

# LAUNCHING PUBLIC-PRIVATE PARTNERSHIPS FOR HIGHWAYS IN TRANSITION ECONOMIES

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***Abstracts:** In many countries, the private sector has been involved in financing infrastructure through concessions under a public-private partnership (PPP) program. This paper reviews potential applications of partial risk guarantees, the required legal framework (e.g., concession law) for attracting private capital for PPP schemes, possible steps for a country to launch a program of private participation in highways, the concept of Greenfield and road maintenance concession programs, and the treatment of unsolicited proposals. It also summarizes potential applications of the World Bank Toolkit for PPP in Highways as an instrument to help decision-makers and practitioners to define the best PPP approach for a specific country.*

***Key words:** a public-private partnership (PPP) program; concession law; private capital; “build-own-operate-transfer” (BOOT) contract; “build-own-operate” (BOO) contract; “build-operate-transfer” (BOT) contract*

## I. INTRODUCTION

Many governments do not have all the financial resources required to expand, maintain, and operate their country’s highway networks and other transport infrastructure. The overall resources needed are enormous. In the United States, for example, it is estimated that \$55 billion will be required annually over the next 20 years simply to maintain the highway and bridges in their current condition.

In many countries, the private sector has been involved in financing infrastructure through concessions under a public-private partnership (PPP) program. Broadly defined, a concession is a legal arrangement in which a firm obtains from the government the right to provide a particular service (Kerf, 1998). PPP schemes, however, are somewhat under utilized in transition economies, and there seems to be an enormous potential for more private sector involvement in the financing and operation of highway assets in these countries.

With many countries increasingly interested in attracting private capital to infrastructure projects, institutions such as the World Bank can contribute through greater use of their

guarantee power. Partial risk guarantees are particularly relevant in the context of seeking more private involvement in the financing of road infrastructure.

This paper reviews potential applications of partial risk guarantees, the required legal framework (e.g., concession law) for attracting private capital for PPP schemes, possible steps for a country to launch a program of private participation in highways, the concept of Greenfield and road maintenance concession programs, and the treatment of unsolicited proposals. It also summarizes potential applications of the World Bank Toolkit for PPP in Highways as an instrument to help decision-makers and practitioners to define the best PPP approach for a specific country.

## II. CONCESSION LAWS

An appropriate concession law is fundamental for a country to establish an enabling environment for PPPs and it also serves as a possible marketing tool for investors. It should apply to construction, expansion, rehabilitation and maintenance of assets providing a public service, aiming at improving the efficiency and modernization of public services. In general, a concession law should include provisions for:

- Definition of concepts and terms .
- Transparent competitive bidding .
- Allowing for bid evaluation on a net present value (NPV) basis .
- Assurance of national treatment to foreign investors .
- Assurance of compensation in the event of expropriation .
- Assurance of access to international arbitration for foreign investors .
- A general deference to the terms of specific contracts, which creates scope for flexible approaches between sectors and projects .
- Public disclosure of concession agreements

A concession law can be kept relatively simple and general, while specific regulation with detailed guidelines about the ways in which the procurement process will be conducted, criteria, contract award, selection committees, etc. should be documented in operational guidelines (or decrees). A separation between law and regulation provides more flexibility for amendments during the implementation of a PPP program.

It is usually beneficial to have a draft concession law reviewed by a law firm with a strong international project finance practice and with a strong local knowledge base.

Public disclosure of concession agreements should be supported. In recent years a growing number of countries have taken the step of publishing the concession agreements. This has several benefits: (a) it provides a further check on corruption, which in addition to its direct

benefits can enhance the legitimacy of private sector involvement in often sensitive sectors; and (b) when the concession agreement relates to the provision of services to the public, it provides consumers with a clearer sense of their rights and obligations, and can facilitate public monitoring of concessionaire performance.

It is usual practice for concessions law to contemplate the concept of “negative concessions” in which the bidding criterion is minimum public contribution rather than maximum payment to the public authority. The law would make explicit the right of the public authorities to enter into multi-year contracts to pay the concessionaire the required stream of payments.

A concession law needs to link with other laws, such as:

- Laws regulating the provision of public services

It is common to find aspects of utility services governed by sector-specific laws, some of which establish specialist regulatory bodies. The relationship between those laws and bodies and concession agreements needs to be spelt out, for example regarding tariffs and service standards.

- Procurement laws

In order to provide a clear legal framework, the regime for bidding for concessions needs to be clear vis-a-vis other procurement laws.

- Laws governing foreign investment

The provisions of a concession law need to be clear relating to other laws that might include restrictions of some kind on foreign participation. It is important that regarding concessions there is no separate treatments for local and foreign investors.

Many countries distinguish between concessions for public works, concessions for the delivery of public services, and concessions for the exploitation of natural resources. A concession law would need to reflect such distinctions. While concessions for public works require investments, under many concessions for the delivery of public services the main obligation of the concessionaire is to provide the service, rather than make specific investments.

There are situations in which one of the bidding criteria is based on minimum public contribution (or “subsidies”) to construction or reconstruction costs. A Concession Agreement may include: (i) re-build<sup>1</sup> and/or build; (ii) operate; and (iii) maintain. It may cover the whole spectrum of PPP, i.e., management and maintenance contracts, operation and maintenance contracts, and Build-Operate-Transfer (BOT) concessions.

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<sup>1</sup> Re-build may include, for example, rehabilitation, modernization, refurbishing.

Other useful provisions in concession laws include (relevant definitions can be found in recent concession agreements):

- The concept of “cannon” or “entry ticket fee,” which is a current practice worldwide. It is usually through the “cannon” that the concession’s high transaction costs are reimbursed by the concessionaire.

- The concept of periodic independent assessment of the concession assets to be carried out by an expert acceptable to both parties and paid, preferably, by the concessionaire.

- Amendments of concession agreements. International experience illustrates two general approaches: (a) provide no special rights for the grantor to unilaterally amend or terminate, and so leave this to be determined by the parties by agreement; or (b) provide the government with such special rights, but with carefully defined safeguards for the concessionaire.

- Required land to provide the public services. Responsibilities of the granting authority may include providing adequate site condition, right of access, expropriation and acquisition of land, contingent environmental liabilities, etc.

- The concept of contract renegotiation, as it is better to be prepared to manage the process when renegotiation may be necessary. Concession laws should establish clear mechanisms for renegotiation and amendments (as a way to minimize contract distress and cancellation). The renegotiation of projects is not an unusual occurrence (Harris et al. 2003).

- Provision for international arbitration.

- Award of contracts through a two-step approach in which the qualitative requirements (e.g., experience, financial capability, management plan) and some of the quantitative requirements (e.g., investment plans) are judged on a pass/fail basis. All bidders that pass this stage are by definition qualified and step two judges the financial offers.

- Exceptions to competitive bidding. For example, most countries permit sole sourcing in the case of very small contracts (where the costs of a tender would be disproportionate to the benefits) and in emergency situations (where there is no reasonable time to conduct a tender --- which may be a particular concern when it relates to the delivery of public services.

### **III. UNSOLICITED PROPOSALS**

Unsolicited proposals, which seem attractive to some governments in their wish to accelerate road or motorway construction in the country, tend to be so controversial (usually involving allegations of corruption), that in fact they may take longer to negotiate than an open, competitive tender procedure. In theory, unsolicited proposals could generate beneficial ideas; in practice, there have been a number of unfavorable experiences, mostly as a result of exclusive negotiations behind closed doors (in a recent case, a contract signed between a government and a private company included a clause that prohibits any leakage of the signed contract).

Several countries have adopted specific legislation to deal with such proposals, while some governments have simply forbidden unsolicited proposals to reduce public sector corruption and opportunistic behavior by private sector companies. The general experience with unsolicited proposals is often negative, reflecting the fact that projects of this type have usually represented poor value for money, were frequently incompatible with the actual development needs of the countries, and their ability to pay. They also often elicit allegations of corruption. Corruption has been shown to be associated with the lack of adequate transport infrastructure in a country, as well as low economic development (Queiroz and Visser 2001). It is essential to eliminate or minimize the perception of corruption in PPP programs so that such programs can best contribute to a country's economic development.

Some governments have adopted procedures to transform unsolicited proposals for private infrastructure projects into competitively tendered projects. Such countries include Chile, the Republic of Korea, the Philippines, and South Africa (Hodges 2003).

#### **IV. STEPS TO LAUNCH A PPP PROGRAM IN HIGHWAYS**

A first step in launching a PPP program in highways in a country is to define the priority projects where the government envisages to elicit private investors financing of the total or partial cost of the project. In the case of Russia, for example, several high priority projects for potential PPP in highways have been described, such as Moscow-St. Petersburg motorway, outer Moscow ring road, Moscow-Minsk highway, access to Domodedovo airport, St. Petersburg bypass, bridge on Volga river at Volgograd.

Other steps to launch a PPP program would include (some of these steps can be done in parallel):

- a. Enact relevant legislation (e.g., concession and toll road laws).
- b. Carry out feasibility study of priority projects. Employ reputable consultants, using well prepared terms of reference (TOR). Identify/quantify social and economic benefits; carry out financial assessment to help check the potential for attracting private capital (e.g., relatively high overall financial rate of return and return on equity).
- c. Carry out environmental and social assessment, including mitigation plan and land acquisition plan for the right of way
- d. Prepare bid documents to select the concessionaire (or concessionaires).
- e. Assess the willingness of users to pay; review tolling / payment options (e.g., actual tolls, shadow tolls, vignette system).
- f. Draft concession and other agreements; define performance standard for the new investment and the service standards during the operation period.
- g. Carry out prequalification of potential concessionaires.

- h. Invite prequalified firms/consortiums to submit bids.
- i. Sign concession agreement with the best evaluated bidder .
- j. Reach financial closure .
- k. Monitor the performance of the concessionaire over the life of the concession .

International financial institutions (IFI) such as the World Bank can cooperate and assist in all of these steps. Forms of assistance may include:

- a. Technical assistance to all required processing stages, including establishing a good regulatory capability.
- b. In case the project requires government subsidies (e.g., government contribution to part of the construction cost), the IFI could consider financing a part of the subsidies .
- c. The IFI could consider providing a partial risk guarantee (PRG) to support the selected concessionaire so it can borrow at lower interest rate and longer maturity .

## **V. WORLD BANK PARTIAL RISK GUARANTEES**

The World Bank through its guarantee instruments can help accelerate growth in transition and developing countries by mobilizing private financing for infrastructure development and other projects of national importance.

By covering government performance risks that the market is not able to absorb or mitigate, the World Bank's guarantee mobilizes new sources of financing at reduced financing costs and extended maturities, thereby enabling commercial /private lenders to invest in projects in transition and developing countries. Guarantees can mitigate a variety of critical sovereign risks and effectively attract long-term commercial financing in sectors such as power, water, transport, telecom, oil and gas, and mining. Guarantees can also enhance private sector interest in public private partnerships. It can also help sovereign governments access the financial market.

The World Bank's presence in transactions is seen by investors as a stabilizing factor because of the World Bank's long term relationship with the countries and policy support it provides to the governments. The World Bank Guarantees help catalyze private financing, which leads to greater job and income opportunities for people, and thus contribute to the achievement of the Millennium Development Goals' overall challenge of reducing poverty. A website dedicated to World Bank guarantees is available at:

<http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTFININSTRUMENTS/EXTGUARANTEES/0,,contentMDK:20267847~hIPK:545970~menuPK:64143502~pagePK:64143534~piPK:64143448~theSitePK:411474,00.html>

A World Bank operational policy regarding its guarantee program, OP 14.25, states that a guarantee objective is to mobilize private sector financing for development purposes. The Bank may guarantee private loans with or without an associated Bank loan; the Bank does not guarantee equity investments. The Bank provides guarantees only to the extent necessary. The operational policy is available at:

<http://wbln0018.worldbank.org/institutional/manuals/opmanual.nsf/toc1/A505EC4B4C9EB1658525672C007D0976?OpenDocument>

Although guarantees may be structured in different ways, there are two basic kinds. Partial credit guarantees cover debt service defaults on a specified portion of a loan, normally for a public sector project. Partial risk guarantees cover debt service defaults on a loan, normally for a private sector project, when such defaults are caused by a government's failure to meet its obligations under project contracts to which it is a party. The nature and scope of government contractual undertakings that the Bank backs vary depending on specific project, sector, and country circumstances. The Bank requires that the underlying contracts for partial risk guarantees contain appropriate dispute resolution procedures; if there is a dispute about the government's obligations, the Bank's guarantee is triggered only after the government's liability has been determined in accordance with such procedures. Both kinds of guarantees may cover scheduled interest as well as principal payments on a loan.

Both governments and the private sector benefit from a guarantee. Governments benefit because it:

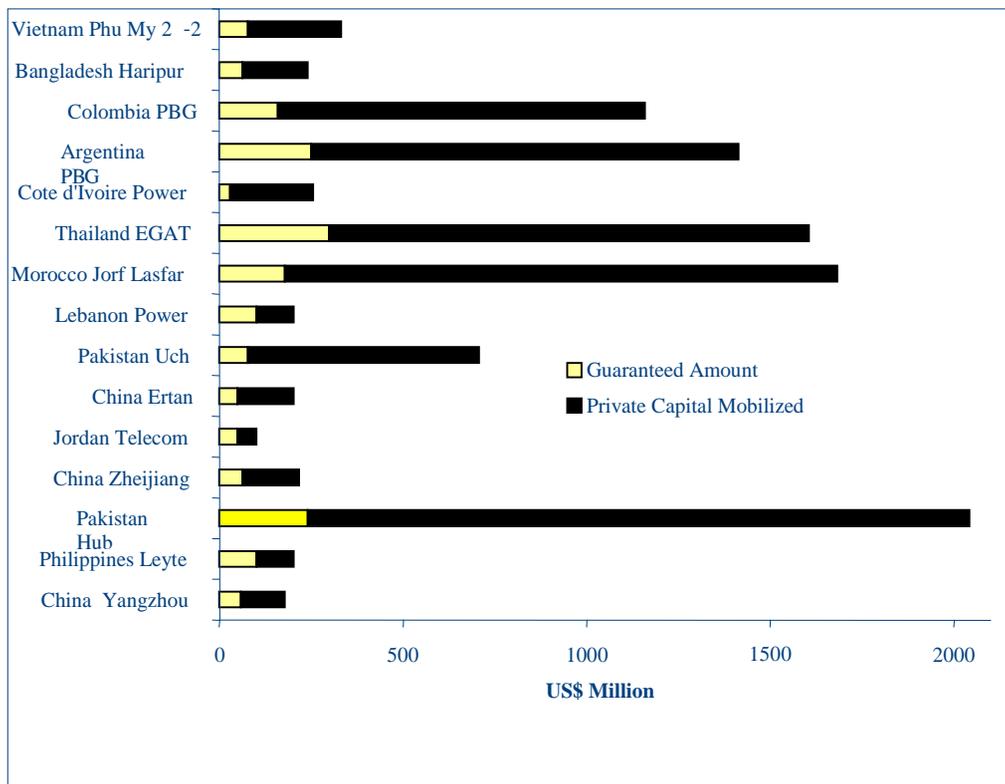
- Catalyzes private financing in infrastructure .
- Provides access to capital markets .
- Facilitates privatizations and public private partnerships .
- Reduces government risk exposure by passing commercial risk to the private sector .
- Improves impact of private sector participation on tariffs .
- Encourages cofinancing .

The private sector benefits because it:

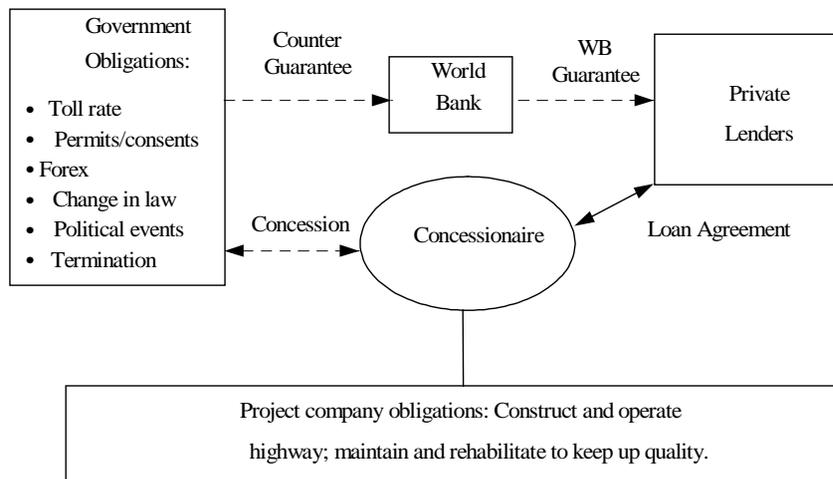
- Reduces risk of private transactions in emerging countries .
- Mitigates risk that the private sector does not control .
- Opens new markets .
- Lowers the cost of financing .
- Improves project sustainability .

The World Bank guarantee instruments have proved to be a powerful instrument in catalyzing private financing to frontier markets. Twenty two guarantees with about US\$ 1.4 billion exposure to the Bank have achieved a remarkable leverage by catalyzing more than US\$ 12 billion of private resources for projects worth US\$ 24 billion (see examples in Figure 1). Each dollar of guarantee financing has catalyzed close to 5 dollars of private finance.

Partial risk guarantees are particularly relevant in the context of seeking more private involvement in the financing of road infrastructure. Such guarantees cover specific government obligations spelled out in a support agreement with the project entity. Example of such agreements include concession agreement, implementation agreement, build-own-operate-transfer (BOOT) contract, build-own-operate (BOO) contract and, the most common form, build-operate-transfer (BOT). Partial risk guarantees are appropriate for enhancing a project's limited recourse project financing, the most common method of financing concessions for transport infrastructure. Figure 2 provides an illustration of how a partial risk guarantee can apply to a highway concession contract (Queiroz 1999).



*Figure 1. Examples of guarantees' leverage in catalyzing private resources*



*Figure 2. Structure of a Highway Concession Contract and World Bank Guarantee*

## VI. GREENFIELD AND ROAD MAINTENANCE CONCESSION PROGRAMS

Greenfield PPP projects include investment in new construction, usually on a new alignment, by the concessionaire, while in road maintenance/rehabilitation/operation (RM/R/O) concessions the concessionaire agrees to assume responsibility for an existing road or part of a road network. Several concession options are available and each country should select the most appropriate for its prevailing conditions. Through the most typical forms of concession, a country can transfer to the private sector the responsibility to: (i) build, operate and transfer (BOT) back to the public sector (at the end of the concession period) a road facility (e.g., a motorway, bridge, tunnel), or (ii) maintain, rehabilitate, operate (RM/R/O concessions) an existing road or road links. Each concession can include individual links or a set of links in a given area of the country (i.e., area-wide concessions).

Steps in the process of launching a road concession program include drafting of all relevant documents, a competitive selection of concessionaires, evaluation of proposals, as well as award of the concession contract. When the main purpose of the concessions is to obtain extra budgetary funding for roads, or release limited public funds for use on other roads (e.g., secondary and rural roads), shadow-tolls (whereby payment to concessionaires are made out of the budget, based on traffic volumes and classification) would not be a feasible option.

All concessions require an institutional means, such as a unit, to monitor the private sector performance, including compliance with the performance standards defined in the concession agreement. The concession contract and public - private sector arrangements for a new investment concession and for a maintenance concession may be different, but a country can pursue both types of concessions at the same time.

## VII. WORLD BANK TOOLKIT FOR PPP IN HIGHWAYS

The main objective of the World Bank Toolkit for PPP in Highways is to provide policy makers from economies in transition with some guidance in the design and implementation of a Public Private Partnership (PPP) in the highway sector. The Toolkit is structured under five headings (or modules) and is navigated through a series of tree diagrams under each of these headings. It also includes a library and interactive financial models. It is a multimedia product available on a CD ROM and also available from the World Bank's web site at:

[www.worldbank.org/transport](http://www.worldbank.org/transport)

or

<http://rru.worldbank.org/Documents/Toolkits/Highways/start.HTM>

Using basic assumptions about a specific motorway project, the financial simulation tool of the Toolkit is helpful to answer key questions on the financial feasibility of the project. For example, questions such as the ones below can be answered with minimum effort using the Toolkit:

- What is the internal financial rate of return (IRR) of the project?
- In the absence of Government subsidies, *ceteris paribus*, what would be the return on equity (ROE)?
- While subsidies may be paid by the Government during the construction period, it recovers some of this payment through taxes during the operation period. What would be the Government contribution to the proposed project that would lead to a financial balance for the government throughout the concession period?
- In the absence of Government subsidies, *ceteris paribus*, what would be the required initial toll rate to yield a return on equity (ROE) of 16%?
- Assuming that an initial average toll rate of US\$0.06 per vehicle -km is the highest acceptable by road users, an investment cost of US\$3 million per km (typical for a four -lane road on flat terrain), and an initial traffic volume (AADT) of 15,000 vehicles per day, what is the minimum concession life that would generate a return on equity (ROE) likely to attract a private sector concessionaire (say an ROE of 15% or higher)?

A recent update of the financial simulation tool is particularly appropriate to answer the above questions. The Excel file with the updated Tool is available on the World Bank website at:

<http://wbln0018.worldbank.org/ECA/Transport.nsf/ECADocByLink/01C97A272081983D85256FD20061ECB8?Opendocument>

## VIII. CONCLUSIONS

This paper discussed potential applications of partial risk guarantees to assist countries in transition to seek more private involvement in the financing of road infrastructure. It also presented a review of the required legal framework (e.g., concession law) for attracting private capital for PPP schemes, possible steps for a country to launch a program of private participation in highways, the concept of greenfield and road maintenance concession programs, and the treatment of unsolicited proposals. The paper also summarized potential applications of the World Bank Toolkit for PPP in Highways as an instrument to help decision-makers and practitioners to define the best PPP approach for a specific country

## IX. DISCLAIMER

This paper reflects only the authors' views, and should be used and cited accordingly. The findings, interpretations, and conclusions are the authors' own. They should not be attributed to the World Bank, its Board of Directors, its management, or any of its member countries.

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