peru) 2. Queiroz Galvao (Brazil)	**Segment 2: winner** Consorcio concesionario Interoaceánica Urcos – Inambari (Odebrecht(Brazil), Graña y Montero (Peru), JJC and CCI. **Segment 3: winner** Consorcio concesionario Interoaceánica Inambari - Iñapari (Odebrecht(Brazil), Graña y Montero (Peru), JJC and CCI. **Segment 4**: Consorcio Intersur (Andrade y Gutierrez (Brazil), Camargo y Correa (Brazil) and Queiroz Galvao (Brazil)	1. Graña y Montero (Perú)	1. GBH-Swissport fron the Ferrovial Group (Spain) The Pre-qualified Colombian group Aeropuertos Unidos did not present offer.
Bidding Mechanism	Lowest amount of public resources expressed as the present value of the sum of required PAO (Annual payment for works) and PAMO (Annual payment for O&M) payments. PAO: $29 million for 15 years once the	Lowest government resources expressed as the present value of the sum of required PAO (Annual payment for works) and PAMO (Annual payment for O&M) payments. The PAMO was fixed in every bidding.	Lowest public resources support expressed as PAS payment that covers investment, operation and maintenance of the concession. It will be paid quarterly and the maximum amount was	Lowest annual maintenance through PAMO for routine maintenance and operation. In this case the government established the PAO as the compensation for the construction, equipment and periodic

	road has been built and rehabilitated. PAMO: $15 million a year for the duration of the PPP.	Segment 2: PAO: US$31,86 million for 15 years once the road has been built. PAMO:.US$4,76 million a year during the PPP period. Segment 3: PAO: US$40,68 million for 15 years once the road has been built. PAMO:.US$5,96 million a year during the PPP period. Segment 4: PAO: US$25,45 million for 15 years once the road has been built. PAMO:.US$4,68 million a year during the PPP period	US$1.339.000 that finally was asked by the unique company bidder. The concession is a 15 years with an investment of US$31 million. The PAS payment will be paid firstly with tolls resources and if they are not enough the government will pay the difference.	maintenance activities. The maximum PAMO was US$9.5 million and the winner offered US$9,4 million. The investment is around US$115 million for the group of airports.

The tariffs for this group of projects are also fixed and maximum.

The regulation is very different between them. In the case of IIRSA North when toll revenues be higher than the PAMO obligation, 20 % is Concessionaire revenue and 80% is for GOP.

In the case of Costa-Sierra project when PAS is completely paid by the toll roads and there exists positive resources, the trust management fund will deposit in the catastrophic events account 50% of them and the remain 50% will be transferred to the concessionaire.

The regulation of the Airport system is slightly more complicated because the bidding was designed considering just one variable which is PAMO (routine maintenance and operation), excluding periodic maintenance which was included in PAO. However, the final potential payment from the Government to the concessionaire could be higher that PAMO plus PAO because it can include a percentage of regulated revenues (when it is higher than the revenues base adjusted) and exclude the payment to the GOP from no regulated revenues.

Partial credit guarantee was important for the IIRSA Amazon North, being the first PPP that got financial closure in the third phase of concessions. It is assumed that the bridge loan with CAF will help the IIRSA South financial closure and in the case of Regional Airports, the contract established that the concessionaire can ask to the GOP the implementation of a partial risk guarantee for until US$13 million.

TABLE V Public Support Group				
Characteristics	**IIRSA Road Amazon North**	**IIRSA South Road (Segments 2,3 and 4)**	**Costa-Sierra Road (Buenos Aires-Canchaque)**	**North Regional Airports**
Guarantees	A $60 million partial credit guarantee (PCG) with the Inter-American Development Bank (BID). The PCG will guarantee the annual government contributions to the project.	Bridge Loan with CAF guarantee by the GOP in the following amounts: **Segment 2:** US$59,08 million **Segment 3:** US$91,38 million **Segment 4:** US$49,54 million	NO	A potential partial risk guarantee can be hired by the GOP with a multilateral organism for until US$13 million

	In addition, US$60 million bridge loan was designed and negotiated with the Andean Development Corporation (CAF) to ensure the prompt initiation of construction. The GOP gives a payment guarantee to CAF in favor of Concessionaire	In addition, the construction costs of toll booths and weighs booths are built by the GOP in all segments of IIRSA South. These construction cost are not included neither in the PAO or PAMO.		
Regulation	In the case that toll revenues be higher than the PAMO obligation, 20 % is Concessionaire revenue and 80% is for GOP.	Once the PAO obligation is finished and the toll revenues are higher than the PAMO, 80% of these extra revenues will be included in a trust fund for Catastrophes events.	When PAS is completely covered by the toll roads and there exists positive resources. The trust management fund will deposit in the catastrophic events account 50% of them and the remain 50% will be transferred to the concessionaire.	The final amount of total support from the GOP will be: If PAMO is higher than the total revenues(regulated +non regulated) the GOP support will be: COF= (PAMO-IR-INRB)+IGI-RE+PAO+LIQ[9] If PAMO is smaller than the revenues (regulated+non regulated) the amount will be: COF= IGI-Fi(IR+INRB-PAMO)-RE+PAO+LIQ
Financial Closure	Yes. US$218 million of securitized bonds under 144A rules in the US to European and US investors. The bonds were backed by the issuance of certificates of annual payments (so-called CRPAOs made to the PConcessionaire by the GOP to compensate for construction progress.	In process	In process	In process

[9] Where:

COF=total amount to support publicly

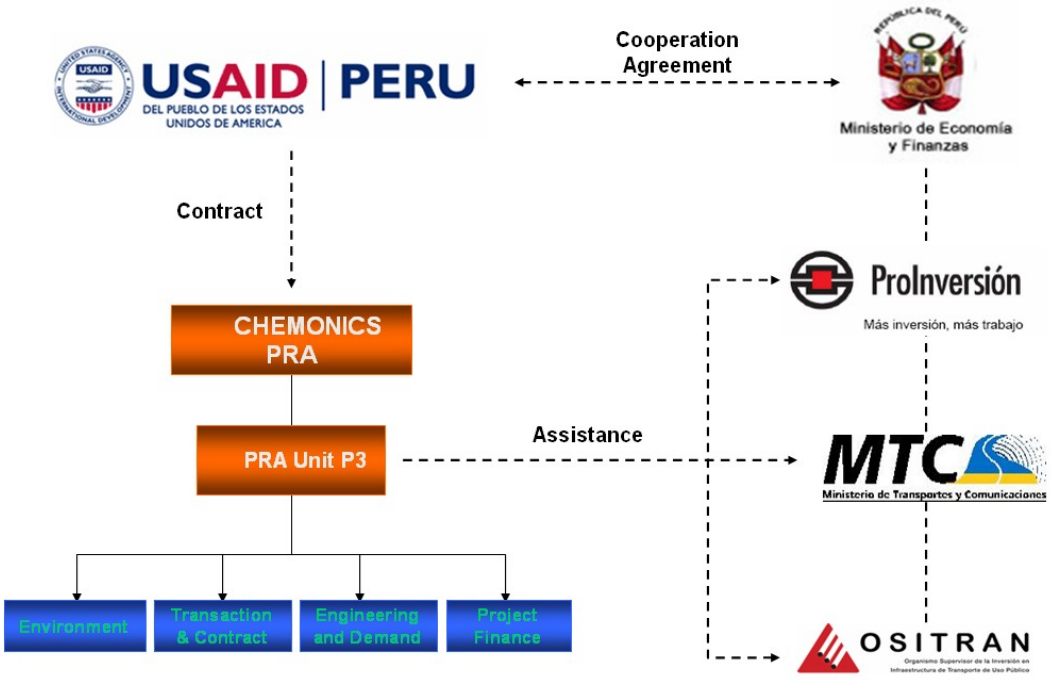
IR=Regulated revenues
INRB= Non regulated revenues
RE=Payment to the GOP for non regulated revenues
IGI=Incentives for revenues generation
LIQ=Cash payments for periodic maintenance, operation and others.

4. Overview and Results of USAID´s PPP activity in Perú

4.1 Overview

The USAID PPP Program was created to facilitate enterprise development, improve productivity and competitiveness, and spur economic growth in poor regions of Peru, through the design and implementation of long-term public-private partnerships to finance, build, rehabilitate, operate and maintain major road and port infrastructure projects.

USAID signed a cooperation agreement with Ministry of Economics and Finance (MEF) to assist the Peruvian Government in the design and implementation of 4 to 6 PPP projects. The consultant company selected by USAID for this assignment was Chemonics International that focused on but was not limited to assisting the government in four principal areas: environmental, transaction and contracts design, demand and engineering and project finance. The following figure presents the relationship between USAID, Chemonics International and the Public Peruvian Institutions related with the PPP program[10].



[10] In the annex, we present the institutional framework of PPP in Peru.

The USAID PPP activity has been guided by two important principles:

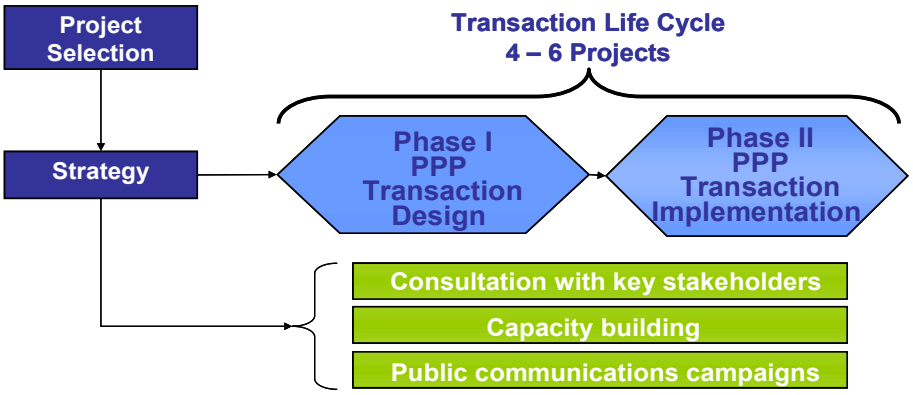
- ***Comprehensive Assistance*:**

  To ensure comprehensive, professional and transparent structuring of PPP projects, the PPP activity team has striven to advise the client from the onset of each PPP Project design to the final contract award.

- ***Encourage Transparent Competition***: To foster transparency and generate the lowest cost service provision to end-users and Government, all PPP are designed to encourage competition among PPP infrastructure providers, both domestic and international.

The program comprised two phases:

Phase A. Project Identification and Selection. This initial phase consisted of the design and execution of a demand-driven approach to identify and select between 4 and 6 infrastructure projects. USAID worked with PROINVERSION to identify a list of potential transport and water and sanitation projects at a regional or municipal level based on specific selection criteria. The criteria used for this initial project identification included population, market size, current situation of service provision, traffic densities and the potential to increase the competitiveness of economic corridors.



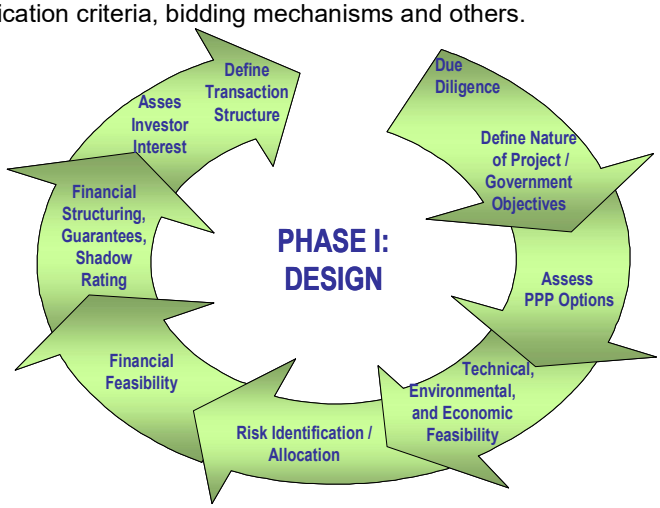
The projects finally selected were two roads that comprised around 1800 km. and the Container South Terminal of Callao Port, with the following investments:

TABLE VI			
	PPP Transaction	**Location of the project (Departments)**	**Estimated Initial Investment**
1	IIRSA – Amazon North Road PPP project between Paita and Yurimaguas (960 Km.)	Loreto, San Martin, Amazonas, Cajamarca, Piura	US$ 218 million
2	IIRSA – Amazon Center Road PPP project between Lima and Pucallpa (845 km)	Lima, Junin, Pasco, Huanuco, Ucayali	US$ 88 million
3	Container´s South Terminal of Callo Port	Callao, Lima	US$ 220 million

Phase B. Transaction design and implementation. This phase covered the complete project life cycle: from the selection, design and implementation of the best option for the PPP to financial closure.

Each project or transaction was carried out in two distinct phases:

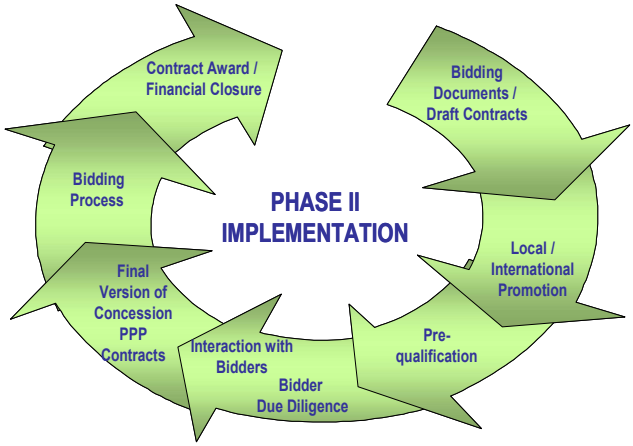
- **Design**. Preparation of the technical, financial, economic, institutional and legal framework for each PPP transaction. At the end of the design phase, USAID normally have supported to determine whether to pre-qualify bidders, the promotion strategy and process, format of the bid, including whether a one or two envelope system should be used, pre-qualification criteria, bidding mechanisms and others.



- **Implementation**. Managing the competitive transaction process from promotion to contract award and financial closure.

  Normally, once the PROINVERSION committee approved the proposed institutional arrangement and concept for the PPP, USAID proceeded to assist them in preparing and managing the transaction, finalizing the project structure and preparing the final tender documents and contracts. Moreover, USAID/PROINVERSION conducted an aggressive local and international transaction promotion campaign to attract the highest number of bids and improve the chances of successful contract award.

  USAID assistance to PROINVERSION included answering questions and requests for clarification from prospective bidders to the evaluation of technical and economic proposals. The important milestones during the implementation included the pre-qualification of bidders, finalization of tender documents and contracts, evaluation of proposals, contract award, and financial closure.



4.2 Results

To support the Government of Peru's effort to increase the supply of basic infrastructure services to facilitate enterprise development, improve productivity and competitiveness, and spur economic growth within the Alternative Development and other poor areas of Peru through the design, structuring, negotiation and implementation of four to six PPP to finance, build, operate and maintain major infrastructure projects in the transport sector (ports and roads).

Since the PPP program's inception three years ago, the USAID/PRA Infrastructure team has worked actively and closely with PROINVERSION in the following PPP:

TABLE VII	
PPP	**Important dates**
The Amazon North road PPP is a 25-year transaction to finance, construct, rehabilitate, operate and maintain 964 km. of national highway between the cities of Paita, in the department of Piura on the Pacific coast, and the river port of Yurimaguas, in the eastern department of Loreto. The Concessionaire is expected to raise approximately $218 million in private financing (debt + equity) to cover the initial capital investment costs. In addition, the Concessionaire is responsible for the maintenance of the road, in accordance with international service quality standards.	Phase I (design): **Completed** Phase II (implementation): **Completed** **The Amazon North PPP was awarded on May 5, 2005 and the PPP Contract signed on June 17th 2005** **Financial Closure: August 2006**
Port of Callao: PPP of the South Container Terminal. The investments for around US$220 million as a minimum plus the additional investments offered by the winner gave a total of US$344 million committed to invest in the south terminal. The annual capacity will be 600.000 TEU and the investments will be: • 2 new berths in 600 meters • New Container Yard 14,5 hás • 6 Gantry cranes • Dredging 14 meters	Phase I (design): **completed** Phase II (implementation): **Completed** **The PPP contract for the South Container Terminal was awarded on June 19, 2006** **PPP Contract signed on July 24th, 2006**

What about AC?

4.2.1 Amazon North Road PPP

PPP Characteristics: The Amazon North highway PPP is a 25-year PPP transaction to finance, construct, rehabilitate, operate and maintain 964 km. of national highway between the cities of Paita, in the department of Piura on the Pacific coast, and the river port of Yurimaguas, in the eastern department of Loreto.

Amazon North Corridor

Due to relatively low average daily traffic counts, a common variable in many poor areas, the GOP will make annual payments to the concessionaire to cover part of the investment, operation and maintenance costs. The selection criteria used to determine the winning bid was the lowest government subsidy expressed as the present value of the sum of required PAO (Annual payment for works) and PAMO (Annual payment for O&M) payments. As a result of the competitive bidding process, the amounts of government subsidies for the project were the following: PAO: US$29 million for 15 years once the road has been built and rehabilitated, PAMO: US$15 million a year for the duration of the PPP.

Bidding Results: On June 17th, 2005, President Alejandro Toledo witnessed the signing of the $218 million Amazon North PPP. When completed in 2009, the Amazon North road PPP will anchor the first all weather road and river transport network across South America, greatly facilitating two way commerce between Peru and Brazil and fully integrating, for the first time, Peru's developed coastal regions with its less developed mountainous Andean region and the extensive tropical region extending deep into the Amazon Basin.

The PPP Contract was signed between the Ministry of Transport and Communications of Peru and a consortium of Brazilian and Peruvian investors and construction firms, *Concesionaria Eje Vial Norte*, led by Brazilian Constructora Norberto Oderbrecht S.A. and formed by Constructora Andrarde Gutierez S.A., also from Brazil, and the Peruvian Graña y Montero S.A.A. The competition included the Brazilian firm Construtora Queiroz Galvao S.A.

To facilitate project financing through the local or international capital market, the Government structured, also with USAID assistance, a $60 million partial credit guarantee (PCG) with the Inter-American Development Bank (BID). The PCG will guarantee the anticipated annual government contributions to the project.

Financial Structure

The concessionaire of Amazon North road concession is composed by:

- Contructora Norberto Odebrecht (17.43% of the project company)
- Odebrecht Investimentos em Enfra-Estructura (32.37% of the project company)
- Constructora Andrade Gutierrez (40%)
- Graña y Montero (10.2%)

The sponsors provide construction performance bond of US$10 million and concession agreement performance of another US$10 million.

The institutions dealing with the financial closure for the concessionaire were Morgan Stanley, Astris Finance and the law firms Clifford Chance and Davis Polk & Wardwell.

The principal advantage of this financial structure is that it reduces the negative carry interest and receives funds upfront, through a credit link note that, Please rewrite I don't understand according to Astris Finance, yields a higher rate than regular permitted investments to minimize negative carry and securitized the construction payments with a bond issue, isolating in this way the construction and operation risks.

On the other hand, the government established the possibility that once the concessionaire finished certain milestones and they are accepted by the Regulator (OSITRAN) and the Ministry of Transport it can issue the CRPAO[11] certificates to the concessionaire as a acknowledgment that the GOP must to pay in the future for this works to the company.

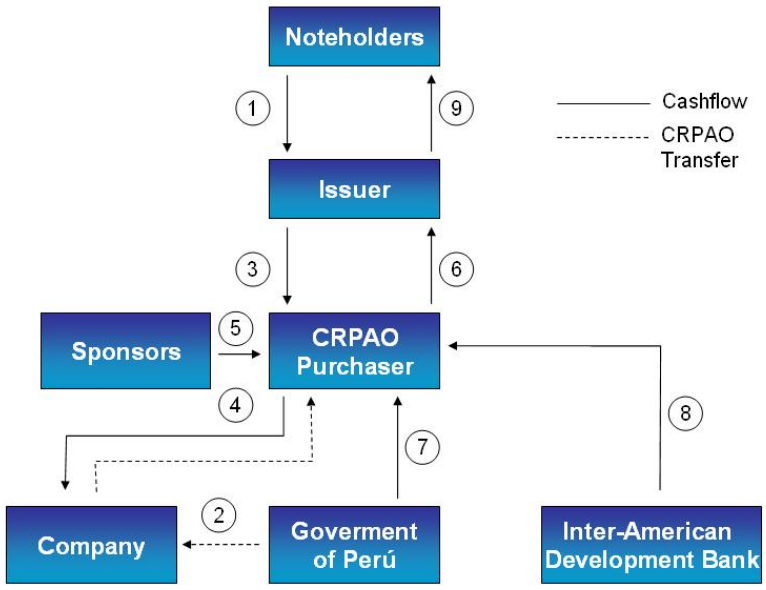
These certificates can be sold by the company, as an obligation of the GOP with the company and the proceeds of these CRPAOs are used to pay the CRPAO holder which will pay to the noteholders.

The concessionaire is the seller of the CRPAOs and they are owned by a special finance vehicle (Delaware based) that buys the certificates. One of the two owners of the Delaware company is the legal issuer of the notes.

The concessionaire will not receive any payment, the funds being in a frozen account in New York, until the partial works are accepted by the GOP. Once the GOP accepts the work the bondholders will be gradually repaid.

In this context the IDB guarantee for US$60 million, protects the payments from the Peruvian Government to the concessionaire.

The issue received a rating of BB/BB/Ba2 (Standar &Poors, Fitch/Moody´s), the same as Peru's rating. The bonds are priced at 8.75%[12].



[11] Certificados de Reconocimiento de Derechos del Pago Anual por Obras, issued in US Dollars and Ander New York Law.

[12] Equivalent to 350 bp over the 2025 treasury. 50bp more than the cost of a 10 year credit default swap of the Peruvian sovereign.

1. Issuer receives proceeds from the sale of Notes
2. Company completes portions of the construction works according to construction schedule and receives CRPAOs.
3. Issuer and Holdco Subsidiary make capital contributions to buy issued CRPAOs from the company
4. CRPAO purchaser uses funds derived from capital contributions to buy issued CRPAOs from the company
5. Should there be a mandatory redemption of the Notes following a termination event under the CRPAO Purchase Agreement, the CRPAO Purchaser may, subject to certain limitations, draw upon the Sponsor Letters of Credit or the Sponsor Support Collateral Account
6. Issuer and Holdco Subsidiary receive distributions on the equity interests from the CRPAO Purchaser equivalent to amounts received by the CRPAO Purchaser as holder of the CRPAO from the GOP
7. The GOP makes payment on CRPAOs to the CRPAO Purchaser via the Peruvian Trust.
8. Should the GOP fail to make payment on the CRPAO, the Peruvian trustee will draw on the IDB US$60 million Liquidity Facility to pay the CRPAO Purchaser.
9. CRPAO Purchaser distributes GOP payments to the issuer as dividends
10. Issuer uses GOP payments from CRPAOs to pay debt service.

Source: Morgan Stanley

Poverty Rates along the Corridor[13]:

The poverty rate in Peru is 51,6% while the average poverty rate of the six departments which the road crosses is 60,4%. The construction and maintenance of this road will significantly expand economic opportunities for the people living in these departments.

Maybe add another column with the populations of the departments

TABLE VIII	
Department	**Poverty Rate**
Piura	60.9%
Lambayeque	46.7%
Cajamarca	74.2%
Amazonas	60.9%
San Martín	57.1%
Loreto	62.7%

Potential Economic Impact:

The Amazon North PPP project will significantly reduce transportation costs and travel time, improve the competitiveness of products and businesses in the area, and provide the foundation for viable alternatives to coca and for a competitive and licit business environment. The table below shows the estimated savings in transport costs and travel time for the Tarapoto – Yurimaguas segment of the Amazon North PPP:

[13] INEI(Statistical and informatics National Institute)

TABLE IX		
Before PPP Yurimaguas – Tarapoto 125 Km.	**With PPP Yurimaguas – Tarapoto 125 Km.**	**Savings**
Transport of Cargo Time: **12 hours** Cost: S/. 160/ton Cost: ton/Km..= **S/. 1.28**	Transport of Cargo **Time: 4 hours** Cost: S/. 90/T Cost: T/km= **S/. 0.72**	 **(-70%)** **(-44%)**
Transport of Passengers Time: **6 hours** Cost: **S/. 25/passenger**	Transport of Passengers **Time: 3 hours** **Cost: S/. 13/passenger**	 **(-50%)** **(-48%)**

4.2.2 PPP of the South Container Terminal of the Port of Callao

PPP Characteristics: In the second semester of 2005, the PPP of the new South Container Terminal of the Port of Callao, the largest and most important port serving Peruvian cargo, was identified by both USAID and the GOP as a PPP of the highest priority.

We show in the following table that Callao Port is the most important in the South Pacific with the highest movement of containers. It is the sixth-largest port of Latin America.

TABLE X: The Principal 10 ports of Latin America and Caribbean, 2005 (TEU)		
Country	**Year**	
	2003	**2005**
1) Santos, Brasil	1,560,957	2,267,921
2) Colón, Panamá[1]	1,512,365	2,054,285
3) Kingston, Jamaica	1,137,798	1,670,800
4) Freeport, Bahamas	1,057,879	1,121,285
5) Buenos Aires, Argentina[2]	897,123	1,075,173
6) CALLAO PORT, PERÚ	553,138	887,035
7) Manzanillo, México	709,209	872,562
8) San Antonio, Chile	524,376	773,048
9) Cabello Port, Venezuela	380,039	746,810
10) Limón-Moin Ports, Costa Rica	611,984	688,563

Source: ECLAC

Note:

1. Includes MIT, Evergreen and Panamá port.

2. Includes Eslogan.

Despite it being one of the most important ports in Latin America, Callao has one of the lowest indicators of port efficiency as we can show in the following table:

TABLE XI	
Country	**Port Efficiency indicator**
USA	6.15
Argentina	4.3
Uruguay	4.3
Chile	4.1
Ecuador	3.6
Mexico	3.3
Brazil	3.2
Venezuela	2.9
Peru	**2.8**
Colombia	2.5

Source: PNUD

One study prepared by USAID/Crecer in 2005 concluded that cost overruns in Callao are around US$217 million annually and they are explained by the waiting time to dock, slow rhythm to load and unload, inventory costs, structural costs overruns and ENAPU costs overruns.

These indicators are correlated with the container movement that currently in Callao is around 14 to 16 containers per hour meanwhile in other ports with gantry cranes, the same indicator can pass 60 container per hour in average.

According to COMEX, the cost to move one container is near US$400 while the same container in Colombia or Chile would be US$140, showing the lack of competitiveness with other ports of the region.

Between October 2005 and March 2006, USAID, with the contributions of a multidisciplinary team of port experts and firms, prepared the PPP transaction design for this new container terminal. USAID generated feasibility studies in demand, operation, investments, industrial organization and regulation and financial modeling.

TABLE XII	
Studies	**Description**
Demand Study	USAID prepared a comprehensive report assessing the demand for port services, cargo handling, the potential for growth, and sensitivity to improvements in the quality of service and the pricing of these services.
Operation and Facilities Review	A revision of the port operations and facilities was performed by Nathan Associates. The main objective of this analysis was to determine the technical requirements, the layout and level of required initial investments to build and equip the South Container Terminal.
Industrial organization and regulation	A comprehensive study of regulation and competition policy within the Port of Callao was developed by Chemonics / *Universidad del Pacífico.* The objective of the analysis was to evaluate the impact of private participation in the provision of infrastructure

	services and operations of the Port of Callao on the port's industrial organization and the competition environment.
Financial modeling and analysis	Chemonics prepared a 30-year financial projection to establish the economic and financial viability of the concession project.
Risk analysis	The objective of this study was to identify and allocate the main financial, commercial, operational, construction and other risks associated with the implementation of the concession, including the risk mitigation mechanisms.

Business Design

Based on the results of these studies, the USAID/ PROINVERSION team prepared the business model for this 30 year concession in which the concessionaire will design, construct, finance, operate, manage and maintain the new south container terminal in the Callao Port, considering the following investments detail:

Phase I: (Between the first and the third year)

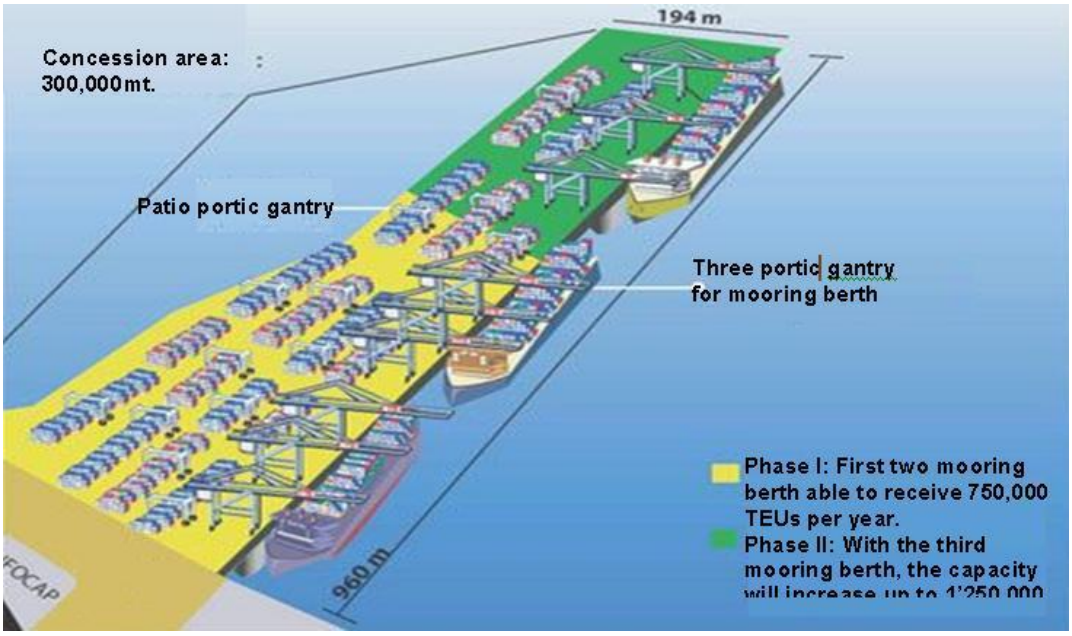
- Concession area of 228.000 square meters
- Construction of the dockage front that will have a length of 650 meters (2 mooring berth)
- Capacity for 750.000 TEUs annually
- Dredging of marine soil until reach to 14 meters of depth
- Installation of 6 gantry cranes, 10 gantry portico, 2 reach stackers and others special vehicles.

Phase II: (According to the demand requirement)

- Enlargement of the concession area to 303.000 meters
- Enlargement of the dockage front to reach 960 meters (1 additional mooring berth)
- Capacity for 1.250.000 TEUs annually
- 3 additional gantry portico.

The concessionaire offered US$144 million in common civil works for the port that will benefit the complete port, some of them are:

- Enlargement of the maritime access to the Callao Port
- Additional dredging for the access channel and puddle maneuver
- Support for the navigation in common areas
- Improvement of terrestrial access to the port
- Implementation of protection systems and security in common areas
- Development of Logistic Activities Zone (ZAL)
- Implementation of common information System.



The total investments considered are US$220 million as a minimum, plus US$144 million offered by the concessionaire in common areas that the concessionaire will deposit in a trust fund to protect this funds and manage this investments.

The port services are called standard services and basically regulated in tariffs (service to the ship and service to the cargo), with maximum tariffs and regulation through the internationally known RPI-X (retail price index minus productivity factor). The concessionaire also can offer additional services which are no regulated.

The final tariffs resulted from the economic offer of the concessionaire are the following:

TABLE XIII	
Service	**Tariffs**
SHIP (meter of length-hour)	US$0.70
CARGO (full container 20 foot)	US$90.00
CARGO (full container 40 foot)	US$135.18
CARGO (empty container 20 foot)	US$72.00
CARGO (empty container 40 foot)	US$108.14

Source: Callao Port Contract

The contract also established service and productivity levels.

The demand study prepared by Chemonics/Universidad del Pacifico estimated a demand in the year 2020 for a total of 30 million of tons of cargo, with 19 million being moved in containers.

Bidding results: A total of four bids were submitted:

1. Consorcio Terminal Internacional de Contenedores del Callao (formed by P&O of England and Uniport from Spain)
2. Consorcio Dragados- Ransa (from Spain and Peru, respectively)
3. HC Limited (Hutchinson from Hong Kong)
4. International Container Terminal Services (ICTS from the Philippines)

The South Terminal PPP contract was successfully awarded on June 19, 2006 to *Consorcio Terminal Internacional de Contenederos del Callao* (P&O from England and Uniport from Spain.) P&O offered the lowest tariff and the highest additional initial investment (US$144 million). P&O ports provides logistics services in around 100 ports and manages approximately 29 container terminals around the world. In 2005, P&O moved around 17 million TEUs. The PPP contract was signed on July 24, 2006.

The modernization of the road that connects the jungle with Lima and also the Callao port will allow increase the productivity and competitiveness of the exports that are near of US$17.000 million and where 93% of them are moved through the Callao Port.

4.2.3 Amazon Central Road PPP

PPP Characteristics: The Amazon Central road PPP is a 30-year transaction to improve, construct, operate and maintain 847 km. of national highway between the cities of Lima, on the Pacific Coast, and Pucallpa in the eastern department of Ucayali, and the highway connecting La Oroya and Huancayo within the department of Junin. The selected Concessionaire is expected to invest approximately $88 million.

Poverty Rates along the Corridor[14]:

As in the Amazon North, the Peruvian national average of poverty rate is 51,6% and we can observe that the Amazon Central road project cross five departments where poverty in average is 57,6%, exceeding the national average. If we exclude the Lima department because the PPP arrives to Ricardo Palma bridge around 90 kilometers before the Lima downtown the poverty rate increase to 62,9%.

TABLE XIV	
Department	**Poverty Rate**
Lima	36.6%
Junín	52.6%
Pasco	61.6%
Huanuco	77.6%
Ucayali	55.8%

Potential Economic Impact: The Amazon Central PPP project will help significantly reduce transportation costs and travel time, improve the competitiveness of products and businesses in the area, and provide the foundation for viable alternatives to coca and for a competitive and licit business environment. The table below shows the estimated savings in transport costs and travel time for the 98 Km. Tingo Maria – Aguaytia segment.

TABLE XV		
Before PPP Tingo Maria – Aguaitia 98 Km.	**With PPP Tingo Maria – Aguaitia 98 Km.**	**Savings in transport time and cost**
Transport of Cargo Time: **6 hours** Cost: S/. 50/ton Cost: ton/Km.: **S/. 0.51**	Transport of Cargo Time: **4 hours** Cost: S/. 40/T Cost: T/km= **S/. 0.41**	 **(-33%)** **(-20%)**
Transport of Passengers Time: **3 hours** Cost: **S/. 20/passenger**	Transport of Passengers Time: **2 hours** Cost: **S/. 10/passenger**	 **(-33%)** **(-50%)**

Amazon Central PPP Design:

In the same way of Amazon North PPP USAID supported to PROINVERSION to prepare the feasibility studies to design the PPP business model, in addition to the Promotion activities. Among the studies prepared are the following:

[14] INEI(Statistical and informatics National Institute)

TABLE XVI	
Study	**Description**
Environmental Impact Assessment[15]	This study included a diagnostic on environmental components (physical, biotical, human, archaeological, countryside, and landscape); identifies and evaluates possible negative and positive, direct and indirect impacts on environmental factors that project development activities can bring about, as with the environmental impact on the project itself.
Engineering Study	The engineering study determined the cost of the initial investments and the long term operation and maintenance costs. The goal of this study was to design a program for rehabilitation and maintenance, and also to update the capital investment costs
Demand Study	A demand study targeted to bidders was prepared by USAID. This study complements and enhances the information of an existing demand study of the MTC. This study is crucial in view of the fact that the financing for this road PPP is based on the projected traffic levels of the highway and the collection of tolls.
Shadow Rating Study	It was work between Chemonics and Apoyo to have an ex-ante rating for debt instruments and to know the potential access to credit and investors confidence over the project.
Financial Modelling	This study determined that the IIRSA Central have an attractive profitability based on the information of investments, costs and demand studies.

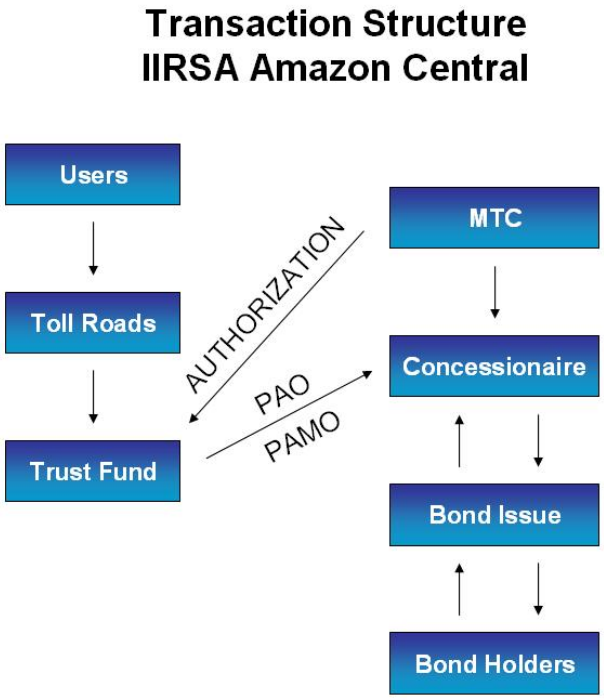
Business Design

The toll revenues coming from the users in the Amazon Central will be deposited into a trust fund constituted by the concessionaire. The trust fund with authorization of the Ministry of Transport in representation of the GOP will authorize the payments of PAO[16] annually for 20 years after the GOP receives the civil works at the end of the second year of the concession period. If the toll revenues are not enough to pay the PAO the difference will be paid directly by the GOP to the concessionaire.

In the case of the operation and maintenance, the Concessionaire will receive from the trust fund and under a similar mechanism described for the PAO, a new payment denominated PAMO, from the first year and until the end of the concession, if the funds are insufficient, the GOP will pay the difference.

[15] This environmental management tools will ensure that all environmental protection requirements of the GOP as well as USAID, Section 216 requirements, will be met.

[16] Annual payment for civil works.



The bidding mechanism is the least annual minimum income guarantee (AMIG), which at the same time, is the value of PAO that the bidders asked in their economic offers.

In summary, the revenues of the concessionaire are PAO, PAMO and 20% of the toll revenues collected, between a cap and the Minimum Income Guarantee. (between years 3 and 22) Over the cap, 100% of the total revenues are of GOP.

The PPP contract is expected to be awarded in June 2007.

Pre-qualified firms. Through June, 2007 there are seven firms already pre-qualified and eighteen registered to participate in the Amazon central bidding process. The pre-qualified firms are the following.

TABLE XVII	
Pre-Qualified Firms	**Country**
Graña & Montero y JJ Camet	PERU
Andrade y Gutierrez	BRAZIL
Conalvias-Condor- odiosa	COLOMBIA
Hidalgo e Hidalgo S.A. – Construcción y Administración S.A.C. Asociados.	ECUADOR-PERU
Constructora Camargo Correa y Constructora Queiroz Galvao	Brazil
Odebrecht	BRAZIL
Obrainsa	PERU

5. Challenges and Responses

In 2004, there existed a limited number of firms with the technical knowledge, experience, financial strength, and willingness to invest in transport infrastructure in Peru. However, despite persistently weak governance indicators, a non-investment credit grade and institutional challenges, the second and especially the third phase of PPPs has been relatively successful in attracting private sector investment in infrastructure that will help to reduce poverty.

The successful PPP designs can be grouped by those designed for “normal” project finance and those designed to be “enhanced” with public resources. In general the projects requiring the GOP enhancement were less competitive, signaling more limited interest form the market. This difference can be explained by a number of variables including limited confidence in the GOP, high perceptions of risk in many of the poor and isolated areas, and weak design in compensating for or sharing perceived risks. Another complicating variable is the fact that PROINVERSION has had a number of bidding processes opened at the same time, causing bidders to select one project over another, or perhaps equally likely, to loose faith in the Government's ability to close even a signal concession and therefore abstain from participating in any of the bidding processes.

It is up to the GOP to recognize these challenges that it will continue to face and to improve the institutional framework and PPP design. The GOP must to pursue high competition with an adequate regulatory framework that allows and motivates private participation, but also protects the social interest. The transaction must to be win-win for the public and private sector (See the graph below).

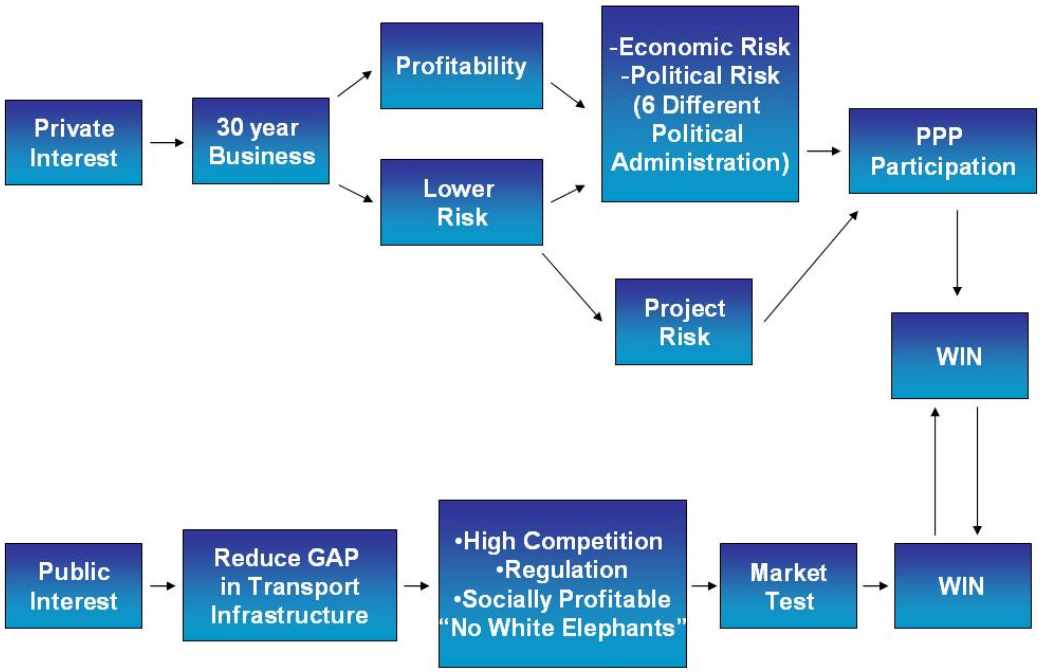
In this chapter we will outline the principal constraints that the USAID-PPP activity faced and will highlight ways in which these constraints were mitigated or resolved. We have also included areas where the project failed to resolve a constraint or where recommendations were made but not accepted by the GOP.

First we will describe macro constraints:

- Lack of Investment Grade
- Weak Investment Climate and Limited Access to Capital
- Weak Governance

Then we will present the PPP specific constraints:

- Inefficient PPP Process
- Limited Experience in PPP Design
- Little Recognition of the Value of Competition
- Bidding Process: A pending Challenge
- Environmental Studies: Jumping a Social License
- Engineering Studies
- Vested Interests



Lack of Investment Grade

Although Peru had a huge improvement in the economic stability in the last years and also relative political stability, it remains a country without investment grade. This fact generates the first component of risk that foreign companies must evaluate prior to deciding to participate in PPP projects. Does the return on the project compensate for country risk. Contract design for PPP in LIC/LMIC must compensate for this risk.

Sovereign risk is measured by the international rating agencies Moodys, Standard and Poor or Fitch Rating. It is associated to the country´s capacity and availability to pay debt and use a qualitative rating, based in letters. The international ranking use the investment grade term to distinguish from debt instruments that are not speculative.

During the period of USAID support Peru has improved in two notches its investment grade after several years of holding the same rating of BB-, passing in 2004 from BB- to BB and recently from BB to BB+ in 2006, now this rating is only one notches away from international investment grade BBB-.

The first upgrade in Peru's rating (2004) was justified based on the Government's record of prudent fiscal management, including a recent constitutional reform eliminating automatic and generous increases in pensioners' annuities, as well as strong economic performance, principally with respect to the mining sector and export growth in recent years.

Currently, Moody´s rating agency is analyzing the credit rating for Perú because of the reduction of country external vulnerability, supported by the increase of international reserves and increasing growing exports. It is necessary to mention that Moody´s has a Perú in the lowest rating between three rating agencies (BA3), three notches under the investment grade.

TABLE XVIII : American Countries Investment Grade 2002-2006

Country	2006	2005	2004	2003	2002
USA	AAA	AAA	AAA	AAA	AAA

Canada	AA	AA	AA	AA	AA
Chile	A	A	A	A-	A-
Mexico	BBB	BBB	BBB-	BBB-	BBB-
Colombia	BB	BB	BB	BB	BB
Peru	BB+	BB	BB	BB-	BB-
Brazil	BB	BB-	BB-	B+	BB-
Venezuela	BB-	B	B	CCC+	B
Argentina	B+	B-	SD	SD	D

Source: Standar & Poor´s

Add Kazakhstan and SA

However, Fitch and S&P has Perú just one notche under the investment grade (BB+) and they are declared that in a period of two years it can be investment grade. The indicators for Fitch are the following:

a) Issuer Default Rating (IDR) in long run foreign money BB+
b) Issuer Default Rating (IDR) in long run local money BBB-
c) IDR short run B
d) Country Ceiling BBB-

In this sense we can observe the good performance of Peru in the last couple of years in terms of country risk. In 2006 Peru had one of the lowest country risks[17] in Latin America after Chile and Mexico.

TABLE XIX: Emerging Markets Bond Index in Latin America 2002-2006

Country	2006	2005	2004	2003	2002
Argentina	223	504	4703	5626	6303
Brazil	196	311	382	468	1445
Colombia	151	238	332	435	645
Chile	83	80	66	84	125
Ecuador	920	669	690	840	1796
Mexico	98	126	166	199	323
Peru	**120**	**206**	**220**	**318**	**621**
Uruguay	175	275	373	624	1706
Venezuela	185	318	411	613	1042

Source: JP Morgan

The country risk measure is called EMBI+ (Emerging Markets Bond Index Plus), economic indicator prepared daily by the investment bank JP Morgan from 1994. It shows the total returns for external debt instruments for the totality of emerging markets, considering a return weighted average of different bonds issued by a country, including principally Brady bonds, external loans and Eurobonds. In other words, it shows the probability that a country can not pay the commitments either by political or economic reasons.

In Latin America, the EMBI+ is represented with instruments basically by the three biggest economies Argentina, Brazil and Mexico, which reflect the size and liquidity of these external debt markets. Although Peru is improving in the country risk levels it still does not reach investment grade which is an additional risk for the PPP projects and it can be reflected in higher debt cost compared with countries that are investment grade.

The context of the bidding process for the Amazon North was further complicated and politicized because it followed a high-profile failure by the Toledo Administration to award a

[17] Country risk is measured over the diference between interes rate paid by the U.S. treasure bonds and the interest rate of the specific country under analysis. It is expressed in points and represents the spread that a public bond paid over the US treasure bond (free risk instrument).

concession for Red Vial 6 due to the lack of confidence that bidders had in the process[18]. Failure to award the Amazon North concession could have signaled and end to the President's ambitious PPP program. In the end, Amazon North was the first PPP project adjudicated in the Toledo Administration.

Responses

1. **Bidders Road Show.**In coordination with PROINVERSION, USAID team conducted a series of one-on-one meetings with potential bidders and firms registered to participate in the bidding process for both the Amazon North and Amazon Center transactions. The purpose of these meetings were to assess the interest of these firms in participating in the bidding process, the level of progress in terms of proposal preparations, and to gather questions, comments, and/or concerns about the technical, financial, and legal aspects of the transactions. These meetings were held in Perú, Brazil, Mexico, Chile, Spain, France, Colombia and the US during the last three years.

   This aggressive promotion campaign was helpful in convincing international bidders to participate in the Peruvian PPP program. In addition to these national and international road shows USAID designed the official investment prospectus (*teaser*) for both the Amazon North and Amazon Center PPP projects which was presented in each meeting with potential bidders to show the positive evolution of Peruvian economy and also the projects business models. Finally, an advertisement for both the Amazon North and Amazon Center transactions was posted in the March 6th, 2004 in a issue of The Economist.

2. **Multilateral Development Banks Road Show.** At the beginning of 2004 our USAID team organized a series of meetings in Washington D.C. with the participation of PROINVERION's executive director and the PROINVERSION project director. The objective of the meetings was to present the Amazon North and Amazon Center road PPP projects to key multilateral and bilateral organizations and to explore the possibility of obtaining, from these organizations, partial risk guarantees for these projects. One-on-one meetings were held with officials of both the public and private sector arms of the Inter-American Development Bank, with the Project finance and Guarantees Department of the World Bank, and with the Office of Development Credit of USAID.

   After this road show the WB and IDB visited Peru to discuss different guarantee mechanisms and possible financial support for the projects. The briefing was attended by high level officials of USAID, the WB, IDB, OPIC, and EXIMBANK.

   These meetings provided the venue for a candid exchange of information and demonstrated the interest and support of the US Government. Ultimately, after 18 months of negotiations, the World Bank signed an agreement

3. **Simulation of Long-Term Financing.** In order to ensure the viability of financing the investment for the rehabilitation and improvement projects, the issuance of bonds was simulated in two series, which were called Amazonas Norte Bonds. The PAOs will be the source of payment for the Amazonas Norte Bonds coupons. It let to prepare the shadow rating considering the long term financing. But did this have any real impact?

4. **Shadow Rating**: The credit rating agency "Apoyo & Asociados", an affiliate of Fitch Ratings that ranks among the top three global rating agencies, was asked to rate the Amazonas Norte Bonds and provide a shadow rating on the risk of the instruments to be issued in order to fund the maintenance and rehabilitation projects of the Amazonas Norte Corridor. In the opinion of Apoyo/Fitch, the irrevocable nature of the PAO is the primary strength of the financing structure. In accordance with the methodology of

[18] Meanwhile the project was considered self-financed by PROINVERSION, it required economic support by the bidders. In the second bid of this project PROINVERSION delayed some investments to relax the financial pressure needs required in the first bid.

Apoyo/Fitch, the rating of the Amazonas Norte Bonds is AAA(pe) in local currency and A(pe) in foreign currency. The difference between these ratings is based on the State's monetary control over its own currency, which is not the case with foreign currency. However, if the PAO is partially guaranteed by a Guarantor with an "A" rating or higher on the international Fitch Ratings scale through a Partial Credit Guarantee that would guarantee a whole number of coupons for a maximum face amount of US$60 million, the Rating Agency believes that this would raise the debt rating by three notches, that is, from A(pe) to AA(pe) for the foreign currency obligation.

5. **US$60 million partial credit guarantee (PCG).** USAID worked with the GOP and IDB to on the design of a guarantee to facilitate the financing of the more than US$220 million Amazon North PPP. This was the first-ever financial guarantee granted by the public sector window of the IDB. The PCG not only allowed the Concessionaire to obtain better financial terms, but facilitated access to the international capital markets. Thanks in large part to the IDB PCG, the IIRSA Norte Concessionaire was able to place $218 million of securitized bonds under 144A rules in the US to European and US investors. The bonds were backed by the issuance of certificates of annual payments (so-called *certificados de reconocimientos de pago annual de obras* – CRPAOs) made to the Concessionaire by the government of Peru to compensate for construction progress. This the first time a Peruvian company has raised financing via US$60 million bridge loan was designed and negotiated with the Andean Development Corporation (CAF) to ensure the prompt initiation of construction this type of financing mechanism.

Weak Investment Climate and Limited Access to Capital

The Capital Access Index (CAI) is an index which indicates the ability of a country to attract private investors by measuring six indicators: macroeconomic environment, institutional environment, financial and banking institutions, equity market development, bond market development, alternative sources of capital and international access.[19] An adequate score undoubtedly increases the real opportunities for a country to access project funds. In the case of Peru, among 122 countries included in the Capital Access Index, Perú reached the position number 45 last year, showing a slight improvement of its position compared with the last three years.

The chart shows that during phase two and during the implementation of the USAID PPP program, the Capital Access Index did not have an important variation implying that the USAID program would need to go to some effort to attract private investors to the PPP program.

TABLE XX			
Country	**2006 rank**	**2005 rank**	**2004 rank**
United Kingdom (OECD)	3	1	3
United States (OECD)	5	4	6

[19] The Macroeconomic Environment category captures the extent to which a country´s macroeconomic environment is favorable to the running and financing of a business. Macroeconomic variables include low and stable inflation and interest rates, low tax rates, and a level of financial sophistication compared with international norms. Institutional Environment reflects the extent to which a country has the institutions needed to support and enhance business financing activities, including enforceable property rights, an efficient judicial system, efficient bankcruptcy procedures and a low-corruption environment. Financial and banking institutions measures the level of involvement of deposit-taking institutions in financing business. Some of the variables are the level of private sector credit extended by deposit taking institutions, the soundness of financial institutions, the ease of access to bank loans and the efficiency of banking system. Equity Market Development reflects the extent to which financing of business operations is important for a given country. The variables are stock market capitalization to GDP, the liquidity of the stock market, and changes in the number of listings. Bond Market Development captures the importance of bond financing of business operations. The variables are the size of private and public bonds to GDP and the securitized asset issuance to GDP. Alternative Sources of Capital measures a country´s use of such financing tools as venture capital, private placements and credit cards. International Access measures the level of foreign capital available to businesses in a particular country and includes variables such as the volatility of exchange rates, international reserve holdings, portfolio and capital inflows and outflows, and sovereign ratings.

France (OECD)	23	20	17
Spain (OECD)	24	17	15
Chile (UMIC)	22	18	18
South Africa (UMIC)	32	24	29
Perú (LMIC)	45	49	48
Ukraine (LIC)	72	71	84
Namibia (LMIC)	74	61	64
Philippines (LIC)	56	58	49
Sri Lanka (LIC)	66	64	59

Source: Milken Institute Capital Access Index 2004, 2005 and 2006.

Kazakhstan? (to be consistent)

Perú has performed well in institutional environment, equity market development, bond market development and international access. However it is necessary to improve in financial and banking institutions, alternative sources of capital and surprisingly, the macroeconomic environment. Outlined below are some of the principle means ways in which USAID helped Peru to mitigate investment climae and capital access constraints.

Responses

1. **Small capital requirements.** The capital required by the Concessionaire was established under US$8 million for the case of IIRSA North, because of the lack of funds of the bidders participating in the process and with the objective to increase the attractiveness of the project and increased competition.

2. ***Ex Ante* vs. *Ex Post* Guarantee**: The partial guarantee that was suggested by the USAID Infrastructure team is an *ex ante* guarantee which means the guarantee was developed before the Concessionaire was selected. This is the first time that the IDB has worked with an *ex ante* guarantee as their normal experience is to work after the PPP Concessionaire has been selected through the bidding process. However, in the case of Peru, with a weak investment climate, medium country risk, non investment grade and only limited experience with public-private sector participation (PPP) in infrastructure investment, PROINVERSION and MEF decided to have project specific guarantee facilities in place before and during the bidding process to ensure the presence of a robust number of qualified domestic and international bidders. The need for the guarantee facility, whether *ex-ante* or *ex post* for PPP infrastructure investments in Peru, become even more evident during the design process given the conservative posture assumed by the domestic capital market with respect to making investments in PPP infrastructure. In 2004, less than 1% of the $7.0 billion in assets of the Peruvian private pension funds (i.e., AFPs) are committed to PPP infrastructure investments. In contrast, in Chile the Chilean AFPs are the driving force behind the Government's highly successful PPP infrastructure investment program.

3. **Multilateral organisms commitment with IIRSA Norte road PPP:** the GOP invited the World Bank, the IDB and CAF to present offers for the financing of an infrastructure guarantee facility for the IIRSA Norte road PPP. Between July and August 2004 the Government had to evaluate the different offers submitted by the IDB, CAF and the World Bank and decided which offer best served the interests of the Government. On August, 2004 the Ministry of Economy and Finance (MEF) determined that the "partial, revolving" guarantee facility offered by the BID represented the "least cost" to the Government and gave the green light for negotiation of the final terms of the agreement.

Weak Governance

Investment climate is also strongly related to governance which is measure by the following set of World Bank Governance indicators. Chile, a leader in attracting private investment for infrastructure, presents a homogeneous group of indicators which are all over the average for

Latin America. In the case of Perú the indicators are heterogeneous with only the regulatory quality topping the Latin American average.

TABLE XXI : World Bank Governance Indicators

Governance Indicator	Year	Chile Percentile Rank (0-100)	Perú Percentile Rank (0-100)	Kazakhstan Percentile Rank (0-100)	Philippines Percentile Rank (0-100)
Voice and Accountability	2005	82.6	48.8	15.0	47.8
Political Stability	2005	75.9	18.4	46.7	17.5
Government Effectiveness	2005	86.1	33.0	29.2	55.5
Regulatory Quality	2005	90.6	55.9	35.1	52.0
Rule of Law	2005	87.4	28.5	26.6	38.6
Control of Corruption	2005	89.7	40.9	18.2	37.4

Source: World Bank

Chile's PPP Program is characterized by a rigorous package of studies for each PPP, high competition for the biddings, attractive infrastructure business, high participation of European companies in the bidding process, and credible public sector management. In 1996 Chile estimated its infrastructure deficit to be US$12,5 billion which contributed to productivity losses of around US$2,3 billion. Currently Chile's PPP system has generated investments of around US$6,7 billion[20].

On the positive side, Peru has a number of institutions which participate in a typical PPP transaction which contributes to a higher level of social accountability than normal public investment controlled by a ministry. Among the institutions are:

- PROINVERSION, private investment promoting agency
- Ministry of Transport and Communication (MTC), the public representative of transport infrastructure
- OSITRAN[21], the public transport infrastructure regulator
- Ministry of Finance, it takes decision over the public resources committed in a PPP transaction through guarantees or direct public support
- INRENA[22], national institute that protects the natural resources involved in an infrastructure project. Normally coordinates with the MTC Environmental Office.
- COFOPRI[23], is a public organism which is in charge to reduce the informality in the housing sector. Thus, its participation is essential in a PPP transaction, giving support to PROINVERSION and MTC to know the properties under potential problem once the road project is being implemented.

[20] According to Coordinación General de Concesiones (Ministry of Public Works) of Chile.
[21] Supervisor Organism of Public Use Transport Infrastructure Investment
[22] National Institute of Natural Resources. It depends of the Ministry of Agriculture.
[23] Organism of Formalization of Informal Properties

- Contraloría de la República, is the public auditing organism that participates in a ex-post way once the project is adjudicated to the Concessionaire.

While the high number of public institutions involved in PPP´s arrangements may tend to mitigate against corruption, it is also clear that high number of institutions participating often with less than clear roles often slows down the PPP process and greatly reduces the ability of PROINVERSION to manage the process in an efficient manner.

Responses

1. **Contract Design Improvement.** A "third generation" PPP contract with significant improvements over similar PPP contracts for other PPP in Peru's transportation sector, which incorporates industry-specific international best practices and innovative risk mitigation mechanisms, was developed for the Amazon North Road PPP. The Amazon Central PPP contract will become a model for self-sustainable PPP PPP (i.e. without government subsidies). Innovative risk management mechanisms were developed specifically for these two contracts, such as: periodic maintenance cost insurance to reduce volatility in periodic maintenance costs; clauses to protect the financiers in the event of early termination of the contract; minimum revenue guarantee to minimize traffic risk in the Amazon Central PPP project;

2. **Multiplier Effect.** The Amazon North PPP contract is being used by PROINVERSION as a model for PPP transactions that require government subsidies (i.e. PPP that require PAO + PAMO payments). This PPP contract model was adapted by PROINVERSION for the five PPP projects that make up the Interoceánica Sur highway and for the more than 20 PPP that make up the Costa – Sierra road PPP program.

3. **Stakeholders Conferences.** USAID and PROINVERSION implemented a campaign that stressed the many benefits of PPP to agencies within the GOP. USAID/PROINVERSION organized several Workshops and Road Shows with national institutions like MTC, MEF, OSITRAN and regional governments or municipalities. The objective was fulfilled generating political commitment and broad-based popular support. It improved the image of PROINVERSION and also show a serious work for the projects were USAID was involved helping PROINVERSION.

Inefficient PPP Process

In this section we will describe the principal weaknesses encountered by USAID in the Peruvian PPP process and some of the response employed by the GOP and USAID to mitigate the impact of the weaknesses.

Objectives of the public institutions. While the objectives of PROINVERSION are clearly focused on the closure of well-designed PPP, the same can not be said for most other GOP agencies. For example the MTC, for example, in Red Vial 6 the civil works were delayed and they will begin after the two first years of the PPP to make the PPP viable after the PPP was vacated in its first bidding. In some opportunities negotiations between the public professionals had been very difficult and in addition to the fragility of the public employment, a hard decision normally delayed the PPP process because of the uncertainty about the future control that Contraloria will apply over the PPP process and over the professionals involved in the project. In the case of MEF, for example, this institution is characterized by a lack of opinion in the process and normally is not actively participating in the PPP process. Redo please

Objectives of the public officials. At the beginning of the USAID Program, USAID perceived profound conflicts of interest between Sector Ministry officials, who did not buy-in to the PPP processes which would reduce their sphere of influence, lead to budget cuts and a staff surplus in the institution. This has been manifested in the form of delays in the delivery of information or delivery of outdated or conflicting information, overly elaborate designs, or demands for an

increased initial investment, among others that greatly compromised the efficiency of the process and have caused some PPP to fail.

Continuos changes of officials. Continual changes in the officials appointed to coordinate the PPP processes in Proinversión, MTC and MEF have delayed transaction implementation due to the fact that many of the agreements that were reached with a given office had to be re-negotiated upon the arrival of a new official.

Continous changes in the PPP schedule. One of the principal problems is that schedules changed continuously and were rarely met, often prone to political considerations as opposed to what the potential bidders required. These changes often were costly both for the government (especially though limited competition) and for the bidders. The process itself can lose credibility and seriousness. The GOP officially opened the AN and AC international bidding processes without having completed the minimum required feasibility analysis. As a result, the original bid schedules had to be modified on several different occasions. This has led to a series of problems in the implementation process and, more importantly, the uncertainty generated by the frequent changes in the bidding calendar has caused potential investors to hold back from participating in the Amazon North road bidding process.

Potential capture of regulator. Another risk is that the GOP is captured by the bidders (if there is not robust competition) through the rounds of questions by the bidders and subsequent changes to the contract (a positive process with robust competition).

1. USAID Response

- USAID held meetings with the state institutions and stressed to them the negative repercussions caused by delays in the delivery of information. As a result, it was determined that USAID could request information directly from Provías Nacional to streamline the process.

- The USAID team made a significant effort to involve the greatest possible number of government officials in the implementation of these projects, especially middle management personnel, who have lower turnover rates in state institutions.

- USAID established a direct and ongoing dialogue with Proinversión where these issues have been discussed in-depth, particularly with regard to the developments in the Amazon Cental process. USAID recommended to PROINVERSION that a final bidding calendar for the Amazon Central PPP not be published until the time periods required for finalizing all of the technical and financial feasibility studies for the PPP have been definitively established.

- USAID established a cost-sharing with PROINVERSION which engenered greater respect for USAID resources. The GOP was willing to share costs in the Callao PPP and also in the last period of the Amazon Central transaction.

- USAID tried to establish clear time frames by pushing the authorities with continuous meetings and letters but was unable to influence the process.

2. Government Response

The fourth phase of PPP in Perú will have a portfolio starting in the second semester of 2007 and it will be finishing together with the Mr. Alan García presidencial period. The projects are the following:

a) Road IIRSA Sur Segments 1 and 5
c) Road Red Vial 4. Pativilca-Casma-Trujillo/Pativilca-Huaraz-Caraz
d) Road Red Vial 1. Sullana-Aguas Verdes/Piura-Sullana-La Tina (Pte.Macará)

e) Second Regional Airports package
f) Second road of Costa-Sierra Program. Road Nuevo Mocupe-Cayalti-Oyotun.
g) Port of Ilo
h) Fluvial Port of Pucallpa
i) Port of Paita

In summary, the road PPP project an investment around US$888 million, airports projects consider an investment for US$255 million and the ports projects around US$60 million. This PPP package will have a total investment amount of US$1200 million and we estimated that at least 2/3 of the total investment must be public resources to support the PPP.

Building on the lessons learned during the third phase of the concession program in Peru, the MEF recently established Supreme Decree No200, described below, that will bring more order to the PPP system. This new law is very positive because it will improve the organization to face the problems in each step of the PPP process.

This new phase of PPP will have a new regulatory framework because the recently approved Supreme Decree No.200 of December 2006 will be applied as soon as possible. This new law established a procedure that all PPP projects requiring government subsidies must follow:

1. The Ministry of Transport prepares the preliminary project profile.
2. The Investment and Programming Office of the MTC prepares the socio economic evaluation of the project.
3. If the project is socially profitable, the Ministry of Economy and Finance (MEF) will prepare the Public Sector Comparator (PSC Study) through the Dirección General de Programación Multianual del Sector Público (DGPM).
4. If the PSC study recomends to implement the project through a PPP, the MEF will prepare a document with the recommendation and the Cabinet authorizes the beginning of the project through the PPP System using some public resources.
5. The Ministry of Transport will be responsible for the design of the PPP, preparing the prefeasibility and/or feasibility studies with MEF and PROINVERSION's participation. The DGPM must approve the studies' terms of reference.
6. Once the studies are completed, MEF will prepare a document elaborating on the following issues: a) Implementation and operation costs, b) quantify and limit to the contingent liabilities and certain liabilities, c) quantify and limit the guarantees, d) liabilities according to the Marco Macroeconomico Multianual, e) budget availability projection, f) Basic outline of financing
7. MEF will send the above mentioned report to PROINVERSION. With that PROINVERSION will included the project in the Promotion Plan pipeline.
8. PROINVERSION will prepare: a) the Promotion Plan, b) Request for Proposals, c) PPP contract, d) Pre-qualification criteria. It will also be in charge of receiving and evaluating the bids.
9. Contraloria will prepare a previous report about the PPP focused in the public resources involved in the PPP.
10. The PPP contract will be signed by the Concessionaire and the Ministry of Transport and Communications
11. OSITRAN will be responsible for the regulation of the PPP contract.

Limited Experience in PPP Design

In this section we will emphasize the importance of a good PPP design, the constraints faced in the projects implemented and the measures established by the GOP or USAID to mitigate problems.

Lack of Resources for Feasibility Studies. The authority in PPP must deal with asymmetric information which is related with the unbalance information between the authority and the bidders and/or Concessionaire. In this sense, the authority in its role to protect the citizens and close an optimum deal with the private sector must to collect and prepare the maximum and most useful information that could be possible to design an adequate PPP process. It means

that the authority would have the best feasibility studies as it can be, to design a PPP process. They are: engineering study, environmental study, citizen participation study, demand study, financial modeling and shadow rating and risk distribution study. In the Peruvian case, lack of resources is the principal factor to complete the total information package required to prepare a PPP it can generates also lack of trust in the PPP process by the bidders. Although most of the studies have been finished for the PPP, they are not totally homogenous in term of depth and topics included. This fact joined to the continuous postponement of the official deadline to bid make some studies obsolete which is a source of conflict with bidders that could take advantage of this situation asking for higher public resources to support the PPP. Edit please

Several PPP contracts. A PPP process can have several and different PPP contracts during the bidding period which generates confusion to the bidders and lack of clarity in the real business design that the government whish for the PPP. It is possible to recommend that the authority can do a shadow work consciously and just once the public sector decided about the scheme and it has been approved by all institutions, the contract can be launched to the bidders. Following this recommendation the confidence and bidders reliability can be improved and also it could increase competition.

Response

Comprehensive Approach: The USAID contract was designed to provide comprehensive services where they were needed from the initial stages through transaction closure. Comprehensive support significantly increased the likelihood of success. More detail about coordination…

Little Recognition of the Value of Competition (and the effort required to achieve it)

In the last PPP period Perú created a new PPP transport industry with Peruvian, Brazilian, Arabian and Ecuadorian companies, however the general diagnostic is that apart from the port and airport, strong competition is still lacking.

Several factors can explain the lack of competition from Peru's credit rating to high perceptions of political risk. Other factors include lack of credibility in the PPP process by the international bidders, lack of business profitability, high level of risk involved in the contracts.

In the third phase of Peruvian Transport PPP between 2004 and 2007 we found two groups of PPP projects. One group, the normal project finance group, in which the projects are totally paid by the revenues coming from the users, and the second group where the governments must to participate with contributions to complement the revenues to make a financial feasible project which is usually called public private partnership (PPP).

As we can observe in the following tables in the case of PPP based in PAO-PAMO scheme the competition has been weaker than the self-financially projects or normal project finance where we have road 6 and Callao Port with 2 and 4 bidders respectively.

TABLE XXII			
Normal Project Finance Group	**Number of bidders**	**PPP Group**	**Number of Bidders**
1. Road 6	2	1.IIRSA Road Amazon North*	2
2. South Container Terminal Callao Port*	4	2.IIRSA South Road (segments 2)**	1

		2.IIRSA South Road (segments 3)**	2
		2.IIRSA South Road (segments 4)**	2
3. IIRSA Road Amazon Central*	7 prequalified companies	3. Costa-Sierra Road (Buenos Aires-Canchaque)	1
		4. North Regional Airports	1

*USAID Support
**In June 23th, 2005 PROINVERSION received the offers for the 3 segments, the competition in segment 3 and 4 was just between the Odebrecht Consortium and Intersur Consortium.

Recommendation

Open Competition - is perhaps the core underlying principle in PPP procurements and is the only way to assure success and best results from any PPP procurement. Competition helps bring about efficiency, reduces price distortions, promotes greater accountability and transparency in business decisions, and leads to better corporate governance. Competitive tendering and the efficient management of the tendering process are essential to ensure the highest quality of service provision at the lowest possible price. It is important that the timeframe and all PPP characteristics included in the contract design rest in the objective of robust competition.

Bidding Process: A Pending Challenge

May 3, 2005 was the due date for submission of technical and economic proposals for the Amazon North road PPP project. After an active bidding process, four of the nine firms that pre-qualified in December of 2004 presented proposals. These four firms, grouped in a consortium of three firms and a single firm, presented two proposals. These two proposals belong to:

i. Consorcio Vial Eje Norte (CVN) formed by the Brazilian firms Odebrecht and Andrade Gutierrez, and the Peruvian firm Graña y Montero; and

ii. Construtora Queiroz Galvao S.A. from Brazil

The principal reasons why the process had only two bidders (four companies) out of the nine pre-qualified firms is the fact that the bidders were never afforded a realistic and adequate timeframe to prepare proposals. Driven largely by political concerns the Government set, and continuously reset, short, arbitrary deadlines for the completion of the bidding process, causing pre-qualified bidders to lose confidence in the bidding process and one by one withdraw from the competition. In addition, bidders did not have an appropriate timeframe from the onset of the process to ensure bidders that they had sufficient time to prepare their respective proposals.

In addition, the Amazon North PPP had to “compete” with a number of other large PPP processes (i.e. Inter-Oceanica Sur, Red Vial #6, Proyecto Costa Sierra, etc.) that the Government was conducting simultaneously.

The fact that PROINVERSION has a number of bidding processes opened at the same time caused bidders to select one project over another, or perhaps equally likely, loose faith in the Government's ability to close even a signal proposal and therefore decide to abstain from participating in any of the bidding processes.

The USAID team helped PROINVERSION to evaluate the two technical proposals. The assessment from the evaluation team indicated that both proposals passed the technical evaluation and, therefore, were eligible for the opening of their economic proposals on May 5th of 2005 in Yurimaguas city.

The economic proposals were also submitted on May 3rd. However, the maximum amounts of subsidies, in terms of PAO and PAMO payments, were only announced during the ceremony. The PAO is an annual payment the Government will make to cover the costs of the initial investments estimated to be approximately US $218 million over a four year period. These payments will be made for a period of 15 years only once the rehabilitation and construction work is concluded. The PAMO is an annual payment to cover the costs of operating and maintaining the road over the 25-year PPP period. The PAMOs are paid from the beginning of the PPP period.

At the bid opening PROINVERSION gave the two bidders 30 minutes to adjust their proposals to these numbers before their actual submission. Although both firms subsequently presented their proposals, the legal representative of CVN asked to include in the minutes of the meeting their protest for the lack of adequate time to adjust their economic proposals. Furthermore, CVN's representative stated that given the fact that they did not have knowledge of the maximum amounts until that moment; their economic proposals did not incorporate any adjustments. Thus PROINVERSION provided the two bidders the opportunity to re-submit their economic proposals on May 5th.

For this to happen legally and transparently both Queiroz Galvao and CVN agreed to make this modification to the established bidding process. This alternative route appears reasonable and would have provide a solution to ensure the submission of two competing bids. It is important to note that the maximum amounts of PAO and PAMO were not changed.

Overall the Amazonas Norte solicitation process has been less than perfect but still competitive and the Government appears to have maintained cost discipline by agreeing, and then "sticking with" the PAO and PAMO investment and O&M estimates developed by the Ministry of Transport and Communication. Review above again please

Lesson Learned

The obvious lesson learned from the Amazon North PPP process is the absolute requirement to have a serious schedule. In addition is highly recommendable that amounts so important like PAO and PAMO would be announced by the GOP with anticipation to let bidders prepare an economic offer with symmetric information. On the other hand it is necessary to increase the economic efficiency throughout the bidding process and in the project design. It will generate better competition and during the PPP period will mitigate the potential dispute or contract renegotiation.

Environmental Studies: A Social License

Redo Please
In transport PPP an environmental study is key to reducing design risk piece to reduce the design risk as it is required to determine a minimum amount of money that the concessionaire will invest in this issue in the PPP period.

For example in the case of Camisea Project, the IDB approved a loan for US$75 million for the transport component in 2003 of the Camisea natural gas project and the social and environmental auditing is a requirement included in the loan contract.

The Camisea project is composed by the gas extraction, operation managed by the argentinian company Pluspetrol, the transport system managed by Transportadora Gas del Perú (TGP) and the distribution component managed by Cálidda that will be transferred to Promigas.

Between December 2004 and march 2006 the project had five spilling incidents that were audited by Exponent, it identified geological factors, soldering and erosions as the principal factors causing the spillings. It is important to highlight that TGP has invested US$50 additional million to reduce the pipes risks and together with the IDB the company has prepared an action plan to improve the pipes manage.

The first generation of road contracts in Peru, did not have a profound regulation in the environmental issue and it could originate several and continual negotiations between the concessionaire and the GOP.

The studies under which the project was founded were previously designed with an objective of to bid through a normal public bidding not through the PPP system. USAID updated and designed new studies to homogenize the information under the 954 kms in the Amazon North project.

By other hand the citizenship must to know and participate in the PPP process giving opinions and suggestions that can have local, regional or national impact.

If the environmental issue is not considered with respect and seriously, there are many examples in Latin America and the World that basically is not possible to get the “social license” because in the moment less expected before or during the concession period appear the problems that were not considered at the beginning in the environmental assessment.

In the specific case of the Amazon North project, the road goes through an extensive environmentally protected area denominated “Cerro La Escalera” which is included in a reserved area whose name is “Cordillera Azul” near to Tarapoto. It is a sensible area which was considered with specific environmental measures to protect the wildlife of the sector.

By the other hand in the case of the Amazon Central, the studies considered carefully the jungle zone between Tingo María and Pucallpa in the construction and maintenance periods.

Measures

USAID prepared for Amazon North PPP road the first-ever Strategic Environmental Evaluation (SEE) for an infrastructure project in Peru, complemented with environmental impact assessments for each road section.

USAID created a comprehensive and unprecedented set of environmental regulations and penalties for non-compliance were prepared and incorporated into the highway PPP contracts.

USAID designed the first public consultations of PPP in Peru, along the Amazon North and Amazon Central corridors to disseminate the potential environmental impacts of the project and the corresponding mitigating measures were completed in most of the municipalities served by these two highways, as well as in indigenous communities living within their area of influence.

A single comprehensive environmental impact assessment for the Amazon Central corridor was developed and approved by the MTC.

Engineering Studies

In order to accurately calculate the value of the investment and maintenance plan, the government must to know the technical specifications for the construction period and the required level of service. It is particularly important in cost models of PPP where the authority will pay enhance PPP financing.

If the authority does not have this important information, the process can loss credibility and it can have the risk that the government can suffer the asymmetric information represented with lack of competition and higher costs offered to take the business by the bidders.

Lack of economic resources has been an important constraint especially for the development of exhaustive studies that help the government with rigorousness and to know with exactitude the amount of money involved in the investments and later maintenance plan.

USAID bring several experts to support the Amazon North engineering studies and the work was focused in the collection of scattered documentation located in different offices of the Ministry of Transport to organize this information into the data room as an organized set of referential information that the GOP offers to the bidders to prepare their technical offers.

At the same time the USAID experts review critically the existing information and detected that it was a little old and heterogenous (prepared by different consultants with different criteria), even in some segments there are not engineering studies and nor PROINVERSION/MTC neither USAID had economic resources to hire additional studies to complement the existing studies.

The studies under which the project was founded were previously designed with an objective of to bid through a normal public bidding not through the PPP system, which has several differences. Among them we can mention the maintenance standards for a long term, the level of definition of engineering solutions and logically the essential criteria that engineering is focused in improve and maintain a level of service for the users.

As an example of a couple of problems derived of the inexistence of new and homogenous engineering studies were the following:

a) The study in the segment Tarapoto-Yurimaguas was built in part with an aerofotogrametric study which now in practice hidden the positive slope existing in a couple of sectors of the segment.
b) Critical points were and will be a point of conflict between the GOP and the PPParie.
c) Shore protections were considered inside of critical points because it did not have a design in some segments of the road.

Lesson learned

The optimum would be:

a) Hire a new and homogeneous engineering study for the all segments of the road. Also it could be just updated in some segments.
b) Prepare the new amount of investments for the road
c) The importance of a exactitude in the amount of investments and the maintenance plan is that Amazon North PPP was bidded through the PAO-PAMO system with government payments.

Vested Interests

Another constraint that faced the USAID PPP program in Peru is related to the opposition by vested interests in the PPP of the Container South Terminal of Callao Port. Vested interests came from different agents that were working in the Callao port in period of the PPP preparation. There are principally three types of agents in the Callao port system: public, semi-public and private agents.

The main public agents are: PROINVERSION, Ositran, Ministry of Transport and Communications, National Port Authority, ENAPU, and Ministry of Economy and Finance. Labor unions are considered as semi-public agents; currently, there is one union in Callao, Sitenapu (Sindicato de Trabajadores de Enapu) which belongs to Fentenapu (Federacion Nacional de Trabajadores de Enapu).

Finally, the private agents are: port services operators, ships agents (agentes marítimos), and Custom agents.

In the end, the objective of the Port Agents, besides serving importers and exporters, should be to provide those services to exporters-importers at reasonable prices to be able to compete for the sea cargo market. Currently, importers-exporters must make the following payments in order to move their goods through the port:

a) sea freight and certain other payments to the ships agent (agente maritimo),
b) on-shore handling charges to the point where he receives his cargo, and
c) customs agents charges and customs duty, not considered further here

The most powerful port interests were the "port operators" such as Tramarsa and Neptunia. These are owned substantially by one Peruvian group, (the Romero group), in association with Chilean maritime interests. The port operators employed non-union labor and represent the largest cost element in the port for the Importer-Exporter.

Only ENAPU, among the public agents, seems in some moment during the process to be against the PPP as it has the same interests in survival as the union. Besides, its “labour liabilities” were seen as the major obstacle to its liquidation. According to ENAPU, what they needed from the central government is just funding to expand and install gantry cranes in Pier 5. Over the past years, ENAPU has asked for this funding to the government with no success.

In the case of the semi-public agent interests the labor unions were considered as one of the biggest obstacles to the PPP process. They saw the increasing role of the private sector as a threat for the following reasons:

a) it could reduce the influence of organized labor
b) it could reduce the resource base on which their pensions are based. Currently, the fringe benefits that members of the unions receive are higher than the average of South American countries. Besides, the Ley 2530 gives pensioners the same salary increases as active workers.
c) innovations and technology efficiencies might lead to unemployment.

Now in the case of the private agent interest, we can distinguish three principal private ports agents: logistics operators, maritime agencies, and export-import users.

Undoubtedly for the users (Confiep, Cámara de Comercio, Adex, and Comex) the PPP is very important as a way to reduce the existing excessive costs, which have been studied in detail in several studies.[24] The same idea is considered for maritime agencies and shipping lines. However, logistic operators were happy without PPP at all, this is case of the APAM (Asociacion Peruana de Agencias Marítimas) as they are in a special condition where competition is low and were getting benefits for some grade of vertical integration. In the case of ASSPORT (Asociacion de Operadores Portuarios) there seems were supporting the PPP process.

Vertical integration, in Callao Port, between shipping- seaport agent- warehouse was considered high in some cases, which commonly stops some improvements of being transferred to the users.

GOP Response

The GOP had several activities focused in promote the PPP, convince the different agents about the advantages of the PPP and also negotiating with the most powerful forces into the system.

[24] For each dólar charged, there are two dolars in costs overruns. It could be avoided. “Estudio de costos y sobrecostos portuarios del Callao” Enero 2005. Proyecto Crecer. USAID Perú.

In the table we show each agent with the PPP risk involved and the principal activities that the GOP executed to mitigate the risks.

TABLE XXIII		
Agent	**Risks**	**Activities**
ENAPU	• Strikes • Port paralization	PROINVERSION had meetings with them and promised to push the GOP invest in gantry cranes and the expansion of pier 5.
Unions	• Strikes • Port paralization	PROINVERSION had meetings with unions, mainly with the APRA (the major political party in the port). Government promised union workers to continue working in pier 5 or under a potential PPP.
Operators and Vertical Integration	• High profits for the operators	Operators can continue working inside of the port but fulfilling quality services. With PPP they will increase the level of competition.
Chilean port operators	• Status quo • Bidders join Romero group • Political • National security	Congressman, especially Mr. Jacques Rodrich, Congressman, said that he is against the participation of Chilean companies in the PPP. PROINVERSION said that it is not good restrict competition in the PPP in this way and neither had the tools to do that.

USAID Response

USAID hired two American companies to support the Container South Terminal of the Callao Port PPP process, Nathan and Chemonics. They prepared several studies in two phases in the first phase and supporting the National Port Authority, Nathan attended several meetings to promote the modernization of the Callao Port after communicate publicly the results of several studies related to the vested interests in the port and existing cost overruns in Callao Port and operational problems in the port that originated inefficiencies and loss of competitiveness for the Peruvian economy.

In the second phase USAID tasked Chemonics to prepare the principal documents to design the PPP. Among them the studies were:

a. Industrial Organization for the PPP of the Container South Terminal
b. Demand Study for the PPP of the Container South Terminal
c. Financial Model for the Container South Terminal PPP
d. Operational Review of the Callao Port process.

6. Recommendations

We may want to drop this depending on the product

It is not easy for LMICs/LIC to design and implement successfully PPP programs. There are many external and internal constraints to be solved or mitigated to pave the way for the private participation in public infrastructure provision in a efficient, economic and responsible manner. It is nevertheless urgent for LMIC/LIC to increase investment in infrastructure that will help increase economic growth and reduce poverty.

In this context and taking in consideration the experience of Peru as an LMIC we can suggest several recommendations to the Peruvian authorities to improve the next PPP transport infrastructure program with around US$1200 million in investments between roads, ports and airports. These recommendations could also be implemented also in others LMICs/LIC with similar characteristics.

6.1. PPP Process

We present a group of measures to improve the efficiency of the PPP process that will trigger higher national and international confidence in the PPP Peruvian industry it ewill attract more bidders and also will save public resources.

a) MEF, MTC and PROINVERSION must to define a initial Program of transport projects that will be adjudicated in the next couple of years.
b) Define the studies needed by each PPP project and prepare the studies in a exhaustive way. It is recommendable that engineer, demand and environmental studies will be hired before the risks analysis and financial modeling. The Peruvian Government must assure that the resources be enough to fulfill with high quality studies.
c) Based on adequate studies PROINVERSION and MTC must define the group of transport projects that will not require government resources. These projects will must to have the first priority to be launched through PPP system.
d) Among the several projects that will require government support. The MEF based on the studies prepared by the MTC and PROINVERSION will review the socio economic evaluation and after that, MEF must to prepare the Public Sector Comparator to define if the project will be implemented through the PPP system or just through public investment.
e) Later, the process must follow the Supreme Decree No.200 for PPP with public resources contribution.
f) The promotion Plan of each project must to be published just once all public institutions, including the Contraloría have accepted and approved the package of legal documents (Promotion Plan, RFP and Contract) and the MEF have approved the public financial commitments of the PPP project (national guarantees, multilateral guarantees, payments to the concessionaire and others).
g) With this new procedure for the PPP system, the bidders could know the official economic values long before the economical and technical offer submission
h) Once the legal documents are published, just in this moment PROINVERSION will established the bidding period with their technical and economical offers submission date and the adjudication period.

6.2. PPP Design

Every PPP design in Peru must consider the factors presented in this paper like lack of investment grade rating, weak investment climate and weak governance that limit the potential benefits of the PPP projects. The trade-off that the authority can face is to stop the process or go slowly until the projects especially those that require public resources as support can reach adequate levels of demand or go ahead with the program but transferring less risks to the private sector.

Peru has a new concession package that will have a total investment amount of US$1200 million and we estimated that at least 2/3 of the total investment must be public resources to support the concessions. This idea will reinforce the importance of the Supreme Decree No.200 to foster socially profitable projects. In summary, the road concessions project an investment around US$888 million, airports projects consider an investment for US$255 million and the ports projects around US$60 million.

Our recommendations in this sense are the following:

a) Prepare an exhaustive group of studies for each PPP project
b) Determine if the size of the project is adequate to manage by the private sector and also to inspect by the public sector.
c) Determine the advantages or disadvantages for the bundling or unbundling projects.
d) Determine if the project face competition from others kinds of infrastructure
e) Determine if the project under the constraints mentioned before requires national guarantee, multilateral guarantee, credit lines guarantees by the government in construction period u others credit enhancement.

f) Always prepare a shadow rating to know if the project will be financially viable in the capital markets.
g) Determine if the project has monopolistic characteristics to be regulated, face competition or it can be a contestable market.
h) Prepare multiple road shows to present the project to the current bidders in the country and the potential bidders especially in Europe. Most of them are concentrated participating in Chile and recently in USA.

6.3. New Projects

Although the Peruvian Government has currently a group of potential projects for PPP and also has the Intermodal Plan of Transport (PIT) funded by the IADB and prepared by the french company BCEOM where appear some recommendations for the most attractive transport projects to be implemented by PPP. It is necessary to establish or discover a new group of projects that can be implemented with resources coming from the regions.

This year has been demonstrated that regional governments, does not have the capacity or the total resources to satisfy the demand for public services adequately. Thus, the most important results are lack of health services, education, transport, water and energy.

By other hand there are many potential businesses that are sleeping because of lack of financial resources or high level of risk. They also can be triggered with the support of the public sector and/or private companies acting as sponsors or participating sharing risk and future profits.

Therefore the objectives could be a) incorporate the public sector with municipal, regional and national funds to the provision of public goods b) incorporate the private companies to the economic activities development.

The Peruvian Government, by promoting and facilitating the participation of the private sector, and turning to the private capital market for the required investment financing, will lessen the pressure on the GOP's fiscal budget, freeing scarce tax revenues to be focused on other public sector priorities such as education and health while still ensuring sustainable investments in infrastructure construction and maintenance.

The Program of PPP could include the following areas:

a) **Social Infrastructure**: in this group of projects, the GOP can choose schools in the educational sector, hospitals from the health sector, water and sewage, energy and jails from the security citizenship.
b) **Productive Business:** this group will let the participation of the private companies and public sector to develop new business and initiatives to develop jointly. Specifically the projects can be for example, forestry or alternative energy development business like ethanol or biodiesel.
c) **Transport Infrastructure**: the projects here can be chosen among roads, bridges, small airports, runways and river ports.

In this context it is necessary to mention that in this decade, USAID has been working in three different programs to improve roads in Perú. The first intervention was in the Fernando Belaunde Terry (FBT) road between Tarapoto and Tingo María, where through a direct investment of around US$26 million, built 90 kilometers in afirmado to connect Campanilla and Pizana. The second intervention had been trough the Infrastructure area of the Programa de Desarrollo Alternativo (PDA), the results were kilometers and the investment was. Undoubtedly that the principal objectives in this area would be to protect the past investments made in the FBT and in the PDA roads, looking for some new formulas of PPP to attract the private sector to assure the long run maintenance of the infrastructure.

An important source of funding to consider in the future is the mining canon which is a participation that local and regional governments receives from revenues and rents that coming from mining exploitation.

For example, the mining Yanacocha, belonging to the North American company Newmont Mining Corporation and to Benavides family from Peru, possesses the second largest gold mining location of the world, both in volume and extension, the

value of its production reaches to 1.17% of Peruvian PBI as to 2005 and in terms of exports it represents around 10% of the Peruvian exports.

The new law of mining canon No.28322, indicates that 50% of the Income Tax paid by Yanacocha, for using mineral resources, will be invested in the department of Cajamarca and it could be dedicated preferably to infrastructure works like road infrastructure, infrastructure of basic services, electric infrastructure, works of civil defense and agricultural infrastructure.

The Cajamarca Region has received in 2005 S/.285 million nuevos soles and in the year 2006 a total of S/.355 million nuevos soles, around US$111 millions.

ANNEX

The Institutional Framework for Transport PPP in Perú

The institutional framework in Peru for PPP in the transport sector is legally well defined. At the national level, is the institution in charge of fostering and promoting private investment in this sector. PROINVERSION's steering council comprises the following Ministers of State: the Chairman of the Cabinet, who heads the steering council, the Minister of Economy, the Minister of Transport and Communications, the Minister of Energy and Mines, the Minister of Housing, the Construction and Sanitation Minister, the Minister of Production, the Minister of Foreign Trade and Tourism, and the Minister of Agriculture.

Its main functions are to:

- Promote of public assets and projects, including development of a private sector participation communication strategy, the design of the privatization and PPP strategy, approval of private investment promotion campaigns for each company being privatized.

- Promote investment, which includes identification of investment opportunities, design of marketing strategies, and education of audiences about the benefits of private sector participation, among others.

- Liaise with investors, by providing information and guidance services to potential investors, coordinating and negotiating international treaties, coordinating settlement of disputes and following-up and evaluating the impact of private investments.

- Carry-out strategic Planning, including the promotion of a framework that attracts private investments, design of the National Investment Plan and analysis of Peru's economic situation in regards to private sector participation.

- Design and implement privatization transactions with the assistance of consulting firms or investment banks

This Steering Council nominates PROINVERSION's Executive Director, who is responsible for management of the organization as well as for the organization and planning to fulfill the goals and requirements determined by the Council. The actual implementation of the projects is entrusted to the Projects Division, which is subdivided in project teams. Each team is headed by a Project Director who is assisted by 2 to 3 professionals. Normally, the project Director can also hire consultancy services to complete the necessary studies.

The Ministry of Transport and Communications (MTC), together with PROINVERSION, participates in all phases of the PPP's project cycle. The MTC selects the projects eligible for PPPing, prepares preliminary engineer and environmental studies and approves the final version of the PPP contract.

Another institution that participates in the PPP process is OSITRAN (Organismo Supervisor de Transportes). It is responsible for setting the PPP's tariff structure, as well as for controlling and enforcing the PConcessionaire's compliance with the construction and maintenance requirements set forth in the contract. OSITRAN also participates in and contract renegotiations.

A. The PPP Project Cycle

The Project Director is responsible for carrying out the project through the PPP cycle. Once the project's Promotion Plan is approved by Supreme Resolution, the head of the Projects Division passes this responsibility to a Project Director. The Promotion Plan includes, at a minimum, a) General design of the process, b) Type of PPP, c) Tentative financial structure, d) Period of the PPP and e) the proposed bidding calendar.

A.1. The design phase.

In Perú, as well as in most other countries, the PPP project cycle is usually divided into two main phases: design and implementation. In the design phase the public sector (the Government) designs and establishes the technical, financial, economic, social, environmental and regulatory aspects of the project. The engineering, demand, and environmental studies, among others, are also prepared during this phase. In some countries, like Chile and Colombia, the bidding documents (request for proposal and draft PPP contracts) are also prepared during this phase. In this phase the head of the Projects Division collects the existing information from the government entity in charge of the sector (MTC, National Ports Authority (APN) u other) and prepares the data room to design the Promotion Plan to be approved by the PROINVERSION Council.

PROINVERSION has been converted into a super ministry of investment trying to understand the language of each sector, mitigating the specific risks associated to the project and the sector and preparing the business design that meets the demands of both, the public and private sectors.

Once the Promotion Plan and the Request for proposals are published, PROINVERSION takes charge of the PPP process, with the sector ministry providing input more on a reactive than proactive way. The success of the PPP is perceived more as PROINVERSION's success than an inter-institutional success.

A.2. The implementation Phase

The implementation (transaction) phase begins when the feasibility studies are completed and the bidding documents (approved by the Controller) are published. During this phase, the government agency in charge of conducting the bidding process is also responsible for promoting the activity, interacting with bidders to clarify the process/documents, and for the technical and financial evaluation bids.

In the Peruvian case, PROINVERSION approves the request for proposals, determining the potential public resources to support the process.

Ideally the request for proposals and the PPP contract would be published once all the sector ministries (including Contraloría) gave their approval, leaving PROINVERSION to complete the transaction. This however has rarely been the case in our experience.
Once request for proposals and the PPP contract are published, PROINVERSION normally receives comments from bidders to both documents at the same time and the Infrastructure Committee with the support of the project chief and the legal unit answer the questions. Additionally the Infrastructure Committee can ask the opinion from a consultant team.

Questions must be answered at least 15 days prior to the deadline for receiving technical offers from the bidders. In this public act, the bidders submit their technical and economic offers and the notary takes the minutes, beginning the period to evaluate the offers.

The Committee will evaluate the proposals considering:

a) Minimum technical requirements
b) Innovations and technical additions to the basic minimum requirements offered by the bidder
c) Environmental and ecologic issues
d) Others established in the specific RFP

Finally, the PROINVERSION Committee awards the PPP to the bidder with the highest financial score.