## TWU PAPERS

## THE WORLD BANK



## **Environmentally Sustainable Development**

**TWU-27** 



**Transport Division** 

# **Concessions in Transport**

L. Nicola Shaw Kenneth M. Gwilliam Louis S. Thompson

## **Discussion Paper** November 1996

## **CONTENTS**

ACKNOWLEDGMENTS	ii
ABSTRACT	ix
Техт	
Introduction	1
What is a Concession?	1
Past Experience	4
Benefits of Concessions	5
Critical Concerns	<i>.</i>
The Need to Establish Objectives	<i>.</i>
Risk Allocation	
The Importance of Competition	11
The Elements of a Concession	11
Technology and the Structure of the Industry	18
Financing	21
Fundamentals of the Concession Process	22
Consortia	23
Pre-Qualification Requirements	24
Bid Evaluation Methods	24
Performance Specifications	31
Ancillary Development Rights	31
Public Service Obligations	31
Termination Clauses	32
Government's Residual Roles	33
Securing Future Investments	35

## **TABLES**

TABLES	
Table 1. Countries with Transport Concessions.	4
Table 2. Revenue and Subsidy Allocation in Bus Contracts	9
Table 3. The Elements of a Concession and the Party (Government or Concessionaire)	
Responsible	17
Table 4. What Might Be Concessioned?	18
Table 5. Contract Duration: Actual and Appropriate	27
Figures	
Figure 1. The Spectrum of Options for Ownership and Operation of Infrastructure	2
BOXES	
Box 1. Terminology.	3
Box 2. Setting Tariffs for a New Facility: Two Options.	8
Box 3. Four Options at the End of a Concession.	15
Box 4. Combinations of the Public/Private Mix Before and After Concessioning	20
Box 5. The Captive Shipper and Carrier	21
Box 6. Mexico's Toll Roads.	26
Box 7. Tariff Specification and Monopoly Behavior	28
Box 8. Land Acquisition for Concessioned Colombian Toll Roads	34

## **ACKNOWLEDGMENTS**

This paper was prepared by Nicola Shaw, Ken Gwilliam, and Lou Thompson under the direction of Anthony Pellegrini, Director, Transportation, Water and Urban Development Department. We have had help from many people both within the Bank and outside, particularly those we have worked with to bring concessions into effect in a number of countries around the world. Within the Bank Group we would particularly like to thank Penelope Brook Cowen, Ben Darche, John Flora, Colin Gannon, Marc Juhel, Anil Kapur, Michel Kerf, Michael Klein, Ron Kopicki, Robert Taylor, and Amnon Mates. Barbara Koeppel provided writing services and Barbara Gregory prepared the document for publication. Any errors and/or omissions remain ours.

### ABSTRACT

- i. This paper considers world wide experience with a restricted range of the spectrum of options for private participation in the supply of transport infrastructure and services. That range, which we term "concessions," covers situations where the government retains ultimate ownership of either the physical assets or the right to supply, but grants exploitation rights to a concessionaire. The concessionaire takes a large part of the commercial risk during the period of the concession. These "concessions" include leasing, franchising and BOT arrangements.
- ii. One major concern in selecting an appropriate structure for private participation is shown to be the importance of securing effective competition, which is affected by the initial structure of the sector concerned. Another is the selection of the concession structure. There are a wide range of elements to consider, such as size, duration, service specification, tariff authority, etc., and the combination is critical in allocating risk between private and public sectors, and hence in determining the effectiveness of the concession arrangement.
- iii. The fundamentals of the concession process considered in this paper include prequalification requirements, performance specifications, bid evaluation methods, the treatment of public service obligations and termination arrangements. The role of government in the process is analyzed, with particular emphasis given to means of ensuring that the limited duration of the concession does not produce inefficiencies in operation or interruptions in the continuity of service or investment supply.
- iv. The study is based on a collation and analysis of a large number of specific transport concession documents and descriptions, further details of which can be accessed through the TWUTD page on the World Wide Web (http://www-esd/html/esd/twu/twutd/index.htm).

## **CONCESSIONS IN TRANSPORT**

#### INTRODUCTION

- 1. Over the past ten years, the private sector has become increasingly involved in infrastructure, with private management of government assets in sectors such as power, telecommunications and water, and in transport specifically, worldwide. Concessioning is one of the mechanisms most widely adopted to achieve this management, whether the assets are physical or legal (the right to supply a service). 1
- 2. This report explores the various aspects of concessioning, its usefulness to governments,<sup>2</sup> and the various methods employed to introduce it. The report draws on the experience of governments and concessionaires, worldwide, and explores factors related to engineering and financial analyses, economics, legal systems and social welfare. All these elements need to be addressed in order for concession agreements to be sustainable.
- 3. The report does not intend to prescribe a uniform format for all circumstances; rather, it outlines a set of options and discusses the most appropriate combination given certain conditions.
- 4. The appendix (which can be found on the TWUTD's World Wide Web home page http://www-esd/html/esd/twu/twutd/index.htm) provides information on experiences with concessions in all modes of transport, worldwide.

### WHAT IS A CONCESSION?

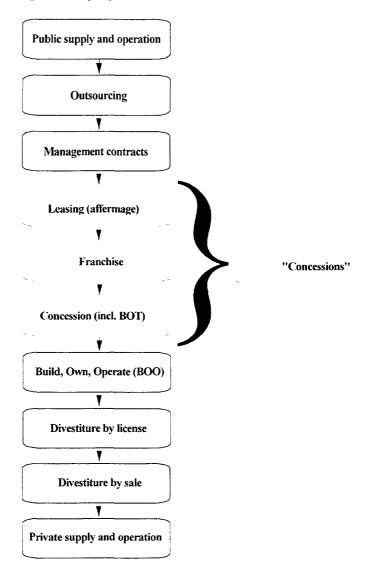
5. There are many ways to bring the private sector into the transport market: outsourcing, management contracts, leases, franchises, concessions, divestitures by license or sale, and private supply and operation. Concessions, which include leasing, franchising and BOT arrangements, involve a more limited set of instruments. Where these operate, governments retain the ultimate ownership of assets and/or the right to supply, and transfer at least some part of the commercial risk of providing and/or operating the assets to a private concessionaire.

Concessioning is not a new concept. Nineteenth century railway charters can be considered as concessions, for example, as in the case of the Lobito Railway in Angola.

Government" is used in this paper as a proxy for any public entity granting a concession.

- 6. These characteristics distinguish concessions from management contracts, at one end of the spectrum, where the private sector is generally not asked to carry much, if any, commercial risk. By retaining ultimate ownership, and/or the right to supply, governments control policy, can find a way to allocate risks to those best suited to bear them, and can ensure that the policy risks, in particular, are removed from the sector for the duration of the agreement. At the other end of the spectrum, concessions also differ from build-own-operate (BOO) contracts, where governments relinguish ownership.4
- 7. Figure 1 shows the progression from government supply and operation of facilities or services, to complete privatization.

Figure 1. The Spectrum of Options for Ownership and Operation of Infrastructure.<sup>3</sup>



Adapted from "Concessions—The Way to Privatize Infrastructure Sector Monopolies," Pierre Guislain and Michel Kerf. Viewpoint, Note No. 59, the World Bank, October, 1995.

For a more detailed discussion of the nature of management contracts, leases, and concessions see "Management Contracts" Hafeez Shaikh and Maziar Minovi, CFS Discussion Paper Series, Number 108, The World Bank, May 1995. Their definition of concessions suggests that concessionaires, who carry the risks and make investments, are rarely paid a fixed fee, that there is always some form of success fee, and that agreements have a long duration. This approximates this report's use of the term, although here it is argued that risks and investment costs can be shared by concessionaires and governments. In addition, while various fee structures are possible, there is typically some form of fixed fee (paid by the government or by the concessionaire).

- 8. The three forms—affermage, franchise, concession—(Box 1) are all considered in this report as concessions, since they share the following characteristics:
  - A government defines and grants specific rights to a company (usually private);
  - ♦ A concession has a defined term (generally 5 to 50 years);
  - ♦ A concession is geographically delimited;
  - ♦ An agreement describes the concession's objectives and directly or implicitly allocates risk.

Concessions can be either *positive*, where a firm pays a government for concession rights, or *negative*, where a government pays the company for the services which it provides under the agreement.

#### Box 1. Terminology.

- Affermage contracts: Operators lease both infrastructure and equipment. They are required to take some commercial risks and make most marketing decisions.
- 2. Franchises: Operators provide services that are fully specified by the franchising authority, carry some commercial risk and cover investment costs. The franchising authority may retain control over and responsibility for common functions, such as marketing.
- 3. **Concessions:** Operators cover investment costs and carry commercial risks. The agreements are for constructing or rehabilitating infrastructure and operating a facility or service for a fixed period.

## **EXPERIENCE**

9. Transport concessions have already been widely adopted around the world (Table 1), although many have been awarded in a non-competitive manner. However, the practice is still in its infant stage in many countries.

Table 1. Countries with Transport Concessions.

Bus	Passenger Rail	Freight Rail	Road	Port	Airport
USA	USA	Argentina	USA	USA	USA
Chile	Argentina	Brazil	Canada	Argentina	Canada
Colombia	UK	UK	Argentina	Chile	Chile
UK	France	Sweden	Chile	Brazil	Uruguay
France	Sweden	Burkina Faso	Brazil	Mexico	Venezuela
Denmark	Turkey (attempt)	Cote d'Ivoire	Mexico	Uruguay	UK
Belgium	India	Bolivia	Colombia	Venezuela	Greece
Sweden	Thailand	Chile	Uruguay	France	Turkey
Norway	Taiwan		UK	Belgium	Hungary
Netherlands	Philippines	Congo	France	Italy	Russia
Morocco	Australia	Gabon	Portugal	Netherlands	Turkmenistar
India	New Zealand	Cameroon	Greece	Latvia	Lithuania
Korea		Mexico	Turkey	Cameroon	Ukraine
Sri Lanka		Guatemala	Hungary	Pakistan	Poland
Australia		Cameroon	Bulgaria	Thailand	Albania
New Zealand		Pakistan	Russia	Indonesia	Gabon
Argentina		Brazil	India	Malaysia	India
South Africa		Mali	Thailand	Korea	Pakistan
		Senegal	Indonesia	China	Thailand
		Malawi	Malaysia	Sri Lanka	China
		Zambia	Hong Kong	Philippines	Japan
		Australia	China	Vietnam	Philippines
			Japan	Spain	Vietnam
			Philippines		Cambodia
			Singapore	Colombia	
			Australia		Australia
			New Zealand		
			Spain		

Note: Countries listed in italics are those where concessions are being prepared.

10. The appendix describes many experiences by country and mode. In preparing this report, the transport division (TWUTD) of the World Bank collected many concession agreements, copies of

which can be made for World Bank operational purposes. The appendix can be found on the

#### BENEFITS OF CONCESSIONS

TWUTD home page on the World Wide Web (http://www-esd/html/esd/twu/twutd/index.htm).

11. Over the past decade, the private sector has substantially expanded its involvement in providing and operating transport infrastructure facilities and services that were once seen as natural monopolies which should be provided and managed exclusively by the public sector.

- 12. The reasons for this shift include a changing perception of the nature of public goods and the extent to which a project or facility enjoys a natural monopoly. In market economies, while it was never thought that the public sector should provide all services, the prevailing notion was that some activities (particularly in transport) had adverse externalities that should be controlled; also, that governments should retain ownership and control over some assets for strategic reasons. Hence there was a belief that natural monopolies should be operated either in public hands (ostensibly in the public interest) or by private operators subject to detailed regulatory oversight. In addition, it was believed that the public sector could operate the monopolies as efficiently as the private sector.
- 13. Evidence across regions has shown, however, that although public ownership might protect against exploitation of private monopoly power, the lack of clear accountability and the multiple goals of publicly-owned companies create inefficiencies not counteracted by the threat of bankruptcy; these can equal or exceed the dangers of private monopoly power. There is also a reduced incentive for innovation. Abuses of public monopoly power are also well known and have often been significant. Thus, much of the rationale for the public sector operating natural monopolies has become increasingly difficult to defend.
- 14. Furthermore, the core of what actually constitutes a "natural" monopoly has shrunk. In transport, this has emerged from a growing awareness that competition exists between modes (such as railways and roads) even if not within a single mode. There has also been progress in defining ways to increase competition in parts of the transport system even while others remain true monopolies.
- 15. Governments also introduce concessions in order to reduce on-going expenditures or to reap one-time payments from concessionaires, often for political ends, even though the outcome may not be best for the economy. They can lead to decisions that do not maximize a country's economic benefits in the long term, as they shift the objectives away from those related to transport sector efficiency. Another objective (usually not expressed) is for obtaining personal profit through the bidding process. Indeed, many opportunities for corruption and collusion exist in these transactions, and recognizing such possibilities is important when designing a concession program.
- 16. Nevertheless, if a government states its objectives explicitly and thus determines the best form of concession for its purposes, it will maximize the chance of achieving its goals. It must also identify the risks involved, its information/skills gaps and strengths relative to the private sector,

along with the information and monitoring needed throughout the agreement. In addition, it will need to retain some regulations, regardless of the mechanism selected to supply the services. These will include controls on predatory practices and market concentration, other non-competitive practices, and on safety and the environment. They may also involve quality controls, employment regulations, and price constraints.

17. Even where a substantial degree of monopoly power remains, there is increasing consensus that it is possible to regulate through contracts—that concession agreements between governments and private sector suppliers promote the benefits of competition (through a bidding process for the concession) and efficiency (from the private sector operation). These agreements are usually favored by managers of transport enterprises since they provide clear objectives and responsibilities. Contracts are flexible and hence can be designed specifically for particular conditions, avoiding many of the disadvantages of generalized regulation. The development of mature local capital markets and more sophisticated financing packages have also allowed increased private sector participation in capital intensive, "lumpy" investments, such as those in transport.

#### **CRITICAL CONCERNS**

#### The Need to Establish Objectives

- 18. The appropriate structure for any concession depends on a government's objectives. By requiring concessionaires to meet certain conditions, a government can:
  - ♦ Introduce competition in the sector
  - Reduce subsidies
  - ♦ Enhance operational efficiency
  - Improve the allocation of resources between and within sectors
  - Protect and improve social equity and the environment
  - Develop the market
- 19. However, a government cannot always develop all of its program to the extent intended. For example, at the sector level, private sector resources may not be available or sufficient. Thus, a government may need to scale down its goals. One mechanism for doing so would be to use feasibility studies, with consultants determining exactly what can be achieved, as was done in India, with the National Highways Program. At the level of individual projects, it may be better to review all financing and management options, and only then consider concessioning, if appropriate. This paper concentrates on the latter question of individual concession projects and how to structure those projects to achieve the objectives and create a sustainable agreement.

#### **Risk Allocation**

20. Projects entail many risks that must be considered explicitly in an agreement, both to allow financial closure<sup>5</sup> and to ensure success. To this end, creating an appropriate risk-sharing structure is critical. The general principle is that each risk should be carried by the party best able to assume or mitigate it.

- 21. Ideally, a government should know how risks can best be managed before the bidding process begins. Although the extent of risk is not always clear in advance, understanding can be improved by isolating individual risks and identifying which parties have any control over them. In some cases, a government may wish to subject the final risk allocation to market forces in the bidding process. With toll road concessions, if the sponsors require a traffic guarantee this could be made one of the elements of the bid. In this way, the real value of the guarantees (cost of the risks) can be assessed and the risks allocated more efficiently. Particular types of risks are considered below.
- 22. Commercial risk. This arises primarily from the uncertainty of traffic levels. Where the infrastructure is new, governments may assume part of the risk by guaranteeing a particular level for an interim period. However, guarantees should not be open ended, either in duration or extent. Where existing services are being concessioned, governments can reduce the risk by providing information about traffic level before concessioning; however, even with this information, demand projections are often inaccurate.
- 23. Two examples illustrate different approaches to sharing commercial risk. In Colombia, where a concessioned toll road network is being developed, the operators were guaranteed a minimum level of income but a maximum threshold was also set over which half the toll revenues will accrue to a special account. The account will cover any deficits guaranteed by the National Roads Institute and finance additional works. The other half will go to the concessionaire for increased maintenance costs.
- 24. In Australia, the BOT arrangement for the Sydney Harbor tunnel allows the concessionaire to collect tolls from an existing bridge as well as the tunnel, and a certain level of revenue has also been guaranteed. The government also made a grant of much of the financing, along with a loan (repayable in 2022), based on the bridge toll revenue that will be collected while the tunnel is being constructed. In addition, the government contributed land in the central city for the tunnel entrance.
- 25. Tariffs. Various approaches for tariff setting exist. Tariffs are perhaps the most politically sensitive aspect of a concession, particularly for passenger services. Where market competition for the service is strong (such as between truck and rail for freight service), concessionaires are usually given considerable scope to set their own tariffs, although they may be subject to utility rate regulations. For example, on the railway between Burkina Faso and Cote d'Ivoire, the concessionaire establishes the tariffs. Similarly, in Buenos Aires, concessionaires of five different terminals at the

Financial closure refers to the completion of the financing arrangements and signature of loan agreements. It typically occurs after a concession agreement has been signed.

port can set their own charges. Where some degree of monopoly power exists, tariffs tend to be regulated and where government sets them, mechanisms for changes must be clearly arranged.

#### Box 2. Setting Tariffs for a New Facility: Two Options.

The agreement for the toll road from Bogota to Villavicencio (Colombia) stipulates that the concessionaire will obtain a minimum income based on traffic volumes and toll levels. It also states the tariff for different types of vehicles at different stages of the concession, along with sites for toll booths. The tariffs are inflated by the consumer price index from June 1994 throughout the duration of the agreement. The concessionaire must notify the National Roads Institute ten days before it introduces any changes. If the Institute does not approve them for any reason, the minimum income will be protected.

In the concession for the Bangkok Transit System, there is no agreed minimum income. The concessionaire is required to charge just one fare for any entry to the system (called the *chective* fare). This must be lower than the *authorized* fare, which is based on the consumer price index and various other factors such as exchange rate variations, interest rates on the concessionaire's debt, the cost of electricity, exceptional risks and major investments the company makes besides those listed in the agreement. The effective fare may only be changed once in eighteen months. If any of these factors after considerably, an advisory committee and the concessionaire may agree to change the authorized fare. However, if the government prohibits the change, it must reimburse the concessionaire for its losses

- 26. Government policy. When private financiers lend to concessionaires, they expect that government policy will be committed to developing the private sector. Also, they want some assurance that a concessionaire is committed to a project and has enough revenue to cover costs and pay a return.
- 27. Unfortunately, government commitment can diminish: in India and Thailand, governments required toll road concessionaires to change or abandon the toll in the face of public pressure. In the short run, this can cause financial problems for the concessionaires, and in the long run, reduce the interest of other firms in investing in concessions. Thus, projects ultimately cost more for the government.
- 28. Where a concessionaire is concerned that political commitment to the private sector is weak, termination clauses in the agreement are essential. The termination clauses are designed to reduce a government's ability to rescind a concession and state the formula by which concessionaires will be compensated. Potential concessionaires are generally reassured if there is a long history of private involvement in infrastructure or services and where the concessioning mechanism has been used successfully before.
- 29. In some instances, the World Bank guarantees the risk to commercial lenders (not equity sponsors) in the event government policy changes (the sums involved do not necessarily count fully in the country exposure limits of the lending program). At present, these guarantees are being considered in seven countries for highway, light rail, and urban transport concessions; they are used to encourage local and international private investors and may include the regulatory framework and government responsibilities under the concession agreement. For example, they can cover defaults

caused by the poor performance of public entities under contract with a concessionaire, foreign exchange convertibility, and changes to the agreed regulatory framework. However, they can be difficult to negotiate and the Bank requires that a government provide a counter-guarantee. A concessionaire is required to pay a guarantee fee, which encourages it to seek non-guaranteed debt sources, where possible.

- 30. **Income risks.** In the case of subsidized public transport services, various options exist to distribute the revenue risk between government and operator. One approach is for the government to pay an operator to run the service, offering a sum equal to its operating costs plus some profit, in exchange for which the government retains all revenues collected (known as a *gross cost* agreement).
- 31. Another approach is where an operator retains the revenues it collects and carries the traffic risks, while the government pays an agreed *top-up* fee (known as a *net* or *minimum cost* agreement). Both gross and net cost contracts are frequently used in bus concessions (Table 2).

Table 2. Revenue and Subsidy Allocation in Bus Contracts.

Gross Cost	Net Cost	No Government Subsidy
London (pre 1996)	London (progressively post 1996)	Chile
New Zealand	France	India
Sweden	Copenhagen	Inner Melbourne
Outer Melbourne	Ukraine	Morocco
Perth (+ incentives)	UK outside London (mostly)	
United States		

32. A variation of the gross cost approach is where the concessionaire is guaranteed a minimum income. Examples are the agreement for a toll road from Bogota to Villavicencio (in Colombia), and for the San Jose (Puerto Rico) lagoon bridge, which allows the concessionaire to retire from the operation without taking a loss if demand does not reach a certain percent of the levels projected. In Puerto Rico demand did fall below that expected in the early years, but it has been rising steadily and

Partial risk guarantees ensure payment in the case of debt service default resulting from the non-performance of contractual obligations undertaken by governments or their agencies in private sector projects. Sovereign contractual obligations vary depending on project, sector, and country circumstances. Typical government contractual obligations include: maintaining the agreed regulatory framework, including tariff formulas; delivering inputs, such as fuel supplied to a private power company; paying for outputs such as power purchased by a government utility from a private power company or bulk water purchased by a local public distribution company; and compensating for project delays or interruptions caused by government actions or political events. Transfer risks may also arise for investors and lenders because of constraints in the availability of foreign exchange. A partial risk guarantee can cover such risks of foreign exchange transfer. "The World Bank Guarantee: Catalyst for Private Capital Flows" Project Finance Group, Cofinancing and Financial Advisory Services, September 1995.

is expected to meet projections in 1996 (which highlights the problem of forecasting demand for new facilities). The project also illustrates that private infrastructure provision is not incompatible with the provision of a social service.

- 33. **Exchange rates.** The two main exchange rate risks relate to the fact that some input prices and tariffs are charged in a different (local) currency from that of the initial investment, and to the repatriation of profits.
- 34. Private investors are generally most concerned with the first of these risks, largely because the guaranteed repatriation of profits is almost a pre-requisite for any international private sector investment in a country. In modes such as ports and airports, it is less significant since tariffs are typically charged to international firms and in US dollars. However, where individuals are the source of revenue (through tolls or fares), a concessionaire's income will almost certainly be in the local currency. If prices and debt are denominated in foreign currency, the risk can be significant. Such risks could be treated as any commercial risk (to be borne by any company operating in the country), but concessions tend to treat exchange rate risk explicitly, whether through tariff adjustments (based on the exchange rate changes in a given period) or payments made in an agreed currency.
- 35. For example, on the southern access road to Buenos Aires, the real dollar equivalent value of tolls is to be maintained throughout the concession. Tolls, which will be fixed for each section of the route independent of distance traveled, will be set in US dollars but collected in pesos. Rates will be adjusted annually to reflect changes in the US consumer price index (CPI) since September 1993. The toll level in pesos will be recalculated monthly to reflect changes in the exchange rate. For some of the port charges in Buenos Aires, tariffs were also established in US dollars and then charged locally in Argentine pesos. Semi-annual adjustments are made to reflect the changes in the US producer price index.
- 36. In fact, the particular method selected to adjust charges is not the important factor; rather, it is that the government does not assume all the risk. This needs to be arranged in order to maintain a balance between protecting a company from risks over which it has no direct control, and giving it the motivation to plan, invest, and operate efficiently.
- 37. **Exclusivity**. The problems associated with financing a concession and meeting payments can be eased by obtaining an exclusive market, since revenues are likely to be higher and more predictable when there is no competition. Conversely, competition provides incentives for efficiency.
- 38. Exclusive rights to operate in a market are often granted to toll road concession companies. It could be argued that this should not be necessary since where profits are high enough to support two operations, another toll road will be built. Still, financiers and potential concessionaires often believe that exclusivity is essential to their security. Even where it is granted, governments frequently provide free alternate routes, as was the case for the Mexico highway concessions. In fact, this was one reason for the concessionaires' financial difficulties and the need to reformulate some of the agreements. In Hungary, because there are free alternate routes to the toll road known as the M1/M5, the concession stipulates that the government will ban (or at least encourage the municipalities to ban) the through traffic of heavy-goods vehicles on the untolled roads (to be enforced by the police).

Plans have also been made for various traffic-calming measures on the untolled roads, to make them less attractive to truck traffic (relative to the toll road).

- 39. Exclusivity can also be a consideration in other sectors. For example, the Punta del Este small aircraft airport in Uruguay will be closed under the terms of the concession agreement for the international airport at Laguna del Sauce. To ensure that the small airport is closed, the concessionaire must make certain improvements at the Laguna del Sauce.
- 40. Regulatory measures to generate traffic or revenues for a concessionaire should be treated very cautiously. Forcing traffic off competing facilities, whether by closure or any other physical obstruction, should be considered only if it is viewed as a means to ensure the socially optimal outcome. It should not be used simply as a mechanism for creating a financially viable private sector concession project.
- 41. In some cases, concessionaires are required to give other operators access to their facilities. For example, where restructuring has divided a railway, other operators often need to use part of the infrastructure (such as when inter-city trains need to use commuter tracks near city centers). Agreements generally specify the arrangements and the tariff ("trackage right" or "access charge") level. If companies cannot agree on the fees, a panel of experts can be created to set the terms. This approach has been used for the railway concession in Cote d'Ivoire and Burkina Faso where one expert will be chosen by the concessionaire, one by the other operator, and a third must be agreed by both parties.

#### The Importance of Competition

42. In some cases concessions allow suppliers to compete *in* the market, once a facility/service is operating. In other cases, where a natural monopoly exists, the tendering process ensures competition *for* the market even if there is none *in* the market. Further, the threat of future competition for a concession (depending on the terms) ensures that pressure will be maintained throughout the operating period. The achievement of one or both of these forms of competition is essential to ensure that either the market, or the government acting as public customer, can select the most effective operator and that the selected operators have a strong inducement to employ the most cost effective operating arrangements.

#### The Elements of a Concession

- 43. The way in which a concession's elements are combined is critical since it allocates risks between a government and concessionaire and determines how well the latter will meet the former's objectives. The main elements are the:
  - ♦ Size of the package
  - Duration
  - ♦ Ownership

- Service specifications
- ♦ Tariff authority
- ♦ Payment terms
- ♦ Award criteria
- Renegotiation terms
- ♦ Performance assurance
- ♦ Investment planning
- Network planning
- ♦ Exclusivity (access to facilities)
- 44. **Package size.** The size of a concession is critical. Large packages may generate scale economies (such as for construction and some services), but reduce competition since only a few firms can bid, due to lack of financial or technical resources. Small packages, while promoting competition *for* the concession, make operational integration more complicated and increase overall management (especially bidding) costs.
- Duration. Whatever the legal regime, a company must be satisfied that its capital 45. investments can be recouped in a concession. This would seem to imply that concessions should be at least as long as the time needed to accomplish this, but it is not necessarily so. In fact, the nature of the investment and the degree to which it is sunk in the current use are more important criteria. For a concession to be shorter than the economic life of the assets, the assets must be divisible and versatile and have viable alternate uses. For example, a bus fleet is divisible in that single buses can be removed from or added to a fleet without destroying its viability. Buses are also versatile, since they can be put to use in other services or at other sites. Further, there are many places in which similar buses are used or could be used and thus there are likely to be real options for alternate uses. If a government regularly awards contracts for bus concessions, companies know that once one agreement ends, they may bid for others and can therefore re-employ the asset. Thus, where a concessionaire can easily remove capital investments and employ them elsewhere, there is no reason for the duration of the concession and economic life of the asset to be identical. Of course if a government makes the investment and provides the asset to the concessionaire on a lease basis, these concessions may also be shorter than the economic life of the asset.
- 46. The shorter the concession, the more immediate the competitive pressure. Even where the asset is totally sunk, concessions that are shorter than the economic life may be possible. This will require arrangements to ensure the incentive to invest is not removed, such as requiring payments for the depreciated value of sunk investments at the end of the concession period.

- 47. In the bus industry, where concessions are usually short (and some companies operate solely under concessions), a government may need to offer incentives to overcome that short investment horizon. It may offer a concessionaire the opportunity to renew an agreement, since employment severance itself incurs costs. Alternatively, it may stagger its concession awards to allow each company to bid for new contracts on a regular basis.
- 48. Ownership. Who owns an asset depends on its type, the market for it and its importance to the concession. In all concessions involving basic infrastructure, ownership or the right to use an asset reverts to the government at the end of a contract. However, during the agreement, an asset may be owned by either the concessionaire or government, which affects liability. Governments may want to retain ownership for strategic reasons or to encourage companies to enter the market. The latter may be necessary where companies do not have access to second-hand equipment such as vehicles or cranes, or cannot lease them privately. If these second-hand and leasing markets do not exist, governments could try to create them, to reduce barriers to entry.
- 49. **Service specifications.** The degree to which a government allows a concessionaire to determine the structure of service to be provided depends largely on the extent to which the latter enjoys monopoly power and on the nature of externalities. Where the concessionaire wields significant monopoly power or where the government pays for the supply of services (negative concessions), services are likely to be specified most carefully.
- 50. With infrastructure concessions, because ownership reverts to governments at the end of the concession period, agreements must stipulate what the level of performance must be at that time (and how it is to be reported throughout). The existence of such standards will ensure that construction and maintenance work will be of good quality and that services will not be disrupted by the transfer of ownership.
- 51. With passenger service concessions, agreements should contain specific requirements about performance and the condition of assets, since this reduces the risk of political interference. However, a government should not specify maximum levels of service unless it plans to invest in a project. Where it does, this can cause a concessionaire to spend more extravagantly than it would if it were relying solely on its own finances. Thus, as a general principle, concessionaires should be allowed to raise the quality or quantity of service where it is in their commercial interest to do so.
- 52. Tariff authority. Where responsibility for setting tariff lies depends on the degree of a concessionaires monopoly power, on government objectives (such as social equity), and on the degree to which the public is concerned with a particular mode. Specifying tariff levels (and the formula by which to change the fares and fees) in the concession agreement reduces the political risk to the concessionaire but also reduces its ability to react to market conditions. In the case of rail freight operations, although exceptions exist (for example, a government protecting against monopolistic practices such as below-cost pricing or unduly high charges), it is unlikely that governments would be justified in regulating tariffs, largely because of the complexity of tariff schedules and the degree of competition from road hauliers. When governments have social equity objectives (and thus set fares at some desired level), they may receive lower payments from the

concessionaires or may have to increase their transfer payments (to the firms), and should assess both elements before embarking on such a policy.

- 53. Payment terms. Payments can be either from concessionaires to governments or vice versa. Concessionaires pay governments for the right to supply profitable services, infrastructure or both. Governments pay concessionaires for the provision of unprofitable service.
- 54. Government payments to concessionaires are not always, or only, in the form of direct money transfers for meeting the requirements of the agreement. They may also include contributions in equity, land or infrastructure, or acceptance of responsibility for employee severance payments, for example. In general, the extent of the contribution forms part of the decision criteria for selecting the concessionaire; that is, bids will be evaluated on the level of compensation requested by the concessionaire, just as they are when a company bids for a concession where it will pay the government. The main exception is the provision of land or existing infrastructure, where the government contribution is usually specified in advance. Governments can usually lessen the burden of transport facilities on the public purse by reducing the level of their payments, but with a corresponding increase in market based charges or reduction in the quality of service supplied.
- 55. With regard to subsidies, if governments concession passenger services on separate routes (as with London's bus services) rather than on an area basis, there will be no cross subsidy within the concessionaire's operations. The government may need to subsidize unprofitable routes however. Subsidies for freight operations should rarely be made, which may mean that concessionaires will require that any existing subsidies to competitors be adjusted.
- 56. Award criteria. These depend on government objectives, which must be defined at the start of the concessioning process. To reduce its exposure to risk a government usually establishes prequalification conditions that bidders must meet. The criteria adopted for qualified bidders reflect the government's desire to allocate resources in ways that best meet its objectives while ensuring that private sector initiative can be maximized. The criteria should be specified in advance of the bidding, along with their relative weight, since this helps potential concessionaires understand the selection mechanism and reduces the risk of allegations about corrupt government practices.
- 57. The criteria largely determine the allocation of benefits between governments and consumers. For example, with the award of an exclusive concession to the highest bidder, any economic rent accrues to the government. Freight railway concessions in Mexico, Brazil, and Argentina all reflect this practice to some extent. Where an award is based on the lowest price to be charged for a service, benefits will accrue entirely to the customer. In Santiago, Chile, proposed fares were one criterion on which bus operators were selected.
- 58. Renegotiation terms. These depend on the cost and duration of future concessions and on the quality of service under existing agreements. Some initial agreements extend for lengthy periods (30 years is not uncommon for transport infrastructure). The longer a concession, the greater the likelihood of regulatory capture (where the regulators and operators develop a close relationship that interferes with their capacity to regulate properly), as well as of a knowledge gap about all aspects of

the operation between the incumbent and competitors (as well as the government). To ensure that the government or new operators receive facilities in good order, issues of service, maintenance, and other quality indicators must be specified at the outset. Similarly, a government needs to consider the level and quality of service provided by an incumbent if it is to be allowed to negotiate a contract extension or bid in a new competition. The various ways to handle renegotiations are listed in Box 3.

#### Box 3. Four Options at the End of a Concession.

Each method listed below seeks to ensure that the capital and maintenance investment will be appropriate at all times and that service quality will be consistent throughout and between concessions.

- 1. Automatic renewal In some agreements, the concession period is extended automatically if a concessionaire's performance has been acceptable. In this way, the company has an appropriate investment horizon and re-tendering costs for both parties are eliminated.
- 2 Existing concessionaire negotiates a roll-over. This allows a government to maintain continuity of service and pressure a concessionaire to be efficient. It avoids the re-tendering process, which may be costly, though governments should be aware that renegotiation is also resource intensive. In addition, the absence of competition removes the concessionaire's incentive to reveal its true valuation of the concession.
- 3. Existing concessionaire is bought out. The conditions for such a transfer are specified in the agreement, for example, a government pays a concessionaire for the undepreciated assets at the end of a concession.
- 4. Re-bidding It incumbents are unsuccessful, they receive the value of their bids from the successful bidder's offer. The government receives the portion of the successful bid which is not paid to the incumbent. The government therefore does not have to buy the concessionaire out and the value of the concession is set by the market.
- 59. **Performance assurance.** Ensuring that infrastructure is properly maintained over a long concession can be a problem. Where monopoly power is great, a government must vigilantly monitor performance. If a concessionaire has contractual obligations (such as completing a facility on time), the government needs to verify that they are fulfilled. To this end, many highway concession agreements provide for some sort of independent engineering appraisal. With road and rail concessions, testing of road and track conditions is usually required before operations begin. Performance measures generally continue throughout a concession, with some reporting required annually. In some cases, reporting requirements are more detailed towards the end of the concession. With bus franchises, many governments use the regulatory authority as the conduit for passenger comments, or at least require operators to pass them on to the authority. This allows customer satisfaction to be assessed, although less formally.
- 60. Governments tend to support failing concessionaires, since it can be politically embarrassing to see them fail, and the transactions costs associated with a failure can be significant. When this occurs the concessionaires are less motivated to perform efficiently and to the terms of the agreement. However, if they were allowed to go bankrupt, this would prove governments' commitment to agreements and help maintain competitive pressure during the concessions. Thus,

agreements should provide for government assumption of the responsibility for services in the event of failures.

- 61. Investment planning. Governments must balance the objectives of promoting commercial behavior by concessionaires, reducing the potential to exploit monopoly power, and ensuring that infrastructure is not exhausted at the end of an agreement. Another trade-off is between greater governmental responsibility for investment planning (which can mean simpler bid evaluations) and higher degrees of private sector initiative. For example, the Argentine government adopted a rather complex approach for concessioning the Buenos Aires suburban railways by specifying the level and minimum amount of investment in any given year, while allowing bidders to propose in which years they would invest (within limits) over the life of the program. Substantial renegotiation is now occurring, because with demand growing faster than projected a different investment program is now appropriate.
- 62. **Network planning.** This function is often retained by government. However, operators may feel they are the ones best able to decide on issues such as closing branches on freight railways, laying freight track to serve a single customer (as in Argentina), or reacting to bus market developments by altering services (which is a subject of continuous debate between operators and regulators in London). In most cases, a concessionaire's commercial knowledge will be important to ensure the correct decision. Hence it is sensible to allow for operator input in network planning at least.
- 63. **Exclusivity.** In one form or another, exclusivity is the root of monopoly power. It can stem from the exclusive right to own, construct or operate infrastructure. While concessions normally allow governments to retain ultimate control of these rights, concessionaires are often given some degree of exclusive right for either the full term (in Colombia, the government has agreed not to build, or allow to be built, competing roads during the period of the concessions) or for a fixed period after concessions begin. Investors thus feel more secure in forecasting markets, which may reduce the cost of projects. In some cases, an exclusive concession allows a company to charge efficient prices. A concessionaire might choose to use differential pricing mechanisms without which it would be unable to cover the fixed costs of a facility, as with many freight railroads.
- 64. Exclusivity can also stem from the sole right to operate on the infrastructure. As this can be the source of a concessionaire's monopoly power, regulations in the agreement may be warranted. For example, access conditions should be specified for railways, along with common carrier requirements (i.e., an operator must carry freight for any shipper requesting service). One condition could be that reasonable tariffs will be charged (perhaps stipulated in the concession agreement) and that all parties requesting passage will be granted access. With the Cote d'Ivoire/Burkina Faso railway, the concessionaire was awarded exclusive access to the track for the first seven years. After that, the government may require the concessionaire to grant access to other operators, who would pay for this.
- 65. However exclusivity is not always vital for concessions to succeed, and in many countries, they have not been exclusive (as with toll roads and competing port terminal operators, for example).

Table 3. The Elements of a Concession and the Party (Government or Concessionaire) Responsible.

	Bus	Rail	Road	Ports	Airports
Package size: Depends on monopoly power, market size and feasibility of division	Route or area	Line or area	Links or sub networks	Berth, terminal, or port	Runway, terminal or airport Airport services, luggage handling etc.
Term: Depends on economic life of immobile assets (divisibility and flexibility for versutile assets)	3-5 years (for service concessions) 20 years (with infrastructure)	5 to 10 years (operation only) 30 to 50 years (with track investment)	30 years	5 years (operation only) 10 years (superstructure only) 30 years (including infrastructure)	10 years (passenger service only) 30 years (with runway and terminal investment)
Ownership: Depends on nature of asset (and markets for it), its importance for operating the concession.	Vehicles: concessionaires Company facilities: either Infrastructure: either/both Network facilities: government	Vehicles: concessionaire Infrastructure: either/both	Either / both	Infrastructure: either/both Superstructure: Concessionaire	Infrastructure: either/both
Service specification: Depends on monopoly power & externalities	By government	Passenger service: Either and government for PSO Freight service: Government specifies PSOs, if any, rest, by concessionaire	Limited government specification	Limited government specification	Limited government specification
Tariff authority: Depends on extent of concessionaire's monopoly power and the award criteria	Government	Passenger: Either; government for PSO; Freight: Concessionaire	Government	Concessionaire	Concessionaire
Payment terms: Depends on award criteria, can include any government contribution	Government payments for passengers Land Existing facilities	Government payments for passengers Land Existing infrastructure Employees severance payments	Government payments for road users Government equity Land Existing infrastructure	Land Existing infrastructure Employee severance payments	Existing infrastructure Land
Award criteria: Depends on government objectives	Quality of service Highest offer / lowest subsidy Level of investment	Level of investment Highest offer / lowest subsidy Number of employees retained Quality of service	Highest offer / lowest subsidy	Level of investment Highest offer / lowest subsidy Number of employees retained	Level of investment Highest offer / lowest subsidy Number of employees retained
Renegotiation conditions: Depends on cost/duration of future concessions and quality of service under existing agreement	Service levels Investment program Required government contribution	Investment program Service levels Required government contribution Quality of service	Maintenance Tolls Payment to government	Service quality Maintenance and investment programs Payment to government	Service quality Maintenance and investment programs Payment to government
Performance assurance: Depends on complexity of agreement and penalty clauses.	Monitoring program Reporting regime	Monitoring program Reporting regime	Construction completion bonds Reporting regime	Construction completion bonds Reporting regime	Construction completion bonds Reporting regime
Investment planning: Depends on quality of service agreements and government objectives	Vehicles: concessionaire Infrastructure. either	Concessionaire, within boundaries	Concessionaire, within boundaries	Concessionaire, within boundaries	Concessionaire, within boundaries
Network planning: Depends on market structure	Government	Passenger: Government Freight: Concessionaire	Government	Government	Government
Exclusivity: Depends on extent of monopoly power	Terminal access Bus stop use	Track Access Station Access		Berth access Storage facilities	Gates Runway slots

### Technology and the Structure of the Industry

66. Another major concern involves the structure of the industry in which the concession is granted and the technology used (Table 4). Often, full privatization, rather than a concession agreement, is the suitable course (**bold type in the table**). Elsewhere, government retains control since its role as policy maker and body promoting integration is critical (<u>underlined in the table</u>). This leaves many areas where concessioning may be appropriate (normal type in the table).

Table 4. What Might Be Concessioned?

	Infrastructure	Operating equipment	Services
Bus <sup>2</sup>	Route	Buses	Route and schedule information
	Network		Ticketing
	Streets, signals, and lanes Stations and stops Garages		Maintenance
Rail	Track, signals, and stations Yards Shops	Locomotives Wagons Carriages	Allocation of access to track Route and schedule information Maintenance
Road³	Pavement Toll plazas	Toll booths	Traffic management Maintenance
Port	Berths and quays Cargo handling Warehouses Towage and Pilotage Channels, lights, and buoys Breakwaters	Pilots and tugs Ships Cranes/equipment Warehouses Networks Lights and buoys	Landside Portside Security Channeling and dredging Coastal management Customs
Airport	Runways Terminals Air Traffic Control Baggage and freight handlers Commercial	Aircraft Networks Baggage and freight handling Terminal facilities Navigation equipment	Landside Airside Allocation of gates and runways Customs

#### Notes

- 1. Entries in **bold type** are generally **privately owned** and those <u>underlined</u> are generally retained <u>in public hands</u> (even if some elements of the operation are contracted out). The others can be either public or private and will vary depending on the nature and aim of the concession.
- 2. Inter-city bus operations tend to be privately operated.
- 3. Rural roads tend to remain in public/community hands.
- 67. In fact, most services can be privately provided—either under private ownership or concession—with the government retaining control of the particular facilities it needs in order to direct transport policy and ensure fair network access to all (for example, access to bus-only streets). Where technological innovation may create or reinforce monopolies (for example, through information

asymmetries between the government and the operator, or between operators), governments are likely to concession, rather than privatize, the equipment. Thus most markets can be served by concessions so long as the terms of the concession make it possible for concessionaires to obtain financing.

- 68. However, some services do not lend themselves to concessioning. These include services or infrastructure that cannot offer exclusive use (such as rural roads), or services that governments continue to operate for strategic, security, and safety purposes (such as controls for ports and airports). Facilities for the exclusive use of a concessionaire's customers (such as access roads to ports or toll highways) may or may not be concessionable, depending on their effects on financing possibilities. Activities that draw revenue from local markets in local currencies, such as highway and bus infrastructure, may also be difficult to concession without a mechanism to deal with potential currency swings that affect concessionaires when they purchase equipment or services or borrow on international markets outside their countries. Although such mechanisms would mean the foreign exchange risk is passed on to consumers, and hikes are always unpopular, without them lending costs could be high making concessioning infeasible.
- 69. Another consideration, especially when a government concessions an existing state owned company or facility, is the treatment of land and facilities controlled by it but not vital to its operation. Although such assets can be included in the concession, and hence raise the price the company pays to the government, this limits the opportunity for competition for the real estate market and introduces different objectives for the concessionaire.
- 70. When a government concessions the construction and operation of a new facility or the provision of new services the issues are slightly different. Competition in both the transport and real estate markets remains important. This can be partly achieved by requiring bidders to include both transport companies and real estate developers in their consortia.
- 71. Concessionaires may benefit if real estate is developed to create demand for the transport facility. However, several pitfalls appear when land and transport are included in one concession:
  - (a) If transport development is linked to lucrative real estate development, insufficient attention may be given to the transport facility and the concessionaire may have little incentive to operate efficiently or provide high quality service, especially after development and/or construction profits have been realized.
  - (b) Where land (or air rights) and a transport facility are concessioned together, it is difficult to determine the appropriate length of the concession. In general, real estate development has a longer life than transport facilities, or the amortization period may differ. Thus, termination agreements are particularly important. The Bangkok Transit System agreement states that the concessionaire may only use the land below, across or parallel to the system for the duration of the concession.
  - (c) Where land and development rights are included in a concession, concessionaires can extract monopoly rents over the commercial operations, such as filling stations on highways.

- 72. Because functions carried out within a single agency vary in their suitability for concessioning, an agency may need to be restructured if the best agreements are to be achieved. The ease with which restructuring is accomplished varies. For example, it may be easier to construct a supervisory and legal unit to oversee concessioned roads than to reorganize a monolithic railway company to allow for competitive access or the franchising of individual commuter lines. The organizational structure of the industry at the time the government considers a concession affects the time needed to complete arrangements. Restructuring a large monolithic public sector railway might require far more time than preparing a concession agreement for a single bus service.
- 73. The appropriate process of restructuring will depend on the public/private mix both before and after concessioning. In the first three of the combinations described in Box 4, the public monopoly may need to be restructured before concessioning is considered. However, in general, only a minimum of restructuring should be undertaken in the public sector before transferring the entity to private hands. In some cases, the private sector may charge the government for the restructuring required in order for firms to bid for the concession (such as for cleaning up a polluted environment or laying off employees). This allows the restructuring to be done in a commercially sound manner and helps ensure that governments will be able to compare the bids for the concession effectively, including all restructuring costs.

#### Box 4. Combinations of the Public/Private Mix Before and After Concessioning.

- 1. A public monopoly is restructured, disaggregated, and concessioned to provide private, competing services. This was accomplished through the division and sale of London's bus companies and franchise of routes.
- 2. A public monopoly is concessioned and becomes a private monopoly. This may be important if differentiated pricing and significant investment are required. In such cases, the possibility of competition can still be introduced over time. However, entry conditions should be considered carefully as should the regulatory mechanisms, in general. The concession for the railway in Cote d'Ivoire/Burkina Faso limited the exclusivity of the private monopoly to the first seven years. After this time, other carriers, approved by the government, may be allowed to pay an access fee and operate on the line.
- 3. Services of a public monopoly are supplemented by a concession. Occasionally, different transport modes are involved, as with the Croydon Tramlink concession in the UK, where bus service is provided through the public monopoly retained by London Transport, and the tram (now being constructed) will be operated by a concessionaire. In such cases the concession design will be particularly important, to ensure the optimum relationship between the two modes.
- 4. Private sector services are supplemented with a concession. This might be needed when the market is not providing satisfactory service: For example, "social" bus services in New Zealand are run under concessions and supplement the private sector operations. The critical questions are how to create a concession and how to ensure it is sustainable. A government may have to deal with opposition from existing operators, who attempt to keep the concession from materializing. Once operating, these same companies may try to offer competing services to drive the concessionaire out of the market.

74. The aim of restructuring is to improve economic welfare. It can reduce the risk for private sector operators (since they can obtain financing more easily), enhance a company's future viability, and generally create conditions in which a concessionaire can work. Responsibility for the burdens that result from previous public sector operations (such as an excessive workforce or environmental damage) should be separated from other concession elements and may be assumed by governments or concessionaires. Above all, the business should be restructured along commercial lines so that all services (both new and existing) can be profitable under the concession arrangements and prices. The main concern in this respect is the possibility of exploitation of captive shippers or carriers (Box 5).

#### Box 5. The Captive Shipper and Carrier.

The "captive shipper": Where carriers exercise monopoly power, shippers have only one way to access their markets—as they are captive to a railway, port or airport. To correct the situation, tariff controls can be established. Where tariffs are fixed or maximum rates are established, all shippers are protected.

The "captive carrier". Where there is but one dominant shipper in a market who has enough monopoly power to dictate its rates and level of service, the carrier is captive. To after this situation, a government can arrange a concession for the particular line route on which the shipper dominates. (The Sudeste railway in Brazil is an example of this industry structure and concessioning approach.) The most likely candidate for the concession is a shippers consortium, because it would then be motivated to operate more efficiently. However, the agreement should also include safeguards for other carriers and shippers. Another option is to grant a general concession topen to any bidder) but allow the shipper the right to operate its own equipment (such as trains, barges, etc.) subject to a regulated facility access charge.

#### Financing

- 75. A concession's success depends on a company's ability to raise the capital needed for a project. Even in the case of concessions for operations, companies may need to borrow to satisfy contractual obligations, such as replacing vehicles. For example, because commercial banks were unwilling to lend to bus concessionaires in Kingston, Jamaica the concessionaires were unable to honor their obligations to provide adequate terminal and depot facilities or to purchase new vehicles. The root of the problem was that fares, set by the Government, were not high enough to promise sufficient revenue to satisfy the commercial banks that loans to finance new equipment would be secure.
- 76. Since private operators seek returns on investments equal to those they can obtain elsewhere with similar levels of risk, and governments want sustainable concessions, both must know what are acceptable levels of risk and returns, and what is required for concessionaires to attract adequate financing. The problem is that if the agreements do not satisfy financiers, the agreements will have to be changed to avoid failure of the concession (which can lead to allegations of government favoritism).

- 77. A sine qua non for private finance is that revenue and usage projections for the service or facility must be high enough to justify financing. Thus, financiers often require that traffic, revenue and construction studies be performed by "independent internationally recognized experts."
- 78. The ability to obtain financing will also depend on the allocation and specification of responsibilities within a concession. Other criteria include the extent of government guarantees, duration of the agreement, security of revenue streams, market for any collateral, foreign exchange exposure of the revenue, completion arrangements and termination clauses.
- 79. Although the allocation of risk is central, it is also true that financial packages are complex and highly tailored to particular circumstances. For example, many banks and governments require a concessionaire to provide sizable equity stakes because this proves commitment and gives lenders a cushion so that default does not occur with a temporary traffic downturn or slower-than-predicted traffic growth. In addition, governments feel that a sizable equity stake ensures that the concessionaires will be motivated to stay the course and operate efficiently.
- 80. For their part, governments need to demonstrate commitment to private sector involvement, both in the agreement and throughout the concession. Where commercial risks are completely assumed by the public sector, the ultimate risk—of a government reneging on contractual agreements—is more likely to occur. Furthermore, removing a concessionaires' risk entirely reduces its incentive to restrain costs or remain with a concession for the duration. Paradoxically therefore, financiers may be reluctant to provide funds for concessions when governments carry all the risk.

#### FUNDAMENTALS OF THE CONCESSION PROCESS

- 81. The critical elements that need to be considered during the evaluation process include:
  - ♦ The nature of consortia
  - Pre-qualification requirements
  - Bid evaluation methods
  - ♦ Performance specifications
  - ♦ Public service obligations
  - ♦ Ancillary Development Rights
  - ♦ Termination clauses
  - A government's residual roles
  - ♦ Mechanisms for securing future investment

- 82. Each element must be addressed to award a concession successfully, ensure its sustainability and avoid legal challenges. Some post-award disputes have caused changes in an agreement or composition of a consortium. In other cases they have delayed projects or prompted costly legal action. For example, consortia were changed in the bidding for Buenos Aires ports after an unsuccessful bidder exposed financial weaknesses in the winning bid. In San Juan, Puerto Rico, legal disputes arose over the disqualification of one bidder for the Tren Urbano project. In Toronto, they persist over the agreement for an airport terminal. However, no single course exists for arranging successful concessions; rather, each warrants a tailored approach.
- 83. Governments must recognize that the concessioning process does not progress rapidly. It took over a year from the call for bids to the signing of the agreement for the Hungarian M1-M15 toll motorway project, the Burkina Faso/Cote d'Ivoire railway, and the Bogota transport system. Each stage usually lasts a few months, and longer lead times are needed when governments are uncertain about their preferred approach, or have limited design specifications for heavy construction contracts.
- 84. Despite these general caveats, some important lessons have emerged. First, thorough preparation always reaps rewards. Once it establishes its objectives, or in order to define them, governments need to carry out substantial sectoral, financial, and legal analyses that are then used to prepare the bidding documents and appraise bids. Specialist consultants may be needed to analyze a system or prepare the documents.
- 85. Second, governments need to develop their regulatory capacity and credibility. This is a very different role from that of operator and investor, and requires new skills and organizational processes. However, when the skills are available and institutions function appropriately, the private sector is more confident (which enhances competition), and governments can enforce agreements more adeptly. One approach is to establish a central regulatory agency either for a particular sector (as in the UK utility regulation arrangements) or for all sectors (as in Bolivia).

#### Consortia

86. Frequently, consortia are formed to bid for concessions. This introduces different incentives within the bidding groups. Since a large part of a concessionaire's profit can come from construction, in build and operate schemes, construction firms are often the driving force behind bidding consortia. Similarly, vehicle suppliers dominate in the consortia bidding for urban or high speed rail systems. In such cases, the consortium that wins a concession does not need to tender the construction or vehicle contract competitively (the firms are already part of the bidding group). However, since the profits of the vehicle suppliers and construction companies are made early in the concession, there is some reason to believe that their long-term commitment may be weak. Thus, equity contributions are often required (for example, the EBRD requires these for at least 20 percent of the total project cost) to ensure a consortium makes a long-term commitment. It is also important to realize that a government's regulatory and oversight role is critical to a concession and that these roles are not cost-free and monitoring can be open to corruption.

87. Consortia can help concessions succeed for various reasons. First, each of the members has an interest at different stages in seeing the project through. In addition, the group can ensure that any one member does not demand an unacceptably high price for its services.

## **Pre-Qualification Requirements**

- 88. Governments often require bidders to pre-qualify before submitting full bids. This can significantly reduce government costs (of time and money) associated with appraising a large number of bids in detail. For example, in the case of the Delhi bus agreements, 10,000 applications were received for 209 new routes, and the selection was inevitably somewhat arbitrary. Further, although pre-qualification cannot provide a full picture of a bidder's competency, it can highlight potential problems that would lead to some applicants' being disqualified and hence allows authorities to reduce the construction, operational, financial and legal risks. This is particularly important with large projects, since a government's risks are greater.
- 89. Construction risk. The usual way governments reduce risks associated with construction is to investigate a bidder's history with the particular techniques needed in the concession and require that they demonstrate experience with similar sized projects. Also, bidders must post construction bonds. Such a course was followed for highway BOTs in Mexico, Hungary, and Canada.
- 90. Operational risk. The usual method to assess a firm's capacity to operate a facility, is to assess its experience in the sector and the quality of its staff (bidders are often required to present a list of key personnel to be involved with the project). Firms may also be asked to demonstrate their ability to obtain insurance or equipment. Such assessments were made for Argentina's suburban passenger railways, proposed for Jamaica's bus system, and required for Hungary's highway BOTs. In Morocco, bidders for the bus system had to prove they could get insurance on their operations and provide the requisite number of buses.
- 91. **Financial risk.** The usual way to evaluate the financial risk associated with a consortium's bid is to require certain national/international balances in the consortium, information on each member's financial history and commitment to the consortium. While financial institutions will not negotiate packages before an agreement is signed, governments can still require statements of support from the institutions, as these could indicate a company's standing and the source from which it expects credit. Financial capacity was assessed in the pre-qualification process for the Mexican and Hungarian highway BOTs and proposed but not effectively implemented for the Jamaican bus concessions.
- 92. Legal risk. Government awards are occasionally challenged. Thus, firms must show they have complied with the bidding terms. Failure to comply was the basis for eliminating some bidders for the San Juan, Tren Urbano rail system.

#### **Bid Evaluation Methods**

- 93. Bidding processes differ, even for projects in the same country and mode. The guiding principle should be to maximize competition and clarity in the process so that the ultimate customers pay a competitive price, even where there is no competition in the market. Because a concessionaire is likely to have some degree of monopoly power, which may enhance its strength in dealing with traditional administrative regulation, concessioning replaces such regulations with enforceable contractual arrangements.
- 94. Transport concessions have sometimes had difficulty attracting bids due to the quality of the bidding documents, the structure of the proposed concession, the government's ability to market the opportunity, and the level (real and perceived) of profit and risk associated with the project. For example, competition was limited for some of the freight railways in Argentina (the Belgrano), Cote d'Ivoire/Burkina Faso and Bolivia. The failure of the Richards Bay (South Africa) bus concession also seems to have been related to the lack of competition for the contract.
- 95. With respect to clarity and transparency, *points formulae* (which involve many objectives) should be used with caution, since they can dilute the incentive to operate efficiently, once a concession is obtained, if the terms of the bid become the conditions of the contract. Governments should therefore ensure that the various objectives are consistent and construct a transparent, quantitative method to assess a firm's capacity to meet them.
- 96. Criteria for evaluating bids include the following:
  - ♦ Duration
  - ♦ Lowest tariff to be charged
  - Payments to governments/concessionaires
  - ♦ Highest level or earliest investment
  - Retaining the highest number of employees
  - Best approach to solving a particular problem
- 97. **Duration.** Occasionally, the duration that bidders propose for a concession is one of the criteria on which their bids are evaluated, as with Mexican toll roads and the Tates Cairn Tunnel in Hong Kong. Governments often prefer shorter concessions as these make the competitive pressure more immediate and can reduce the overall value of government payments. However, from the concessionaires point of view shorter concessions reduce total revenues while costs remain largely unchanged. Hence concessionaires try to recoup their investments in the shorter period, by increasing the price consumers pay for the service.

#### Box 6. Mexico's Toll Roads.

The Mexican government embarked on an ambitious program of 6,000km of toll road concessions in the 1980s. Although concessions for road construction and operations were based on many criteria, investors who promised to transfer the roads back to the government in the shortest time were especially favored: This was partly due to a concern that only short-term financing would be available and the administration's desire for success within its term of office. Thus, investors negotiated high toll rates that would earn positive returns within the concession period. However, because the fees were high, the traffic anticipated did not materialize, as consumers continued to use the free roads, despite travel times which were twice as long.

The roads also failed because cost overruns averaged more than 50 percent of projected costs. In addition, anecdotal evidence suggests that before the concessionaires concluded direct agreements with trucking companies, drivers were using alternate routes, despite the longer travel times, so as to pocket the toll fees.

The Mexican government, which had guaranteed the rates of return, took various steps to remedy the situation. Concession periods were extended to 30 years and joint ventures were formed if it appeared they would be more financially viable than single concessionaires.

Other problems stemmed from the fact that government traffic and cost projections were hastily calculated and the quality of the designs and estimates fell far short of the requirements. Also, state-owned banks lending to the concessionaires did not perform the normal project screening and appraisals, and the financing arrangements were therefore less sound.

- 98. In general, the duration of infrastructure concessions should reflect the investment recovery period. However, if the assets are mobile and versatile, as in the case of bus operation agreements, for example, shorter concession periods are usually appropriate. This is possible if new concessions are regularly awarded, since then companies can re-deploy their assets on another agreement. Wherever a government has a specific reason for preferring a short concession period, the duration should not be a selection criterion but should be specified as part of the conditions of contract.
- 99. Many agreements provide for extending a concession. Where this is the case, they also state at what stage an extension can be negotiated and whether both sides must favor it. This simplifies renegotiations. In general, concessionaires may bid for new agreements if these are re-tendered, so long as termination was not due to poor performance or bankruptcy.

Table 5. Contract Duration: Actual and Appropriate.

	Actual (Years)	"Appropriate" (Years)
Bus		<del>*************************************</del>
Operation only	<ul><li>3 (London, New Zealand, Sweden, Chile)</li><li>4-5 (Denmark, Delhi)</li><li>5-6 (London)</li></ul>	3-5
With designated right of way construction	23 (Bogota)	20
Road	<ul> <li>16 (Bogota-Villavicencio)</li> <li>25 (Thailand)</li> <li>30 (Sydney Harbor Tunnel)</li> <li>35 Possible 17½ year extension (Hungary)</li> <li>7 Construction and 30 year operation (Malaysia)</li> <li>35 Following construction (Canada)</li> <li>30 Two possible 10 year extensions (Thailand)</li> </ul>	20-30
Rail	2 (27)	
Operation only	7 (UK) 15 Rolling 5 years (Cote d'Ivoire/Burkina Faso)	5 - 10
With track investment	10 (Argentina passenger) 10 Possible 10 year extensions (Chile) 20 (Argentina metro) 25 (Australia, Pyrmont) 25 Possible 25 year extensions (Guatemala) 30 From operation (Thailand BTS) 30 Possible 10 year extensions (Argentina freight) 50 Possible 50 year extension (Mexico) 99 (Croydon Tramlink)	30
Airport Passenger services only	15 (Cameroon)	10-15
Including runway and terminal investment	<ul><li>20 (Colombia)</li><li>20 Two possible 20 year extensions (Canada)</li></ul>	30
Port		
Superstructure only	<ul><li>10 Possible 5 year extensions (Maputo)</li><li>15 Possible 5 year extensions (Maputo)</li></ul>	5-15
Including infrastructure investment	20 (Panama) 20 (Karachi) 50 From start of service (Le Havre)	30

100. Lowest tariff to be charged. One of the key objectives of concessioning is to reduce political intervention, such as setting fares and tariffs for publicly-operated facilities and services. Using tariff levels as an award criterion establishes them, and the degree to which they can be raised,

in the agreement, and prevents governments from changing rates for political purposes during the life of a concession. However, since operating conditions, political concerns and a country's economy may change over time, the re may be little enthusiasm among political leaders for this bidding criterion. Further, where there is more than one concession for a particular mode, users are likely to compare rates, which could create pressure to eliminate differences (even where operating or construction costs vary).

- 101. In addition, where bidders are asked to propose a tariff, and the lowest bidder is selected, different fare levels for different services (such as between bus and train fares or different classes of service), make integration of the transport system more difficult. However, fare and ticketing integration of passenger systems is often the key of quality passenger transport. While mechanisms to allocate revenue to particular carriers within a fare or ticket-integrated area can be constructed, these are costly, complicated, and often controversial.
- 102. Nevertheless, since the lowest fare criterion more nearly replicates the effects of a competitive market than some others, a government may still find it attractive. Where a flat fee per kilometer or a basic flat fee tariff can be charged, bids may be compared on this basis, as was done in the award of concessions for the Tates Cairn Tunnel in Hong Kong, toll roads in Colombia, and bus operations in Santiago, Chile. However, where there is a broad traffic mix or a large number of time periods and the structure is complex (as is usually the case for rail freight), the bid evaluation becomes more complicated and this approach may not be practical.

#### Box 7. Tariff Specification and Monopoly Behavior.

Where competition is strong, tariff specifications may not be necessary. However, where governments seek to suppress monopoly behavior, tariffs (and the tariff escalation mechanism) should be specified in the agreements and enforced throughout the concession. Tariffs may also be specified in agreements for other reasons, such as social equity. Some general rules include:

- 1. Where monopoly is not a problem and concessionaires must compete—as with freight railways in Argentina or Brazil—they should generally be free to set their own tariffs.
- 2. Where monopoly is a spotty problem —as with many bus networks where some routes are less lucrative than others—tariff caps or regulatory mechanisms may be appropriate.
- 3. Where monopoly is a problem or public support is required—as with most suburban passenger systems—the concession should specify tariffs and formulas for tariff changes.
- 103. Payments to governments/concessionaires. Where the government is introducing concessions as a means of reducing the burden on the public purse it may use the criterion of the greatest fiscal benefit (lowest subsidy or highest premium). If fares are not fixed within the bidding documents, bidders may tend to plan and bid on the basis of the monopoly price. If the concessionaire faces competition from other transport modes or operators in the market (as was the

case in Argentina and Mexico, where freight railways compete with trucking companies), it will not be able to charge customers a monopoly price, and the customers will benefit from competitive tariffs.

- 104. Where a government sets the tariffs this is less of a problem and the bidder can be safely selected on the basis of performing the service for the lowest amount. This is common for passenger transport services and can also apply to infrastructure, as with the Prince Edward Bridge in Canada. Where this approach is adopted, governments define the conditions of agreement in order to evaluate bids equitably and ensure their social objectives are met. Penalties and incentives are often included in order to ensure that the conditions of the agreement are met.
- 105. The main issue is who carries the revenue risk. Where revenues accrue to the operators (as with net cost bus contracts) they carry both cost and revenue risk. Where revenues accrue to governments (as with gross cost bus contracts), concessionaires carry the cost risk and governments the demand (revenue) risk. Evidence in the UK and with other bus concessions suggests such concessions attract more bidders, particularly small firms, and yield a more competitive contract price. As a result, gross cost contracts are less costly to the public purse than net cost contracts for any given service (because of the greater competition for the contract).
- 106. Highest level or earliest implementation of investment. Both of these have been applied as criteria when facilities require significant improvements. Where a discount rate is specified, different offers can be objectively compared on a common basis. However, if concessionaires default on investment obligations once operating, it may be costly to replace them and hard to assess whether another bidder will face similar problems. In order to reduce the possibility of default, governments will often require a high level of investor equity (as a symbol of commitment through the life of the project), particularly where most of the shareholders are construction firms seeking returns from the construction contract, or equipment suppliers seeking returns from the systems supply contracts.
- 107. **Retaining the highest number of employees.** This criterion applies particularly when concessionaires take over a state-operated service and has been applied, for example in the Argentine freight railway concessions—where bidders were required to specify the number of employees they planned to keep and points awarded on that basis. In a variation of this, the minimum number of employees to be retained on the Brazilian railways was established in the bidding documents. In this case, concessionaires may also further reduce their workforce, having taken over the network. However, if they choose to do so, they must provide the workers with compensation packages equivalent to those which the government paid. Yet another version of this approach was adopted with the concession for the Manzanillo international terminal in Panama, where the concessionaire began a new operation and was required to *generate* 500 jobs.
- 108. However, this is likely to conflict with the long-term goal of increasing efficiency. Thus, it is rational to remove those workers whose marginal product is less than their wage level, and employ them elsewhere. For this reason, governments should generally deal with employment and labor issues directly, rather than indirectly through concessions. If this criterion is used, however, it is important that all bids are evaluated on the basis of the net cost to the government. Where higher

bidders only promise to retain few employees the government must allow for the increased severance costs it will incur when it evaluates the bids.

- 109. Best approach to solving a particular problem. In some cases, governments take the concession principle one step further. Rather than specifying the details of a project, they describe the problem to be solved, such as congestion, limited access to a particular facility, or inadequate passenger transport services. Then they require bidders to conduct feasibility studies of their proposed solutions and provide the evidence in their bids. Occasionally, they provide detailed requirements to which proposals must comply (such as maximum costs or minimum service). In others, the problem is stated in general terms. In Bogota, Colombia bidding documents for the mass transport system described existing transport movements and required bidders to provide an option for improved, integrated, and efficient transport in all or part of the city.
- 110. In such an approach, governments require detailed analyses for each proposal, preferably by experts. They then make a cost-outcome trade-off, eliminating those schemes that are less fully considered or deemed inappropriate. Although this approach is less transparent than some of the others, it gives bidders an incentive to find innovative solutions and ensures that no options are overlooked due to limitations of bureaucratic vision or understanding.
- 111. This criterion should only be applied if the criterion for evaluation can be made explicit. Where this is not possible, it should be used with caution since it is difficult for bidders or the government to know exactly what constitutes a "best" solution. The process of bid evaluation can thus be murky and is particularly susceptible to corruption.
- 112. A more limited way to promote innovation is to allow bidders to suggest various service options at different subsidy levels or payments to the government from which the latter can then select. One approach would be to require all bidders to place a bid for a basic, fully specified service and then propose modifications and different costs, as is done in the Greater London area. In Santiago, bus franchises competitions specify origins and destinations, as well as a range of qualitative requirements but companies can establish their preferred routes.

#### Lessons With Respect to Bidding and Awarding Concessions

#### 113. The salient lessons are:

- (a) The crux of successful concessioning is an awareness of the relationship between decision criteria and how they fit together (for example, a positive concession with both a short duration and low tariff will probably not succeed).
- (b) It is essential that criteria be transparent. Often, multiple criteria can be reduced to a minimum by incorporating some objectives as standards (say, buses under a certain age) at the pre-qualification stage and as conditions of the contracts. If multiple criteria cannot be reduced in number, then monetary weights should be set for each.

- (c) Governments should continually examine the criteria to eliminate any perverse incentives that materialize as the scheme is devised. Because transport concessions tend to be complex, particularly in the tariff structure but also in the construction and service areas, problems may not appear until after the full details have been developed.
- (d) Each country's unique legal system and cultural differences (such as where contracts are traditionally honored or not), play an important role in the choice of criteria—particularly with respect to renegotiations and the transparency of agreements.

### **Performance Specifications**

- 114. Performance specifications, rather than design specifications, are generally preferable since they allow concessionaires to make commercial decisions balancing operating costs and capital expenditures. Additionally, performance specifications provide the flexibility necessary for innovation and development of new technology. In the case of transport infrastructure concessions, performance specifications may be critical because consortia bidding for them often include groups that do not have much operational experience. However, the tighter the specification, the less scope there is for commercial innovation, and reaching the appropriate trade-off between these two objectives is difficult. Once established, they must be enforced if an agreement is to have any meaning even if this means a concession fails as was the case with the Maracaibo airport concession in Venezuela.
- 115. Where governments have particular service objectives that supersede the goal of subjecting the sector to market forces, they should be specified in the agreement, in advance and government should bear the cost of designing the system and the additional costs of meeting the particular conditions. For example, where the government's goal is to reduce the time that a bus spends at the stop, the agreement might call for two people to operate a bus (a driver and conductor), as in London.

#### **Ancillary Development Rights**

116. These rights are often the most lucrative part of a concession, hence concessionaires may choose to focus on them, rather than on the transport facility or service. Given their value, governments should treat them as assets to be traded for the transport service required. Thus, the agreement must carefully specify the service obligations. For example, land development around the Guangzhou-Shenzen (China) superhighway has been cited as one of the most important aspects of that project; Hopewell Holdings was granted the right to develop the land acquired for interchanges, as well as to develop residential and retail property under the elevated road. In the agreement for the Bangkok Transit System, the concessionaires were allowed to develop commercial activities within the stations only if they would assure that access would be available to the transit system outside the shops' business hours and that materials used to construct the commercial centers would be the same quality as those in other parts of the system.

## **Public Service Obligations**

- 117. The concession framework provides a finely-tuned mechanism for efficiently administering public service obligations. When designing bidding documents, governments can stipulate their requirements, although is likely they will need to negotiate on some of the preferred conditions in order to satisfy their budget constraints. Two ways exist to concession services desired for purely social reasons, and for which the government is willing to pay. Governments can:
  - (a) Offer unremunerative services separately as a negative concession to the bidder that asks for the lowest government payment (such as with *social* bus services in New Zealand and the UK, outside London). This ensures there will be little cross subsidy of the public service obligation from other services within a concession and that governments fully understand the cost of their social policies.
  - (b) Require that concessionaires provide for unremunerative services (such as early morning bus service in London and inter-city rail services over freight railway tracks in Brazil) in their bid price for large packages which would also include profitable operations. This approach requires that remunerative and unremunerative services be linked so as to create packages that are attractive to concessionaires. The danger is, of course, that cross subsidies may be distributionally perverse, as well as obscuring the real costs of providing social services.

#### **Termination Clauses**

- 118. Because concessions are of limited duration, arrangements for terminating them affect the whole concession process and performance. Objectives include the following:
- 119. Ensuring that the system is in satisfactory condition when it is handed over. The last few years of a concession are critical, since it is then that a company reaps fewer benefits from investing in infrastructure that will last longer than the life of the concession. Thus, agreements may contain clauses which specify that failure to maintain facilities or services at a sufficient level during the last few years will be reversed by the government on transfer, and that concessionaires are liable for the costs (this was stipulated for equipment on Argentina's suburban railways).
- 120. In Bangkok, the concessionaire for the mass transport system is required to transfer it to the metropolitan authority in the state in which it was normally maintained during the last two years of the agreement, and which the company considers sufficient for use for the next two years. Also, there must be enough spare parts with which to operate the service. Conversely, with the Cote D'Ivoire/Burkina Faso railway, investments are negotiated every three years throughout the concession period, so as to maintain a consistent standard of upkeep. In this case, the government pays for the investments.

- 21. Ensuring there are no workforce problems. There are two concerns with respect to the
- workforce: that existing employees, with their expertise, be retained at the time of the transfer to operate the system and that new employees be sufficiently well trained and have experience with the system.
- 122. The Bangkok concession for a mass transport system addressed both issues. The Metropolitan Authority agreed to retain any employment agreements made by the concessionaire, although the latter will need to consult with the Authority on any changes in these agreements or before hiring any new workers, during the last three years. Also, the agreement gives the Authority the right to place its technical officers in vacant positions within the concessionaire's organization during the last five years of the concession.
- 123. Retaining property that belongs to the concessionaire that is crucial to operating the system. In most cases, the concessioning authority has the right to any vital equipment, for which it can provide a lump sum payment at the end of the concession. Equally important, concessionaires are not permitted to install facilities on land outside of the designated area (which could cost the government additional sums in the future). The agreement for the Bangkok Transit System specifies this clearly.
- 124. Ensuring continuity of sub-agreements. Most of these need to be terminated at or before a concession ends. However, in some cases, commercial service agreements are maintained afterwards. In California, toll road concession agreements allow commercial ventures (such as service stations) along the highways to operate for 99 years after the date of transfer (the highway concessions last only up to 35 years). In Mexico, toll road concessionaires may operate commercial facilities along the roads for two years after a concession ends.

#### Government's Residual Roles

- 125. Since a key goal of concessioning is to involve the private sector in providing transport service, government control over the concession once an agreement is signed should be limited. For this reason, an agreement must be detailed and ambiguities must be minimized, particularly for agreements of long duration. Clear lines of authority must be defined and each party must be capable of performing in the way agreed. Some countries have a history of renegotiating/changing concessions throughout their duration; although this complicates the process and makes it opaque, it may also make the concession more sustainable. Changes to secure financing are fairly common. In Bangkok, the transit system agreement was altered through the addition of appendices, so that the concessionaire could secure financing. Generally, these appendices allocate risks more precisely.
- 126. The residual government role can be fairly extensive. It usually includes:
- 127. **Providing oversight.** The government must ensure that the concessionaire complies with the agreement and accepts changes in design, operating structures, or tariffs as provided for in the contract. For example, with toll roads, agreements often specify tariff modifications depending on different economic conditions or traffic levels. Thus, it is a government's responsibility to ensure that a concessionaire adopts the correct formula for recalculating the tolls and introduces them on the agreed dates.

- 128. Oversight of performance to which penalty clauses apply (such as punctuality, cancellations, cleanliness and maintenance of vehicles) can be difficult because monitoring is costly and time consuming. Nevertheless, the penalties (which must be specified in the agreement) and the concession will only be as effective as the enforcement; thus, it should be swift. Rescinding agreements, rebidding concessions and transition processes can cost the government a great deal and negatively affect the service. Where it impacts international trade, economic costs are probably significant; where it impacts individual consumers, political pressure to avoid disruption may be intense. If the penalties are so cumbersome that neither concessionaires nor governments have a full grasp of the ramifications, they should be avoided.
- 129. If governments demonstrate their commitment to enforce the agreements in a particular case, then other operators may be motivated to comply, as happened with the London bus network. By contrast, the Jamaican government was unable to force bus operators to honor their contractual obligations, partly because of its own defaults. As a result, the system deteriorated, as often occurs when enforcement is weak.
- 130. Supplying land. The need for linearly contiguous plots and the multiple ownership of the land involved makes acquisition difficult for roads and railways. In many infrastructure concessions, it is simpler and more cost effective for governments instead of concessionaires to buy land for facilities. Typically governments own the land and lease it to concessionaires. However, there are various ways in which this can be done. Agreements may state that government must supply the land by a certain date. In such cases, a government can negotiate the price with existing owners, but it is also able to use its powers of land acquisition, if negotiations fail. This approach was adopted in Australia for the Sydney Harbor Tunnel and in Bangkok for the transit system. Elsewhere, a concessionaire and government may agree on the cost of the land, but the former negotiates with the owners, and is thus motivated to seek the best price. When difficulties arise, the concessionaire may have recourse to a government's right to acquire property (power of eminent domain); however, it must then forfeit the income it could have derived from bargaining with the owner.

#### Box 8. Land Acquisition for Concessioned Colombian Toll Roads.

In Colombia, the National Roads Institute has the authority to negotiate a price with each land owner, as long as the total cost is not more than 20 percent above the one agreed upon with the concessionaire. The concessionaire then pays the owners through a trust fund established to construct and operate the project. Where it cannot agree on a price with the owners, the Institute takes the legal and administrative actions needed to sequester the land. However, payments will still be made by the concessionaire, who must agree to the sequestration. For this process to succeed, the agreement for higher payments or sequestration between the Institute and concessionaire becomes critical. In fact, the agreement contains a clause that reduces the potential for delay, since it requires the concessionaire to pay the necessary sums reven where they exceed those in the agreement and where they are disputing the amounts). The dispute is resolved later, at which time the concessionaire may be reimbursed.

131. Providing employment severance. In some cases, a government is responsible for employees of the existing transport service, when a concessionaire does not need them. Some concessions stipulate the number to be retained as one of the bidding criteria. For example, in

Mozambique, the port terminal concessionaires were required to keep at least 90 percent of the non-managerial staff, as well as give first consideration to existing managerial staff. Benefits and working conditions had to be retained.

132. For employees who are surplus to transport requirements, governments either need to find them other jobs within the public sector or terminate their agreements. Where the latter is the only option, this may create political difficulties. Also, it raises the government's costs, since it has to provide severance pay. Some agreements limit the number of employees that can be retained and stipulate the working conditions, as with the Cote d'Ivoire/Burkina Faso railway line concession, which also states that previous state employees are to be given priority if the concessionaire hires extra workers during the first three years.

#### **Securing Future Investments**

133. Where agreements extend for a long period, concessionaires need to invest to maintain the quality of service. Such investments are treated differently in various agreements. The simplest situation may be with toll road facilities, where a concessionaire's investments will probably be repaid from operating revenues. Conversely, in port, airport and railway concessions, concessionaires may need to invest in ancillary assets that have a longer life than the concessions. In order to encourage such actions, governments may want to reimburse investments made within a certain period of the end of the agreement, with some allowance for depreciation at transfer—but they must agree to this in advance (as with the railway in Cote d'Ivoire/Burkina Faso).