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PRIVATELY FINANCED INFRASTRUCTURE PROJECTS

Draft chapters of a legislative guide on privately financed infrastructure projects

Report of the Secretary-General

Addendum

**INTRODUCTION AND BACKGROUND INFORMATION
ON PRIVATELY FINANCED INFRASTRUCTURE PROJECTS**

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A. Introduction

1. Purpose and scope of the *Guide*

1. The purpose of the *Guide* is to assist national authorities and legislative bodies wishing to establish a favourable legal framework for promoting infrastructure development through private investment. The advice provided in the *Guide* aims to achieve an appropriate balance between the need to facilitate private participation in infrastructure projects and the need to foster the interests of the host Government and the public. In addition to legislative and policy-making bodies, the *Guide* may be of interest to other authorities, at the national or local level, involved in the execution of privately financed infrastructure projects.
2. The *Guide* is intended to be used as a reference in the preparation of new laws or in the review of the adequacy of existing laws and regulations. For that purpose, the *Guide* discusses a number of issues often addressed in national laws and regulations pertaining to infrastructure projects. The *Guide* considers the desirability of dealing with those issues in legislation and, where appropriate, offers recommendations for the formulation of possible legislative solutions. The *Guide* does not provide a single set of model solutions, but it helps the reader to evaluate different approaches available and to choose the one most suitable in the national or local context.
3. While the *Guide* is primarily concerned with legislative issues, some of its chapters (e.g. chapter IV, “Conclusion and general terms of the project agreement”) discuss selected issues that arise under the agreements executed by the parties to a privately financed infrastructure project. Where such a discussion is offered, its focus is on matters that might be usefully addressed in the legislation, in addition to being dealt with in the relevant agreements. The *Guide* is not intended to provide advice on drafting agreements for the execution of privately financed infrastructure projects or on contractual solutions for problems that arise under such agreements.
4. The *Guide* is concerned with projects in which private entities participate in the financing, construction, maintenance or operation of certain types of public infrastructure in exchange for the right to charge a price, either to the public or to a State entity, for the use of the infrastructure or for the services it generates. The *Guide* gives special attention to infrastructure projects that involve an obligation, on the part of the selected entity, to undertake physical construction, repair, or expansion works in the infrastructure concerned prior to its operation. Some chapters deal specifically with issues that arise in connection with that obligation (e.g. chapter VI, “Construction phase”). However, a number of chapters discuss issues that may well arise in projects where the private operator takes over an existing infrastructure or where such infrastructure is permanently owned by the private operator (e.g. chapter I, “General legislative considerations”; chapter IV, “Conclusion and general terms of the project agreement”; and chapter VII, “Operational phase”).
5. Projects in which a private operator takes over an existing public infrastructure are sometimes grouped together with other transactions for the “privatization” of State functions or property. However, the *Guide* does not cover “privatization” transactions that do not relate to infrastructure development and operation. A number of reasons justify this limitation of the scope of the *Guide*. “Privatization” transactions may be carried out for various reasons, depending on the activity or property being “privatized”. In many cases, they are carried out for the purpose of

obtaining revenue for the Government or to free the Government of economic activities that can be more efficiently carried out by the private sector. This is typically the case in the sale of State-owned land and other real estate property, but may also be the motivation for the sale of shares in State-owned companies. In the particular case of infrastructure projects, however, the main purposes are typically to expand the availability of needed infrastructure and to improve the management and operation of existing infrastructure.

6. Furthermore, the infrastructure projects discussed in this *Guide* involve the establishment of a lasting bundle of rights and obligations between the infrastructure operator and the Government, through a project agreement or sector-specific regulations. In turn, the activities of most privatized companies other than public utilities would not be subject to special regulation; for example, upon transfer to the private sector, a steel corporation or a privatized automobile plant previously owned by the Government would in most cases operate in essentially the same manner as competing companies in the same market.

7. It should be further noted that the *Guide* does not cover projects for the exploitation of natural resources. This limitation, too, is due to a number of reasons. For historic or strategic grounds, many countries have established a special ownership regime for natural resources or other particular categories of goods and property. Common examples may include water sources, minerals, oil, natural gas and other substances found in the subsoil. In some countries they may extend to forests, beaches, the territorial waters or the continental shelf. Many countries have a well established tradition of granting private persons and entities the right to exploit economically those natural resources under some “concession”, “licence” or “permission” issued by the State. The mechanisms for awarding concessions for the exploitation of natural resources are in most cases different from those commonly used for selecting a company to carry out an infrastructure project. By the same token, the function of a concessionaire of natural resources, as a commodity producer, is quite distinct from the position of a project company in a privately financed infrastructure project. While infrastructure facilities are destined to be used by the public or to generate public services, mines and other natural resources are not intended for public use and in most cases are exploited by the concessionaire in its own private interest. Furthermore, unlike public services that are provided under some form of regulatory oversight by the State, the minerals or other materials extracted or processed by the concessionaire usually become its own property and are in most cases sold freely on the market. Lastly, the concessionaire of an infrastructure facility is typically under an obligation to ensure its permanent operability, whereas at the end of a mining concession the mineral deposits are returned to the State with their substance diminished or even exhausted.

2. Terminology used in the *Guide* */

8. The following paragraphs explain the meaning and use of certain expressions that appear frequently in the *Guide* or which are often used in national laws in connection with infrastructure projects. For terms not mentioned below, such as terms of art used in financial and business

*/ [N.B.: This section may be expanded so as to cover other terms that might appear in future chapters and might require prior explanation.]

management writings, the reader is advised to consult other sources of information on this subject, such as the *Guidelines on Infrastructure Development through Build-Operate-Transfer (BOT) Projects* prepared by the United Nations Industrial Development Organization (UNIDO)^{1/}

(a) “Infrastructure projects”

9. In the context of this *Guide*, the term “infrastructure projects” is used to refer specifically to the development and operation of physical facilities, equipment or systems used to generate public services for purposes of economic production or personal or household use. Examples of infrastructure projects within that meaning may be found in various sectors, and include various types of facilities, equipment or systems: power generation plants and power distribution networks (electricity sector); systems for local and long-distance telephone communications and data transmission networks (telecommunications sector); waste water treatment plants, water distribution facilities (water sector); facilities and equipment for waste collection and disposal (sanitation sector); physical installations and systems used for public transportation, such as urban and interurban railways, underground trains, bus lines, roads, bridges, tunnels, ports, airlines, airports (transportation sector).

10. Infrastructure projects do not always require the construction or operation of large physical facilities. Indeed, in some cases (e.g. cellular telephony) the main element of the project may consist of services obtained from others (e.g. owners of communications equipment) rather than of construction works.

(b) “Public services” and “public utilities”

11. Infrastructure projects typically entail the provision of services or commodities to the public (or to an intermediary who distributes them to the public) or the operation or maintenance of a facility open to public use. These activities are often referred to under national law as “public services” and, according to the legal tradition of the country concerned, their providers may be referred to with different expressions, such as “public utilities”, “public services enterprises” or “public service providers”. It should be noted, however, that those expressions are not uniformly understood and may encompass different activities in different legal systems. While infrastructure projects as defined above would, under most legal systems, involve some form of “public service”, this expression may also be used in connection with a number of other activities not covered by the *Guide*.

12. The notions of “public utilities” and “public services” are well established in the legal tradition of some countries, being sometimes the subject of constitutional law or detailed statutory provisions. In some countries the provision of public services may be governed by a specific body of law, which is typically referred to as “administrative law” (see chapter I, “General legislative considerations”, paras. 12-15). However, such a high degree of specificity is not present in all legal

^{1/} United Nations Industrial Development Organization, *Guidelines for Infrastructure Development through Build-Operate-Transfer (BOT) Projects*, Vienna, 1996. (UNIDO Sales Publication No. UNIDO.95.6.E) (hereafter referred to as the “*UNIDO BOT Guidelines*”).

systems. In a number of countries, aside from being subject to special regulations, public utilities are not regarded as being intrinsically distinct from other types of business.

13. As used in this *Guide*, the expression “public services” refers to services provided in connection with public infrastructure or as a result of its operation. The expressions “public utilities” and “public service providers” refer to the legal entities responsible for the management of infrastructure facilities or systems that supply those public services. In this *Guide* the expressions should not be understood in the technical meaning that may be attached to them under any particular legal system.

(c) “Concession”

14. In many countries, public services constitute State monopolies or are otherwise subject to special regulation by Government. Where that is the case, the provision of a public service by a private entity typically requires an act of authorization by the appropriate State body. Different expressions are used to define such acts of authorization under national laws, and in some legal systems different expressions may be used to denote different types of authorizations. Commonly used expressions include terms such as “concession”, “franchise” or “licence”. In some national laws, particularly those belonging to the civil law tradition, certain forms of infrastructure projects are referred to by well-defined legal concepts such as “public works concession” or “public service concession”.

15. The *Guide* uses the word “concession” to refer generally to the right given to the project company or consortium to construct and operate or only to operate the public infrastructure facility and to charge for its use or for the services it generates. As used in the *Guide*, the word “concession” is not to be understood in a technical meaning that may be attached to it under any particular legal system or national laws.

(d) “Build-operate-transfer (BOT)” and related expressions

16. A number of acronyms are sometimes used to refer to various types of privately financed infrastructure projects, according to the type of private participation or the ownership of the relevant infrastructure.

17. An infrastructure project is said to be a “build-operate-transfer” (BOT) project when the host Government selects a private entity to finance and construct an infrastructure facility or system and gives the entity the right to operate it commercially for a certain period, at the end of which the infrastructure and the right to its operation is transferred to the Government. In those projects, the host Government usually holds title to the facility and the land on which it is built throughout the life of the project. The expression “build-transfer-operate” (BTO) is sometimes used to emphasize that the infrastructure facility becomes the property of the host Government immediately upon its completion, the project company being awarded the right to operate the facility for a certain period. One variation of BOT or BTO projects are the “build-rent-operate-transfer” (BROT) projects or “build-lease-operate-transfer” (BLOT) projects, where, in addition to the obligations and other terms usual to BOT projects, the private entity rents the physical assets on which the facility is located for the duration of the agreement.

18. “Build-own-operate-transfer” (BOOT) are projects in which a private entity is engaged for the financing, construction, operation and maintenance of a given infrastructure facility in exchange for the right to collect fees and other charges from its users. In contrast to BOT projects, under this arrangement the private entity owns the facility and its assets until it is transferred to the host Government. However, the parties may provide that the private entity will own the facility permanently and is not under an obligation to transfer them back to the host Government in which case the project is referred to as a “build-own-operate” (BOO) project.

19. Besides acronyms used to highlight the particular ownership regime, other acronyms may be used to emphasize one or more of the obligations of the project company. In some projects, existing infrastructure facilities are turned over to private entities to be modernized or refurbished, operated and maintained, permanently or for a given period of time. Depending on whether the private sector will own such an infrastructure facility, those arrangements are called either “refurbish-operate-transfer” (ROT) or “modernize-operate-transfer”(MOT), in the first case; or “refurbish-own-operate” (ROO) or “modernize-own-operate”(MOO) in the latter case. The expression “design-build-finance-operate” (DBFO) is sometimes used to emphasize the private sector’s additional responsibility for designing the facility and financing its construction.

20. Sometimes all of the above transactions and other possible forms of infrastructure projects are generally referred to with the acronym “BOT”. In the *Guide*, however, the term “BOT” is only used in reference to the particular type of infrastructure projects described in paragraph 16.

(e) “Project agreement”, “project consortium”, “project company”

21. As used in the *Guide*, the words “project agreement” mean an agreement between the host Government and the private entity or entities selected by the host Government to carry out the project, and which sets forth the terms and conditions for the construction or modernization, operation and maintenance of the infrastructure. Other expressions which may be used in some legal systems to refer to such an agreement, e.g. “concession agreement” or “concession contract”, are not used in the *Guide*.

22. The expression “project consortium” refers to the group of companies that submit a joint proposal for the development of an infrastructure project and agree to carry it out jointly if awarded the project by the host Government.

23. The words “project company” are used to refer to the independent legal entity especially established by the project consortium for the purpose of carrying out the construction works and operating the infrastructure facility.

24. When in the context of the *Guide* particular reference is made to the fact that the project consortium or the project company has been granted a concession (i. e. the right to construct or operate the infrastructure facility as defined above in para. 15), the expression “concessionaire” may be used for such a project consortium or project company. Furthermore, the word “concessionaire” is sometimes used in the *Guide* to refer, generally, to entities which operate public infrastructure pursuant to a concession by the host Government.

(f) References to national authorities

25. The expression “host Government” is generally used in the *Guide* to refer to the authority that has the overall responsibility for the project and on behalf of which the project is awarded. Such authority may be national, provincial or local.

26. The expression “regulatory body” is used in the *Guide* to refer to the governmental organ or entity that is entrusted with the authority to issue rules and regulations governing the operation of the infrastructure. The regulatory body may be established by statute with the specific purpose of regulating the sector in which the infrastructure operates.

27. The term “awarding authority” is used in the *Guide* to refer to the organ, agency or office within the host Government which is responsible for selecting the concessionaire. Depending on the system of the host country, more than one organ, agency or office may be involved in the selection process and related procedures leading to the award of the project.

(g) “Procurement” and “selection procedures”

28. The word “procurement” is generally used in the *Guide* to refer to the systematized acquisition by the Government, on a commercial basis, of the items or services it needs in order to perform its functions or fulfil its objectives. The body of those rules is usually known as “procurement law”. The word “procurement” usually denotes a purchasing activity and this narrow connotation may be inappropriate to refer to the award of privately financed infrastructure projects. For clarity purposes, the *Guide* uses the words “selection procedures” to refer to the procedures used by the Government to award the right to construct and operate an infrastructure project.

(h) Turnkey contract; design-build contract

29. The *Guide* uses the term “turnkey contract” to refer to a construction contract whereby a contractor or consortium of contractors is engaged to perform all obligations needed for the completion of the entire works, i.e. the transfer of the technology, the supply of equipment and materials, the installation of the equipment and the performance of the other construction obligations (such as civil engineering and building)^{2/} In a turnkey contract, the contractor is normally obliged to undertake all necessary works so that the purchaser receives a facility which is ready for being put to operation. A contract is said to be “design-build and turnkey” when the construction organization also assumes the responsibility for the design of the infrastructure.

B. Background information on infrastructure projects

30. The following sections discuss basic issues of privately financed infrastructure projects, such as private sector participation in public infrastructure and the concept of project finance. They further identify the main parties involved in those projects and their respective interests, and briefly describe the evolution of a privately financed infrastructure project. These sections are conceived as general background information on matters that are examined from a legislative perspective in the subsequent chapters of the *Guide*. For additional information, the reader is particularly advised to consult publications by other international organizations, such as the United Nations Industrial Development Organization (UNIDO)^{3/} the World Bank^{4/} or the International Finance Corporation^{5/}.

1. Private sector and public infrastructure

31. The roles of the public and the private sectors in the development of infrastructure have evolved considerably in history. Public services such as gas street lighting, power distribution, telegraphy and telephony, steam railways, electrical tramways were launched in the nineteenth century and in many countries they were provided by private companies that had obtained a licence or concession from the Government. Numerous privately-funded road or canal projects were carried at that time, and there was a rapid development of international project financing, including international bond offerings to finance railways or other major infrastructure.

^{2/} The notion of turnkey contract is discussed in the *UNCITRAL Legal Guide on Drawing Up International Contracts for the Construction of Industrial Works*, New York, 1988, United Nations Publication, Sales No. E.87.V.10 (hereafter referred to as the “*UNCITRAL Construction Legal Guide*”), p. 16.

^{3/} *UNIDO BOT Guidelines* (see footnote 1).

^{4/} International Bank for Reconstruction and Development, *World Development Report 1994 - Infrastructure for Development*, Washington, D.C., 1994; *World Development Report 1996 - From Plan to Market*, Washington, D.C., 1996.

^{5/} International Finance Corporation, *Financing Private Infrastructure*, Washington, D.C., 1996.

32. However, during most part of the twentieth century the international trend was, in turn, toward public provision of infrastructure and other services. Infrastructure operators were often nationalized and competition was reduced by mergers and acquisitions. The degree of openness of the world economy also receded during this period. Infrastructure sectors remained privately operated only in a relatively small number of countries, often with little or no competition. In many countries the pre-eminence of the public sector on infrastructure service provision became enshrined in the constitution (see chapter I, "General legislative considerations", paras. 1-4).

33. The current reverse trend toward private sector participation and competition in infrastructure sectors started in the early 1980s and it has been driven by general as well as country-specific factors. Among the general factors are significant technological innovations; high indebtedness and stringent budget constraints limiting the public sector's ability to meet increasing infrastructure needs; deepening of international and local capital markets improving the access to private funding; as well as an increasing number of successful international experiences with private participation and competition in infrastructure.

34. Various projects for the development of new infrastructure have been carried out by private entities in recent years. In addition to that, many countries have launched extensive privatization programmes transferring public utility companies to private operators. In many countries, new legislation was adopted, not only to govern these transactions, but also to modify the market structure and competition rules governing the sectors in which they were taking place (see chapter II, "Sector structure and regulation", ____).

2. Forms of private sector participation

35. Recent developments show that private sector participation in infrastructure projects may be devised in a variety of different forms, ranging from publicly-owned and operated infrastructure to fully privatized projects. The paragraphs below discuss the following three main variants: (a) public ownership and operation; (b) public ownership and private operation; and (c) private ownership and operation. The appropriateness of a particular variant for a given type of infrastructure is a matter to be considered by the Government in view of the national needs for infrastructure development and an assessment of the most efficient ways in which particular types of infrastructure may be developed and operated. In a particular sector more than one option may be used^{6/}

(a) Public ownership and operation

^{6/} For a more detailed discussion of these forms, see International Bank for Reconstruction and Development, *World Development Report 1994 - Infrastructure for Development*, p. 8-9.

36. The traditional modality of infrastructure provision offered limited or no scope for private sector participation, with the Government being both the owner and the operator of the infrastructure. However, some countries have devised mechanisms for attracting direct private financing or for facilitating the operation of public infrastructure under commercial principles.

37. A way of achieving those results may be for the Government to establish a separate legal entity, such as a joint stock company, controlled by the Government but managed as an independent private commercial enterprise that is subject to the same rules and business principles that apply to private companies. Some countries have a well established tradition in operating national infrastructure through these types of companies. Opening the capital of such companies to private investment, or making use of such a company's ability to issue bonds or other security may create an opportunity for attracting private investment in infrastructure. Some of these companies have been used as "special purpose vehicle" for raising private funds for infrastructure investment through the project finance modality.

38. Another form of involving private participation in publicly owned and operated infrastructure may be the negotiation of "services contracts" whereby the public operator contracts out specific operations and maintenance activities to the private sector. The host Government may also entrust a broad range of operation and maintenance activities to a private entity acting on behalf of the relevant public authority. Under this arrangement, which is sometimes referred to as a "management contract", the private operator's compensation may be linked to its performance, often through a profit-sharing mechanism, although compensations on the basis of a fixed fee may also be used, particularly where the parties find it difficult to establish mutually acceptable mechanisms to assess the operator's performance.

(b) Public ownership and private operation

39. There are various ways in which the whole operation of public infrastructure may be transferred to private entities. One possibility is to give the private entity, usually for a certain period, the right to use a given infrastructure, to supply the relevant services and to collect the revenue generated by that activity. Such infrastructure may already be in existence, or may have been especially built by the private entity concerned, such as in a typical "build-operate-transfer" (BOT) project (see above, para. 18). This combination of public ownership and private operation has the essential features of arrangements which in some legal systems may be referred to as "public works concessions" or "public services concessions" (see chapter I, "General legislative considerations", para.12).

40. Another form of private participation in infrastructure is where a private entity is selected by the host Government to operate a facility which has been built by or on behalf of the host Government, or whose construction has been financed with public funds. Under such an arrangement, the operator assumes the obligation to operate and maintain the infrastructure and is granted the right to charge for the services it provides. In such a case, the operator assumes the obligation to pay to the Government a portion of the revenue generated by the infrastructure which is used by the Government to amortize the construction cost. These arrangements are referred to in some legal systems as "lease" or "*affermage*".

41. The nature of the private entity's rights in the equipment and assets related to the infrastructure, as well as the regime under which such infrastructure is operated (whether pursuant to a contract or to a unilateral "licence"), may vary greatly between different legal systems (see further chapter I, "General legislative considerations", paras. 12-15). In a number of countries some types of publicly owned infrastructure are rarely taken over by the Government at the end of the concession period since the Government usually prefers to maintain that infrastructure under private operation. In these cases, the private use and possession of public assets, which was originally awarded for a definite period, may, in practice, become indefinite (see further chapter IX, "Duration, extension and early termination of the project agreement", ___).

(c) Private ownership and operation

42. The third basic modality entails that the private entity not only operates the infrastructure, but also owns the assets related to it. Here, too, there may be substantial differences in the treatment of those projects under national laws, for instance as to whether the Government retains the right to reclaim title to the infrastructure or to assume the responsibility for its operation (see also chapter I, "General legislative considerations", paras. 16-19).

43. Where the infrastructure is operated pursuant to a governmental licence, private ownership of physical assets (e.g. telecommunication network) is often separable from the licence to provide the service to the public (e.g. long-distance telephone services), in that the licence can be withdrawn by the Government under certain circumstances. Thus, private ownership of the infrastructure may not necessarily entail an indefinite right to provide the service.

3. Financing infrastructure projects

44. Alternatives to traditional public financing are playing an increasing role in the development of infrastructure. In recent years, new infrastructure investment in various countries included projects with exclusively or predominantly private funding sources. The two main types of funds are debt finance, usually in the form of loans obtained at commercial markets, and equity investment. However, financing sources are not limited to those. Public and private investment have often been combined in arrangements sometimes called "public-private partnerships".

(a) Equity capital

45. The first type of capital for infrastructure projects is provided in the form of equity investment. Equity capital is obtained in the first place from the members of the project consortium or other individual investors interested in taking stock in the project company. However, such equity capital normally represents only a portion of the total cost of an infrastructure project. In order to obtain commercial loans or to have access to other sources of funds to meet the capital requirements of the project, the members of the project consortium and other individual investors have to offer priority payment to the lenders and other capital providers, thus accepting that their own investment will only be paid after payment of those other capital providers. Therefore, the members of the project consortium, as the main promoters of the project, typically assume the highest financial risk. At the same time, they will hold the largest share in the project's profit, once the initial investment is paid. Substantial equity investment by the companies participating in the project consortium is typically

welcomed by the lenders and the host Government, as it helps reduce the burden of debt service on the project company's cash flow and serves as an assurance of those companies' commitment to the project.

(b) Commercial loans

46. Debt capital often represents the main source of funding for infrastructure projects. It is obtained in the financial market primarily by means of loans extended to the project company by national or foreign commercial banks, typically using funds which originate from short to medium-term deposits remunerated by those banks at floating interest rates. Consequently, loans extended by commercial banks are often subject to floating interest rates and have normally a maturity term shorter than the project period. However, where feasible and economic, given financial market conditions, banks may prefer to raise and lend medium-to-long term funds at fixed rates, so as to avoid exposing themselves and the project company over a long period to interest rate fluctuations, while also obviating the need for hedging operations.

47. Due to the magnitude of the investment required for a privately financed infrastructure project, loans are often organized in the form of "syndicated" loans with one or more banks taking the lead role in negotiating the finance documents on behalf of the other participating financial institutions, mainly commercial banks.

48. Commercial loans are usually provided by the lenders under the condition that their payment takes precedence over the payment of any other of the borrower's liabilities. Therefore, commercial loans are said to be "unsubordinated" or "senior" loans. Senior loans may be divided into "unsecured" and "secured" according to whether their payment is guaranteed by any security provided by the borrower. Unsecured loans (i.e. loans that are not guaranteed by any security offered by the borrower) are typically provided on account of the borrower's creditworthiness. However, with a view to minimizing their exposure, lenders providing unsecured loans often require an undertaking from the borrower that its net assets will not be pledged in the favour of another party in preference to the unsecured creditors (such an undertaking as usually referred to as "negative pledge"). Secured loans, in turn, are typically guaranteed by collaterals provided by the borrower, such as shares of the project company or its property and receivables. The borrower's ability to offer such types of security and the creditworthiness of the borrower and their guarantors typically limit the risk to which the lenders are exposed, thus reducing the cost at which the credit is offered.

(c) "Subordinated" debt

49. The third type of funds typically used in these projects are "subordinated" loans, sometimes also called "mezzanine" capital. These loans rank higher than equity capital in order of payment, but are subordinate to senior loans. This subordination may be general (i.e. ranking generally lower than any senior debt) or specific, in which case the loan agreements specifically identify the type of debt to

which it is subordinated. Subordinated loans are often provided at fixed rates, usually higher than those of senior debt. As an additional tool to attract such form of capital, or sometimes as an alternative to higher interest rates, providers of subordinated loans may be offered the prospect of direct participation in capital gains, by means of the issue of preferred or convertible shares or debentures, sometimes providing an option to subscribe for shares of the project company at preferential prices.

50. Subordinated loans may be provided by the project company's shareholders, as a supplement to equity investment or may originate from other sources, such as governmental financial institutions, financing companies, investment funds and other so-called "institutional investors" such as insurance companies, collective investment schemes (e.g. mutual funds) or pension funds. These institutions normally have large sums available for long-term investment and may represent an important source of additional capital for infrastructure projects. Their main reason for accepting the risk of providing capital to infrastructure projects are the prospect of remuneration and the interest in diversifying investment. Normally, institutional investors do not participate otherwise in the development of the project or the operation of the facility.

(d) Capital market funding

51. As more experience is gained with privately financed infrastructure projects, increased use is being made of capital market funding. Funds may be raised at the capital market by the placement of bonds and other negotiable instruments on a recognized stock exchange. Typically, the public offer of negotiable instruments requires regulatory approval and compliance with applicable requirements of the relevant jurisdiction, such as requirements concerning the information to be provided in the prospectus of issuance and, in some jurisdictions, the need for prior registration. Bonds and other negotiable instruments may have no other security than the general credit of the issuer, or may be secured by a mortgage or other lien on specific property.

52. The possibility of gaining access to capital markets is usually greater for existing public utilities with an established commercial record than for companies specially established to build and operate a new infrastructure and lacking the required credit rating. Indeed, a number of stock exchanges require that the issuing company must have some established record over a certain minimum period before being permitted to issue negotiable instruments.

(e) Financing by Islamic financial institutions

53. One additional group of potential capital providers are Islamic financial institutions. Those institutions operate under rules and practices derived from the Islamic legal tradition. One of the most prominent features of banking activities under their rules is the absence of interest payments, and consequently the establishment of other forms of consideration for the borrowed money, such as profit sharing or direct participation of the financial institutions in the results of the transactions of their clients. As a consequence of their operating methods, Islamic financial institutions may be more inclined to consider direct or indirect equity participation in a project than other commercial banks. At the same time, those financial institutions would give emphasis to reviewing economic and financial assumptions of projects for which financing is sought and would follow closely all phases of its implementation.

(f) Financing by international financial institutions

54. International financial institutions may also play a significant role as providers of loans, guarantees or equity to privately financed infrastructure projects. A number of projects have been co-financed by the World Bank, the International Finance Corporation or by regional development banks.

55. International financial institutions may play an instrumental role also in the formation of “syndications” for the provision of loans to the project. Some of those institutions have special loan programmes under which they become the sole “lender of record” to a project, acting on its own behalf and on behalf of participating banks and assuming the responsibility for processing disbursements by participants and for subsequent collection and distribution of loan payments received from the borrower, either pursuant to specific agreements or other rights that are available under their status of preferred creditor. Some international financial institutions may also provide equity or mezzanine capital, by investing in capital market funds specialized in securities issued by infrastructure operators.

56. International financial institutions may also provide guarantees against a variety of political risks, including, *inter alia*, expropriation or nationalization, failure of the host Government to make agreed payments (where the project company is a supplier of goods or services to a Governmental agency), to make available sufficient foreign exchange or to grant necessary regulatory approvals. The availability of these types of guarantees may facilitate the project company’s task of raising funds in the international financial market.

(g) Support by export credit agencies

57. Export credit agencies may provide support to the project in form of loans, guarantees or a combination of both. The participation of export credit agencies may provide a number of advantages, such as: lower interest rate than the rates applied by commercial banks and longer-term loans, sometimes at a fixed interest rate. However, insurance coverage or other form of support by export credit agencies is usually tied to the purchase of equipment originating from their countries or containing a certain minimum percentage of national components.

(h) Combined public and private finance

58. In addition to loans and guarantees extended by commercial banks and national or multilateral public financial institutions, in a number of cases public funds have been combined with private capital for financing new projects. Such public funds may originate from State income or sovereign borrowing. They may be combined with private funds as initial investment or as long-term payments, or take the form of governmental grants or guarantees (see chapter V, “Government support”, ____).

59. Infrastructure projects may be co-sponsored by the Government through equity participation in the project company, thus reducing the amount of equity and debt capital needed from private sources. Land grants may also be made to the project company, so as to provide additional revenue

sources (e.g. service areas or shopping malls alongside toll roads). In the case of new infrastructure, the risk to which the private sector is exposed may be mitigated by ancillary concessions for operation of infrastructure already in existence (e.g. a concession over an existing toll bridge may complement a concession for building and operating a new one).

60. In some cases, Governments undertake to make direct payments to the project company with a view to stimulating investment in projects perceived to be of high commercial risk. Private sector investment in new toll roads, for instance, may be discouraged by the fact that traffic forecasts, however professionally they may be prepared, are uncertain and depend on a number of unforeseeable factors. In order to attract investment to new projects deemed to be of public interest, some countries have introduced a system of direct payment by the Government of a flat sum established, for example, on the basis of a traffic estimate. Flat-fee payments may also be used in the case of infrastructure of low commercial potential (e.g. railbed and stations, piped sewerage and treatment).

61. Government support is often justified by the public interest in developing infrastructure which the private sector alone might not be willing to develop without some form of financial support. It is also argued that, even when some form of public financial support is provided, private investment in infrastructure reduces significantly the need for public subsidies and expenditures that would otherwise be incurred without private investment. Therefore, direct Government support is not considered to be inconsistent with the concept of private infrastructure financing. However, some forms of financial support offered by Governments have been criticized as constituting undesirable incentives contrary to the principles of private operation of infrastructure leading to project mismanagement (see chapter V, “Government support”, ____).

4. Parties involved in infrastructure projects

62. The parties to a privately financed infrastructure project may vary greatly depending on the infrastructure sector, the modality of private sector participation and the arrangements used for financing the project. The following paragraphs identify the parties in a typical privately financed infrastructure project involving the construction of a new infrastructure facility and carried out under the “project finance” modality^{7/}

(a) The host Government

63. The execution of a privately financed infrastructure project frequently involves a number of public authorities in the host country. The awarding authority and the main body responsible for the project within the host Government may rest at the national, provincial or local level. Furthermore, the execution of the project may necessitate the active participation (e.g. for the issuance of licences or permits) of other agencies in addition to the awarding authority, at the same or at a different level

^{7/} This section discusses selected issues that arise in connection with different phases of a privately financed infrastructure project. For more information, including an analysis of economic, financial and management issues, the reader is advised to consult general literature on the subject, such as the *UNIDO BOT Guidelines*.

of Government. These authorities (which, as indicated in para. 25, are collectively referred to in the *Guide* as “the host Government”) play a crucial role in the execution of privately financed infrastructure projects.

64. The host Government normally identifies the project pursuant to its own policies for infrastructure development in the sector concerned and determines the type of private sector participation that would allow the most efficient operation of the infrastructure. Thereafter, the host Government conducts the process that leads to the selection of the concessionaire. Furthermore, throughout the life of the project, the host Government may need to provide various forms of support - legislative, administrative, regulatory and sometimes financial - so as to ensure that the infrastructure is successfully built and adequately operated. Finally, in some projects the host Government may become the ultimate owner of the facility.

65. The host Government has a legitimate interest in ensuring that the project is properly executed and that the construction work meets the expected standards. Thus, the Government will usually reserve the right to monitor the execution of the project, a task that might involve governmental officials at different offices and ministries, and which requires an adequate level of coordination among them. For that purpose, it may be helpful to appoint an agency, committee or officer invested with the authority to coordinate all monitoring procedures in connection with the project (see chapter I, “General legislative considerations”, paras. 22-27).

66. The host Government also has an interest in receiving high quality infrastructure that will benefit the national economy by the provision of needed services. Additionally, the host Government might be interested in creating employment opportunities for local workers, or gaining advanced technology related to the project. Those objectives are sometimes reflected in legislative or contractual provisions concerning technology transfer or margins of preference for companies that undertake to hire local personnel.

67. The host Government remains accountable to the public and will therefore be interested in ensuring that the infrastructure is operated efficiently and in accordance with its overall policy for the sector concerned. Besides evaluating their qualifications, the host Government reviews carefully the composition of project consortia, so as to satisfy itself of their commitment to the project in all its phases (see further chapter III, “Selection of the concessionaire”, paras. 36-38). Issues affecting the general public, such as quality and continuity of services, environmental protection, level of tariffs or the observance of health and safety standards, are of particular concern for the host Government. Thus, the host Government may wish to retain the right to exercise some form of control over the operation of the project, sometimes through a special regulatory body or through the enforcement of the terms of the project agreement (see chapter VII, “Operational phase”, ____).

(b) The project company and its shareholders

68. The bulk of the investment in the project, in terms of money, supplies and labour, is made in the construction, expansion or renovation of the infrastructure. Thus, the project consortium usually includes construction and engineering companies and suppliers of heavy equipment interested in becoming the main contractors or suppliers of the project. Those companies will be intensively involved in the development of the project during its initial phase, and their ability to cooperate with

each other and to engage other reliable partners will be essential for a timely and successful completion of the works. However, by the very nature of their business, construction companies and equipment suppliers may not be at ease with a long-term equity participation in a project. Therefore, they will often seek to involve a company with experience in the operation and maintenance of the type of infrastructure being built. The presence of one or more of such companies may be encouraged or even required by the host Government as an assurance that the technical feasibility and the financial viability of the project in all its phases, and not only during the construction period, have been adequately considered.

69. For the project company's shareholders it is important to have a return on their investment commensurate with the level of risk they assume. Besides commercial aspects, such as the level of revenue that the project is expected to generate, the legal security afforded to investments in the host country will play an important role in the decisions of those companies to invest in a given project (for a discussion of the need for a favourable legal framework for private investment in infrastructure, see chapter I, "General legislative considerations", paras. 28-62). In particular, they will seek to obtain assurances that their investment will be protected from confiscation or dispossession. Foreign companies will also look for guarantees that they will be able to convert into foreign currency the revenue earned in local currency, and that they will be able to repatriate or take abroad their profits and residual investment after the expiry of the project term (see chapter V, "Government support", ___).

70. The companies participating in the project consortium typically establish a separate company with legal capacity, assets and management of its own for the specific purpose of carrying out the project (see chapter IV, "Conclusion and general terms of the project agreement", paras. 22-34). It is relatively simple to vest all rights, assets and obligations related to the project in a single independent legal entity. Under such a model, the direct involvement of other parties such as the project company's shareholders may be limited, and the project company will enter into the project agreement and other instruments in its own name and will have its own personnel and management. Furthermore, a project company established as an independent legal entity allows a clear separation between the assets, proceeds and liabilities of the project and those of the project company's shareholders, thus facilitating accounting and auditing procedures. The project company normally becomes the vehicle for raising the financial means required in addition to the equity contributed by its shareholders. Typically, the shareholders will choose a type of company in which their liability will be limited by the value of their shares (such as a joint stock company). Sometimes, the shareholders of the project company may also include "independent" equity investors not otherwise engaged in the project (usually institutional investors, investment banks, bilateral or multilateral lending institutions, sometimes also the host Government or a State-owned corporation). The participation of private sector investors from the host country is sometimes encouraged by the host Government.

71. The project company will have the overall responsibility for the project and will establish a number of contractual arrangements with construction contractors, equipment suppliers, the operation and maintenance company and other contractors, as required for the implementation of the project. Having usually no recourse to the individual shareholders, the host Government may require the project company to provide various types of guarantees for the performance of its obligations under the project agreement (see chapter VIII, "Delays, defects and other failures to perform", ___).

(c) Lenders

72. In traditionally secured transactions, the lenders typically rely on the overall creditworthiness of the borrower and are protected against failure of the project by guarantees provided by the project company's shareholders or their parent companies. This form of financing is usually described as "corporate finance" or "balance-sheet" finance, to emphasize that the amounts borrowed to finance the project become a corporate liability of the project company's shareholders. Corporate finance would typically be provided to borrowers with a sufficiently strong credit to stand the risk of project failure. Insofar as the lenders are protected against that risk, corporate finance may be available to creditworthy borrowers at relatively favourable terms.

73. However, for large-scale projects involving the construction of new infrastructure the shareholders are often not ready to guarantee the obligations of the project company. Therefore, these projects are often carried out as "project finance", where the repayment of loans taken by the borrower is primarily assured by the revenue generated by the project. Other guarantees are either absent or cover only certain limited risks. To that end, the project's assets and revenue, and the rights and obligations relating to the project, are independently estimated and are strictly separated from the assets of the project company's shareholders.

74. Project finance is said to be "non-recourse" financing due to the absence of recourse to the shareholders of the project company. In practice, however, lenders are seldom ready to commit the large amounts needed for infrastructure projects solely on the basis of a project's expected cash flow or assets. The lenders may reduce their exposure by incorporating into the project documents a number of back-up or secondary security arrangements and other means of credit support provided by the project company's shareholders, the host Government, purchasers or other interested third parties. This modality is commonly called "limited recourse" financing.

75. The risks to which the lenders are exposed in project finance, be it non-recourse or limited recourse, are considerably higher than in traditionally secured transactions, even more so in the case of infrastructure projects where the security value of the physical assets involved (e.g. a road, bridge or tunnel) would rarely cover the total financial cost of the project, given the lack of a "market" where such assets could be easily realized. This circumstance affects not only the terms under which the loans are provided (e.g. the usually higher cost of project finance, as compared to corporate finance), but also the composition of the lending syndicate and the role played by the lenders in structuring the project.

76. Before agreeing to finance the project, the lenders would review carefully the economic and financial assumptions of the project so as to assure themselves of its feasibility and commercial viability. The lenders' attention will typically be focused on assessing the following types of project risks: *pre-completion risks*, i. e. the risk that the infrastructure might not be completed at all, or that it might be completed later than originally planned or at a higher cost than the original estimate; *operating risk*, i. e. the risk that the facility might fail to operate at the expected level of efficiency; and *market risk*, i. e. the risk that the commodity produced or service provided might not be marketable at the price and at the volume originally estimated. Commercial banks that specialize in lending for certain industries are typically not ready to assume risks with which they are not familiar. For example, long-term lenders may not be interested in providing short-term loans to finance

infrastructure construction. Therefore, in large-scale projects, different lenders are often involved at different phases of the project.

77. The lenders usually negotiate with the project consortium to structure the project in a way that limits their exposure to those risks to an acceptable level. As for pre-completion risks, for example, the lenders examine carefully the management, specific skills and financial strength of the construction contractor or contractors and typically require that they provide an adequate level of equity investment and an acceptable form of guarantee of performance (see further chapter VI, “Construction phase”, ___; and chapter VIII, “Delays, defects and other failures to perform”, ___). A similar approach will be taken with regard to operation risks (see further chapter VII, “Operational phase”, ___; and chapter VIII, “Delays, defects and other failures to perform”, ___). Acceptable protection against market risk will depend on the nature of the commodity produced or service provided. In power generation projects, for example, the lenders might find comfort in the existence of a firm commitment by a power distribution company to a certain minimum level of purchase (e.g. a “take-or-pay” agreement). Where services are provided directly to the public, the lenders will be concerned about the criteria for fixing and adjusting the prices and whether regulatory controls apply (see chapter VII, “Operational phase”, ___). They will further review carefully the terms of the concession granted to the project company (whether it is an exclusive concession or and whether the project company will compete with other service suppliers) (for a discussion of issues concerning competition, see chapter II, “Sector structure and regulation”, ___; see also chapter IV, “Conclusion and general terms of the project agreement”, paras. 17-21).

78. In addition to that, extensive security arrangements are negotiated with the project company and its shareholders with a view to guaranteeing priority payment of commercial debts before payments are made to other creditors or dividends are distributed to equity investors or to the project company’s shareholders, and to conferring control of the project on the lenders in the event of default by the project company.

79. Security used in project finance typically includes mortgages, fixed or floating charges over all the assets of the project and assignments of future receivables arising from the operation of the project. Also, the lenders usually require the automatic deposit of an agreed part of those proceeds into a blocked account. Often loan agreements give the lenders the right to appoint a substitute in the event of default or inability of the project company to continue operating the infrastructure. The greater the amount of security the laws of the host country allow to be stipulated, the greater is the likelihood that financing will be available for the project at more favourable terms (see chapter I, “General legislative considerations”, paras. 18-19; and chapter IV, “Conclusion and general terms of the project agreement”, paras. 39-45).

80. With a view to avoiding disputes that might arise from conflicting actions taken by individual lenders, or disputes between lenders over payment of their loans, lenders extending funds to large projects typically negotiate a so-called “inter-creditor agreement”. An inter-creditor agreement usually contains provisions dealing with matters such as provisions for disbursement of payments, pro rata or in a certain order of priority; conditions for declaring events of default and accelerating the maturity of credits; coordination of foreclosure on security provided by the project company.

(d) International financial institutions and export credit agencies

81. International financial institutions and export credit agencies will have concerns of generally the same order as other lenders to the project. In addition to this, they will be particularly interested in ensuring that the project execution and its operation will not be in conflict with particular policy objectives of those institutions and agencies. Increasing emphasis is being given by international financial institutions to the environmental impact of infrastructure projects and their long-term sustainability.

82. The methods and procedures applied to select the concessionaire will also be carefully considered by international financial institutions providing loans to the project. Many global and regional financial institutions and bilateral development funding agencies have established guidelines or other requirements governing procurement with funds provided by them. These institutions and agencies usually require procurement proceedings to be conducted in accordance with their guidelines or requirements, even if national procurement laws differ. This requirement is typically reflected in their standard loan agreements (see further chapter III, "Selection of the concessionaire", para. 17).

(e) Other capital providers

83. Capital providers other than commercial banks and international financial institutions may include "institutional investors" such as insurance companies, mutual funds, pension funds or investment funds. Under the terms of their investment, these other capital providers are usually entitled to priority payment of principal and interest, or priority dividend payment, before dividends are distributed to the project company's shareholders and other shareholders of the project company. They will often have the right to receive periodic reports and financial statements. In the case of institutional investors holding preferential shares or debentures, they will enjoy other rights available to them under the laws of the country where the project company is established or where the shares or debentures were issued, which may include any of the following: the right to be collectively represented by an agent; the right to be consulted on and to approve certain changes in the statutes of the project company and to be kept informed of them until repaid; a preferential right to distribution of surplus assets.

(f) Construction contractors and suppliers

84. The construction contractor or contractors usually assume responsibility for the design of the facility and caretaking of it through all stages of construction until its physical completion. Their main interest is to be able to complete the works within the agreed schedule and original cost estimate and in conformity with the technical requirements. Typically, the construction contractor will be required to indemnify the other members of the project consortium against losses that arise from that contractor's failure to perform^{8/}

^{8/} For a discussion of remedies for, and contractual approaches for dealing with, default by the construction contractor, see *UNCITRAL Construction Legal Guide*, pp. 182-195 and pp. 199-212.

85. Often one or more of the companies that conclude contracts with the project company for the construction of the infrastructure facility or the supply of equipment are also members of the project consortium. This situation carries with it the risk that equipment suppliers or construction contractors might attempt to secure contracts at preferential terms. This is one reason why some host Governments insist on the right to review or approve the terms of such contracts (see chapter VI, “Construction phase”, ___).

(g) Operation and maintenance company

86. The operation and maintenance of the infrastructure may be carried out by the project company itself or may be entrusted to a contractor or group of contractors. Among all private parties to a project, infrastructure operators are the ones with the longest lasting involvement in the project. The operating company in particular will be in a singular position, as the task of operating the facility will place it in direct relation with its customers and will expose the operating company to public scrutiny. For those reasons, the operating company’s viewpoint as regards the assessment of the economic and financial viability and profitability of the project may differ from the viewpoint of the other members of the project consortium and, therefore, it may be valuable to obtain the input of the prospective operating company at the early stages of the project, for instance by including the operating company among the project company’s shareholders.

87. Where a contractor is retained for the operation and maintenance of the infrastructure, possible methods of payment may vary from lump-sum payments to cost-plus methods, in which the variable portion above and beyond the recovery of costs may be either a fixed sum, a percentage of the cost or a share in the revenue of the project. Combinations of any of those methods are also common. From the perspective of the project company, performance-based contracts are in most cases preferable to cost-plus contracts. The project company will normally establish some form of control mechanism over the operation of the facility (e.g. audit rights and cost review) so as to ensure that the operating costs are kept as much as possible within original estimates. Where the reimbursement of costs is subject to a maximum ceiling, the interest to reduce cost will be shared with the operating company.

88. The performance by the operation and maintenance company is normally subject to standards of quality that may derive from many different sources, including the law, the project agreement, the operation and maintenance contract or the instructions or guidelines issued by the competent regulatory body. In addition to that, a number of other requirements may be contained in legislation such as labour or environmental law. The operation and maintenance company is usually required to provide guarantees in form of independent (or “on-demand”) guarantees, contract or performance bonds or surety bonds, and to purchase and maintain adequate insurance, including casualty insurance, worker’s compensation insurance, environmental damage and third party liability insurance.

(h) Insurers

89. Privately financed infrastructure projects involve a variety of risks during both the construction and operational phases of the project which the project company, the host Government, the lenders or the contractors may not be able to absorb. Thus, obtaining adequate insurance against such risks

is essential for the viability of a privately financed infrastructure project. Typically, an infrastructure project will involve casualty insurance covering its plant and equipment, third party liability insurance, and worker's compensation insurance. Other possible types of insurance include insurance for business interruption, interruption in cash flows, and cost overrun insurance. Those types of insurance are usually available in the commercial insurance markets, although the availability of commercial insurance may be limited for certain *force majeure* risks (e.g. war, riots, vandalism, earthquakes, hurricanes). The private insurance market is playing an increasing role in the coverage against some types of political risks, such as contract repudiation, failure by a governmental agency to perform its contractual obligations or unfair calls of independent guarantees. In addition to private insurance, guarantees against political risks may be provided by international financial institutions, such as the World Bank, the Multilateral Investment Guarantee Agency (MIGA), the International Finance Corporation, regional development banks or by export credit agencies.

(i) Independent experts and advisers

90. Independent experts and advisers play an important role at various stages of the development of privately financed infrastructure projects. Experienced companies typically supplement their own technical expertise by retaining the services of outside experts and advisers, such as financial experts, outside international counsel or consulting engineers. Independent experts and advisers may also assist the host Government in devising sector-specific strategies for infrastructure development and in formulating an adequate legal and regulatory framework. Furthermore, independent experts and advisers may assist the Government in the preparation of feasibility and other preliminary studies, in the formulation of requests for proposals or standard contractual terms and specifications, in the evaluation and comparison of proposals or in the negotiation of the project agreement.

91. Merchant and investment banks often act as advisers to project consortia in arranging the finance and in formulating the project to be implemented, an activity which, while essential to project finance, is quite distinct from the financing itself. They may also provide advisory services to Governments in seeking solutions to legal, economic, financial and environmental problems that arise in the preliminary phases of infrastructure projects.

92. In addition to private entities, a number of intergovernmental organizations (e.g. the United Nations Industrial Development Organization, the Regional Economic Commissions of the United Nations) and international financial institutions (e.g. the World Bank, the regional development banks) have special programmes whereby they may either provide this type of technical assistance directly to the host Government or assist the host Government in identifying qualified advisers.

5. Phases of execution

93. Depending on the type of infrastructure, the phases through which a privately financed infrastructure project evolves may include the initial identification of the project and the selection of the concessionaire, the conclusion of the project agreement and related instruments, the execution of the construction or modernization works to the operation of the infrastructure facility and possibly the transfer of the project to the host Government. The following paragraphs describe briefly the various phases of a privately financed infrastructure project involving the construction of a new

infrastructure facility and carried out under the “project finance” modality. These phases may not necessarily be present in other types of projects, or may evolve in a different way.

(a) Identification of the project

94. One of the initial steps taken by the host Government in respect of a proposed infrastructure project is to conduct a preliminary assessment of its feasibility, including economic and financial aspects such as expected economic advantages of the project, estimated cost and potential revenue anticipated from the operation of the infrastructure facility. It is also important at this stage to assess the technical feasibility of the project as well as its environmental impact. The preliminary conclusions reached by the host Government at this stage will play a crucial role in conceiving the type of private sector involvement that is sought for the implementation of the project, for instance, whether the infrastructure facility will be owned by the host Government and temporarily operated by the private entity, or whether the facility will be owned and operated by the private entity. The choice of the modality of private sector participation will be significant for a series of legal issues commonly dealt with in the legislation, such as the ownership of the infrastructure facility and related assets and the acquisition of land (see chapter IV, “Conclusion and general terms of the project agreement”, paras. 8-12).

95. In projects that involve the transfer to the private sector of a governmentally-owned public utility, the host Government may need to take a number of additional preparatory steps with a view to enabling its operation as a private company, such as restructuring the company according to commercial principles or abolishing statutory monopolies.

96. Following the identification of the future project, it is for the host Government to establish its relative priority and to assign human and other resources for its implementation. At that point, it is desirable that the host Government review existing statutory or regulatory requirements relating to the operation of infrastructure facilities of the type proposed with a view to identifying the main governmental bodies that have to give approvals, licences or authorizations or which have to be otherwise involved in the project. Depending on the importance and level of authority assigned to the project, the host Government, at that stage, may wish to designate an office or agency for the purpose of coordinating the input of other offices and agencies concerned and monitoring the issuance of licences and approvals (for further consideration of this issue, see below, chapter I, “General legislative considerations”, paras. 22-27).

97. Furthermore, the host Government may need to make advance budgeting arrangements, to enable it to meet financial commitments that extend over several budgetary cycles, such as long term commitments to purchase the project’s output (e.g. “take-or-pay” arrangements) or other forms of support provided to the project (see chapter V, “Government support”, ____).

(b) Selection of the concessionaire

98. Once a project has been identified, its viability and feasibility have been assessed, and the need or interest for private financing has been confirmed, the host Government will turn to the selection of the concessionaire. For projects involving the construction of new infrastructure, the selection

method often involves competitive proposals submitted by a selected number of candidates who have met the relevant prequalification requirements.

99. The confidence of project consortia in the viability of the project and their readiness to invest the time and funds required for preparing tenders or proposals is often influenced by their assessment of the rules governing the selection process. Project consortia might be discouraged to participate in a selection process that they perceive as unclear or cumbersome. Therefore, for Governments wishing to attract private sector investment in infrastructure it is advisable to have procedures in place that maximize economy and efficiency in procurement, provide a fair and equitable treatment of all project consortia and ensure transparency in the selection process.

100. Whatever method is chosen by the host Government, the selection process for infrastructure projects is often complex and might require considerable time and entail significant cost for project consortia, thus adding to the overall cost of the project. Ensuring that documents distributed to project consortia are sufficiently clear and contain all elements necessary for the preparation of their tenders or proposals is important to reduce the need for clarifications, as well as minimize the potential for complaints or disputes. The legislation plays a significant role by providing a clear framework for the award of privately financed infrastructure projects. (See further chapter III, "Selection of the concessionaire").

(c) Preparations for the implementation of the project

101. Following the selection of the concessionaire, a number of measures will have to be taken with a view to beginning the implementation of the project. The project agreement will set forth the obligations of the parties concerning the implementation of the project. For projects as complex as infrastructure projects, it is not unusual that several months elapse in negotiations before the parties are ready to sign the project agreement. A number of factors have been reported to cause delay in the negotiations, such as inexperience of the parties, poor coordination between different governmental agencies, uncertainty as to the extent of governmental support, or difficulties in establishing security arrangements acceptable to the lenders^{9/} A significant contribution may be made by the host Government by ensuring appropriate coordination among all offices and agencies involved, or by identifying in advance the types of guarantees and facilities it may provide to the implementation of the project (see chapter V, "Government support", ____). The clearer the understanding of the parties as to the matters to be provided in the project agreement, the greater the chances that the negotiation of the project agreement will be conducted successfully. Conversely, where important issues remain open after the selection process and little guidance is provided to the negotiators as to the substance of the project agreement, there might be considerable risk of costly and protracted negotiations.

102. In addition to the conclusion of the project agreement and related instruments, the project company will also enter into agreements with the lenders for the provision of loans for the implementation of the project and will establish contractual arrangements with contractors and suppliers. Moreover, a number of other arrangements are usually made in the period immediately following the award of the project in preparation for the commencement of the construction. The project company may also have at this stage to bring in the country the equipment and other material, as well as the personnel needed for the execution of the project. Where licences are required, the host Government will be instrumental in avoiding unnecessary delays.

(d) Construction phase

103. Following the satisfactory completion of the preliminary arrangements referred to above, funds may be disbursed for the implementation of the project, and the construction works may begin. It is during the construction phase that most of the investment is made in the project, at a time when no revenue is yet generated by the infrastructure. Thus, the overall financial viability of the project is largely predicated upon a successful construction phase. Delays in the construction and cost overruns are the two main reasons of concern for all the parties involved.

104. From the perspective of the host Government, delay and cost overruns also carry negative political implications and may undermine the credibility of the host Government's policy on privately financed infrastructure projects. The host Government usually requires the project company to assume full responsibility for the timely completion of the construction. The project company, in turn,

^{9/} For a discussion of issues having an impact on achieving financial closure, see International Finance Corporation, *Financing Private Infrastructure*, Washington, D.C., 1996, p. 37.

will seek relief in the event of *force majeure* and other exempting circumstances, as well as assurances that it will not incur additional cost or liability for delays that result from requests by the host Government for changes in the original design or specifications of the project. Therefore, a number of provisions will be made in the project agreement, sometimes pursuant to a statutory requirement, so as to deal with the possible consequences of those situations (see chapter VIII, “Delays, defects and other failures to perform”, ____). Furthermore, the host Government, as well as the lenders, will want to be assured that the technology proposed for the implementation of the project has been sufficiently used and is of proven safety and reliability. They will consider with great caution any suggestion to use new or untested technologies. In any event, a number of tests may be required to be performed prior to final acceptance of the infrastructure facility.

105. Completion and cost-overrun risks will normally be allocated by the project company to the construction contractors and, for that purpose, the construction contract will normally be a fixed-price, fixed-time turnkey contract with guarantees of performance by the contractors. The contract usually requires the construction contractor to provide guarantees that the infrastructure facility will operate to predetermined performance standards. The liability of the construction contractors may extend beyond the completion date pursuant to the terms of their contracts or provisions of the applicable law. Also, the equipment suppliers are usually asked to provide extensive warranties as to the fitness of the technology provided.

(e) Operational phase

106. After completion of the construction works, and upon authorization by the host Government for the operation of the facility, the longest phase of the project begins. During that phase the project company undertakes to operate and maintain the infrastructure facility and to collect revenue from the users. Conditions for the operation and maintenance of the facility, as well as quality and safety standards, are often provided in the law and spelled out in detail in the project agreement. In addition to that, a regulatory body may exercise an oversight function over the operation of the facility (see chapter VII, “Operational phase”, ____).

107. For the project company, the revenue generated by the infrastructure facility is the sole source of funds for repaying its debts, recouping its investment and making profit. Therefore, one of the main concerns of the project company during the operational phase is to avoid as much as possible any interruption in the operation of the facility and to protect itself against the consequences of any such interruption. In this respect, the interests of the lenders will normally be convergent with those of the project company. It will be important for the project company to ensure that supplies and power needed for the operation of the facility will be constantly available. Also, the project company will be concerned that the exercise by the host Government of its monitoring or regulatory powers does not cause disturbance or interruption in the operation of the facility, and that it does not result in additional costs to the project company.

108. The host Government, too, will be interested in ensuring the continuous provision of services or goods to the users and customers of the infrastructure facility. At the same time, however, the host Government will have a legitimate interest in ensuring that the operation and maintenance of the facility are performed in accordance with the applicable quality and safety standards and operating rules and conditions (see chapter VII, “Operational phase”, ____). These aspects will be of particular

concern to the host Government in respect of infrastructure facilities open to use by the general public (such as a bridge or tunnel) or of a hazardous nature (such as power plants or gas distribution networks). The particular perspective of the host Government, which results from its being accountable to the public for the infrastructure facility, may lead to conflicts or disagreements with the project company. Thus, the importance can be seen of having in place clear rules concerning the operation of the infrastructure facility and of establishing adequate methods for settling disputes between the host Government and the project company that might arise at that phase of the project (see chapter XI, “Settlement of disputes”, ____).

(f) End of the project

109. With the exception of those cases where the infrastructure facility is to be permanently owned by the project company, most privately financed infrastructure projects are undertaken for a certain period. In some projects, extensions of the project period in favour of the same project company may be possible; in other cases, the law requires any extension of the concession to be submitted to competitive tendering (a more detailed discussion of these issues is contained in chapter IX, “Duration, extension and early termination of the project agreement”, ____). In some countries, it is customary to award consecutive concessions for the same infrastructure, so that the assets are transferred directly from one concessionaire to its successor.

110. Some Governments may, however, have an interest in receiving the infrastructure facility and all related assets and equipment at the end of the term of a BOT project. In those cases, the host Government will be interested in ensuring that modern technology has been transferred, that the infrastructure facility has been properly maintained, and that national personnel have been adequately trained for the operation of the facility.

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