EUROMONEY BOOKS

PROJECT FINANCE

The guide to financing build-operate-transfer projects

Uses in PPP

By Wilde Sapte

THE GUIDE TO FINANCING BUILD-OPERATE-TRANSFER PROJECTS

USES IN PPP

Wilde Sapte

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Foreword

The following report is the product of the labours of a number of the partners and assistant solicitors of the Wilde Sapte Project Finance Group, whom I should like to thank for the time and effort which they have devoted to this task. In particular, I should like to thank James Ashe-Taylor of our Brussels office and Giles Frost for the chapter on tenders, Martin Bartlam for the sections relating to bond financing and derivatives, Mary Bonar for the sections on finance leasing and (with Christopher Clement-Davies) the chapter on contractual structures, Christopher Clement-Davies additionally for the chapter on concession agreements, Jane Richardson for the sections on loan and security documentation and direct agreements, as well as Mathew Kidwell, David Nanson and Martin Fleetwood. Even I made my contribution!

It would not be possible to produce a report of this kind without the assistance of external sources. I should, therefore, like to thank Compagnie Française d'Assurance pour le Commerce Extérieur, The Export-Import Bank of Japan, Hermes Kreditversicherungs-AG, Lloyd Thompson, the United Kingdom Export Credits Gurantee Department (in particular, Richard Drummond of its legal team) and the World Bank Group for the information which they have provided to us and for their help in finalising the text of the section on export credit agencies and political risk insurance.

My final thanks must, however, go to Euromoney Books for their patience on the many occasions on which the pressing demands of transaction work have forced us to set aside our writing.

In writing this report we have tried to make it as up-to-date as possible, but in broad terms it covers relevant rules as at September 1997.

Howard Barrie
Head of Wilde Sapte's Project Finance Group
December 1997

Preface

Recent years have seen a dramatic increase worldwide in the involvement of the private sector in the development and funding of public facilities and services, and techniques are continuously being developed to draw the public and private sectors together with a view to sharing the risks and rewards associated with such activities.

These various techniques are often referred to as 'public/private partnerships' (PPPs) and range from the simple contracting out of services to the involvement of the private sector in the financing, design, construction, operation, maintenance and, in some cases, ownership of major infrastructure facilities. This report is concerned with the latter, commonly referred to as 'BOT' projects. Although BOT is often used to describe the specific build-operate-transfer technique of infrastructure development (under which the private sector finances, constructs, operates and maintains the facilities for a given period, with the public sector acquiring operational control at the end of that period), the expression is given its wider meaning in this report and is used to refer to all types of infrastructure projects which involve private sector investment and funding.

There are many factors contributing to the PPP trend. The public sector is currently suffering from a general shortage of public funds available for the development of large-scale and capital-intensive infrastructure projects, while at the same time increasingly perceiving the need for infrastructure facilities to promote economic growth in the shortest possible timescale. BOT structures also allow the public sector to transfer to the private sector many of the risks associated with the implementation of these projects.

For private sector investors and financiers, BOT projects have opened up a whole new area of opportunities for new business and relatively high returns. The sharing of risks with other parties to the project and with the public sector entity concerned enhance the appeal of BOT. One aspect of many BOT projects which is attractive to investors and financiers is that they incorporate sovereign credit risk, and this renders them more suitable for financing in the bond markets.

For a BOT project to succeed, it must be sufficiently attractive to both the public and private sectors. If the risks are felt to be too great, or to outweigh the potential benefits and returns, the project will not proceed. Certain types of project have proved virtually impossible to finance on a BOT basis. These have included the financing of health care facilities in the UK, where the legal risk, in the absence of specific legislation which has now been enacted, was felt to outweigh the potential benefits. Other types of project have been slow to develop. As a general principle, however, investors and financiers are becoming more flexible in terms of the types of project in which they will participate and will now consider financing a project the revenue stream of which is market-based, rather than assured under a long-term contract with a creditworthy purchaser. Over recent years, much has been learned by both the public and the private sectors as to the types and extent of project risk which the other will bear and this knowledge is being used to accelerate the implementation of BOT projects in general.

Many countries with developed economies have made substantial use of BOT techniques. In the UK alone, under the government's 'Private Finance Initiative' launched in 1992, BOT projects with a value of £6.8 billion had been signed by April 1997, of which £5.2 billion represented transport projects. In the emerging markets, however, the implementation of BOT projects has progressed more slowly than expected. This has largely been as a result of the perceived political risks associated with such projects and the difficulties and delays which have been experienced in relation to many of them. It is, however, expected that as governments of emerging markets countries become more accustomed to the requirements of foreign

investors and financiers, the implementation of BOT projects will become easier and quicker, thereby encouraging further projects.

This report covers the basis of BOT techniques and their potential advantages and disadvantages for the participants in these projects. It gives a general view of the application of project finance techniques to projects of this type and also covers in some detail project viability and public/private sector risk allocation issues, procurement procedures, concession agreements, the sources of financing available for these projects and a review of current PPP trends in western Europe.

In a work of this type, it is only possible to give a general overview of BOT structures and the issues involved. It should be borne in mind that every project is unique and the statements contained in this report will not be equally applicable to all BOT projects. There is no substitute for taking appropriate advice on each individual project.

Chapter 1
Introduction to Infrastructure Projects

The principles of project financing outlined in the following chapters relate specifically to infrastructure projects. This term is used in a broad sense to include all types of transport systems, communication systems, power generation and transmission facilities, and water supply and treatment systems. A common feature of all of these is the provision of services to the public. The financing techniques referred to in this work are equally applicable to the upgrading of existing infrastructure and to the creation of new (or 'greenfield') infrastructure projects.

In recent years there has been a move away from the view, entrenched since the early 20th century, that the development of infrastructure is solely the responsibility of the public sector. In the past decade or so in particular, the implementation of infrastructure projects throughout the world has increasingly involved the private sector. This has not, however, brought about a return to the practices of the 19th century, when it was common for infrastructure projects to be undertaken exclusively by the private sector. Instead, what we are now seeing are the public and private sectors working together with the aim of sharing the risks and rewards of infrastructure development, and the concept of the public/private partnership has developed.

PUBLIC/PRIVATE PARTNERSHIPS

Meaning

The term 'public/private partnership' (PPP) has no precise meaning but is used to describe many forms of arrangement between the public and private sectors for providing public services. These include:

- *The contracting out of services*, where the private sector is contracted to provide services on behalf of the public sector for a given period and for an agreed contract price, without the private sector being required to assume any financing or revenue risk.
- *Joint ventures*, where the public and private sectors assume joint responsibility for the financing and implementation of the public service facilities.
- *Leasing*, where all or a substantial part of the risks associated with funding, developing and operating the facilities are assumed by the private sector, with the public sector entity taking the facilities on lease.
- *Build, operate and transfer (BOT) projects*, where the private sector has the primary responsibility for financing, developing and operating the facilities for a fixed period of time, which should be sufficient to enable the private sector entity to repay the financing and achieve the required rate of return on its investment. At the end of that period, the project is transferred to the public sector. This is perhaps the most familiar form of PPP and the basic concept has been employed (with some variations) in many different ways, including:
  - build, own, operate and transfer (BOOT);
  - build, lease and transfer (BLT);
  - build, rent and transfer (BRT);
  - build, transfer and operate (BTO);
  - design, build, finance and operate (DBFO); and
  - design, construct, manage and finance (DCMF).
- *Build, own and operate (BOO)*, where the private sector retains the ownership and control of the facilities, with no transfer to the public sector.

Development

The development of PPPs, particularly in relation to infrastructure projects, is attributable to a number of factors. First, national governments have increasingly found that they do not have the resources available to maintain and develop their country's infrastructure to the level regarded necessary for the economic well-being of the country. Secondly, with continuing technological advances, competitiveness in world markets has become dependent on the availability of high-quality, efficient infrastructure.

Thirdly, PPPs are regarded as an efficient way of allocating the risks and responsibilities of developing infrastructure. The private sector is perceived as being able to bring to a project efficiencies that the public sector traditionally cannot match, as well as technical expertise developed in the private sector. A government can facilitate the project by the provision of assets, such as land and licences, and the provision of subsidies, guarantees and/or revenues.

Lastly, a PPP is often considered preferable to a full privatisation of infrastructure facilities because it allows the government to exercise considerable control over the project. It can also be used to ensure that the private sector does not exploit the rights granted to it to develop and, in particular, to operate the project, by limiting the amount of profit which the private sector can make.

BOT PROJECT STRUCTURE

BOT is a technique that has been used extensively in infrastructure projects. Here, a private sector entity (usually referred to as the 'concessionaire') is granted a concession by a national government or government entity (the 'host government') to design and build infrastructure facilities in its country and to operate and maintain those facilities for a given period. The concessionaire is responsible for raising the finance required to carry out the project. At the end of the concession period, the facilities and their operation are transferred to the host government. The concessionaire will normally be a special-purpose vehicle (SPV), formed by the private sector promoters (or 'sponsors') of the project.

Phases of a BOT project

BOT projects generally evolve through a series of different phases:

- *Project formulation* – The need for a particular infrastructure facility is identified – normally by the host government but occasionally by a developer or international agency. The host government will then consider what means it has for financing that facility and whether it might be suitable for financing on a BOT basis. This latter point will require the host government to undertake a preliminary feasibility study.
- *Invitation to tender* – Once the host government has determined to proceed with a BOT structure, it will need to decide what procurement procedure to follow. This might be determined, at least in part, by applicable procurement laws, but it is common for the host government to invite competitive bids. The host government will need to formulate structured proposals that are as detailed as possible, and should include any precise requirements as to the infrastructure facilities, the revenues which are expected to be generated and the length and terms of the concession. Procurement is discussed in more detail in Chapter 3.
- *Submission of bids* – On the basis of the invitation to tender, prospective sponsors, usually acting as consortia (see Chapter 4), will carry out their own feasibility studies for the project and then prepare and submit bids.
- *Selection of winning bid* – The host government will evaluate the bids and select a winner to whom the concession will be awarded.
- *Negotiation and execution of documentation* – The parties to the project will prepare, negotiate and enter into the detailed documentation required for the project. The principal document will be the concession agreement between the host government and the SPV. The concession agreement will set out the rights and obligations of the parties in relation to the project and will form the basis of all the project contracts. The SPV will also need to execute the documentation relating to the financing of the project.
- *Construction* – The project facilities will be constructed by a contractor, which will often be a sponsor of the project, employed by the SPV in accordance with a construction contract. The construction costs will normally be met from a combination of debt and equity. Subject to passing agreed completion tests, the facilities will be accepted by the SPV and the host government.
- *Operation* – The SPV will operate and maintain the project facilities throughout the concession period, normally by means of an operation and maintenance agreement with

a specialist operator, which again will often be a project sponsor. Throughout the period of the concession the SPV will use the revenues generated by the project to operate and maintain the facilities, repaying the finance and making a profit for the benefit of its investors.

- *Transfer* – The final phase of the project will be the transfer of the project by the SPV to the host government at the end of the concession period. The concession period will normally be sufficiently long to enable the SPV to repay its debt and equity and pay a reasonable rate of return to its investors. The transfer should therefore be for nil, or a nominal, consideration.

The parties

Every BOT infrastructure project will involve at least some, if not all, of the following parties.

The host government

As mentioned earlier, it will normally be the host government that perceives the need for an infrastructure project and determines whether the project is suitable for financing on a BOT basis. This will depend partly on the political and economic circumstances of the country in question and the government might need to consider whether and to what extent it is feasible to change the laws of the country, or in some instances even the country's constitution, to enable the project to be implemented or to encourage foreign investment. It might be necessary to enact legislation specific to the project, or to refine the laws relating to the recognition and enforcement of contractual obligations or security rights, or the laws relating to nationalisation and expropriation or to provide for the regulatory regime within which the project is to function. Equally, the government might wish to provide for incentives for foreign investment, such as tax holidays on project profits (normally for a limited period), exemption from customs duties and concessionary tax rates.

In any event, the host government will normally provide support for the project in some form. This might be the provision of land, which the government might need to expropriate for the purpose, or it might be the provision of fuel or energy, or simply the granting of licences and consents required by local law. The host government might be willing to subscribe for some equity in the SPV. Other forms of support that the host government might provide are discussed in Chapter 2.

The concessionaire

The project sponsors will normally wish to form an SPV to act as the concessionaire. The form of entity that will be most appropriate will vary according to the circumstances. (This is discussed further in Chapter 4.)

The SPV will be capitalised by the sponsors in agreed proportions, normally on the terms set out in a sponsor support agreement between the sponsors and the SPV. This agreement will deal not only with the sponsors' initial capital investment but also any obligations to inject further capital throughout the term of the concession. It might be the case that these contribution obligations are supported by guarantees of parent or affiliated companies of the sponsors given in favour of the SPV.

The relationship between the sponsors themselves needs to be clearly defined and will usually be set out in a shareholders' agreement or joint venture agreement between them. These agreements are likely to address issues such as how the SPV is to be administered, how it is to be financed, how the sponsors are to share profits and how, if at all, the sponsors may transfer their shareholdings or other interests in the SPV.

The SPV might, either initially or as the project progresses, have other equity investors, such as a development finance institution, institutional or private investors and, occasionally, the host government itself.

Lending banks

Most BOT projects to date have been funded to a great extent by commercial debt. The percentage of the anticipated project cost that commercial banks will be prepared to lend will vary greatly, depending on such issues as the size and sector of the project, the projections and source of project revenues and the banks' evaluation of all other risks associated with the project. The banks will usually lend directly to the SPV.

The banks will be expected to finance the project on a 'non-recourse' or 'limited recourse' basis. In this context, this means that the commercial banks will expect to have recourse to the SPV and all its assets for the repayment of the debt, including its land and buildings, plant and machinery, its rights under the various project contracts and, importantly, its rights to project revenues, while the banks might have some, but not unlimited, recourse to the sponsors in respect of the liabilities of the SPV to the banks.

The key issue in agreeing to a limited recourse financing is that the banks will wish to be satisfied that the income which the project can be expected to produce will be sufficient to repay the financing within the allotted time. The source of the income is therefore vital in the banks' assessment of the risks that they are taking on the project.

In return for agreeing to finance the project on a limited recourse basis, the banks will require the ability to exercise a considerable degree of control over the SPV and its activities, and to have the ability to take control of the project if any one of a large number of events of default should occur.

Other lenders

The SPV might in addition be able to borrow from other sources, particularly national and regional development banks, bilateral agencies, including the export credit agencies, and development finance institutions.

Finance lessor

Depending on the jurisdictions involved and the tax regimes in those jurisdictions, it might be possible for the SPV to benefit from lower costs of funds by reason of tax-based leasing of equipment from a finance lessor.

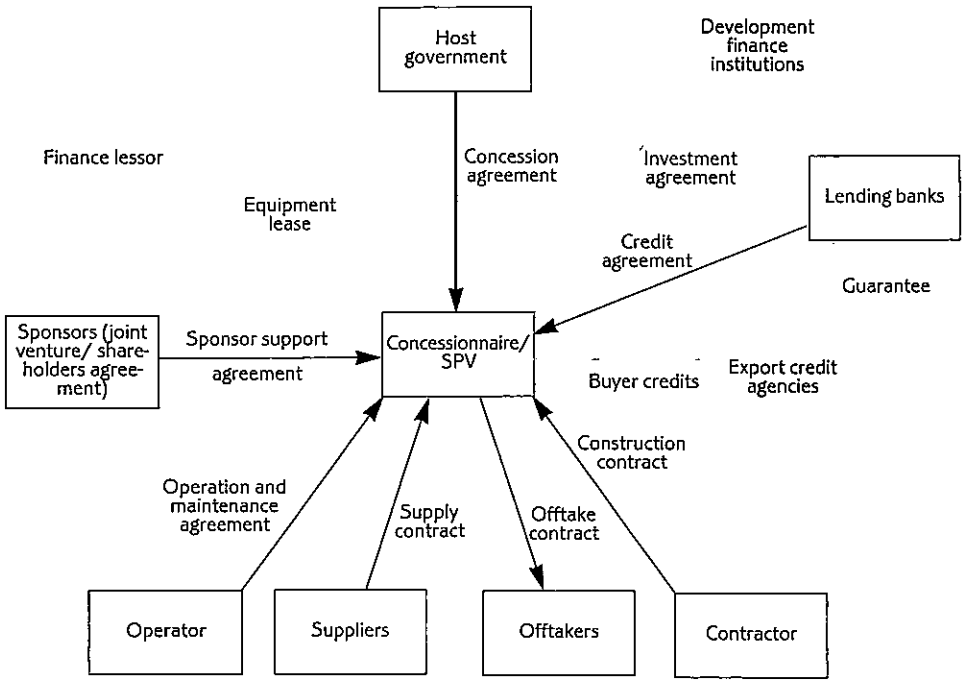
Parties to the project contracts

As the SPV will have no or a limited workforce, it needs to ensure that it performs its obligations under the concession agreement by effectively sub-contracting those obligations to third parties. The principal contract parties will be the construction contractor and the operator of the project facilities. It is common for one or both of these parties to be sponsors, or affiliates of the sponsors.

The SPV will also need to ensure that it has adequate supply contracts in place for the supply of raw materials and/or natural resources

Exhibit 1.1

A TYPICAL BOT STRUCTURE



required for the project and, depending on the nature of the project, offtake contracts whereby third parties (or 'offtakers') agree to purchase the product of the project. Such contracts should generally introduce some degree of price stability and certainty to, and thus reduce the risk of, the project.

The principal project contracts are discussed in Chapter 4, and a diagram of a typical BOT structure is set out in Exhibit 1.1.

ECONOMIC AND FINANCIAL VIABILITY

Whether a BOT project can be considered economically and financially viable needs to be viewed from the perspective of the host government and the private sector.

The host government

The host government, when considering whether a project is economically viable, will wish to be satisfied that the project represents value for money in relation to government expenditure as a whole, and that its infrastructure objectives could not be met in a more cost-effective way. This will almost inevitably involve the host government making comparisons with the economics of financing the project using public funds.

Most host governments will be able to borrow at a lower cost than that demanded of a private sector special purpose entity borrowing for the purposes of a BOT infrastructure project. There are, however, other factors that will have an effect on the outcome of the comparison, such as the allocation of risks between the host government and the private sector, the efficiency and expertise which the private sector can be expected to bring to the project and the acceleration of economic activity in the host country brought about by the project.

The private sector

The essential factor in determining whether a project is financially viable for the private sector is whether cautious expectations of project revenues will be sufficient to repay project debt and equity and enable investors to receive a reasonable return on their investment. In particular, lending banks will wish to be satisfied that their debt will be repaid within the term of the financing, which will normally be considerably shorter than the concession period, allowing for a margin of error and the possibility of extending the term of the financing should the need arise. The investors will wish to have their investments repaid and to receive their returns as soon as possible, but in any event within the concession period. These areas are considered in more detail in Chapter 2.

RISK ALLOCATION

One of the key issues in any BOT financing is the allocation of the various risks associated with the project between the public and private sectors and, after that, among the individual parties involved. Although the specific risks in any project will vary case by case, certain risks will be common to most BOT projects:

- *Completion risk* – Perhaps the greatest perceived risk of a BOT infrastructure project is that the construction of the infrastructure facilities will not be completed in the manner, within the time and at the cost originally contemplated. These risks may be practical risks associated with the construction process, such as geological problems, disputes among the workforce, weather conditions, availability of raw materials and transport problems, or may be the risk that the construction contractor defaults or becomes insolvent.
- *Technology risk* – There may be risks associated with the technology proposed to be used in implementing the project.
- *Political risk* – The perception of the political risks will depend upon the jurisdictions involved in the project. This will be a concern principally in relation to the jurisdiction in which the project facilities are located, and careful consideration will need to be given to the social and political stability of that jurisdiction, the extent to which it has a developed legal system, and any other factors that might affect the position of a party investing in that jurisdiction. Again, depending on the jurisdiction, there may be a foreign exchange risk in relation to the ability of foreign investors to convert local currency receipts of the project into the required hard

currency and to repatriate funds in order to make the necessary payments abroad, as well as to pay returns on the equity contributions of the investors and to remit the proceeds of any sale of that investment.

- *Exchange rate risk* – Where the revenues of the SPV are in a currency different from that of its payment obligation, the SPV will be at risk of unfavourable changes in exchange rates which could leave it unable to meet those payment obligations in full.
- *Legal risks* – The laws of the relevant jurisdictions will need to be assessed in relation to issues such as the enforceability of contractual obligations, the enforcement of security, insolvency, procurement, corporations and the regulation of all activities associated with the project.
- *Environmental risks* – The failure to comply with applicable environmental requirements could lead to civil or even criminal liability on the part of the project parties. Although environmental liability is more likely to be incurred by the SPV or the operator of the facilities, the sponsors and lenders to the project will also need to consider to what extent they could incur liability.

These issues are also dealt with more fully in Chapter 2.

FINANCING

Traditionally, infrastructure projects have been financed partly by debt and partly by equity, but finance for BOT projects is available from a wide variety of sources.

Equity

BOT projects will normally be financed at least in part by the subscription for shares in the SPV. The principal subscribers will be the project sponsors, though there may be other investors – for example, the host government, institutional investors and, in some cases, the general public in local or international capital markets. Equity is discussed further in Chapter 6.

Senior debt

To date the commercial banks have been the greatest source of senior debt for BOT projects. The financing of projects has become a specialised area, particularly as it requires the term of the debt to be much longer than the term of loans for general corporate purposes. This, coupled with the perception among commercial banks that project financing is relatively high risk, means that banks will wish to receive enhanced margins on their loans compared, for example, with corporate lending direct to the sponsors, particularly during the construction phase of the project. Because of the risks involved and the reliance by the banks on the project revenues to service and repay their debt, the banks will require a substantial degree of control over the activities of the SPV and will wish to be able to assume control of the project if it gets into difficulties.

Mezzanine finance

Mezzanine finance has characteristics of both debt and equity, and will rank between the two in terms of priority. Essentially this type of finance is treated as debt while the project has sufficient resources to service it, but is treated as equity if it has not. Mezzanine finance is also discussed further in Chapter 6.

Capital markets

To date the capital markets have not been used extensively to finance BOT projects. Although a number of bond issues have been made in the United States for project financing and a limited number of BOT projects have been successfully financed via the capital markets in the United Kingdom, these are traditionally conservative markets. The credit rating agencies have proved unwilling to give good investment ratings to one-off projects, particularly in view of project completion risk, without significant credit enhancement. These markets are, however, increasingly being seen as a desirable source of funding, given that the available maturities and terms of such funding are likely to be more favourable to the SPV than senior commercial debt. The expectation is that these markets will in the future be used more extensively.

Leasing

It can be advantageous to consider tax-based leasing facilities in respect of project equipment. The

feasibility of this will depend upon such issues as the jurisdiction in question, its tax regime and the type of equipment. The economic benefits of introducing tax-based leasing can be considerable, and a number of United Kingdom projects (particularly independent power and cable projects) have taken advantage of such facilities. The use of this financing technique does, however, introduce certain risks, and it will need to be considered to what extent the project economics can tolerate adverse changes in the relevant tax regime. These issues are discussed in further detail in Chapter 6.

Development finance institutions

Many developing countries have access to funding from development finance institutions, such as the International Finance Corporation (IFC) and the Asian Development Bank. Funds are available with long maturities, but, depending on the institution, might only be available to governments or for projects that have the benefit of a host government guarantee. This is particularly the case where funds are available at a subsidised rate.

Certain agencies provide financing for BOT projects, such as the IFC, the UK's Commonwealth Development Corporation and the European Bank for Reconstruction and Development. The financing will be offered on commercial terms, but may be available for a longer term than is available in the commercial sector. These agencies will generally be required to limit the percentage of the total project costs which they will finance.

Export credit agencies

These sources of funds and credit support are likely to be attractive to a BOT project in that they generally offer a competitive rate of interest, often at a fixed rate, and longer loan maturities. It needs to be borne in mind that the support is generally available only to promote exports of the agency's home country. A careful evaluation of the advantages and disadvantages of the support should therefore be made.

These agencies are able to offer a variety of incentives, including:

- buyer credits in the form of direct loans to the SPV;
- loans and grants to overseas governments;
- guarantees to project lenders; and
- political risk insurance for project lenders and sponsors.

Sponsor support

Equity

As discussed earlier, the sponsors will normally be the principal subscribers for equity in the SPV. They will need to ensure that they have the resources to fund the equity prior to and during the construction phase, though in the longer term the expectation is that this will be at least partly offset by the profits that the sponsors make from their contractual arrangements with the SPV.

Consideration will need to be given as to whether the sponsors should be able to sell all or part of their equity investment to other shareholders and what avenues might be open to them to achieve this.

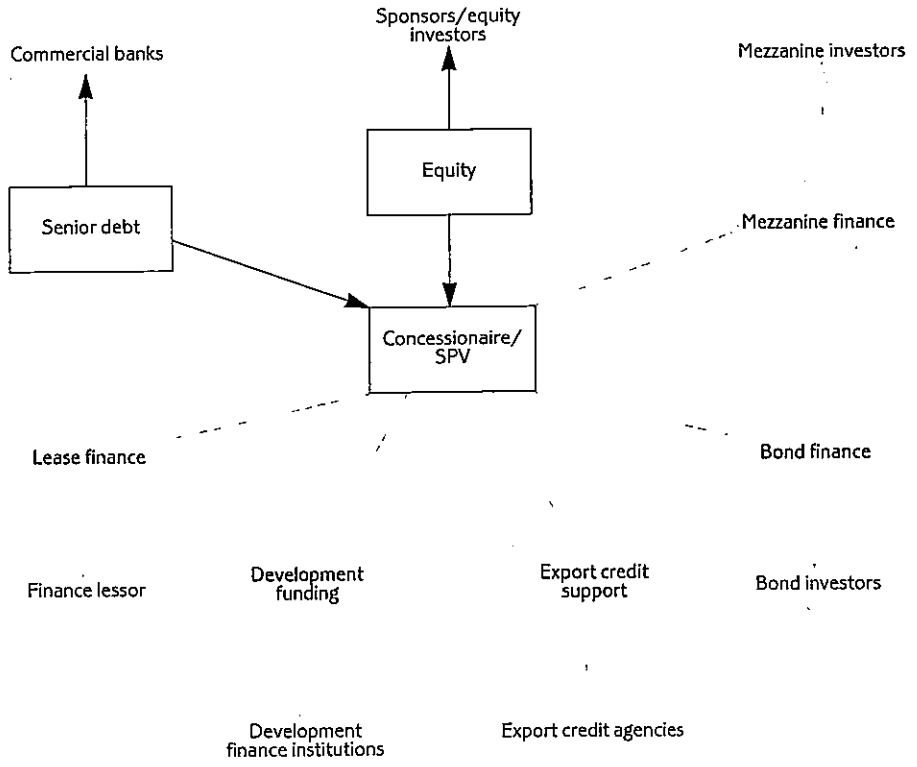
Other forms of support

As well as contributing the initial equity, the sponsors might be required to give additional support to the project, including:

- *Completion guarantees* – The sponsors might be required to guarantee to the SPV that the project will be completed on time, or to guarantee, throughout the construction phase, the repayment of the commercial debt. The commercial banks might require any guarantee to be supported by a letter of credit.
- *Funding shortfalls* – The sponsors will normally be required to subscribe for further equity in the SPV in the event of any shortfall in the funding of the SPV, typically where the cost of completing the project facilities is greater than the amount of original equity and debt combined.
- *Price guarantees* – The sponsors might be required to make up any shortfall between the market price of the SPV's product and an assumed price on which the project economics depend.
- *Letters of support/comfort letters* – The sponsors will need to consider to what extent they are willing to undertake legally binding obligations in respect of such matters as their continuing ownership of the SPV and the

Exhibit 1.2

A TYPICAL BOT FINANCING STRUCTURE



provision of resources, or whether they wish merely to confirm their intentions but without incurring liability if they fail to implement them. Under English law, the appropriate documents are a letter of support in the former case and a comfort letter (which does not constitute a binding obligation) in the latter. Sponsor support is discussed further in Chapter 4.

A diagram of a typical BOT financing structure is set out in Exhibit 1.2.

BUILD, OPERATE, TRANSFER

The three principal phases of a BOT project merit further consideration.

Build

Concession agreement

The concession agreement will, among other matters, set out the design and build specifications of the project facilities and the requirements of the host government in relation to the construction of those facilities. These construction-related requirements are likely to include:

- a construction timetable;
- the tests that will determine whether construction has been completed for the purposes of the concession agreement;
- a provision for the payment of liquidated damages if completion is delayed;
- the ability of the host government to vary the specification;
- rights of inspection;
- information and reporting requirements;
- insurance requirements; and
- controls over sub-contracting.

Concession agreements are discussed further in Chapter 5.

Construction contract

The first issue to be considered will be the type of construction contract that is appropriate in the circumstances. The construction contract will most commonly be a 'turn-key' contract, whereby the contractor is responsible for completing the project facilities and handing them over to the SPV in fully operational condition. There are two main methods of pricing turn-key contracts:

- *Fixed-price* – Under a fixed price construction contract, the contractor undertakes to complete the construction by a given date and for a fixed price. The onus is therefore on the contractor to price the work realistically at the outset. Except as otherwise provided, the fixed price will not be subject to alteration.
- *Cost plus or cost plus fee* – Here, the contractor is reimbursed for the costs incurred in the construction and is paid a fee for its work on an agreed basis, which might be a fixed fee or be calculated by reference to a percentage uplift on the costs.

A fixed-price construction contract is the norm in the construction of BOT infrastructure facilities. Although it could work to the advantage or disadvantage of the contractor, it is of enormous benefit to the project as it offers certainty as to the construction costs. This in turn permits more accurate cash flow projections and should protect the project from potentially disastrous cost overruns during the construction phase.

In the construction industry, fixed price construction contracts will often provide for incentive payments to the construction contractor to complete the construction ahead of schedule. This is not normally the case in BOT infrastructure construction, as the SPV is unlikely to have funds available to it for this purpose. It is normal, however, for the contractor to be obliged to pay liquidated damages to the SPV if completion is delayed.

The SPV will seek to pass on to the contractor the obligations relating to construction which it is undertaking under the concession agreement, and any further construction-related obligations imposed on the SPV by the banks under their financing documents.

Construction contracts are also discussed in detail in Chapter 4.

Operate

Concession agreement

The concession agreement will also set out the host government's requirements as to the operation and maintenance of the project facilities throughout the life of the concession. The government's interests are two-fold. It will wish to ensure that the project facilities perform as expected during the concession period and also that they meet minimum requirements when they are transferred to it at the end of the concession period.

Operation and maintenance agreement

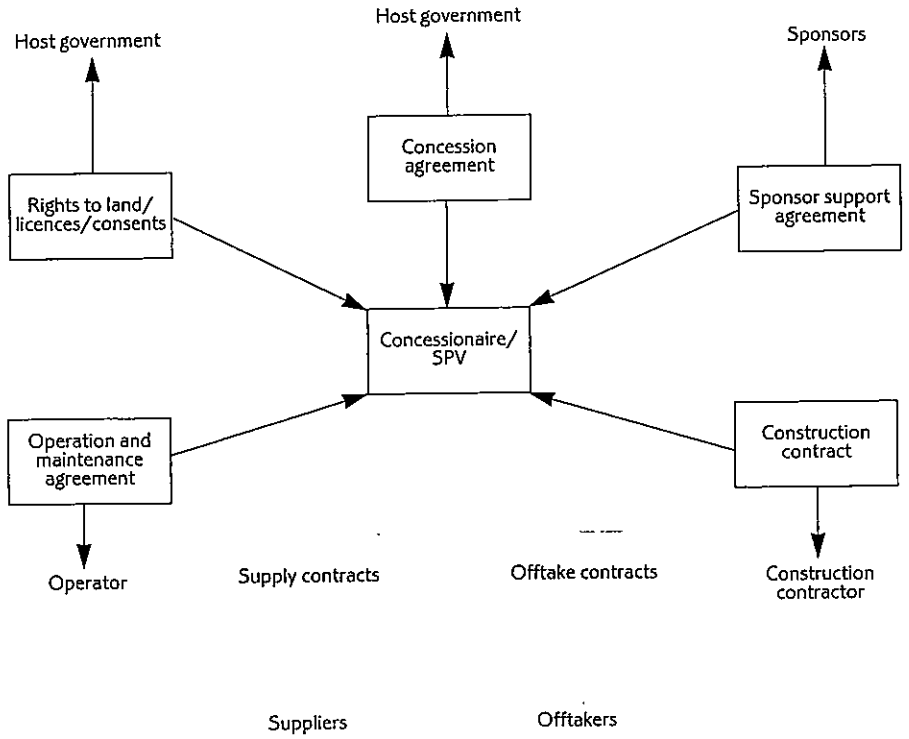
The SPV will need to enter into appropriate contractual arrangements with a specialist operator to ensure that these obligations are performed. In addition to operating the project facilities on a day-to-day basis, it is normal for the operator to perform some maintenance. The operating arrangements are therefore commonly contained in what is referred to as an operation and maintenance agreement. Where the operator is not equipped to perform specific major maintenance work, it might sub-contract this to a specialist.

Although the actual operation of the project facilities will not commence for some considerable time after the construction contract is being negotiated, it is essential to involve the operator in the project at an early stage. The operator should be consulted on those aspects of the design and construction of the facilities which will impact on its ability to perform its obligations under the operation and maintenance agreement and should also be involved in verifying that the facilities are constructed and completed in accordance with the construction contract.

The host government and the lenders to the project will in any event wish to see that satisfactory operation and maintenance arrangements are in place at the outset. These might provide for minimum levels of performance. In many cases, these arrangements will be concluded for the full term of the concession and as such will need to cater for changes in circumstances, such as the introduction of new legal or regulatory requirements relating to operation, and for inflation by including a mechanism for the escalation of costs and fees. In addition, all the parties to the project will need to be satisfied as to the creditworthiness of the operator, or alternatively to be confident that the operator could be readily replaced by an equivalent on comparable terms and conditions should the need arise.

It is common for the operator to be a sponsor of the project, and it is in the interests of the project for the operator to have a vested interest in its success.

Exhibit 1.3
A TYPICAL CONTRACTUAL STRUCTURE



Operation and maintenance agreements are also discussed in more detail in Chapter 4.

Transfer

It is characteristic of a BOT project that the project is transferred to the host government at the end of the concession period. The length of the concession period is determined at the outset taking into account the projected economic life of the assets and with a view to enabling the SPV to service and repay all project debt and pay a reasonable rate of return to the equity investors. It is common to provide for the concession period to be extended in certain circumstances – for example, where construction is delayed or operation is interrupted for any substantial period as a result of *force majeure*.

The provisions relating to the transfer of the facilities will be set out in the concession agreement and will typically address the following issues:

- *the timing of the transfer;*
- *any capital sum payable by the host government for the transfer;*
- *conditions of transfer* – for example, it is normal for the host government to specify the criteria as to condition and performance which the project assets must meet on transfer;
- *transfer of technology rights* – the host government will need to have the right to use the technology necessary for the continued operation of the project;
- *transfer of warranties and other rights* – the SPV will normally be required to transfer the benefit of any remaining third-party warranties relating to the project to the host government; and
- *warranties* – the SPV may be required to give a warranty to the host government at the time of transfer as to the condition and performance of the project facilities, normally limited in time; for example, a one-year warranty might be given to repair or replace defective items.

A diagram of a typical contractual structure is set out in Exhibit 1.3.

THE UK PRIVATE FINANCE INITIATIVE

Historical background

The United Kingdom government's initiative for the promotion of PPPs is known as the Private Finance Initiative (PFI).

At the start of the 1990s the UK government acknowledged that the old methods of funding public sector projects through the 'tax and spend' regimes of the 1970s and 1980s had become unsustainable, and had resulted in systematic under-investment in infrastructure. A better means of procurement was required and prioritisation of projects was needed. The PFI was therefore introduced by the Chancellor, Nigel Lawson, in his Autumn Statement of 1992. The fundamental points behind the initiative were that:

- the private sector had genuinely to assume risk;
- there should be competition where the government facilitated a project or sought private sector partners, or where the government purchased services as a customer; and
- the initiative would apply not only to infrastructure projects, but also to other capital investment which provided services to the public sector.

Spending by government departments had to be based on appraisals of value for money and would count against departmental provision. The Chancellor saw the initiative applying to financially free-standing projects, joint ventures, leasing and services provided by the private sector to the public sector. To assist with the procurement of PFI projects, in 1993 the Chancellor set up the Private Finance Panel, designed to promote the PFI and to assist both the public and private sectors in getting to grips with the concept and its requirements. However, PFI projects were slow to progress, often due to a lack of real understanding in both the public and private sectors as to what was required, and simple lack of experience in undertaking such projects.

The Treasury guidelines stated that when considering private finance the final decision had to rest on whether value for money could be demonstrated. However, any project had initially to be examined to see whether, in principle, it was possible genuinely to transfer control and the associated risks to the private sector without disproportionate cost. If it was possible, a PFI solution had to be considered, and to this end the possibility of private finance had to be addressed explicitly when drawing up departmental efficiency plans.

By November 1995, Treasury figures put the capital value of PFI projects under consideration at between £4.74 billion and £5.08 billion. These included projects to provide new trains for London Underground's Northern Line, a new Scottish air traffic control centre, the Channel Tunnel rail link, prisons at Bridgend and Fazakerley and a number of roads to be upgraded or developed on a DBFO basis. Very limited success had, however, been acheived in getting contracts actually signed.

New government guidelines

In 1996, the experience that the UK government had gained from the negotiations surrounding the PFI projects was used to produce new guidelines for the procurement of PFI projects. The new guidelines, *Private Finance Initiative – Guidelines for Smoothing the Procurement Process*, were published jointly by HM Treasury and the Private Finance Panel and received support from both the CBI and the Construction Industry Employers' Council. The guidelines included:

- The need for the public sector to be clear about the service being sought, but to allow the private sector to produce innovative ideas on how that service should be delivered.
- Where there was sufficiently strong competition to promote value for money in the public sector, early disclosure of the public sector comparator should be made to save abortive tendering effort if that comparator was substantially below plausible bids.
- Departments nominating a minister for each PFI project with a capital value above £10 million, or the two largest projects in the department (whichever the greater), to see the project through to signature.
- To avoid unnecessary bidding costs by inviting no more than four bidders to produce full tenders.
- To select preferred bidders as early as reasonable bearing in mind the need to secure value for money and to settle material commercial issues through competition; with sufficient comfort to ensure financing arrangements did

not provide an excuse for reopening contracts later; with an agreed timetable to contract award; and with remaining bidders put on hold.
- Debriefing candidates to ensure everyone learned from the process.
- Training between 5,000 and 10,000 civil servants in how to carry out PFI projects and making training available to private sector participants.
- The Treasury to produce model contract clauses to minimise the need to 'reinvent the wheel' for issues likely to be common to all PFI projects. Also, to put in place a standing committee charged with resolving, at an early stage, precedent-setting issues relating to contract conditions.

By April 1997 the number of signed PFI contracts had increased considerably and included eight DBFO roads for the Highways Agency, six rail-related projects for the Department of Transport, 15 projects (mainly sports facilities) for the Department of Education and Employment, 11 miscellaneous projects for the Scottish Office, three prisons for the Home Office and 50 projects involving NHS Trusts, and Health Authorities for the Department of Health, with a combined capital value of just under £5 billion.

The change of government following the general election of May 1997 brought about a review of the PFI. The Chancellor, Gordon Brown, made it clear that it was no longer a case of PFI at all costs and, in his opinion, PFI was not always appropriate. The review was undertaken by Malcolm Bates, Chairman of Pearl Group and of Premier Farnell, and used as its starting point Labour's 12-point plan for partnership with the private sector originally published in its election manifesto.

In June 1997 the Paymaster General announced that the government would adopt the recommendations of the Bates review. The recommendations were aimed at simplifying and streamlining procedures and included the replacement of the Private Finance Panel with a new Treasury Taskforce to combine project and policy expertise. The Taskforce, which includes executives from the private sector with direct project management and financial skills and experience, is required to be satisfied as to the commercial viability of each significant project before the procurement procedure begins. Other recommendations included specialist training for civil servants, the use of standard form contract conditions and the prioritisation of projects.

In accordance with the new prioritisation policy, in June and July 1997 the Treasury announced the proposed health sector and road projects which are to be given priority. Many projects, at various stages of advancement, have been cancelled and others are subject to further review.

PFI advantages and disadvantages

Advantages

- Competitive tendering opens up the analysis of public sector projects to the private sector. Projects that are not economically viable will not proceed.
- The PFI avoids government departments producing 'wish lists' of projects that require funding, but which are untenable in the long run.
- Risk is transferred from the public sector to the private sector – ie away from the public purse.
- Costs are capped, which assists departments in budgeting. For example, while payment is on usage in the case of DBFO roads, no further amounts are paid once a defined threshold is reached, and the maximum availability of a prison or a hospital is known.
- Opportunities are provided for the private sector to produce innovative and novel solutions, which can be operations-driven as well as design-based. Improvements in management techniques are also promoted.
- Business is created where business did not exist and new private sector skills can be sold elsewhere.
- The PFI allows new methods of finance to be developed that can also be used purely in the private sector.
- Less public money is tied up in capital investment and more is available to finance further PFI projects.
- Concessions are for long periods and require the SPV to consider ways of efficiently maintaining the project through its working life.
- As the SPV only starts being paid once the project is operational, it is highly motivated to bring the project into service as early as possible.

Disadvantages

- Projects can be viewed solely on a financial basis with little or no consideration of social effects. Not all projects are viable on a financial basis.
- Too much risk is sometimes placed on the private sector, making projects no longer viable or preventing finance being obtained.
- Value for money and transfer of risk are emphasised at the expense of other factors – for example the social cost of requiring fewer staff to maintain a hospital.
- Stand alone projects lose any advantages of economies of scale or the ability to link with others. Innovation can lead to a lack of standardisation.
- Trained staff are required who are aware of the needs of the parties to PFI projects.
- Too much control of infrastructure is removed from public bodies to the detriment of the public as a whole.
- PFI projects commit the public sector to pay out money over long periods during which the project itself may have become obsolete.
- The private operator is subject to changes in general government policy, which can have a major effect on the viability of the project.
- Higher bidding costs than for conventional public sector contracts will deter bidders from competing for the project concession and consequently raise the cost of the project for government.

Development of the PFI

The public sector is able to obtain finance for projects more cheaply than the private sector, but its ability to raise funds is constrained for a number of reasons. One method of getting around this problem is for the private sector to raise the finance, but the problem is that its finance costs are higher. Therefore, in order to justify using the private sector there must be advantages which outweigh the increased finance cost. Through the PFI, the UK government has attempted to secure these advantages via whole project-life cost savings produced through private sector innovation, efficient management, effects of competition, etc.

In order for the PFI to work there have had to be changes in the public sector's approach to these projects. There needed to be changes in specifications and procurement methods to allow the private sector the freedom for innovation which would provide the costs savings to make a project viable. Initially there was some difficulty, but as both sides became more familiar with the concept and the Treasury and Private Finance Panel produced guidelines, such opportunities for innovation have grown. The most suitable areas have been financially free-standing projects and joint ventures. When a government department or agency wishes to undertake a project it needs to be assessed to see whether it is suitable for the PFI. If it is suitable then a prequalification procedure may be held and a list is drawn up of candidates who are invited to submit full tenders.

The shortlist will consist of between two and four bidders, and it is generally at this stage that model contracts are provided. It is also at this point that the financiers are involved in negotiations to ensure that the financial risks of the project are acceptable to them. Following further negotiations, one or two preferred bidders are named and, of these, the one with the package best meeting the criteria of the project is chosen to sign the contract. If there are any problems reaching agreement and the contract is not signed, the department will return to the other preferred bidder to try and reach an agreement. The main cause of failing to sign an agreement is that finance is not available for the SPV.

Because of the type of projects required by the PFI, most concessionaires are a special-purpose vehicle owned by a consortium, drawing together the specialities required to undertake the project.

It is clear that PFI has been a measured success. As a result of the cooperative process and of negotiation, the government now has a better understanding of the private sector's requirements for financing projects and the private sector has a better understanding of what government requires.

Under the Labour government, the PFI is expected to be an important part of the infrastructure procurement methods in the UK for a number of years to come.

Examples of PFI projects

Roads on a DBFO basis

Under these concessions the private sector has contracted to design, build, finance and operate new roads or upgrade existing roads in return for 'shadow' tolls, ie paid by government. The Highways Agency's objectives have included:

- ensuring that the project road is designed, maintained and operated safely and satisfactorily so as to minimise any adverse impact on the environment and maximise benefits to road users;
- transferring the appropriate level of risk to the public sector;
- promoting innovation, not only in technical and operational matters, but also in financial and commercial arrangements;
- fostering the development of a private sector road-operating industry in the UK;
- minimising the financial contribution required from the public sector.

The main benefit sought has been that by transferring the responsibility for designing, constructing, financing and operating road schemes, the private sector would consider its obligations as a whole over the 30-year life of the project. The design phase has included scope for considering how the maintenance of the road and the length of time between maintenance periods would affect the materials used in construction, and how the type of maintenance carried out would affect the income and operation of the road. Longer time periods between maintenance would require better materials with resulting higher up-front costs, but offset against this would be possible higher use and therefore greater income generation in the future.

The private sector has been required to estimate the amount of use the road would enjoy and consider the associated risks. Under the payment mechanism the SPV is paid a toll by the government dependent on traffic use (subject to a maximum level of use). There have also been incentives for implementing agreed safety schemes and deductions for lane closures so that maintenance and repair is likely to be less disruptive.

In addition, the SPV has had to bear the risk of changes in transport policy (other than the introduction of tolling where the road users pay) and rely on other roads providing the supply of vehicles to use its roads.

As the basis for negotiations, model contracts have been provided which reduced time in preparing bids and provided significant efficiencies for the Highways Agency. It is anticipated that the resulting agreements will produce average cost savings to the Agency of 15 per cent, and reasonable profits for the operators.

Prisons on a DCMF basis

The concessions have required the private sector to design, construct, manage and finance new prisons. The Home Office's objectives were similar to those of the Highways Agency with the DBFO roads, and included:

- the transfer of risk through the structure of the payment scheme;
- encouraging continued innovation through the payment mechanism;
- termination of the concession if the SPV is in serious breach of its obligations or becomes insolvent;
- making the SPV responsible for complying with changes in general legislation.

As discussed in Chapter 3, the original scheme proposed by the Home Office required the SPV to take demand risk. Unlike the DBFO road schemes, this type of risk was considered unacceptable by all the bidders as it related to sentencing policy, and so the Home Office was forced to rethink its position. The result was that the SPV would be paid according to the number of prisoner places available for use rather than for those actually occupied: in effect a 'take or pay' scheme. The original invitations to tender did not allow for negotiation of terms with bidders and this too was changed.

The DCMF contracts have been entered into for 25 years, at the end of which the prisons revert to state ownership. As payment is made on the availability of prisoner places, no payments are made until the prison is ready for operation, placing the construction risk on the SPV. This risk is increased by liquidated damages which are payable if the places are not available by a pre-arranged date. Under the DCMF agreements the prisons are to be delivered within two years as opposed to the average time under non-PFI procurement of

between three and eight-and-a-half years to design and construct prisons.

The prison contracts give scope for innovation in their design, maintenance and operation. By incorporating new technology and allowing flexibility in design within the requirements of containing offenders, SPVs expect to reduce costs while maintaining the quality of service required: for example, better lines of sight can mean fewer prison officers are required. Value for money has been achieved with expected savings to the prison service in excess of 10 per cent over the contract life compared with risk-adjusted public sector base cases.

From the initial problems encountered with the prison contracts, much experience has been obtained which underpins the government guidance now given to ministries as to how to negotiate PFI contracts. This has included the need to specify 'core' service requirements where they exist, and to identify potentially non-transferable risks as early as possible. There is also a need to include lenders in the negotiations at an early stage to ensure that the risks are acceptable from a financing perspective.

ADVANTAGES AND DISADVANTAGES OF THE BOT STRUCTURE

In addition to some of the advantages and disadvantages of PFI projects already identified, there are some general advantages and disadvantages associated with BOT structures, which will need to be considered carefully in the individual circumstances in which a BOT project is proposed.

Advantages

The advantages offered by the BOT structure relative to the financing of infrastructure projects exclusively from government resources include:

- *Private sector funding* – The majority of BOT infrastructure projects will be wholly or largely financed by the private sector, involving little or no capital expenditure by the host government. This should assist in reducing the government's public borrowing requirement and enable public resources to be channelled into other areas less suitable for private financing. (For example, the draft report of the Kinnock High Level Group on PPP financing of Trans-European Networks (TENs) published in June 1997 acknowledges the need for some element of public financing, at national or European Union level, to encourage progress in the implementation of TENs which has been slow to date.) The availability of private sector funding is also likely to ease the tax burden in the country concerned, thereby encouraging business enterprise and foreign investment.
- *Accelerated development* – The availability of private sector funding for infrastructure projects makes it likely that a project can be implemented in a much shorter timescale than would otherwise be the case.
- *Value for money* – The normal competitive bidding process for a concession, together with the efficiency and technical expertise that the private sector is likely to bring to a project, should ensure that the government gets value for money from the project. Indeed, this is the cornerstone of the PFI.
- *Efficient risk allocation* – Every BOT structure will involve a close analysis of the risks associated with the implementation of the project and the allocation of those risks between the public and private sectors. The aim should always be to allocate each risk to the party that is best able to manage and minimise it, bringing about greater efficiency and cost savings over the life of a project. This principle is also fundamental to the PFI.
- *Government control* – The host government has the ability to formulate and specify its precise requirements in terms of the project facilities and their operation. It will also retain a substantial degree of control over the private sector during both the development and operation stages of the project. Although the government will have the automatic right to have the project facilities transferred to it at the end of the concession period, it will normally also reserve the right to assume control of the project on the occurrence of certain events, mainly linked to the persistent or significant default of the SPV.
- *Technology and skills transfer* – BOT financings will involve the participation of experts in many different fields, enabling access to tech-

nological expertise which might not be possessed in the country in question. Similarly, the implementation of the project often enables the local workforce to acquire new technical skills.

- *Social benefits* – The implementation of many infrastructure projects will have a direct beneficial effect on the lives of the inhabitants of the country in question and its environment.
- *Political benefits* – By satisfying pressing local needs, BOT infrastructure projects can enhance internal, social and political stability. In addition, they can have the effect of promoting international cooperation.

Disadvantages

In assessing whether a particular project is viable, regard should also be had to the potential disadvantages inherent in a BOT infrastructure project:

- *High cost for government* – It is likely that the host government will be able to borrow funds to finance a project more cheaply than by raising project finance debt from the private sector. The reasons for this include the following:
  - BOT projects are complex. They take a considerable time to develop and involve careful analysis on the part of all parties to the project of the likely risks and rewards, including the preparation of detailed feasibility studies. The documentation required for the implementation of the project will be complex and extensive and will normally require lengthy negotiation.
  - Where the government buys the entire product of the project, its payments need to cover not only the financing costs but also the return to the sponsors on their investment in the project.
  - The host government might provide financial incentives to encourage BOT projects in general.
  - The government may be committed to the SPV to provide other financial support specific to a particular project, for example by way of subsidy or contingently on the happening of certain events (such as the use of the infrastructure facilities falling below given levels or depreciation of the domestic currency).
  - Where the government owns the supplier of natural resources that are needed in substantial quantities for the project's operation, there may be pressure for payment for those resources to be treated as informal equity or otherwise to be linked to the price or profits received for the product of the project. In these cases, the government has less certainty of receiving a world market price for the resources than if it sold them directly to the market-place.
- *Equity contributions* – A disadvantage for project sponsors is that, in addition to investing considerable management time and resources in the planning of the project, they will normally be expected to invest substantially in the SPV while it is not in a position to borrow funds. In addition, the commercial banks will wish to control the payment of returns to the sponsors both in terms of amount and timing and to control transfers of equity holdings.
- *Loss of control* – The willingness of banks to lend on a limited recourse basis to a special-purpose vehicle will depend partly on the banks' ability to control the activities of the SPV, particularly in terms of its relationship with the other contracting parties. The host government will also have a great degree of control over the project.
- *Forecasting* – The viability of a BOT project will depend in part on economic projections based on certain assumptions and historic and comparable data. By definition, this is not a precise science and there are examples of substantial miscalculations that have been made.
- *Risks* – The many other threats to the viability of a BOT projects have been touched on earlier in this chapter and are examined in more detail in Chapter 2.

Chapter 2
Project Viability

ECONOMIC AND FINANCIAL VIABILITY DISTINGUISHED

The concepts of economic viability and financial viability of BOT projects are concerned with quite different issues. A BOT project is considered to be economically viable where it can be demonstrated that it represents value for money in relation to all government expenditure and other public sector contributions which are involved. In other words, the test to be applied is whether the government could achieve its social and/or economic objectives more cost-effectively in some other manner – perhaps, with a different measure of private sector input, or perhaps with none at all, by means of a conventional publicly funded procurement. On the other hand, when assessing whether a project is financially viable, one views it as a discrete entity and looks to establish whether it is capable of generating sufficient cash flow to cover the costs of establishing and running the project business (including finance costs) and to produce a satisfactory return for shareholders.

Nevertheless, it would be untrue to say that the economic viability of a project is exclusively the concern of the host government – or, indeed, that a project's financial viability is relevant only to the sponsors and funding providers. Governments will, for example, wish to ensure continuity of service from each project, and so they will wish to satisfy themselves that it is, and will continue to be, financially viable. On the other hand, sponsors and funding providers will want to be satisfied that there is a strong and enduring political commitment to the project. This will be eroded if the project proves incapable of meeting the host government's objectives and delivering value for money for public expenditure.

ECONOMIC VIABILITY

Value for money

For many years, there was a presumption that the use of private finance to fund public projects could scarcely ever provide governments with value for money, because the cost of borrowing by the private sector is inevitably higher than it is for most governments. However, there has been a growing appreciation that the combination of public and private sector strengths are often capable of delivering a variety of additional benefits and cost savings which more than compensate for increased financing costs. Examples of those benefits include:

- optimum risk allocation;
- quality assurance without 'gold plating';
- integrating design with operational needs;
- operational efficiency;
- access to new technology;
- use of more effective business processes and cost control procedures;
- economies of scale/collateral commercial ventures;
- improving the match between supply and demand;
- providing for alternative uses; and
- speed of delivery.

The principal method of testing value for money in many BOT projects involving the supply of services to the public sector is by the use of a public sector comparator – that is, 'benchmarking'. Model cash flows are prepared for a conventional publicly funded procurement of the facilities in question over a period equivalent to the proposed BOT contract term. A comparison is then made with the net present value (or net present cost) of the estimated cash flows according to the BOT project model.

There will often also be significant qualitative differences between the services offered by BOT schemes and public procurements. It may be that the BOT proposals are capable of delivering collateral benefits or an enhanced level of service and will inevitably involve a different allocation of risk. In applying the public sector comparator, therefore, it is important to take into account all these variations and to establish a common basis for comparison.

Fiscal constraints on public procurement

Throughout the world, the pressing need for investment in large-scale economic infrastructure is being driven by such factors as the need to compete in an increasingly globalised economy, the rapid pace of technological advances and the growing concern for the environment. Traditionally, the provision of infrastructure has been seen as the responsibility of governments. Faced with the scale of the need for infrastructure investment and the challenge of competing priorities for government spending, however, governments everywhere (including those of affluent OECD countries) are experiencing acute strains on the public purse.[1] Accordingly, fiscal pressures have, above all else, been the driving force behind the proliferation of BOT financings.

With a conventional public procurement, the government is required to meet the greater part of the project's funding requirement prior to and during the initial construction phase – that is, before the project becomes operational and the supply of services commences. With a BOT project, on the other hand, government has greater flexibility. Payments by government will not generally commence until the service charges arise during the operational phase. By this time the social or economic benefits of the project will already be accruing, and much (if not all) of the initial capital costs involved will generally have been met by the private sector.

Furthermore, the capital cost of the project will not generally count against the government's balance sheet or borrowing limits, provided there is an adequate degree of risk transfer. As a result, the credit rating of the country concerned – and thus, its ability to attract foreign investment – will be enhanced.

Where governments are simply unable to find the financial resources to fund a conventional capital asset procurement, it is very much easier to demonstrate the economic viability of a BOT project.

Public investment

Successful BOT projects are truly a product of the joint endeavours of the public and private sectors, although the contributions that governments are required to make vary widely according to the particular circumstances of each project. Many of these contributions are political or administrative in nature and are discussed later in this chapter; others, however, represent a real economic cost to governments and, as such, need to be brought into account when assessing a project's economic viability. They may include:

- accepting long-term purchasing commitments;
- making capacity payments;
- making available an existing public revenue stream;[2]
- making a direct capital investment;
- making in-kind contributions (such as land acquisition or investment in supporting infrastructure);
- making available state resources on subordinated payment terms or non-world market prices;
- transferring designs and intellectual property;
- conferring subsidies or grants;
- agreeing to tax and duty exemptions;[3]
- making compensatory payments for domestic currency devaluation; and
- providing guarantees.[4]

Financially free-standing projects

In some instances, governments do not need to provide any financial support in order for BOT projects to proceed successfully, and their contributions may, for example, be limited to licensing and permissions for the project to proceed. This situation occurs where financial analysis shows that full recovery of the project construction and operating costs can be achieved through charges for services to users.

For the most part, full cost recovery through non-subsidised charges tends only to be socially and politically viable either with 'greenfield' projects (ie where users are being provided with a new facility where none previously existed) or with projects to replace or refurbish an existing facility for which substantial user charges have customarily been levied. Many of the projects that it has so far been possible to implement on a financially free-standing basis have been for the construction of new tolled roads and bridges.

It is, of course, axiomatic that projects requiring no financial support from government pass the 'economic viability' test.

FINANCIAL VIABILITY

Importance of cash flow

The principal defining characteristic of BOT financings (indeed, of all project financings) is that they are founded on a revenue stream. This will need to be robust and predictable because, at best, lenders can expect only limited recourse from the project sponsors, and the realisation of security over the project assets is in practice unlikely to provide significant cover for their lending exposure. Furthermore, if a project is incapable of generating sufficient revenue to meet the costs and expenses involved, there will be no profits available to provide a return on shareholders' investments either. Cash flow is thus the life blood of BOT financings.

The test for financial viability is therefore this: will sufficient cash be generated by the project to meet all design and construction costs, operating expenses, debt service and financing costs, taxes, royalties, professional fees and other costs associated with the project (with an ample cushion for contingencies such as falls in demand or exchange rate fluctuations) in order to leave a sufficient surplus to provide the shareholders with a satisfactory return on their equity investment?

Project forecasts

When presented with a project investment opportunity, banks and potential equity investors alike will seek to apply this test of financial viability by preparing cash flow forecasts, often referred to as the 'banking case' or 'base case'. These forecasts will show the projected revenue of the project at periodic intervals (usually annually or semi-annually) over a number of years (in the case of the banks, to a date falling some time after the intended final maturity of their loans so as to provide for a reasonable cushion period), together with the expenditure for the corresponding periods required to produce that revenue. The difference between revenue and expenditure in each period represents the free cash flow. A discount at an appropriate rate is then applied to future revenues in order to determine their net present value (NPV) at the end of each appraisal period – that is, their value after deducting their notional earning potential for the period from then to the time when they are due to be received. The banks would then use this information to effect a comparison as at the end of each appraisal period between the total of the anticipated future cash flows and the outstanding amount of their loans.[5]

The base case will rest on certain specified assumptions. Usually, these will include financial assumptions (such as currency exchange rates, inflation rates or levels of taxation) and technical assumptions (which would, in the case of a power station for example, generally include its output, operation and maintenance costs and certain technical performance targets, such as its 'heat rate'). Sometimes, additional categories of assumptions may be appropriate, such as assumptions as to matters connected with the market in which the project will be competing or levels of employment. Given the significance of the assumptions in establishing the base case, there is often much heated debate amongst prospective participants as to the 'correct' assumptions to be used and whether any particular group, usually the lenders, are insisting on too conservative assumptions.

Project forecasts are, in addition, an essential tool in the ongoing monitoring of the project's performance. This is discussed further in Chapter 7.

Currency convertibility

Where the principal revenue stream on which the BOT financing depends will be generated in a currency that is not readily convertible, foreign lenders and equity investors providing hard currency will need a mechanism to enable domestic currency receipts to be converted, together with a governmental assurance that they will be able to repatriate dividends and capital. In order to safeguard their interests in these circumstances, lenders and investors often seek project-specific foreign exchange guarantees from host governments. Foreign exchange convertibility guarantees are particularly relevant for infrastructure projects such as toll roads, railways and power stations, which generate domestic currency revenues but which must service foreign currency debt.

TECHNICAL FEASIBILITY

Whether a project is technically feasible is, in essence, assessed according to a two-fold test:

- Can the project be built as contemplated?
- Will the project perform according to the established specifications?

Project lenders will rely heavily upon technical studies commissioned by them from independent consultants possessing appropriate qualifications and expertise in relation to the perceived risk areas. Accordingly, lenders will be concerned to establish that they will have rights of recourse against those experts in respect of deficient advice. Indeed, lenders also will need to satisfy themselves as to the creditworthiness of their technical consultants. Given the high value of most BOT projects, they commonly require the exposure of their consultants to liability in respect of technical reports and feasibility studies to be backed by indemnity insurance at an agreed level. Such cover is not always readily available in the insurance market or, where it is, the insurance may in some instances impose extensive exclusions or deductibles.

Where projects involve the application of new technology or old technology in a novel configuration which is not yet supported by a successful track record, it becomes more difficult to manage the technical risks involved. In such cases, it may be that the viability of the project will depend on sovereign guarantees.

POLITICAL AND SOCIAL VIABILITY

Extent of government involvement

The nature and extent of government involvement in differing BOT projects varies widely. However, in most instances, it is imperative that the project proceeds as a truly joint endeavour of government and the private sector participants. Indeed, conversely, most projects are not politically viable where the private sector perceives that there is either insufficient public sector commitment to the implementation of the project by means of a BOT structure, or a degree of social or political instability causing a significant risk of radical changes in policies or circumstances that could be contrary to the interests of the project, the investors or lenders.

Grasping new concepts

In many countries, the use of BOT structures is a novel development that involves a radical change in philosophy. There are a number of new concepts which must be grasped by politicians, officials and society as a whole. Failure to do so can result in a lack of the required commitment from government and the relevant public authorities from the outset, or unrealistic expectations leading to growing disillusionment with BOT structures as expectations are not met; in some instances popular hostility can build up in relation to the whole BOT process. The most important of those new concepts are highlighted in the following sections.

New role for governments

BOT involves a redefinition of the role of government, at least in the context of many infrastructure projects which are perceived as delivering 'public' services (such as power generation and water). For much of this century, it has been generally understood that it was government's responsibility to develop, own and exercise direct control over the facilities that deliver these services. On the other hand, with BOT projects, government's role becomes that of managing the procurement process and, thereafter, exercising general supervision within the scope of a transparent and stable regulatory framework. BOT is not compatible with continuing operational interference by government.

User charges

Often the financing of some BOT projects depends on the recovery of part or all of the costs incurred in the design, construction, financing and operation of the project through charges levied directly on users. In some instances, citizens will have previously been accustomed to receiving the services in question free of charge; in other cases, they may have paid charges at a lower rate held down by public subsidy. The experience in many countries at differing stages of development shows that new charging regimes are capable of engendering such popular hostility that they become unsustainable.

Profit

In order to attract private sector investment for BOT projects, it is of course necessary to structure the financing in such a way that investors have the opportunity of reaping a reasonable return on their capital, commensurate with the risks they are taking. Yet, politicians and citizens alike can find the concept of investors (indeed, often foreign investors) deriving profits from providing 'public' services a difficult one to accept, particularly when coupled with new or increased user charges.

Risk allocation, not wholesale transfer

It is crucial for governments to appreciate that, in order for most BOT projects to succeed, they must be prepared to shoulder certain project-specific risks. This may, for example, be through the issue of political risk guarantees (such as indemnities against expropriation or political interference), underwriting minimum toll levels or offering protection against certain events of *force majeure*. However, the principles of BOT are often confused with those of privatisation, which does of course generally involve wholesale risk transfer to the private sector.[6]

Governments and politicians have not infrequently viewed foreign direct investment (FDI) through BOT structures as the panacea for reconciling competing fiscal, social and economic demands. In doing so, they have failed to appreciate the full range and extent of the support required from, and residual risks retained by, government to make projects work on a continuing basis. High, but unrealistic, expectations can thus be just as much an obstacle to attracting FDI for BOT projects as negative attitudes to the process within the public sector.

Political commitment

In order to pre-empt or counteract the growth of popular opposition to BOT financings, investors will expect host governments to demonstrate a clear, long-term commitment to the use of BOT structures, and a thorough appreciation of the implications of the new philosophy. This commitment may need to manifest itself in a variety of practical ways, and some examples are considered in the following sections.

Training officials

Although, at ministerial level, a high level of commitment to BOT policies and understanding of the underlying principles and implications may be apparent, the private sector will also be concerned with the attitude and approach of civil servants at all levels within ministries, and other public officials whose cooperation will be required to promote and operate the project. Accordingly, government must be prepared to devote appropriate efforts and resources to training those civil servants and officials and explaining BOT concepts and structures.

Managing expectations

The pressure of unrealistic expectations as to the levels of service can represent a major obstacle to the success of BOT projects. Accordingly, investors will expect governments to have made a realistic assessment of what levels of service are affordable, and then to communicate with citizens candidly and effectively in relation to their resulting policies. For example, if efforts are made to make citizens aware that constraints on public spending mean that there would be no prospect of a major bridge construction project proceeding without full cost recovery through non-subsidised tolls, the imposition of those tolls may prove more palatable.

Adhering to long-term development strategies

In many projects (such as tolled bridges or tunnels), the future development of competing projects could impact on project revenues to such an extent as to undermine financial viability. For this reason, investors often expect governments to commit themselves to a clear long-term development strategy. Indeed, they may require specific assurances that concessions for competing projects will not be granted during the BOT term, or indemnities covering any adverse impact on revenues resulting from future developments.

Building consensus

Investors and lenders will not be willing to participate in a BOT project unless they can rely on the host government's firm commitment for the duration of the project. Accordingly, it is insufficient simply for the current governing party to support

the policy. Rather, governments must attempt to build a broad consensus of support across the mainstream political spectrum, and encompassing labour unions and other interest groups.

Preserving commercial freedom
An important prerequisite for BOT financings is that governments should establish at the outset precisely what performance targets and operational restrictions it intends to impose on the concessionaire. Where competitive tendering is used, the bidding consortia will expect this to be to a large extent expounded in the invitation to tender. For investors and financiers, it is important that these project specifications are settled at least before financial close because they will need to analyse the cost implications and ensure that these are properly reflected in the base case (see the 'Project forecasts' section earlier in this chapter). Conversely, they need so far as possible to be satisfied that the host government will resist any future pressure to interfere in the implementation or operation of the project (for example, by imposing changes in the payment mechanism or requiring compliance with additional or enhanced environmental standards).

Creating a favourable climate for investment
This should include a credible legal and regulatory framework, an efficient administration, well-developed financial institutions, liberal trade policies and a broadly based market economy.

Country risk

The overall degree of risk associated with investing and carrying on business in a country (referred to as the 'political risk') is perhaps the first consideration in lenders' and investors' appraisals of a BOT financing proposal. In evaluating the political risk, they will focus on social and political stability, the transparency and reliability of the legal and regulatory framework (the issues connected with which are discussed in the next section) and any other risks that may affect future returns on country investments.

An unstable social or political environment has the potential to cause a variety of changes in policies or circumstances during the lifetime of the project, which may threaten its financial viability. Lenders and investors are particularly concerned to establish, in so far as they are able, that their exposure to political risk is low. Political risks are discussed in detail in Chapter 6.

LEGAL AND ADMINISTRATIVE VIABILITY

Legal framework

BOT financings inevitably involve highly complex commercial and financial structures. There are many reasons for this. Partly, this is attributable to the many participants involved. Partly, also, this complexity stems from the wide range of risks associated with the project, which have to be allocated with great precision. A third factor is the long-term nature of BOT schemes, which means that the arrangements must be flexible and responsive to circumstances changing over time. To meet these requirements, a plethora of subtle techniques are employed, which depend upon the existence of a sophisticated, reliable and well-developed legal framework.

The areas of law that most commonly impact on the feasibility of BOT projects are considered in the following sections.

Enabling public laws or 'concession laws'
What matters most to foreign banks and investors when assessing the legal framework within the host country is that there is a clear definition of the powers and duties of the ministries and public authorities whose participation is required to achieve a successful implementation and operation of the proposed project. Experience has shown that uncertainty over which set of officials has authority to deliver a particular ingredient of a BOT scheme can be a major obstacle to progress.

The private sector will also be concerned to ensure that the relevant public authorities have the legal powers available to them to perform the various functions that the project proposals envisage. These might include acquiring land and assets for the project, transferring existing public infrastructure to the private sector or providing logistical facilities for the benefit of the project. In addition, it may be necessary for legislative changes to be enacted to abolish existing state monopolies or public subsidies.

Often, these issues are addressed by specific 'concession laws' (although specific legis-

lation is not always required, particularly in common law jurisdictions). But in turn the implementation of these concession laws has sometimes been delayed by debate or court proceedings as to whether they are consistent with the country's constitution.

General business and commercial laws

The viability of a project is also dependent on an extensive framework of general business and commercial laws. BOT structures are established by means of a network of contracts between the various public and private sector participants, some of which (such as the operation and maintenance agreement) may be intended to govern the rights and obligations of the parties throughout the BOT term. Accordingly, it is essential that there is an adequate legal basis for the enforceability of contracts.

Similarly, investors will expect to find legal protection for private property rights, both against third party interference and, indeed, state expropriation and nationalisation. There often needs to be clear legal recognition of lessees' rights, and of intellectual property rights. Indeed, sponsors may only be prepared to contribute new technology and designs belonging to them where the host government has ratified the relevant international conventions and agreements acknowledging their proprietary rights and prohibiting infringements.

Company law

A fundamental feature of true BOT and other project financings is that the lenders have no (or at least limited) recourse to the project sponsors. Legislation thus needs to be in place providing for the establishment of corporations with limited liability to carry on the project business. This will also need to set out clear and flexible corporate procedures and for the subscription of equity. In addition, investors will expect to see an appropriate mechanism for the sale or transfer of shares and (where appropriate) reasonable protection for minority shareholders.

Investment laws

Adequate protection of the interests of foreign investors must be enshrined in local law.[7] In particular, they will be concerned about their rights to exchange local currency into foreign currency, to repatriate profits from the project, to bring in foreign nationals to design, build and operate the project, and to establish companies in the host country. In addition, the tax regimes must be favourable to foreign investment (or at least non-discriminatory). Foreign investors' concerns as to the perceived risk of state expropriation or nationalisation of the project business are also sometimes addressed through legislation providing for full compensation in those circumstances.

Security legislation

Lenders will, of course, expect to take effective security over the project, to allow them if possible to take over control of it in the event that the SPV defaults. But in many jurisdictions secured creditors cannot have these powers. More generally, they will be seeking to ensure that the legal framework permits them to claim a security interest in the project assets themselves, although sometimes they many be satisfied with simply rights conferred by a 'golden share' or some other non-security based mechanism to take over management of the SPV. Whatever the mechanics lenders have to be confident that no material asset or contract upon which the success of the project depends is at risk from other creditors in such a way as to place the project as a whole in jeopardy. Consequently, there must be clear regulation of the priorities of differing creditors' rights.

Bankruptcy laws

Lenders will scrutinise the bankruptcy legislation of the host country to establish that it does not contain any unacceptable obstacles. For example, there may be provisions imposing a moratorium on any enforcement action or payments as provided for in the credit agreement in certain circumstances. On the other hand, other creditors of the SPV, such as suppliers, would expect to receive a reasonable measure of protection under the general law in the event of the SPV's bankruptcy.

Other legislation

There are numerous other areas of legislation that have the potential to impact significantly on a pro-

ject's viability. Investors are likely to focus in particular on the extent of obligations and liabilities imposed by employment and environmental laws and regulations, and the cost implications will be brought into account when preparing the base case. In addition, planning restrictions can affect both the timescale and cost of projects, particularly if lengthy public enquiries are required. Indeed, if the necessary consents are not forthcoming, the project may not proceed at all.

Where the concession is intended to confer a monopolistic status on the SPV in order to achieve financial viability, it is necessary to ensure that the terms of the concession are compatible with competition law in the host country. Conversely, where state monopolies exist, the impact of these on the project will also have to be explored.

A legal framework that is favourable to private sector BOT participants in the rights it confers or protects is worthless if it is not underpinned by an effective system for the administration of justice, together with the institutions necessary to ensure the rule of law. Sponsors, lenders and contractors alike need to be satisfied that the courts will deliver quick, unbiased and high-quality justice in relation to any disputes brought before them, and that effective procedures exist for the enforcement of legal rights. In particular, private sector concessionaires will be concerned about the extent of sovereign immunity from legal action and (where appropriate) the availability of adequate waivers to enable them to action and enforce their rights against public authorities through the courts.

Where it is appropriate for disputes arising under some or all of the project contracts to be decided by foreign courts or arbitrators, private contractors will also need to be satisfied that the resulting judgments or decisions will be recognised and enforced by the courts of the host country.

Regulatory regimes

Sectors concerned with the supply of 'infrastructure services' to consumers – such as electric power, gas, water, telecommunications or public transport – tend to be among the most heavily regulated areas of economic activity. There are a number of reasons for this. For example, efficiency in these sectors is often viewed as being dependent upon the preservation of the service provider's monopoly. Furthermore, the provision of these services is widely seen as having a particular value and importance to society as a whole in the host country. Thirdly, the quality of the available infrastructure services can have a significant impact on a country's overall economic performance.

Differing approaches to regulation have been developed around the world. However, the principal objectives of regulators tend to be:

- to prevent the exploitation of consumers by monopoly providers; and
- to prevent the exploitation of private investors by government.

Accordingly, investors will want to satisfy themselves that the regulators will strike the optimum balance between these objectives in all matters that are capable of impacting on project cash flows, such as pricing or service levels. At the same time, investors will wish to ensure that there is an effective regulatory system to protect the project from direct political interference. They will expect to see clarity and precision in the regulator's powers and approach, together with effective independent review and appeal procedures from the regulator's decisions. Investors will also wish to assess the cost of compliance, in particular with the regulator's information requirements.

Procurement procedures

One of the most important functions of government in relation to any BOT financing is to manage the procurement process. In doing so, its paramount concern should be to ensure that the project meets the objectives set for the country's development. The government will thus wish to subject the proposals of different bidders to extensive scrutiny and to test them out against each other. Inevitably, therefore, bidders will be required to devote substantial resources before contract award to developing their proposals and to complying with the requirements of the tender process laid down by government.

A variety of problems can arise concerning the conduct of the procurement process. Common obstacles to private sector participation include:

- confusion over government objectives and evaluation criteria;
- lack of procedural clarity, fairness and transparency;
- inappropriate procurement methods (competitive tendering versus selection);
- failure to establish an effective prequalification procedure;
- excessive restrictions on participation;
- no clearly defined timetable;
- inadequate protection for intellectual property; and
- inefficient procurement administration.

Such problems have frequently been a major contributing factor in the failure of BOT projects to proceed. Conversely, where BOT procurement procedures have become well-established (such as those relating to independent power projects in the USA), experience shows that the costs and time involved are lower.

Administrative framework

With many BOT projects, the public sector will have a substantial and enduring involvement throughout the lifespan of the project. During the development and construction phases, the relevant ministries and public authorities will need to process applications from the SPV, sponsors and contractors for the appropriate licences and consents and, where necessary, institute public enquiries and other proceedings to enable them to issue these. Administrative action may be required in relation to other aspects of the project – such as to effect the compulsory purchase of land for the project. After the project becomes operational, public authorities will continue to be responsible for inspecting, monitoring and regulating the project business. Any of the participants in the project may at some stage need to establish or enforce their rights through the courts of the host country. In all these areas, the quality of public administration is critical.

ENVIRONMENTAL VIABILITY

The past 20 years have witnessed growing worldwide concern over the effects of economic development on the environment. This has proved to be a powerful stimulus for enhanced environmental standards (globally, as well as at a regional and local level) and steadily increasing regulation. This, in turn, can have a substantial impact on the viability of BOT projects, particularly in the following areas.

Compliance costs

Whether through the laws of host countries, the conditions imposed for the grant of concessions or the availability of the required consents or approvals, governments and public authorities will often require contractors to conduct extensive preliminary environmental impact assessments and to build into the design of projects and their operating procedures substantial environmental safeguards. Legal standards, furthermore, are not static; rather, they may be expected to rise during the BOT term in step with advances in technology[8] and changes in environmental priorities. In addition, state authorities often impose a detailed regime for monitoring compliance throughout the project's lifespan. Frequently, such requirements involve significant additional expenditure and technical resources.

Environmental liabilities

Legislation in the host country will often provide for liability to be incurred in a wide variety of circumstances. As well as imposing fines and penalties for specific criminal offences (typically, on those responsible for incidents causing pollution), the law may also extend liability to parties without the need to demonstrate culpability (such as an obligation to meet clean-up costs in respect of historic contamination of the project site). Moreover, such liabilities may not simply rest with the SPV, but may also affect sponsors, operators and other contractors, and even lenders. Insurance is not widely available at a commercially acceptable cost for all the potential liabilities.

Investment criteria of development finance institutions

Where projects require the support of development finance institutions such as the World Bank and the European Bank for Reconstruction and Development (EBRD), compliance with their policies and procedures may involve additional obligations. Many of these agencies

have adopted detailed environmental policies in relation to potential investments.[9] For most major projects, they will expect sponsors to undertake a full environmental assessment (EA)[10] prior to appraisal of the project by the agencies. They may then require as conditions of their investments the implementation of specific EA recommendations in order to meet the highest international environmental standards.

Environmental protests

Action by protesters in opposing some projects on environmental grounds (eg UK road construction schemes) has resulted in significant additional costs, as well as construction delays.

NOTES

1 Additional pressures apply to the member states of the European Union in meeting the 'Maastricht criteria' for joining the proposed single European currency, which impose strict limits on government spending.

2 With the Sydney Harbour Tunnel project, for example, the sponsors were awarded a concession to operate the existing Sydney toll bridge. Revenue from the tolls could then be used to service debt incurred in constructing the tunnel.

3 Other financial incentives commonly offered include tax holidays on project profits for a fixed period, as well as exemption from customs duties otherwise payable on imports and concessionary rates of sales or production taxes. Tax incentives have, for example, been offered by Pakistan's government to attract private sector investment in BOT power projects.

4 In a wide variety of circumstances, governments have needed to provide guarantees to the SPV or its lenders. Where government reserves the right to participate in setting the level of tolls in a road project, for example, it may have to guarantee a minimum revenue stream to secure the project's financial viability.

5 As well as being the means by which funders test the financial viability of a project proposal before entering into a commitment to invest, the base case does incidentally perform a second function: it is also used as a benchmark for the ongoing monitoring of the project's actual financial performance throughout its lifetime.

6 Although it is true that privatisation too is, for many a relatively recent development, particularly in relation to large-scale economic infrastructure (such as telephone systems or water supplies), popular understanding of the principles and concepts involved is much deeper and more widespread than it is in relation to BOT. This is because most people are familiar with the operation of capitalism and the free market.

7 See *Guidelines on the Treatment of Foreign Direct Investment*, IBRD/World Bank (1992).

8 Existing legislation in EU member states contemplates an evolving standard of environmental performance through the concept of best available techniques not entailing excessive costs (BATNEEC).

9 EBRD is specifically directed under its constitution to 'promote in the full range of its activities environmentally sound and sustainable development' (Article 2) and has committed itself 'to assist its countries of operations in the adoption of sound environmental policies as delineated in Article 130r in the Treaty on European Union' (EBRD Environmental Policy, September 1996).

10 The agencies may also expect to review and approve the terms of reference for environmental assessments.

Chapter 3
Tenders

INTRODUCTION

As the unsuccessful bidders for the Channel Tunnel rail link in the United Kingdom can bear out, abortive tendering for large scale infrastructure projects costs enormous amounts of money. Nevertheless, competitive tendering is now a feature of most BOT projects, and in certain areas (notably the European Union (EU)) it is a legal necessity.

There is an art in managing tenders both from the public sector side and for prospective tenderers. As regards the public sector, the efficient running of a tender process will encourage sensible bidding and a wide selection of prospective tenderers, while on the private sector side tender processes that require substantial amounts of expenditure by bidders against an uncertain prospect of success are unlikely to be attractive. This is particularly the case where there is no actual certainty of a contract actually being awarded – for instance, where the project being tendered for is politically sensitive.

One response to this disincentive to tenderers is for the party seeking the tenders to indemnify bidders against all or part of their bidding costs. This can in some cases bring other benefits as it gives the party seeking the tenders an incentive to act as efficiently as possible and encourages tenderers to be more innovative in their bids. Unfortunately, general parsimony on the part of those seeking tenders and a particular reluctance to incur up-front costs means that there have been few projects carried forward on the basis where any substantial contribution has been made to bidders' costs. Such a contribution to bid costs was available in the Channel Tunnel rail link (CTRL) competition in the UK and also on the Lewisham extension for the London Docklands Light Railway, but the contributions available were in each case far less than the actual costs incurred by bidders.

Without indemnities against bid costs, bidders will only tender for projects that they believe are well run and organised and where they think that they have a good chance of success – ie sufficient to risk the costs of bidding if their bid fails.

CHOICE OF TENDER PROCESS

Tenders are about pricing and apportionment of risk, and tender procedures vary. Processes range from traditional straightforward tenders where tenderers are provided with copies of the contract documentation and asked to price their bids without the opportunity to negotiate, through to less traditional forms of tendering where, for example, a shortlisted set of tenderers may be invited to negotiate with the awarding body to settle both the financial and non-financial terms of the project. The choice of tender process will depend largely on the nature of the project, but broadly there are three types of approach:

- The open tender procedure (the traditional form of tender for construction contracts) where a group of tenderers are approached and asked to tender on the basis of being supplied with a specification and contract terms. Tenderers are given no opportunity to negotiate such terms and are merely asked to price their bid.
- The semi-negotiated procedure, which involves producing model documentation to a prequalified shortlist of tenderers (normally three to five in number) and encouraging tenderers to bid on the basis of that model documentation. Tenderers submit not only the financial terms of their bid but also details of the alterations to the model form of documentation they would require in order to sustain their bid at that level. This procedure is particularly popular in the Private Finance Initiative (PFI) projects carried out by the UK government.
- The fully negotiated approach is much less structured and involves the selection of a preferred tenderer from a shortlist of selected tenderers. Following selection, the terms of the project and the project docu-

mentation are negotiated from scratch with the selected tenderer. Although this approach has been adopted in some of the UK PFI tenders (particularly in the health sector), the view is often expressed that the awarding body's inability to 'play off' one tenderer against another outweighs its convenience and relative cheapness.

RISK TRANSFER

At the heart of the decision as to which tender process is to be adopted lies the issue of risk transfer. Where there is certainty on the part of the host government as to the type and degree of risks to be borne by tenderers, and where there is confidence that the tenderers will be prepared to accept such risks, then a simple, standard form, open tender procedure may well be appropriate. Where, however, such certainty cannot exist because, for instance, of the novelty of the project or the fact (as in the UK PFI schemes) that the host government wishes to transfer risks to tenderers to which they are unaccustomed, then a traditional form of tender would clearly be inappropriate as it is inevitable that negotiations about the degree and methodology of the risk transfer will be required.

A typical BOT project requires assimilation on the part of the tenderers of a number of risks. In general terms, these risks can be broken down into five broad areas:

1 Risks associated with design and construction of the infrastructure.
2 Risks associated with the financing of the construction.
3 Operational risks relating to the running and maintenance of the facility.
4 Risks associated with the robustness of remuneration mechanisms and the income stream from the project.
5 In broad terms, political or legal risks, including, for example, public liability risks.

In an ideal world – for host governments – the government would seek to transfer all these risks to the bidder. Conversely, tenderers for projects will obviously wish to minimise the degree of risk they take on, and certainly will be reluctant to accept classes of risk that are beyond their control. The returns that tenderers and their financiers will wish to receive from the project will, at best, incorporate a risk premium to reflect unquantifiable or unascertained risks taken on in the project, and at worst will lead to tenderers refusing to bid for projects and financiers refusing to finance them. Accordingly, in every tender process a balance must be struck between the desire of the host government to transfer as much risk as possible and obtain public value for money, and the unwillingness of tenderers to accept unusual or incalculable risks either at all or only on a basis requiring significantly enhanced remuneration.

Problems with prisons in the UK on a DCMF basis

The UK PFI provides some interesting case studies in the transfer of risk and developing successful tendering processes. In 1994 the UK government decided to award concessions to design, construct, maintain and finance two prisons (one at Bridgend in South Wales and one at Fazakerley on Merseyside). The initial competition for these prisons failed, mainly due to the government's overambitious desire to transfer risk.

In an effort to pass on significant risk and thus to show value for money for the public purse, the government originally asked tenderers to accept payments based on the demand from the judicial system for use of places in the prisons. The government was told by bidders that such an approach was unacceptable and that tenderers were not prepared to proceed and bid on the basis that they were taking the risk as to how many prisoners would actually use the prisons. Tenderers felt that by accepting demand risk they would be exposed to the vagaries of judicial sentencing policy (which might, for instance, move in favour of non-custodial sentences) or that they might be prejudiced by subsequent political decisions to use space in publicly operated prisons ahead of capacity in the privately operated prisons.

Subsequently, when the prison competition was relaunched, the remuneration to the operators was based on the availability of cell space in prisons; the winning bidders were to be paid provided that cell space was made available to agreed standards, regardless of whether or not

the prisons were actually filled with prisoners. The DCMF prison programme has since developed satisfactorily.

This case illustrates the importance of gauging correctly the risk transfer when launching competitions for BOT projects. There is no point in the host government being overambitious and trying to impose unacceptable risks because if it does the project will simply fail. Careful market research and discussions with potential bidders before tenders are invited will lead to a better understanding of what the market will and will not bear, and what financiers of such projects will and will not be prepared to accept.

A number of host governments have developed complex risk matrices prior to launching their competitions. Their purpose has been to analyse, in as scientific a way as possible, the risks associated with the proposed project and to consider how such risks are most appropriately allocated. This approach is time-consuming and relies on the host government (or at least its advisers) having a full understanding of what risks can reasonably be expected to be borne by the tendering parties. A strong advisory team that knows the market well can be invaluable here in ensuring that risks are not passed to tenderers when there is no reasonable likelihood they will accept them, either at all, or on a basis which gives value for money to the public sector.

INVITATIONS TO TENDER

Tender based projects are usually begun by advertisement. (The legal requirements of public procurement mechanisms and, in particular, the EU law on procurement, are considered in the next section.) Sometimes when EU law does not apply, projects will be widely advertised and prospective tenderers invited to enquire for further information (often requiring payment of a fee), while in other cases selected organisations may be approached by the host government in order to 'sound out' their interest in bidding for particular projects.

The UK government in its PFI schemes has adopted a two-stage process to tendering. In almost all cases, projects have had to be advertised in the *Official Journal of the European Communities* (OJEC) and expressions of interest have also been sought from parties. Those expressing interest have been invited to submit basic information about themselves and, based on this information (and sometimes after an interview), a shortlist of between three and five organisations has been drawn up to go forward into the tender process.

Leaving aside any advertisements required by applicable procurement law, the invitation to tender documentation is the first legal stage in carrying forward a project. The form of the invitation to tender (ITT) will vary from project to project, and particularly will vary depending upon the type of tender process adopted. Nevertheless, the ITT will set out the legal rules and basis upon which the tender competition will take place and, in certain cases, the host government may be held legally liable if it fails to conduct the tender in line with the mechanisms set out in the invitation.

The ITT (or invitation to negotiate – ITN) will contain information about the project and the tender process to be adopted, and will also set out the timetable for the tender process and tender requirements. The tender requirements are likely to include the provision of information about the tenderers, non-collusion certificates and financing methodologies. Sometimes indications will also be required as to how the project will be approached by the tenderer, together with comments on amendments to the model contract documentation and, importantly, a priced bid. The required priced bid may simply be a lump sum price or it may be a far more complex financial model indicating the revenue stream that a tenderer wishes to receive in respect of the project.

Governments adopt a number of different approaches to tenders. One extreme is to include in the ITT the contract documentation, and to state to tenderers that no amendment to this is permitted so that the ITT simply requires pricing; the other extreme is to supply no contract documentation in the ITT but to require indicative proposals, leaving contract negotiations to be dealt with once a preferred bidder stage has been reached. The mid-point in this range of options (and arguably the most satisfactory solution in the case of substantial projects) is for model documentation to be supplied to tenderers but for

tenderers to be invited to suggest what amendments to that documentation they would require in order to sustain their bid. Alternatively, the host government may invite bids on two bases: one requiring adherence to the standard form documentation, and the other based on such variations to the documentation as the tenderers would like to see.

With smaller projects it may be uneconomic to prepare full model contract documentation at the tender stage, but even in these cases it is usually worthwhile developing well-structured heads of agreement. The alternative of not dealing with documentation issues until the preferred bidder is selected tends to lead at that stage to a reversal of bargaining power, allowing the preferred bidder to dictate, to a greater extent than would otherwise be the case, the terms of the eventual documentation.

Bidding for BOT projects is not to be taken lightly. In making a bid a tenderer may be making a legally binding offer that is capable of acceptance by the awarding authority so as to constitute a contract. This is certainly the case in simple competitions. A more complicated tender competition is, however, unlikely to be legally binding and post-bid negotiation of some sort is usually required. In all tenders, the ability of any tenderer to increase its bid after having responded to a tender is likely to be very limited.

PUBLIC PROCUREMENT LAW

BOT public works projects (which are above the relevant threshold value) in EU countries are subject to the Public Works Directive which governs the mechanism by which most public sector works contracts in the EU are awarded. The rules imposed by the Directive (as implemented into the domestic law of the 15 EU member states) are highly complex and a number of uncertainties exist concerning their effect. The absence of many decided cases on the rules and their interpretation does not help.

The rules provide for three possible tendering processes, each of which (with some exceptions in the case of the negotiated procedure) must begin with the placing of an advertisement for the project in the 'S' series of the OJEC. The three tender processes are:

1 *The open procedure.* This is where tenderers are invited to bid simply on the basis of an advertisement in the OJEC and any supporting papers that may be made available. There is no limit on the number of people who may bid. This method is only appropriate for straightforward tenders.
2 *The restricted procedure.* This applies where, following advertisement in the OJEC, the persons wishing to tender are invited to prequalify for the scheme, and then prequalifiers are invited to tender. This is appropriate where a project is of a nature and complexity such that it is unrealistic to have a large number of tenderers in competition. Some PFI projects have been taken forward under this procedure, but it does not lend itself to negotiation with tenderers because it provides (as in the case of the open procedure) only limited scope for the public body to discuss with tenderers modifications to their written tender proposals.
3 *The negotiated procedure.* There are, in effect, two forms of the negotiated procedure. In certain cases, it can be adopted without a prior notice in the OJEC: these circumstances are, however, limited. The commonest circumstances justifying this no-notice approach are emergencies, the addition of extra works to an existing contract, or where the existence of exclusive intellectual property rights means that an open competition is not possible.

The second form of the negotiated procedure does involve a prior advertisement in the OJEC, prequalification, and a competition between bidders. In this case, an ITN is issued to prequalified bidders to negotiate with the public sector in order to achieve the economically most advantageous terms. The approach is only permitted in limited circumstances, but 'exceptionally' is permitted where the nature of the project is not suitable for overall pricing. Some doubt previously existed as to whether the word 'exceptionally' in the rules meant that this procedure could be generally used for PFI projects. However, it is understood that the UK government has obtained informal guidance from the EU Commission that the Commission will not object to this approach,

although what view the courts will take remains untested at present. This latter form of the negotiated procedure is now the preferred approach of the UK Treasury in sourcing PFI projects and is currently being used in a number of major PFI projects. Its obvious advantage is to allow greater flexibility for the host government to achieve agreement in what is often a highly complex project. The disadvantage for the host government is that running three or more sets of negotiations in parallel with the various bidders is labour- and cost-intensive.

This summary does not deal in detail with a very large number of technical rules that govern the tendering process. In some cases, the process is so technical that, in any tender competition, an unwitting infringement of the rules by the host government represents a distinct possibility. The fact that the rules are so hard to implement is exacerbated by the sanctions that exist in the case of breach of these rules. In essence, an aggrieved tenderer who believes that the EU rules have been broken has two remedies:

- an injunction to stop the tender process and to require it to restart from the beginning;
- the award of damages against the host government to reflect the loss or damage that has been suffered as a result of the correct tender procedures not being followed.

Although there has been only a limited amount of litigation over the operation of the rules, there is a real concern that in some projects significant litigation could arise in respect of alleged breaches of the tendering process. In some of the major projects the costs of tendering may amount to many millions of pounds and the possibility of the tendering process being invalid and having to be recommenced gives rise to much cause for concern.

INTERNATIONAL PROCUREMENT

World Trade Organisation

Two important international procurement regimes have been established under the auspices of the World Trade Organisation (WTO). These are the Agreement on Government Procurement and the General Agreement on Trade in Services.

Agreement on Government Procurement

The Agreement on Government Procurement (GPA), signed in Marrakech on 15 April 1994 – at the same time as the agreement establishing the WTO – came into force on 1 January 1996. It supersedes the earlier Agreement on Government Procurement signed in 1979 and amended in 1987.

The GPA is a plurilateral agreement under the Agreement Establishing the WTO (contained in Annex 4 to that Agreement) which means that not all WTO Members are bound by the GPA. As at November 1997, the parties to the GPA were the countries of the EU, Canada, Hong Kong, Israel, Japan, Korea, Liechtenstein, Netherlands (Aruba), Norway, Singapore, Switzerland and the US.

It is estimated that the volume of procurement subject to regulation under the GPA has increased tenfold when compared with the earlier 1979 GPA[1] which applied to fewer fields of government procurement. This is because the GPA now applies not only to suppliers' procurement, but also covers works and some services. Furthermore, some sub-central entities and public utilities are now covered.

Scope

The GPA does not cover all government procurement of the signatories. According to Article 1 of the GPA, only public procurement by entities 'as specified in Appendix I' is covered. Appendix I is divided into categories in respect of each of the parties to the GPA:

- central government entities (Annex 1);
- sub-central government entities (Annex 2);
- other entities (Annex 3);
- services covered (Annex 4);
- construction services covered (Annex 5).

No definition of the entities covered is given. There has been some uncertainty as to whether the list of entities in the Annexes is exhaustive, but some commentators believe that this is the case.[2]

Only procurement contracts above the thresholds specified in Appendix I are covered. Each party indicates the level of minimum thresholds that apply to the procurement of goods, construction services and services other than construction services, in respect of each class of entity specified in Annexes 1, 2 and 3. The thresholds are

expressed in terms of Special Drawings Rights (each being equivalent to US$1.37 for 1997). For example, the threshold applying to the supply of goods to central government entities of all parties is SDR130,000 (approximately US$178,000).

However, the picture is complicated by the fact that most parties have set out exceptions to the general rules specifying the types of entities that are covered.

These exceptions are to be found at the end of the schedules to the GPA. Consequently, even if a public procurement contract is above the relevant threshold and would otherwise be covered by the GPA, it could be excluded by one of these country-specific exceptions.

Exceptions for developing countries are also allowed in certain circumstances. Article V provides that the parties shall 'in the implementation and administration of this Agreement ... duly take into account the development, financial and trade needs of developing countries', and goes on to establish a set of principles which should be taken into account in this respect, namely the need to:

- 'safeguard their balance of payments position';
- 'promote the establishment or development of domestic industries...';
- 'support industrial units as long as dependent on government procurement'; and
- 'encourage the developing countries' economic development through regional or global arrangements among developing countries'.

Further exceptions are set out in Article XXIII, dealing for instance with the need to protect national security or defence and the need to protect public morals, order, safety, human, animal or plant life or health or intellectual property.

The GPA does authorise parties to modify the mutually agreed coverage of Appendices I–IV, subject to the procedures for the modification of the GPA as set out in Article XXIV(6). The EU and US have already agreed to extend the scope of the projects covered by the GPA. In 1995, under their much publicised 'Procurement Pact'[3], they agreed to amend Appendix I of their respective agreements to increase the areas (geographical and sectoral) covered by the GPA. The remaining signatories to the GPA are excluded from the benefits accorded by the Pact but are free to conclude their own bilateral agreements.

Main features

The GPA establishes an agreed framework of rights and obligations between its parties with respect to their national laws, regulations, procedures and practices in the area of public procurement.

The cornerstone of these rules is the principle of non-discrimination: under Article III of the GPA parties are required to give the products, services, and suppliers of any other party to the GPA a treatment 'no less favourable' than that which they give to their domestic products, services and suppliers.

The parties have further agreed not to discriminate against goods, services and suppliers of the other parties.

Finally, each party is required to ensure that its entities do not treat a locally established supplier less favourably than another locally established supplier on the basis of degree of foreign ownership or affiliation, nor to discriminate against a local supplier on the basis of the country in which the goods or services which are to be supplied are produced.

Due to this emphasis on the principle of non-discrimination, the GPA focuses on rules and procedures for providing transparency of laws, regulations and practices in respect of government procurement.

Procedures

Three different procedures are provided for under the GPA:

- Open Procedure (Article VII(3)(a)). Under this procedure, all interested suppliers may submit a tender.
- Selective tendering procedure. Only those suppliers invited to submit a tender by the entity may do so. However, the entity inviting tenders must observe the provisions of Article X which prohibits any discrimination in the way the invitations to tender are made; Article X(1) requires, for instance, that a minimum number of foreign and domestic suppliers are invited to tender.

  Further safeguards against discrimination are set out in Article VIII. According to this provision, qualification procedures must comply with the following:

  – any conditions for participation are to be

published 'in adequate time' to enable interested suppliers to submit their tenders; and
- conditions for participation must be limited to those essential to ensure the prospective supplier's capacity to fulfil the contract in question.

Entities are prohibited from not considering potential suppliers for inclusion on their list. They are required to inform all suppliers on their lists should the lists be terminated.

Finally entities must publish their list of permanent suppliers once a year in one of the publications listed in Appendix II(a) to the GPA.

- Limited tendering procedure (Article VII(3)). Under this procedure entities contact suppliers individually, subject to the conditions set out in Article XV. This restricts the circumstances under which this tendering procedure can be used, for instance, to cases of extreme urgency brought about by events unforeseen by the entity, or situations in which the product or service can only be supplied by one supplier.

All procedures must allow for minimum deadlines for the preparation, submission and receipt of tenders (Article XI(2)):
- In the case of the open procedure, the period for the receipt of tenders should not be less than 40 days after publication of the invitation to tender.
- In selective procedures, not using permanent lists of suppliers, the period for submitting an application to be invited to tender should not be less than 25 days from publication, and in no case should the deadline for receipt of the tenders be less than 40 days from issuance of the invitation to tender.
- In selective procedures involving the use of permanent lists of qualified suppliers, the period for receipt of tenders shall not be less than 40 days from the initial issuance of invitations to tender.

These deadlines may be reduced in exceptional circumstances, as set out in Article XI(3).

All tender documents provided to suppliers must include all information necessary to allow parties to submit responsive tenders (for example, address of the entity, deadline and languages in which the documents are to be submitted (Article XII)).

Article XIII contains further general procedural rules in respect of submission, receipt and opening of tenders and awarding of contracts. Again, these are aimed at ensuring fairness, equity and transparency in the procurement process. Article XIII(1)(a), for instance, stipulates that tenders should normally be submitted directly or by mail. Tenders by facsimile, telex or telegram are only permitted if they contain all relevant information (as to price and conditions) and include a statement that the tenderer accepts all terms and conditions of the invitation to tender. A tender submitted in such a way must be confirmed 'promptly' in writing . In order to allow for the adaptation of the GPA to potential new ways of data transmission (eg by Internet), the GPA contains a provision for regular consultations by a Committee 'regarding the developments in information technology' and if necessary negotiation of modifications to the GPS itself (Article XXIV(8)).

Only tenders that conform with the essential requirements of the tender notice at the time of opening the tenders can be considered for award of the contract.

Other provisions

The use of 'offsets' is specifically prohibited by the GPA (Article XVI). Offsets are defined in footnote seven to the GPA as 'measures used to encourage local development or improve the balance of payments accounts by means of domestic content, licensing of technology, investment requirements, countertrade or similar requirements'.

In order to prevent the use of technical specifications as a barrier to international trade, the GPA stipulates, for example, that technical specifications should be in relation to 'performance rather than design or descriptive characteristics' and 'be based on international standards, where such exist' or failing that, be based on recognised national standards (Article VI).

Post-award information

Entities must publish the award of a tender no later than 72 days after the award of the contract in an appropriate publication as listed in Appen-

dix II. Information given in the published notice must include the name and the address of the winning tenderer, name and address of the entity awarding the contract and the date of the award. In addition, information on the value of the winning tender, or the value of the highest and lowest offers considered, must be provided.

On request, the entity must supply an unsuccessful tenderer with the reasons why his tender was not selected (Article XVIII(2)).

More generally, all laws, regulations, judicial decisions or administrative rulings of general application to government procurement must be published (Article XIX(1)).

Challenge and enforcement

A new feature of the GPA is the inclusion of mandatory requirements for a domestic procedure for challenging alleged breaches of the GPA. Article XX(2)-(7) sets out the requirements, which include an independent review body with the authority to order the correction of the breach, giving a supplier suspecting a breach of the GPA a right of recourse to an independent domestic tribunal as a first step.

Furthermore, Article XX(7) stipulates that the challenge procedure shall provide for 'rapid interim measures to correct breaches...and to preserve commercial opportunities'. Such interim measures may include suspending the procurement process.

Disputes under the GPA are also subject to the procedures of the WTO 'Understanding on Rules and Procedures Governing the Settlement of Disputes' (Article XXII(1)). The GPA provides for a Dispute Settlement Body which has various powers, including the authority to make recommendations and give rulings, and to authorise the suspension of concessions or other obligations under the GPA (Article XXII(7)). It has, however, been argued that the WTO dispute resolution mechanism is available only after domestic remedies have been exhausted (unless these should prove to be insufficient or non-existent).[4]

General Agreement on Trade in Services

All WTO Members are signatories to the General Agreement on Trade in Services (GATS). This agreement, also signed in Marrakech in April 1994, introduces common rules for trade in services. It obliges Members to accord to services and service suppliers of any other Member no less favourable treatment than it accords to like services and service suppliers of any other country.

This principle does not, however, apply to 'laws, regulations or requirements governing the procurement by governmental agencies of services purchased for governmental purposes and not with a view to commercial resale or with a view to use in the supply of services for commercial sale' (Article13(1)). The inclusion of such an exception is understandable in view of the wide support given by Members to the GATS. The Members did, however, agree to enter into multilateral negotiations on government procurement in services under GATS within two years of the entry into force of the GATS.

The Working Party on the GATS Rules was established in March 1995. At the end of 1996, it reported that 'Members have considered the implications of the existence of the Agreement on Government Procurement for any disciplines that might be developed in GATS, as well as some of the reasons given by Members as to why they are not signatories of the GPA. Members are also engaged, on a voluntary basis, in an information-gathering exercise in relation to national procurement regimes affecting trade in services.'[5]

The Singapore Ministerial Declaration of December 1996 underlined the Ministers' commitment to continue studies in this area. The Declaration states that Ministers intend to carry out more analytical work on the subject of government procurement in relation to trade in services in the future. Their work will continue to be done in parallel with that of the GPA Working Group on Transparency in Government Procurement, the latter having already considered the findings of the Working Party on the GATS Rules in their own discussions (see below).

Outlook

In order to broaden the application of the GPA, the idea that an interim agreement on procurement should be developed under the auspices of the WTO has been expressed.[6] Such an agreement is meant to encourage states which have not signed up to the GPA and are not prepared to submit themselves to its rigours to

undertake to observe at least some public procurement obligations.

This issue was considered at the WTO Ministerial Conference in Singapore in December 1996. As a result, the Singapore Ministerial Declaration from the conference contains a reference to the future work planned in this field within the WTO. Article 21 of the Singapore Declaration announces the intention of the parties to establish a working party to study the transparency of public procurement procedures and to develop principles which could be included in a future interim agreement.

The WTO Working Group on Transparency in Government Procurement has already begun work on the first of these tasks. At its meeting in May 1997, the Group met representatives from the World Bank and UNCITRAL who described the methods of procurement favoured by their own organisations (see below). The World Bank, UNCITRAl and the IMF have observer status at the Working Group meetings.

In its second meeting in July of the same year, Group Members shared their thoughts on the concept of transparency and discussed how common objectiyes could be achieved within the current legal framework. Special presentations were given by the WTO Secretariat and several of the national delegations.

At its third meeting in November 1997, the information gathering process continued with the Secretariat presenting the results of empirical research carried out by several international organisations, the national delegates and by the Working Party on the GATS Rules. Discussions centred on identifying the main issues still to be resolved.

The Group's objectives are likely to be discussed further before it embarks on the second and more interesting part of its mandate: the development of new agreed provisions on transparency for government procurement policies.

United Nations Commission on International Trade Law (UNCITRAL)

UNCITRAL was established in 1966 by the UN General Assembly. It is responsible for overseeing and developing the law of international trade. An important part of its work to date has been in projects aimed at the reform and modernisation of the laws on public procurement. In 1994, the Commission adopted the UNCITRAL Model Law on Procurement of Goods, Construction and Services.[7] This sets out the Commission's recommended procedures for producing a competitive, transparent, fair and objective procurement regime. All stages of the procurement process are covered in the Model Law, including guidelines on prequalification procedure, qualification criteria, the form of communications, methods of procurement and tendering proceedings (solicitation, submissions, evaluation and comparison). The Commission claims that use of these procedures produces the most efficient and economical procurement system.

As at December 1997, only Albania and Poland have passed legislation based on the Model Law.

World Bank Procurement

The World Bank provides financing for both public and privately managed projects. In both cases it is the borrowing organisation which is responsible for arranging procurement. However, the Bank's financial involvement in a project is conditional on the parties using Bank approved procurement procedures. Failure to use agreed procedures (as these are set out in the loan documentation) may result in the cancellation of any funds made available for the project.

For any project to be eligible for financing, the procurement procedures used must accord with those set out in the Bank's *Guidelines: Procurement under IBRD Loans and IDA Credits* publication and in the Standard Bidding Documents (SBDs). These procedures are based on four basic principles which underlie all World Bank funding of projects: efficiency, fairness, transparency and impartiality.

Applying these principles, the Bank generally prefers borrowers to use the international competitive bidding process (ICB). Characteristics of this process include the publication of Notices publicising the work in the *United Nations Development Business* and public bid opening. Other approved processes include limited international bidding and national competitive bidding.

Awards must be made to the lowest evaluated responsive bid. The bids will be evaluated

in the light of a range of factors including, but not limited to, financial cost.

European Bank for Reconstruction and Development

The EBRD also has a requirement that goods, works and services procured under EBRD financed operations which exceed certain thresholds must be subject to an open and fair competition. This is touched on in Chapter 6.

NOTES

1 Amended in 1987. See Sue Arrowsmith, 'Developing Multilateral Rules on Government Procurement: a new Approach in the WTO?', 5 *Public Procurement Law Review* (1996), p145.

2 See, for instance, Pablo Olivera 'Defining the Scope of Covered Entities under the WTO Agreement on Government Procurement and the EC Procurement Rules', 1 *Public Procurement Law Review* (1997), p17.

3 Council Decision 95/215 of 29 May 1995 concerning the conclusion of an Agreement in the form of exchange of letters between the European Community and the United States of America on government procurement, OJ L 134/25, 1995.

4 Christian Schede, 'The 'Trondheim Provision' in the WTO Agreement on Government Procurement: Does this 'Major Revision' live up to the needs of the private sector?' 5 *Public Procurement Law Review* (1996), p171.

5 The 1996 Report of the Council for Trade in Services to the General Council (S/C/3).

6 On this see Sue Arrowsmith, 'The WTO Singapore Ministerial Declaration and Public Procurement', 9 *Public Procurement Law Review* (1997) p CS49.

7 See also the Guide to Enactment of the UNCITRAL Model Law on Procurement of Goods, Construction and Services (A/CN.9/403).

Chapter 4
Overview of Contractual Structures

The long-term success of a new infrastructure project is dependent on the correct identification of both the benefits and the risks associated with it. Correct identification must be followed by appropriate allocation of these benefits and risks – the latter to the party best able to minimise or control them at realistic cost. The project sponsors and the SPV should, in conjunction with the SPV's lawyers, analyse the risks arising under each project contract, identify which party is to take these risks and ensure that the appropriate provisions appear in the relevant contracts to achieve this. The lenders and their advisers will need to satisfy themselves that this has been achieved under the contractual structure and other relevant laws, in a way that is consistent with the assumptions underlying the financial plan.

Given that a number of parties with differing interests will be involved in the project, the final pattern of risk allocation will be made within a contractual framework that reflects the outcome of negotiations and commercial compromise, and one that also takes into account the relevant legislative framework. (For example, in those countries that have enacted concession laws, certain areas of risk allocation may be predetermined by those laws and not susceptible to consensual allocation by contract.) The following discussion of contractual structures must therefore be treated as broad guidance rather than universally definitive.

There are several different perspectives to keep in mind in any general discussion of project contracts. These documents will represent long-term commercial agreements designed to protect the interests of the project sponsors. Secondly, they will allocate the perceived risks associated with the project between the different participants. Finally (at least on a project financing) they will need to be 'bankable'. Each of these considerations will pull the parties to them in somewhat different directions as the documents are structured and negotiated.

There is, of course, no single definition of the term 'project contracts'. It tends to be used loosely to describe all the documents needed to allow the transaction to go ahead, other than the financing documents. It represents all of the commercial agreements, licences, contracts, leases and corporate documents that underpin the deal that is being financed. A typical list might include the following:

- a concession agreement or government licence;
- a consortium (or other collaboration) agreement between the sponsors;
- a shareholders or other joint venture agreement;
- corporate documents for the SPV (and any other project company);
- a construction contract (or engineering, procurement and construction contract (EPC));
- construction sub-contracts, supply agreements and warranties;
- security for the contractor's performance (eg a performance bond, advance payment bond or maintenance bond);
- an operation and maintenance agreement;
- a supply contract (eg fuel supply);
- an off-take agreement for purchase of the completed facility's product (eg a power purchase agreement with the electricity board);
- throughput and 'tolling' agreements (on a pipeline project);
- a site lease or other document of entitlement to land;
- possibly specific enabling legislation (eg a 'hybrid bill' in the UK);
- ancillary government permits and planning consents (eg import licences, central bank permits, planning consent etc.);
- agreements with local utilities (eg water and electricity);
- project insurances and related documents; and
- technology/operating licences.

It should be noted that not all the rights required by the SPV will be acquired by contract. Some rights may arise as a matter of general law (for example, the European Union is promoting the concept of third-party access to transmission systems for such supplies as gas, electricity, rail

and telecommunications) while in other cases the rights to be granted as part of a concession may result from the holding of a competition subject to national or transnational tendering rules (see Chapter 3). Specific statutory rights may be granted for a particular development, such as the Docklands Light Railway in east London or the Channel Tunnel rail link. Generally applicable laws relating to such diverse matters as environmental liability and labour rights will have an effect on the SPV's business. It is necessary to identify on a project-by-project basis the impact of such rights and liabilities. Whether specific provision needs to be made for them will depend on the nature of the project business and where the associated risks fall.

The project contracts form the heart of any BOT project. The scope of the individual contracts will inevitably vary from project to project. The project contracts encountered on a power project will in many respects look very different from those needed on a road or rail project or a telecommunications financing. Many of the same considerations will apply, however, from project to project in the BOT field. The rest of this chapter will discuss those considerations in more detail, in the context of an analysis of the key provisions of a number of those contracts. (Concession agreements are discussed in detail in Chapter 5.)

CONSORTIUM AGREEMENT

In almost every large-scale infrastructure project a number of sponsors will come together in order to promote a project and participate in it as a consortium.

Typically in a BOT structure, a construction company and/or supplier of major plant or feedstock and a future operator of the new business will cooperate to establish or bid for a project. They may be joined by a future purchaser (an offtaker) of the product or service to be provided by the new project business. These parties have a common interest in seeing that the project business is established and financed. The consortia for the early UK independent power plants (IPPs) typically included a major turnkey contractor, an operator and a regional electricity company as offtaker.

However, each member of such a consortium will also have different interests to promote in its separate dealings with the SPV. For example, a construction company or supplier will inevitably look for favourable terms in the construction or supply contract. These may have adverse time, cost and liability implications from the SPV's perspective. The operator, on the other hand, whilst concerned that the performance of the completed works will allow it to control maintenance costs and maximise its profits from operation, may also seek to limit its liability and financial exposure to the SPV.

From an early stage the sponsors will need to define their mutual obligations. Questions include:

- What exactly is the role of each party?
- How much human and economic resource will each party commit to different phases of project development?
- How will each party protect its commercial interests in the project, whilst placing suitable restrictions on its potential liabilities?
- How will decisions be made by the consortium/SPV and contracts with it drawn up?
- How will losses be apportioned (often a relevant tax consideration)?

At the initial stages of development, the sponsors may draw up heads of agreement or a memorandum of understanding which focuses on such issues, and decide the form of their initial and future cooperation. The document may be legally binding or may be an expression of intention not intended to create enforceable rights and obligations. In some jurisdictions (eg the Netherlands) even preliminary heads of agreement may be interpreted by the legal system to be legally binding. The parties may be loosely described as a consortium or joint venture or acting in consortium, but the terminology does not necessarily describe a legal form – that will depend upon the parties' underlying arrangements as interpreted in the relevant jurisdiction.

The sponsors may, however, go one step further and enter into a formal consortium or collaboration agreement. Once the SPV has been incorporated and started trading, the shareholders agreement regulating its membership is likely to supersede such an agreement. In the interim, however, the sponsors may feel

the need to give a degree of formal expression to their relationship during the early stage of the project (especially where commitments and potential liabilities are significant).

Agreement terms

A consortium or collaboration agreement usually takes the form of a relatively short document setting out an obligation to collaborate in the initial phases of the project's development and to commit certain resources to it. The main provisions will cover the following areas:

1 *Cooperation and resourcing.* The agreement will contain an (inevitably imprecise) obligation to cooperate and work together towards the successful development of the project. To flesh out this duty, something will have to be said about the commitment of resources: what personnel will be made available to the project, for example in terms of numbers, seniority and experience of staff; what, if any, physical assets may be supplied; and how proprietary know-how and intellectual property (which at this stage will probably remain in the ownership of the party supplying it) will be used?

2 *Decision making.* Provision will have to be made for regular meetings between the parties and the making of certain decisions about the project. There may be a 'steering committee' of some kind, for example, at which the more high-level policy issues are discussed and settled. This will obviously be a more difficult provision to structure where a multi-party consortium is involved. If there are only two sponsors, a formal procedure may be almost superfluous. The greater the number of sponsors, the greater the need for clear mechanisms that promote the rapid and effective implementation of decisions. A two-tier structure may have to be introduced, allowing certain decisions to be taken on a majority basis while reserving others for unanimity.

3 *Costs.* The consortium will incur certain costs and expenses as its work progresses. These may include the fees of professional advisers, or temporary office costs. The sponsors will have to agree on how these costs are to be met and shared between them. A more difficult question relates to the recovery of 'internal' costs – the notional cost represented by the time and skills of the sponsors' staff working on the project, and the attribution of value to the work they carry out. Frequently, this will be treated as a 'sweat equity' investment – ie converted into equity in the SPV as the project develops and remunerated in that way. How those costs and value attributions are measured, and what conversion factors are applied, can prove challenging issues.

4 *Reserved roles.* Sometimes, the sponsors will seek to map out specific roles for themselves in the agreement in relation to the future SPV's activities. This may be either as contractors providing services to the SPV on an arm's-length basis, or as participants in the SPV's activities with primary responsibility for certain designated areas. In many cases, the respective roles of the sponsors will be so self-evident that the question hardly needs to be addressed. In a more complex consortium, however, there may be certain overlapping functions between sponsors. The exercise of defining 'reserved roles' can then become extremely contentious. The sponsors may also seek to lock the consortium into an agreed remuneration structure in relation to these future roles, which can of course add to the difficulties. Because the detailed agreements necessary to give effect to 'reserved roles' of this kind would usually not be settled until a later stage of the project, the technical lawyer may object to such provisions in a consortium agreement as unenforceable 'agreements to agree'. However, that rarely diminishes their commercial significance in the minds of the participants!

5 *Termination and withdrawal.* The agreement may have to deal with termination and the right to withdraw from the consortium. These provisions are perhaps of less significance than in the case of a more advanced joint venture, with extensive assets and liabilities of its own. It is true of any joint venture that the constructive cooperation of the sponsors will always be essential; if this breaks down, or if a sponsor loses interest in the consortium, the provisions of the consortium agreement are unlikely to provide a solution – more likely only a basis for a claim for compensation. There is likely to be a 'drop dead date', however, by which certain

progress must have been made or the agreement will terminate. Provision may also need to be made for a situation where a disenchanted sponsor seeks an exit route, whilst leaving the majority to press ahead with the project on much the same basis as before.

6 *Exclusivity and confidentiality.* Membership of the consortium is likely to have to be on an 'exclusive' basis. There will usually be a prohibition against competition with the activities of the consortium, and perhaps a restriction on becoming involved with a rival consortium (even following the success of the latter in a competitive tender). Confidentiality undertakings are likely to be extensive.

PROJECT VEHICLE

Whatever the differing interests amongst the consortium and whatever the rules under which it operates, clearly the promoters will need to agree the legal form in which the project business will operate and the nature of their individual participation in that form. As touched on in Chapter 1, they will generally wish to establish a new special-purpose vehicle which is a legal entity distinct from the constituent members of the consortium.

The legal structure of the SPV will need to take into account the following main factors:

- the sponsors' need for an appropriate joint venture vehicle which offers the protection of limited liability;
- the law of the jurisdiction or jurisdictions in which the project facilities will be constructed and operated;
- the fiscal treatment of the SPV, the sponsors/consortium members and key suppliers to or purchasers of the product of the project and, in particular, how losses in the early years can best be used in the business of the project or the consortium members;
- the availability of off-balance sheet treatment of the financing and other accounting considerations;
- the requirements (if any) of the host government;
- the requirements of project financiers or outside debt providers in relation to the integrity of the cash flow and security over project assets;
- the requirements of development finance institutions (DFIs) – such as the World Bank, its private sector arm the International Finance Corporation (IFC) or the European Bank for Reconstruction and Development (EBRD) – and export credit agencies (ECAs) that may be involved in the financing structure (see Chapter 6);
- exchange control;
- political risk; and
- regulatory issues.

Legal form of project vehicle

Selection of the appropriate form and the country of its incorporation or legal domicile will be made in the light of the factors listed above. The number and type of available forms will differ from jurisdiction to jurisdiction, but the commonest form is a single-purpose limited liability company.

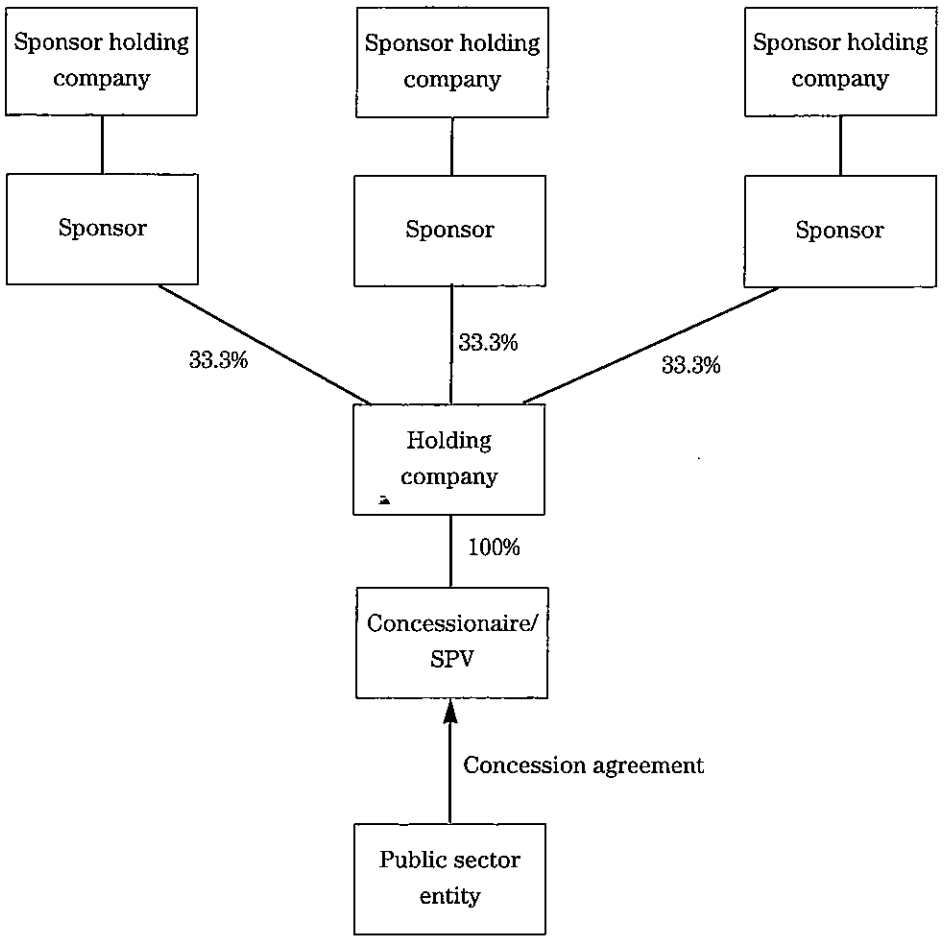
Alternative approaches in some jurisdictions might involve a limited partnership (under which the liability of some or all of the sponsors is limited) or, in the early development stages, a European Economic Interest Group (EEIG) structure. (The latter, which is a non-profit making body, would become inappropriate, however, once the project business had progressed beyond the initial stages of development to become an operating business.) For ease of reference, the remainder of this section assumes that a limited liability company (SPV) is used as the project vehicle.

The SPV may itself be a subsidiary of another special-purpose company, perhaps set up by the sponsors as the vehicle for a range of activities carried on by the consortium. The SPV may also form separate companies (forming its own corporate group) where appropriate. The sponsors may, for example, be reluctant to hold shares directly in the SPV, or be unable to grant security over shares in their own respective corporate groups without breaching negative pledges. A diagram showing a typical corporate structure is set out in Exhibit 4.1.

SHAREHOLDERS AGREEMENT

The contractual rights and obligations of the sponsors in relation to the SPV will be partly governed by the constitution of the SPV (its memorandum and articles of association or equivalent

Exhibit 4.1
A TYPICAL CORPORATE STRUCTURE



documents), which deals with their position as individual shareholders of the SPV. This may extend to arrangements such as pre-emption rights over shares, which have in practice more to do with the arrangements of individual sponsors among themselves than with the SPV. In addition to, or in substitution for such arrangements, it is usual to have a shareholders agreement or joint venture agreement ('shareholders agreement') regulating the relationship of the sponsors (and subsequent owners of their shares in the SPV) among themselves.

Such arrangements (which may not be on the public record) are also of importance to lenders to the SPV. They will want to understand the intent of the sponsors – eg as to future financing needs, decision-making in certain key areas or the withdrawal of sponsors from membership (usually by way of sale of their shares) – but may also seek to exercise a degree of control over such arrangements, both by provisions in their credit agreement with the SPV and by separate contractual arrangements with sponsors (eg direct agreements).

Key areas to be negotiated

Management and decision making

Inevitably, difficult questions will arise in negotiation in respect of the SPV's management and decision-making mechanisms. These tend to be the central issues in joint venture negotiations, and are likely to include the following specific questions:

- Where the equity contributions of the sponsors differ, how will board representation be structured?

- Will different classes of shares be necessary?
- How will decision making be split as between the board and general meeting?
- Which decisions can be made on a majority basis (simple or weighted) and which will require unanimity?
- How will minority interests be protected without creating obstructive safeguards?
- What provisions will be included to resolve deadlocks?

As a general rule, it is unusual for lenders or host governments to become closely involved in detailed questions of management procedure of this kind because many different approaches are possible in practice, and it is primarily up to the sponsors to put in place a structure that they are satisfied will work. However, the former will want to feel comfortable about the broad efficacy of these arrangements. If the decision-making procedures are too cumbersome or difficult to operate, they could threaten the viability of the project and the revenue stream it generates.

One issue that frequently causes difficulty in this context is the question of conflict of interest. Conflicts of interest are considered later in this chapter. In the context of the shareholders agreement, however, it is often necessary to suspend the voting rights of the shareholder subject to the conflict of interest when it arises.

Equity commitments

A number of questions can arise in respect of the equity contributions as the shareholders agreement is finalised.

- *Balancing contributions.* Some equity contributions will take the form of cash. Others may take the form of 'sweat equity' or contributions in kind (eg real estate or office premises). Valuing the latter can prove difficult because there will be concerns on both sides about (respectively) the possibility of overvaluation or undervaluation. If the result is perceived to be a distortion or imbalance in the sponsors' equity interests in the project, especially if this is reflected in voting rights, it is likely to be unacceptable to the disadvantaged shareholder(s).
- *Timing of contributions.* There may be extensive discussion about the timing of the shareholders' equity contribution(s). In the past, it was common for equity to be subscribed entirely 'up front', in advance of most drawdowns under the loan documents. As project finance techniques become more sophisticated, however, and as competition for mandates increases amongst lenders, that is becoming increasingly rare. Phased commitments are frequently encountered nowadays, so that subscriptions are made in parallel with (certain) loan drawdowns. Sponsors are sometimes even able to 'back-end' their commitments, injecting them towards the end of the development period. Any phasing of the sponsors' equity of the kind described will obviously focus attention on the creditworthiness of the entities making the commitments. Parent company guarantees or letters of credit may therefore have to be provided.
- *Contingent contributions.* A proportion of the sponsors' equity may be contingent – that is to say the obligation to subscribe may only arise on the happening of certain events. This device is frequently used to provide the project and the lenders with a degree of protection against certain perceived risks – for example, construction-related risks or specific events that may adversely impact on the project's cash flow. While sponsors may be prepared to accept arrangements of this kind, they will be anxious to ensure that both the contingent amounts and the events that trigger them are carefully limited.

Termination events and withdrawal

Many of the termination events in the shareholders agreement will be comparatively straightforward, relating (for example) to breach of the agreement and insolvency. These will be backed up by compulsory share transfer provisions. The more contentious question relates to any right a shareholder may have unilaterally to withdraw from the SPV (an 'exit route'). One would obviously not expect this right to be available where the relevant shareholder's obligations remain substantially unperformed.

At least in the early years the identity and constructive cooperation of all the shareholders is likely to be critical to the project's viability. But once a shareholder's equity has been subscribed, and any other significant undertakings dis-

charged, he may wish to sell down his interest to a third party. Both the lenders and the host government may nevertheless resist any such right. They may see the continued presence within the SPV of the sponsor in question as an important condition of continuing success, and may seek to lock him in for the long term. At the very least, the exercise of any such right is likely to be dependent on the shareholder finding a third-party buyer with satisfactory financial and technical (and perhaps managerial) resources to replace it. This has recently proved a contentious area in the context of PPPs in the UK. On the one hand, the government has been trying to encourage an equity market in relation to completed projects. On the other, public sector bodies are often nervous about the replacement of any sponsors to whom they have awarded a high-profile – and probably politically sensitive – project.

Pre-emption rights

As a further safeguard on any right to sell down to a third party, shareholders are likely to insist on pre-emption rights in the shareholders agreement. These will give the remaining shareholders the right to acquire the shares of the would-be departing member, in proportion to their existing holdings. Rights of this kind are a fairly standard feature of joint venture arrangements. The most difficult issue tends to be the valuation of the shares to be transferred. The practical mechanisms used (eg put and call options, 'Russian Roulette' provisions and auction arrangements) will also need careful thought.

Restrictions on competition

The agreement will usually contain a clause restricting the ability of any shareholder to compete with the project. In a commercial environment where a sponsor is already carrying on certain activities (eg a rail project in the UK), the nature and scope of 'competition' will need careful definition in the agreement. Any such provision will also have to be evaluated from the perspective of applicable competition laws.

Taxation issues

The taxation treatment of the SPV will also need detailed examination. The aim will be for losses to be utilised to advantage, while profits are sheltered. The use of group and consortium relief may need consideration. In the modern world of project finance, these questions are more than likely to have an international dimension. They need to be considered in the context of how significant a limited tax holiday would be to the project economics.

CONSTRUCTION CONTRACT

This is a fundamental commercial contract for all concerned because:

- It is likely to absorb the majority of the SPV's capital expenditure.
- The quality and efficacy of the design and construction of the plant will impact on project expenditure and revenues throughout project operation.
- Timeliness or delay in completion of the construction will impact on project economics. In particular, in the case of concession-based contracts or licences to operate, completion of construction and commissioning by a specific date is likely to be a fundamental condition of the concession or licence.

Construction law is a complex and highly specialised area of legal expertise, and the limited aim in this respect is to focus on certain aspects of construction contracts that are particularly relevant to BOT structures.

Much effort frequently goes into the drafting and negotiation of the construction contract in project financings. The standard industry forms are rarely used without extensive amendment. This is a direct reflection of the process of risk allocation that determines the contents of the project documents. It is also often necessary to mirror the construction-related provisions of a concession agreement (if there is one) in the construction contract. (Concession agreements are discussed in Chapter 5.) This in itself can call for extensive revisions to the standard forms. The tension between the theoretical assumptions of the risk allocation process and commercial self-interest is at its clearest as project construction contracts are negotiated. The construction phase is often considered the riskiest phase of the project. The contractor will inevitably be expected to carry much of this risk in the construction contract, which may have a

value running into hundreds of millions of pounds. Quite understandably, however, he will try to limit his exposure to these risks.

The contracting strategy adopted may vary significantly between one project and another. This can lead to considerable differences in the way issues are approached. A 'traditional form' approach may be adopted, for example, with the employer (SPV) engaging a design consultant directly himself, and then hiring a contractor separately to implement the construction works. This structure will basically absolve the contractor from liability for design faults in the works and of responsibility for the design development process as the works proceed. Typically, the design consultant (architect or engineer) would also 'administer' the construction contract during the course of the works. This would effectively leave the SPV with greater responsibility for managing the works than might otherwise be the case. Alternatively, a construction management strategy may be selected. This would involve placing a series of discrete 'works packages' contracts (which might otherwise be sub-contracts) directly with the SPV, leaving a project or construction manager with responsibility for organising and directing them and managing their performance in terms of budget and timetable.

By far the most common approach encountered on PPP project financings, however, is the 'turn-key' design-and-build (or 'engineer-and-construct') contract. This places responsibility for essentially all aspects of design and construction in the hands of a single contractor (or group of contractors), giving the SPV the benefit of single-point responsibility should defects appear in the works, and avoiding the greater administrative and organisational complexity that often goes with the alternative contract strategies. An SPV may not have the resources or skills to make effective use of one of these alternatives. More importantly, the turn-key approach tends to recommend itself to lenders on the basis that it enables a clearer and more robust assumption of risk to be achieved than with any other approach. It is well recognised that this can entail somewhat higher cost than is the case with a more 'managed' strategy, but the benefit is greater certainty about time and cost. The contractor can (in theory) offer a fixed price and a fixed timetable for the entire construction works, thus contributing to a clearer overall pattern of risk allocation. For reasons that are touched on below, however, in practice no construction contract is ever entirely 'fixed price' or 'fixed time'. It is always a question of degree. On the very largest projects, where the cost of design and construction cannot be underwritten by a single contractor or group of contractors, and where the SPV may have extensive resources of its own, one of the more managed approaches may be adopted. The points of detail discussed below are relevant to many of these different contract forms, but have been analysed principally with the turn-key contract in mind. (Since most BOT projects tend to involve (in the technical sense) engineering rather than building works, the acronym now commonly applied to these contracts is 'EPC', standing for Engineering Procurement and Construction).

When structuring or reviewing a construction contract on a BOT project, the key issues tend to fall into six distinct categories. These are discussed in the following sub-sections.

Cost

The lenders to the project will usually have an expectation that there will be a 'fixed price' for the works. Certain contract forms in fact allow the contractor to be remunerated (in whole or part) on a 'reimbursable' basis, by reference to cost plus a margin. There may also be a bonus/penalty mechanism. However, as mentioned above, pricing philosophies of this kind are unusual on project financings, because they presuppose a high degree of control by the employer and create too much initial uncertainty about the final sum. The usual approach is an agreed 'lump sum' price, payable in stages as the works progress. Even then, the price is rarely 'fixed' without qualification. The qualifications will obviously prove a potentially contentious area in negotiation.

For instance, there may be an escalation mechanism if the contractor is unable to hold his prices fixed for more than a limited period. Secondly, there may be 'provisional sum' items in the contract. These relate to aspects of the works for which the contractor was not able to quote a firm price at the date of contract signature. Thirdly,

the cost may be affected by a number of events which do not represent contractor's risks at all (or which he refuses to accept as his risk). These will usually include employer's variation orders, suspension orders, events of *force majeure*, archaeological finds, at least certain changes in law, and of course breaches of contract on the employer's part. Compliance with the specific instructions and directions of the employer may also have this effect, as may unnecessary searches and tests and (more controversially) certain categories of ground condition. Events entitling the contractor to an extension of time will usually also entitle him to extra cost. The combined effect of these events can be to unravel an apparently 'fixed' price.

For that reason, lenders to the project will be concerned to minimise the risk of extensive changes being made to the cost of the works without their approval. They are likely to seek extensive controls over actions of the SPV which may have this effect. They will also look carefully at the certification mechanisms in the contract accompanying payments to the contractor. 'Milestone' provisions (linking the issue of payment certificates to the achievement of specific stages of the works) are often regarded as essential. So too are detailed procedures governing the submission of claims for extra payment by the contractor, and specifying (for example) notification deadlines, a clear basis for calculating extra amounts (including profit), provision for determination of disputed amounts, and so on.

Time for completion

The construction contract will specify a date for completion of the works. The question is, in what circumstances can it be altered? Lenders will tend to want to restrict the scope of such circumstances, since delayed completion will imply a delayed revenue stream. The contractor will inevitably have certain entitlements to extensions of time, however, many of them overlapping with the grounds discussed above for increasing the contract price. The extensions will protect the contractor from risks which he feels he cannot or should not shoulder, but will also delay the date on which the 'completed' project starts to generate revenue. Their scope will therefore be a further focal point in negotiation. Some events (eg variations and suspension orders) will clearly not be arguable. Others, such as the effect of certain unforeseeable ground conditions or the scope of the *force majeure* clause, may prove more contentious. As in the case of claims for additional payment, lenders will want to see the grant of any extensions of time made subject to a detailed and robust procedure, so that their impact on the overall programme for completion of the works remains tightly controlled. Obligatory notice periods will need to be defined, for example, as will the criteria by which the duration of any extension is determined. The contractor will be expected to take reasonable steps to mitigate the relevant delay. There may also be a right vested in the employer to order an acceleration of the works (for a price, of course) in lieu of granting an extension.

The other essential provision from the perspective of the time for completion will be liquidated damages for failure to achieve the agreed or extended completion date. The level at which such damages are set can prove a thorny issue. Lenders will expect them to cover interest payable on the project debt for at least a minimum period. The contractor may resist this basis of calculation. Almost invariably, they will be subject to a cap. The contractor will obviously seek to hold the cap down to a level he regards as consistent with a commercially attractive price and a level of risk to which he feels he can be viably exposed. Lenders will often hold out for a higher figure. Whether this cap is included within, or independent of, any overall limitation on the contractor's liability under the contract is another contentious point. Whatever level is agreed, for the purposes of English law the damages must represent a genuine pre-estimate of loss resulting from delay, or they may become unenforceable as a technical penalty.

Quality

The contract will contain various provisions relating to the quality of the completed works. These will include the following:

Specification

In practice the specification, describing the contents and scope of the design and construction works in detail, may be prepared by either the

employer or the contractor. If the latter, there may also have to be a separate 'Employer's Requirements' document (an 'output' rather than an 'input' specification). The employer and his lenders will want to be sure that certain key parameters and objectives will be met, notwithstanding compliance with the detailed contractor's specification. They may argue that the specification should represent a minimum, not an overriding, standard for the works. This can raise questions about how potentially inconsistent standards within the contract are addressed.

Warranties

Partly for that reason, the contract terms and conditions will usually contain a distinct set of warranties in respect of quality of the completed works. The scope of these warranties is often a matter for argument. The employer's approach may be to include detailed and comprehensive warranties relating to design, construction, compliance with laws and so on. He may also seek a specific fitness-for-purpose warranty. On a design-and-build contract, English common law usually implies a term to this effect. The contractor may, however, object to some of these provisions as excessive, unnecessary or unduly onerous. In particular, he may argue that a fitness-for-purpose warranty imposes too vague a standard for him to accept it.

Tests and liquidated damages

There will be provision for testing on completion and perhaps also for the conduct of performance tests. These will have to be satisfactory to both sides, providing the employer with sufficient safeguards but without effectively augmenting the level of risk accepted by the contractor. Liquidated damages may be specified for defective performance. As with delay damages, their level and interrelationship with any other liability caps may be matters for dispute.

Warranty period

The contract will usually contain a warranty or 'defects liability period' following completion, during which the contractor has an obligation to correct defects appearing in the works. There can be questions about its duration, the scope of the contractor's obligations while it is running and the nature of his liabilities after it has expired.

Control

Notwithstanding the 'hands-off' philosophy implicit in the turn-key concept, the employer and its lenders will always seek a minimum level of control over the contractor's activities during performance of the works to provide them with a safeguard. The underlying rationale is that, on a complex construction contract, prevention is better than cure. These controls can take a number of different forms. In addition to the certification mechanisms relating to stage payments and completion (which can usually be taken for granted), the employer is likely to seek powers relating to:

- *Variations.* The power to issue variation orders is usually regarded as essential. The issue tends to concern any restrictions placed by the contract on that power;
- *Design approvals.* a detailed procedure may govern the design production and approval process;
- *Instructions.* The power to issue directions and instructions to the contractor as to the manner and timing of execution of the works. On a turn-key contract, this power may only amount to a 'fall-back' device, but may be considered an important safeguard nonetheless;
- *Contractor's team.* The employer may seek certain rights to approve key individuals within the contractor's team and at least some of his sub-contractors; and
- *Inspection and testing.* One would normally expect to see a right to inspect and test the works during construction and on completion.

Liability

Arguably the most difficult area of all is the question of the contractor's liability for breach of contract. The employer and its lenders will have two objectives in mind. They will want sufficient protection against the costs and losses that stand to flow from sub-standard performance. They will also want to be sure that the contract contains sufficient disincentives on the contractor against poor performance. It is likely that there will be an overall cap on the contractor's

liability under the contract. It is comparatively rare for this to exceed the aggregate contract price, but it can at times be significantly lower.

As mentioned above, there may be specific discussions about the level of liquidated damages for delay and (perhaps) defective performance and therefore the contractor's liability for such events. The contractor's liability for latent defects appearing after the expiry of the maintenance period may also prove contentious. He will want to 'close his books' as soon as he can after completion, but he may have to accept responsibility for defects appearing over a period of some years (latent defects), thus providing a degree of recourse against subsequent failures in the works and a degree of longer-term protection for the SPV and its lenders.

Security for performance

Finally, there is the question of security for the contractor's performance. Issues can arise in any of the following areas:

- *Bonding.* The employer may seek a performance bond, an advance payment bond, a maintenance bond, or all three. Will the bond be 'on-demand', providing similar security to a letter of credit, or conditional, callable only on proof of default?
- *Retentions.* Should retentions from interim payments be required if the contractor's obligations are bonded? At what level should they be set? At what point should they be paid over to the contractor?
- *Insurance.* How satisfactory are the insurance arrangements? They will need to provide proper protection against 'all risks', damage to the works themselves and third-party claims. Professional indemnity and business interruption insurance are also likely to be sought. The question whether the employer or the contractor takes out these insurances is primarily a matter of convenience. The interests of the parties to the contract and of the lenders will obviously have to be adequately covered. The arrangements will also have to be compatible with the lenders' overall security package.
- *Parent company guarantee.* Does the contractor's credit standing necessitate a parent company guarantee?
- *Completion guarantee.* Is a full completion guarantee needed in addition to the construction contract? This may be a requirement of the lenders and will depend heavily on the shareholders and capitalisation of the SPV, and the perceived levels of risk inherent in the project.

OPERATION AND MAINTENANCE AGREEMENT

The host government's requirements as to the operation and maintenance of the project facilities will be set out in the concession agreement (see Chapter 5). The financing documents are also likely to contain certain operation and maintenance obligations on the part of the SPV. To ensure that the relevant operational requirements are met, the SPV will usually need to enter into an agreement with a specialist operator. Depending on the type of project and the expertise of the operator, the operator will also normally undertake certain maintenance obligations under that agreement. For this reason, the agreement is customarily referred to as an operation and maintenance (O&M) agreement. Where the operator is unable to undertake the full maintenance programme, it might sub-contract all or part of the maintenance work to a separate contractor. The scope of an O&M contractor's responsibilities tends to vary very significantly from project to project, however. Sometimes it will take over virtually the entire range of tasks associated with the running and maintenance of the facility. At others, it will provide more limited services to an SPV with management and resources of its own.

It is common for the operator to be a sponsor, or an affiliate of a sponsor, and it is in the interests of the project for the operator to have a vested interest in its success. For that reason, the operator will often be given a number of performance-related responsibilities, so that its own pattern of risk and reward is linked to that of the project itself. This is likely to involve a bonus/penalty remuneration structure. Whether the operator is obliged in this way to ensure that the project achieves a given level of performance or whether it simply has to operate the plant in accordance with good operating practice will obviously carry different commercial implications. The level of the operator's remu-

neration can be expected to vary significantly, depending on which option is agreed.

As the O&M agreement is likely to contain at least minor maintenance obligations, and often scheduled major maintenance, areas which may require particularly detailed consideration are capital expenditure on the replacement of failed equipment and improvements to the facilities. If the operator is to be responsible for these matters, it will expect to be remunerated appropriately.

Key terms

In addition to the above, a typical O&M agreement is likely to address the following issues.

Timing

The O&M agreement will normally come into effect not later than the commissioning and testing of the project facilities. Frequently, the operator will be involved in this process and, indeed, the operator might be required to accept the facilities on the SPV's behalf (or at least assist in the acceptance procedure) as being satisfactory for the purposes of the construction contract. The operator might also be asked to assist in ensuring that any defects in construction are remedied by the contractor. If there is a concession agreement, the duration of the O&M agreement may need to coincide with the duration of the concession (although a shorter term is not unusual).

Payment

There are various means of remunerating the operator, including:

- *Fixed price.* Here the operator receives a lump-sum fee for providing its services (indexed as appropriate). This has the advantage of certainty for the SPV, but will normally only be appropriate where the services required are unlikely to change significantly during the concession, and where the uncontrolled risks to which the operator may be subject are relatively limited.
- *Cost plus fee.* Here the operator will be reimbursed for the costs incurred by it in operating and maintaining the facility and in addition will receive a fee which may be a fixed percentage of cost or a lump-sum amount. Where this approach is adopted, the SPV will normally insist on tight budgetary controls being imposed on the operator's costs so that their level can be properly managed. Where the fee may be expressed as a percentage of aggregate cost, it may give rise to concerns that the operator has an incentive to drive costs upwards, which reinforces the importance of budgetary constraints.
- *Performance-based fees.* Here, the fee is tied to the performance of the project facilities, so that (at least) a proportion of it is 'incentivised' under a bonus/penalty mechanism, depending on actual performance.

Often, the operator's remuneration structure will consist of a combination of these elements, so that some areas of cost are reimbursable whilst others are 'at risk'. The allocation of specific costs to each area will have to be handled very carefully. Provision will normally need to be made for the costs and/or fees to be increased in line with an appropriate inflation index.

The operator may be asked to pay liquidated damages (within defined parameters) for failure to perform under the O&M agreement. The agreement may also include provisions that prevent the operator from making windfall profits. However, the operator will rarely be in a position to accept levels of risk which correspond fully to the losses and profits that the SPV stands to make as it deviates from its target. There will, therefore, usually be fairly tight limits on the operator's potential liability and return.

Limitation of liability provisions tend to be a prominent issue in the negotiation of these agreements. The operator may argue (for example) that his liability should be limited to a proportion of his (annual) fee. The SPV may seek much more extensive recourse.

Warranties

The operator will normally be expected to give assurances as to the standard of performance of its obligations under the O&M agreement. The fundamental standard will be one of reasonable skill and care. However, this may be widened to include undertakings as to the minimum levels at which the facilities will perform (for example) and indemnities against other potential losses for which he is responsible.

Insurance

The O&M agreement will determine which party is responsible for placing the required insurance cover in relation to the operational phase of the project. It is not uncommon for composite insurance policies to be placed, which cover the SPV and the operator, as well as the host government, the lending banks and other interested parties.

Record keeping and inspection

Each of the SPV, the host government and the lending banks will wish to reserve the right to inspect the facilities and the records of the operator. The operator should also be required to report regularly to these parties on the operation and performance of the facilities. In any long-term agreement, there may be issues as to the period of time for which any such records are preserved and (in some cases) the full extent of disclosure required. With records being increasingly computer-based, care will need to be taken to ensure licensing arrangements permit third-party access.

Technology and training

The O&M agreement should address issues such as the ownership and use of any intellectual property rights relating to the project and restrictions on the transfer of technology. The transfer of these rights to the host government at the end of the concession period might also need to be considered. The agreement may also need to deal with any training of the local workforce which might be required.

Remedies and termination

The O&M agreement should provide for the circumstances in which it may be terminated by either party, typically following unremedied breach of contract or insolvency-related events. The SPV may also seek a right to terminate at will (ie after a given notice period), which the operator may be reluctant to accept. Where the operator is not providing highly specialist services, it may be acceptable to the SPV's lenders that the O&M agreement may be easily terminated by the operator.

OTHER KEY CONTRACTS

Supply and offtake contracts

Depending on the nature of the project business, these are likely to be project contracts of central importance.

Supply contracts

These set up contractual commitments of the supplier to supply to the SPV a minimum quantity or volume of a raw material or specialist product (for example, gas for a gas-fired power plant) over a given length of time. Where certain supplies are a major component of the product of the project, it is often possible for the price for those supplies to be linked to the price the SPV receives for its product.

If the length of time does not correspond with the period of outside debt financing to the project, both the equity investors and lenders will need to analyse future sources of supply and predict movements in the cost of supply in deciding whether to accept the risks associated with uncertainty of supply and volatility of cost. Where the product is generally available and/or there is a world market, such risks may be acceptable.

The obligation to supply a minimum quantity will often be coupled with an obligation on the SPV to purchase, or at least pay for, a minimum quantity – a 'take-or-pay contract'. Combined cycle gas turbine IPPs in the UK have been project financed on the basis of minimum take-or-pay gas supply contracts. Such contracts not only ensure feedstock, but also establish the cost to the SPV of its major raw material over a long period, usually by indexing the purchase price to a relevant basket of commodities where there is no recognised market price.

Equity investors and lenders will need to be satisfied as to the long-term viability of the supplier and, where supply is limited to a particular source (eg a gas field or coal mine), as to the technical assessments of production capacity.

Offtake contracts

An offtake contract will commit a purchaser to take a certain quantity or volume or percentage of production from the project business on an agreed pricing formula. As with supply contracts, if the offtake agreement does not corre-

spond in duration with the financing term both equity investors and lenders will need to assess the future market for the product, including demand and price, once the offtake contract comes to an end. A recent example in the UK market has been the introduction of merchant generation IPPs. In contrast to the initial IPP project financings where regional electricity company distributors entered into long-term contracts (contracts for differences), which had the effect of providing a guaranteed purchase price for the power generated by the SPV, more recent financings have been unable to rely on such offtake arrangements. Instead, equity investors and lenders have needed to analyse the wholesale price for electricity in the UK market and the longer-term predictions of demand in assessing the areas of risk to the SPV and the consequent risk to their investment or loan to these merchant generation plants.

In many countries the purchaser of the output from an SPV with a BOT concession (eg to generate electricity) will be the state or a state agency, and the purchase price may be controlled either by the terms of the concession or by the law establishing the framework for the industry. In such situations investors and lenders will need to understand the existing legal framework and how the pricing structures (often tariffs) are set, and will also need to consider the possibility of legislative change as well as political risk. The Dhabol power project in the Indian state of Maharashtra was subject to political pressure to renegotiate and reduce the agreed offtake price for power on a change of state government.

Where the construction and operation of infrastructure such as roads and railways is concerned, there will be no requirement for feedstock (in the sense of the raw material required for an industrial processing plant), and it may be inappropriate to expect long-term contractual commitments in respect of usage of the infrastructure – ie there may be no offtake contracts. There could be exceptions in the case of railways where specific rights to use capacity may be granted on a long-term basis at a fee, some components of which are fixed (as with the usage arrangements between Eurotunnel and the French, Belgian and British state railway operators). Where shadow tolling is employed, a source and rate of payment for the services of the project business is agreed at the outset, although the amount of revenue will be dependent on actual volumes and/or availability. In the case of tolled roads, the revenues will simply depend on usage with no possibility of long-term contractual arrangements, and the amount which can be charged by way of toll may be controlled through the concession or other legislation. (The host government might, however, be prepared to provide a partial guarantee of traffic levels or revenues).

RISK MATRIX

A technique has evolved of carrying out a detailed analysis of the risks to which the project (and the various parties) may be subject at the preliminary stages of planning a project. The technique is equally useful for a government setting up a competition to award a BOT concession as for a wholly private sector project. It involves listing out in tabular form:

1 The various phases of a project – eg design, construction, operation and handback.
2 All the different categories of risk that can be identified as relevant to those phases – eg construction risk, technology, market conditions, fiscal, political and legal risk.
3 Sub-categories under each of the main categories – eg under construction risk, sub-categories such as environmental considerations, ground/site conditions, cost overruns and shortage of labour or materials.

A qualitative process is applied in allocating the risks to the party best able to take them. As in the case of a government granting a concession to the concessionaire this is relatively straightforward. However, in the case of allocation by the SPV to the counterparties to the many project contracts, the position is not always as clear.

The completed matrix then performs a number of functions:

- in a government concession it provides a comparator for analysing bids;
- it acts as a guide to the drawing up of the concession agreement reflecting the government's preferred position;
- for the SPV, sponsors and lenders it assists disciplined negotiation of the project contracts (because the risk allocation is already

clear outside the context of negotiation);
- for legal advisers it provides a common reference point for ensuring that the project contracts correctly reflect agreed risk allocation;
- for sponsors, the SPV and lenders it provides a common reference point in assessing technical and financial advisers' reports.

The risk matrix is particularly useful in reducing to a manageable form a complex and extensive list of issues, the correct resolution of which is essential to the achievement of a viable and bankable project.

'BANKABILITY'

The question is often asked on BOT projects whether a particular contract is or is not 'bankable'. The term has no exact or commonly agreed meaning, but simply means that the provisions of the contract are likely to be acceptable to the lenders in the context of the overall project financing. Whether or not that is the case will depend on many different factors, but it might be helpful to identify a number of issues that are likely to be relevant:

- Lenders will be making a series of assumptions about the pattern of risk allocation in the project (see further Chapter 2). To be bankable, the project contracts clearly need to be consistent with those assumptions.
- The idiosyncrasies of the overall financial structure. A bond issue, for example, may impose somewhat more onerous requirements in terms of mitigating construction risk than a commercial loan structure. Alternatively, a 'pin-point' equity structure may have been adopted (as in a tolled crossing project), where the SPV has minimal equity (and other) resources of its own and a very high debt/equity ratio. This could mean that virtually all obligations and liabilities of the SPV have to be fully passed on to other creditworthy entities under back-to-back provisions. Conversely, where the SPV has very extensive capital and technical resources available (especially where they include an existing revenue stream), it may be able to adopt a contracting strategy retaining risks which would be unthinkable on a more conventional project financing.
- It should be remembered that markets are fluid and ever-changing. Market practice is often a decisive factor in determining 'bankability'– as are perceptions about market practice. Market practice does change, however. What seems wholly unacceptable in one year may become acceptable to some the next.

With those background considerations in mind, what generalisations can be made about the qualities a set of project contracts must have in order to be 'bankable'? (It goes without saying, of course, that they will need to be enforceable in accordance with their terms, properly authorised etc; these general requirements are not unique to the banks). We would suggest the following:

- *Effective protection.* There has to be a clear and robust assumption of risk in the contracts, which is consistent with the risk allocation structure underlying the financing arrangements. For example, lenders will usually expect the main contractor to accept most of the construction-related risks of the project. If his contract is so flawed, however, that he can make claims for additional time and cost whenever an inconvenient event occurs, it will be unacceptable to the lenders. Again, the project may involve a concession agreement and the host government may have offered a degree of protection against political risk; but if the relevant provisions in the concession agreement contain critical ambiguities which make their effect wholly uncertain, the document is unlikely to be bankable.
- *Patterns of risk allocation.* The overall effect of the project documents, in terms of risk allocation, will inevitably be to leave certain risks with the SPV and thus, indirectly, with the lenders. Some of these will be acceptable to the lenders. Others will not. The extent to which any of them are acceptable or otherwise will, in truth, depend on many factors. The risks to which they tend to be prepared to accept a degree of exposure usually include the following:
  - *project risk* – the inherent ability of the project to generate the anticipated revenues – ie its commercial potential. In a limited recourse structure, the lenders will usually bear some exposure to the risk that

there may be a revenue shortfall;

- *'country' risk* – that ill-defined bundle of economic and political risks that go to define the 'investment climate' of a particular country;
- *interest rate, inflation and currency risk* – can the project's economics support external increases in interest and inflation rates or adverse changes in exchange rates? Lenders may insist on a swap or other hedging arrangement to mitigate these risks;
- *change of law* – all commercial enterprises in a particular country may potentially be disadvantaged by changes in law. Host governments will be most reluctant to offer blanket protection against that risk, and lenders will often accept that position. (This tends to depend heavily on the perception of overall 'country risk', though). Limited or discriminatory damages of law (or taxation) directly affecting the project are a different matter, however. Specific protection against these contingencies may well be required;
- *contract counterparty performance* – will the parties to the different project contracts perform as anticipated? It they do not, certain remedies are likely to be available under the contracts. These remedies might, however, have to be enforced and the liability of the counterparties will often be subject to limitations;
- *refinancing risk* – there may be an assumption behind the construction-phase financing that the loans will be refinanced after completion. The refinancing might not, however, materialise as envisaged. Lenders may build into the original structure certain incentives on the sponsors to help tackle this problem (eg escalating interest rates or a high level of loan-dedicated cash-flow), but they may have to accept some of the consequences themselves;
- *construction risk* – BOT project lenders will only lend against suitable completion-related undertakings and guarantees. However, it is rare for any contractor or sponsor to take on this risk on an unqualified basis. This often leaves the lenders in reality with some residual exposure.

Banks and bondholders will often seek as much protection against even these risks as they can, though the reality is that they are usually shared too amongst the project's different participants.

- *Credit standing.* The parties to the project contracts must have the credit standing to support their undertakings, and limitations of liability must be suitably restricted. Sponsors – for quite understandable reasons – will often seek to minimise their liability in negotiation. Extensive liability limitation provisions are commonly encountered. This often becomes a major issue in the negotiation of construction contracts and operation and maintenance agreements, for example. If the effect of provisions of this kind is to empty the undertakings in the project contracts of most of their real substance, the transaction will become unfinanceable.
- *Force majeure.* For the same reason, *force majeure* provisions need very careful consideration. A *force majeure* clause will relieve a party of liability for failing to perform its contractual obligations for reasons beyond its control. There are many different drafting approaches to this relatively simply concept, however. If taken too far, the clause can be wide open to abuse, allowing a party to escape responsibility for inconvenient or commercially awkward developments, by pointing to specious circumstances other than those which are manifestly and completely under his control. For this reason, the lenders' lawyers will examine the clauses with meticulous care. Their preferences will be for clauses where the list of *force majeure* events is exhaustive rather than open-ended, and where clear and detailed procedures govern a party's ability to invoke these events. A party should always have an obligation, for example, to use reasonable efforts to minimise the effects of a *force majeure* event and to resume performance as soon as possible. Consistency as between *force majeure* clauses in different contracts is also important. If inconsistent treatment of major events of this kind leads to a wide disparity between the responses of the parties when they occur, the result can leave the lenders badly exposed.
- *Consistency.* The lenders will wish to compare certain common provisions across the

project contracts and consider the implications of any inconsistencies. Typical common provisions include:

- the start date and duration of the contract;
- the time for performance (including grace periods);
- the currency of payment;
- *force majeure* (see above);
- cure periods;
- default and termination provisions;
- liability and incentives;
- consequences of change of law/circumstance;
- governing law;
- jurisdiction;
- dispute resolution mechanisms;
- political risk provisions; and
- compensation for breach or termination.

- *Conflicts of interest.* It is to be expected that the project sponsors or consortium members will have come together in order to further their separate commercial interests as, for example, construction companies, operators, suppliers and offtakers, and that investment in the SPV is but a means to an end. As a result, they will deal with the SPV in at least two capacities – that is, as shareholders (or holders of subordinated debt) and also as the counterparties to key project contracts. Where this is the case, it can potentially threaten the SPV's ability to take decisions or act in its best interests where those conflict with the interests of the shareholder in his capacity as a contractor. For example, the contractor under the construction contract may put forward claims for additional time and cost; the SPV may wish to resist these claims. The SPV may need to pursue certain remedies under a project contract against its contractor; the shareholder who is also the contractor would have a vested interest in resisting them.

  The objective of sponsors who become equity investors should be to minimise the risks being assumed by the SPV under the contractual matrix, in order to enhance the value of their investment and to ensure that the project will be bankable. However, in their capacity as counterparties to contracts with the SPV they will naturally tend to expect the company to assume risks which, using the ability to control test, should perhaps be taken by the counterparty. An area where the SPV is particularly vulnerable is that of cost overruns at the level of construction or operation and maintenance.

  A number of factors combine to produce controls on conflicting interests of this kind:

  - The creation of separate teams (and sometime separate subsidiary companies) within larger sponsors who recognise the investment element of the project by separating responsibility for the investment from the supplier relationship. A number of construction companies operating internationally have separate project investment subsidiaries with different objectives to the contracting companies in the same group.
  - The appointment of an independent project manager for the SPV, or at least a project manager whose objectives are transparently separate from those of the sponsor by whom he may be seconded to the role.
  - The use of independent checking engineers, to certify performance of contractual provisions on an objective and transparent basis.
  - The appointment of technical, financial and legal advisers by the SPV whose role is to focus on the project from the perspective of the SPV rather than the sponsors.
  - Differing commercial objectives among the sponsors themselves – eg a construction company will normally be interested in the shorter term while the construction contract is being performed, while an operator will be involved over a longer period once the construction is completed – tend to mean that the sponsors must resolve their differences if the project is to be successful.
  - The identification of outside lenders with the interests of the SPV. The structure of a BOT project financing, particularly where the lenders only have recourse to the SPV, is such that the more risks that are assumed by the SPV (which should properly be allocated to another party) the more risky the project will be for the lenders. This will result in an increased equity requirement or, in some extreme cases, will make the project unfinanceable. The measure of what the lenders

will be prepared to accept becomes an external discipline on the sponsors. Similar considerations apply where there is to be a bond financing.

Lenders will seek to exercise control where sponsors' commercial interests may conflict with these objectives, by a combination of:

- Detailed analysis of project contracts. This will include, in addition to the common provisions (identified earlier in this chapter), an understanding of the risks assumed by the SPV under each key contract. Lenders and their advisers will often become involved in the negotiation or renegotiation of such contracts, including the concession agreement.
- Independently assessing construction costs and operating arrangements for comparison with the market generally.
- Ensuring appropriate length of supply or offtake agreements with sponsors, and realistic pricing arrangements.

Such controls can be imposed through:

- The due diligence process and financial modelling undertaken before the lenders are committed to funding the project.
- Appropriate covenants in the credit agreement, especially the financial covenants relating to loan life cover and debt coverage (see Chapter 7).
- The monitoring throughout the term of the lending of the SPV's accounts and ratios, plus other financial information and also of industry trends.
- Good working relationships with the executives running the SPV and the sponsors themselves, as well as with other lenders to and investors in the project.
- Voting disqualifications in the shareholders agreement where the conflict arises.
- A 'controls matrix' in the credit agreement regulating SPV actions under the project contracts (see Chapter 7).

- *Security.* The lenders will usually need to take appropriate security over the project contracts as part of their security package. This will normally include an assignment of the benefit of those contracts. In negotiating the terms of the agreements, the ability of the SPV to assign its rights under them to the lenders without the need for the counterparty's consent often proves contentious. If it does not have that right, the counterparty may be able to hold it to ransom as the lenders' security package is finalised (since assignment ordinarily requires consent). For the SPV, an unfettered right of this kind is therefore important. The other difficult area in this context relates to termination. The counterparty to a project contract would usually become entitled to terminate it upon the insolvency of the SPV or (under English law) on the appointment of an administrator or receiver. It is obviously vital for banks to be able to avoid a termination of this kind, since the project documents critically underpin all their security interests. Their rights take the form of 'step-in rights', set out in the relevant agreement itself or – more usually – in a direct agreement with them. This subject is also discussed in more detail in Chapter 7.

CONCLUSION

The approach to project contracts is becoming increasingly sophisticated. A more thorough analysis of the risks of the project business leads to more transparent negotiation and the recognition of the need to control the inherent conflicts of interest between key parties. The need to achieve 'bankability' can actually assist in the resolution of these conflicts and an appropriate allocation of risk through the project contracts. The combination of the tension between different parties with differing commercial objectives, the need to achieve a financeable structure and the many different areas of specialist knowledge involved, means that structuring a coherent and workable set of project contracts often presents a considerable challenge.

Chapter 5
Concession Agreements

WHAT IS A CONCESSION?

Concession agreements are the backbone of BOT and BOO projects. The government entity initiating a project of this kind will bestow on its sponsors the right and obligation to finance, develop, construct and complete it, and subsequently to operate and maintain it. This amalgam of rights and responsibilities is often loosely referred to as a 'concession', and the relationship between private and public sectors will usually be regulated by contract – by a 'concession agreement'. This agreement will in a sense underpin the entire matrix of contracts needed to implement the project. Many of the key provisions of these other contracts will be driven by its terms. At the very least, they will have to be compatible with it. For that reason, the key participants in the project in addition to the government and the sponsors – the contractors, lenders, investors, guarantors, offtakers, major suppliers, etc – will take a keen interest in the contents of the concession agreement. It will, in other words, define the commercial parameters of the deal, and it will constitute an essential part of the lenders' security package.

Concession agreements are a little hard to categorise from the perspective of English law. Until recently, there were relatively few contemporary examples of concession agreements in the United Kingdom (the Eurotunnel concession being perhaps the first). Strictly speaking, there is no common law concept of a 'concession'. It is defined in the *Oxford Companion to Law* as the 'grant by a public authority to a person of authority to do something, such as to work the land, extract minerals, operate an industry, or the like'. But this is not a statutory or case law definition. In contrast with civil law jurisdictions, English law does not treat concessions as a species of contract distinct from ordinary commercial contracts. In essence, a concession is simply a form of licence. On a major project it may or may not be coupled with an interest in land (a site lease, for example). It is a long-term commercial agreement bestowing the right to develop and implement the project. Partly for that reason, the term 'concession' is sometimes eschewed in favour of 'development agreement', 'project agreement' or 'implementation agreement'. Franchise agreements are also closely related. There are no clear-cut distinctions between these different terms, however. For the purposes of this chapter, the phrase 'concession agreement' will be adopted, although the issues discussed apply equally to other similar agreements with different names.

STATUTORY FRAMEWORK

Concessions often have a statutory dimension, and indeed the concession may actually be established and its terms set out in a piece of legislation. Even if it is not, enabling legislation may be needed to allow the major project to go ahead (especially in a sector that has hitherto been subject to extensive statutory control). In England there may be a 'hybrid' act of Parliament, for example, granting the government minister the power to grant a concession and to delegate to the SPV those powers needed to implement the project. In cases where intergovernmental arrangements are involved, a concession may also be underpinned by a treaty (eg as for the Channel Tunnel).

In some countries – especially where the concept of concession is given statutory definition – there may be a general power to award concessions, making project-specific legislation unnecessary. This is the case in Turkey, for example, (although concession-based projects in Turkey have been held up while the constitutional court considered the basis on which concessions were being awarded) and in some eastern European and Latin American countries. In others (such as France) the legal principles governing concessions may be drawn simultaneously from public law regulations and the civil/commercial code, which can complicate the interpretation of rights and powers.

If there is a statutory framework to the concession, is an agreement needed at all? The answer is almost certainly yes. The statute will

rarely do more than establish the main parameters of the concession and its principal provisions. Much more detail will be needed before the project can be financed, and this will be set out in a separate agreement. There is also the question of flexibility. Contracts can be varied by subsequent agreement (or by an internal mechanism, such as a variation provision). Laws are more difficult to modify, given the procedural processes involved, that parliament timetables are invariably overcrowded and discussion of any changes may be dominated by political considerations. On the other hand, a law constituting the concession could, in theory, be amended without consultation with the project's commercial participants. This reinforces the need for an agreement to provide the necessary certainty and security.

The statutory dimension can complicate the process of negotiating the concession agreement; it will obviously set limits to what can be negotiated by the parties and set a more rigid timetable. If the project sponsors are to have any say about the content of the legislation (as they might in the case of a hybrid bill, for example), they will have to be given an opportunity to do so as the draft bill is being guided through the legislature. Even then, their scope for commenting will usually be limited.

PURPOSE

There are usually several overlapping but different objectives that the parties to a concession agreement will aim to meet. Each of them needs to be given its due weight. They include the following:

- *Project implementation.* The SPV will want a clear, enforceable right to implement the project – to develop, finance, construct and operate it. Where a BOT structure is involved, that right will have to hold good throughout the term of the BOT arrangement. (Under a BOO structure, the right is likely to be of indefinite duration, although the agreement may simply 'fall away' after a given period.) Equally, the public sector entity granting the concession will want clear undertakings from the SPV that the project will be created as envisaged, and that the completed facility will be operated and maintained to agreed standards. Failure to discharge these obligations will allow it to terminate the concession and take back the project.
- *Government facilitation.* There are usually a number of steps which the government entity may be willing or able to take in order to facilitate the project. These can be identified in the agreement. For example, it may be necessary for the SPV to obtain a large number of subsidiary permits, licences and consents in connection with the project's implementation. The agreement can 'grant' and guarantee many of these authorisations, or put in place a procedure to facilitate the private sector sponsor in applying for them. Provision of the project site is another typical example of government facilitation.
- *Risk allocation.* As mentioned in Chapter 1, BOT (and BOO) projects are almost invariably a form of public/private sector partnership, where risks and responsibilities are allocated and shared between the two sectors. The pattern of risk sharing adopted will depend on the particular characteristics of the project and will vary enormously from deal to deal. But whatever pattern emerges from the negotiations, the concession agreement will be the means by which this allocation is achieved.
- *Commercial incentives.* The government body may offer a range of commercial incentives to the SPV in order to attract interest in the project, and the concession agreement will set these out. (See also Chapter 2.)
- *Economic regulation.* Conversely, the concession agreement may contain a mechanism for economic regulation of the completed facility by the government. Where an offtake agreement is involved, this is likely to be unnecessary, but where there is no such agreement, and no separate statutory licence, the concession agreement may be the only available mechanism by which government can exercise any control over, for instance, the charges levied by the SPV for use of the completed facility or any timetabling commitments. Where the users consist of the public at large (as on a major transportation project), the government will have a pressing political interest in exercising some degree of control.
- *Financing.* Finally, the concession agreement will have to promote the financeability of the

project, for lenders, investors and guarantors. At the very least, its terms will have to be compatible with all the different sources of finance. The length of time that the concession is to subsist is the most obvious instance. It will have to be sufficiently long to accommodate the maturity(ies) of the loan(s), and allow the investors to make a suitable return. In addition, certain financial assurances may be essential – relating to the guaranteed availability of foreign exchange, for instance, or protection against political risk. Where a multi-sourced financing is involved, this will make the process of settling the agreement's terms more complex. Account will have to be taken of the requirements of each source of funding.

The concession agreements have a range of differing objectives, which goes far to explain their lack of standardisation on projects around the world. Having outlined some of their principal purposes, the next section comprises a brief overview of concession agreement provisions.

TERMS AND CONDITIONS

A concession agreement is likely to contain some or all of the following provisions.

Parties

Usually there are only two parties to the agreement – the government entity and the concessionaire (the SPV). However, the agreement will sometimes also create step-in rights in favour of lenders (enabling the lenders on a SPV default to replace the SPV as concessionaire by a lender-owned entity), even though they will not be a party to it. A more logical place for such rights is in a direct agreement between the government entity and the lenders (or their agent) (see Chapter 7), but direct agreements are often strongly resisted by governments. If those rights are set out in the concession, the lenders may at least be able to benefit from them through their security package (see further below).

General

An attempt is often made in the agreement to define the 'concession' in general terms and to refer to the 'grant' of it by the government body. A clause of this kind might say, for example, that the SPV has the 'right and obligation to design, develop, finance, construct and complete the project and to operate and maintain it throughout the term of the agreement, at its own risk and expense and without recourse to government guarantees (save only as otherwise expressly provided for)'. Each of these rights and obligations is then broken down and elaborated in a series of detailed clauses in the document.

Conditions precedent

The agreement is likely to contain a number of conditions precedent. It will usually be negotiated (and often signed) before most of the other project and financing documents are in place, and the execution of those other documents may therefore have to be a condition precedent to the effectiveness of the concession agreement ('financial close' is often a key requirement). It may be necessary to obtain certain government authorisations and consents before the work can get under way and the SPV will require these before it exposes itself to liability. Specific enabling legislation may have to be passed.

Term

The agreement will usually have a specified term, at the end of which it will terminate automatically. The term can be either fixed or variable. A long-term fixed duration (25 or 30 years) is by far the most common (although it may be extendible to compensate the SPV for certain 'exceptional events', by enabling it to earn revenue for a longer period), and one or other of the parties is sometimes given an option to extend it for a stated period. Occasionally, the agreement's term may be left open from the outset, its duration linked to the date of recovery by the lenders of their principal and interest, and by the investors of a stated return (subject of course to the pattern of risk allocation and perhaps also to a maximum period). This variable term model is often associated with 'pin-point' equity structures where the SPV has no real substance.

Design and construction

There will be an obligation on the SPV to design and construct the relevant facilities, by an agreed date, in accordance with agreed standards (and a specification is likely to be

attached to the document). Liquidated damages may (or may not) be payable if the deadline is not met. There may be a 'backstop' date (eg one year after the due completion date) on which the agreement will terminate if the works are still unfinished. Any contractual completion date will have to be subject to an extension of time mechanism. (An example of how the SPV should seek to pass risks through to the project contracts is that it is likely to seek at least a matching liability from the contractor under the construction contract in the event the SPV is liable to pay any such liquidated damages.)

Inspection and approval

Rights will be vested in the government body (or its representative) to inspect the design and construction works as they proceed, and perhaps to approve certain aspects of them. The extent of any powers of approval is always a contentious issue (see further below). At the very least, copies of all final design and 'as-built' drawings are likely to have to be supplied.

Site acquisition

The subject of acquisition of the project site will be addressed. Commonly, this is the responsibility of the government entity, which is likely to be better placed to exercise any compulsory purchase powers than the SPV. On the other hand, the SPV may be made the gover nment's agent for this purpose, with responsibility for much of the detailed administrative work involved. The condition in which the site is to be delivered to the SPV can be a contentious issue.

Financing documents

The government entity may seek powers of approval in relation to some or all of the financing documents entered into by the SPV. This, too, can be a matter of contention. The financing of the project will, essentially, be at the SPV's risk, and it will therefore seek maximum freedom to arrange it on such terms as it thinks fit. The government, on the other hand, will have an interest in ensuring that the project is, in fact, completed as required by the concession agreement, and the terms of the financing documents may also have an impact on the exercise of certain of its own rights and powers (such as the obligation to pay compensation in given circumstances). This debate frequently focuses on subsequent amendments to the documents rather than their initial contents. (The terms of the initial offer of finance will usually feature in the government's appraisal criteria, making its approval as they are documented unavoidable.) For example, will approval of increases in the SPV's debt burden be required, or of changes in the identity of the shareholders?

Variation mechanism

The government entity will have a right to vary the specification for the works and the time for completion. The SPV will have the normal entitlements to adjustments to the programme and to some form of compensation. The more difficult issues concern responsibility for procuring the additional finance needed to fund a variation, and the form that compensation takes. In addition, it is not unusual for the SPV to be asked to bear some of the cost of a variation, below an agreed threshold.

Supporting facilities

Various supporting facilities and arrangements may be necessary as the project is implemented. Connecting roads may have to be built and maintained, for example, or utilities such as water and electricity supplied. Frequently, these responsibilities will fall outside the scope of the concession and the obligation to provide them is placed on the government entity.

Ancillary developments

A BOT project will always have a clear principal objective – eg the provision of a road or railway, or the completion and operation of a power station. It will often generate incidental development opportunities, however, such as the exploitation of unused land or the creation of retail facilities. The agreement will deal with the parties' respective rights in relation to these developments and, in particular, with their respective interests in the proceeds.

Operation

The agreement will set out the SPV's obligations in relation to operation of the completed facility. Because 'operation' will, in a sense, be a funda-

mental right of the BOT concessionaire, the premise will be its freedom to structure the operating regime as it wishes. The issue, then, will be the extent of any constraints imposed on that freedom. What role will the government entity have? What powers of approval will be exercised? What performance standards will have to be met?

Maintenance

The agreement will inevitably specify standards of maintenance for the completed facility that the SPV will have to meet throughout the term of the concession. The government entity will have certain rights of access and inspection. The more difficult question concerns the way in which those obligations are affected by the declining design life and asset value of the facility.

Charges

The SPV will be entitled to charge fees or fares to users of the facility. Where the project involves an offtake contract, the concession agreement may have little or nothing to say about charges. Where the user consists of the general public it is likely to be more detailed. The agreement may, in effect, be the government's regulatory tool. The nature and extent of the government entity's controls over charges, and any revisions to them over time, will be a fundamental commercial issue.

Intervention

The government entity is likely to reserve to itself certain powers to intervene and take over the operation of the facility in (limited) identified circumstances. This might be where the SPV is failing to perform, for example, or in the case of an emergency where (non-delegated) statutory duties oblige it to do so.

Change of circumstances

A central question in any negotiation of a concession agreement will concern the way in which material changes in circumstances affecting the concession are addressed. These can range from political interference through changes in law to economic disruption, and they are discussed in more detail later in this chapter. Modifications to the agreement are likely to be necessary to allow for them.

Force majeure

As with any long-term commercial agreement, the parties (or at least the SPV) will need relief from liability where they are prevented from performing by events beyond their control. This is the basic function of a *force majeure* clause. It may or may not be amalgamated with the 'change of circumstances' clause outlined in the previous section.

Termination

The agreement is likely to vest certain rights of termination in both parties. Protracted and material breach of contract (as defined) by either party is likely to be a cause of termination. So, too, is the SPV's insolvency. The occurrence of certain 'fundamental' political risks (expropriation or loss of currency convertibility rights, for example) may also be included.

Step-in rights

As mentioned in the 'Parties' section above, lenders' step-in rights are likely to be acknowledged, or even created, by the concession agreement. Step-in rights are discussed in more detail in Chapter 7.

Compensation

The agreement is likely to contain elaborate provisions dealing with the subject of compensation payments on a termination (see the 'Termination' section below).

Transfer of assets

With a BOT project, there will be a provision dealing with the SPV's obligation to transfer the project, and the completed assets, back to the government entity at the end of the term. This will generally have to be free of any liens, security interests or other such restrictions. The condition the assets are required to be in at the time of this transfer can be a matter of contention.

Competition and interference

The SPV will often seek a degree of protection from competition by third parties. If the project is being project financed, the lenders and investors who have financed it stand to lose out completely unless there is a robust prospect of the facility operating profitably throughout the

concession period. Equally, there is likely to be at least some risk of disruptive interference in the SPV's activities by other 'competent authorities' besides the government entity granting the concession. This may need to be addressed in the agreement's terms.

Law and disputes

Provisions specifying the proper law of the agreement, and the dispute resolution mechanism(s) applicable to it, will also be included (see the 'Dispute resolution' section below).

Miscellaneous

The agreement is also likely to contain provisions dealing with the following matters:

- insurance;
- liability (and cross-indemnities);
- environmental requirements;
- intellectual property;
- confidentiality;
- records and accounts; and
- legal 'boilerplate' (assignment, sub-contracting, etc).

KEY ISSUES

It will be apparent from the preceding paragraphs that a wide range of contentious issues can arise as the terms of the concession agreement are negotiated. One can never anticipate in advance exactly where the areas of greatest difficulty will be. Set out below, however, are some of the major issues typically encountered.

Risk allocation

One of the fundamental questions in negotiations is bound to be how the project risks are to be allocated between the parties. BOT (and BOO) projects will in a sense (at least as a starting point) involve a wholesale assumption of project risk by the SPV and the sponsors. This is implicit in the obligation to 'build, finance, complete, operate and maintain' the facility 'without recourse to government funds or guarantees'. The issue, then, is what risks will be retained or assumed by the government? Again, by definition, these risks will be limited. How they are identified and addressed in general terms is beyond the scope of the discussion here (but is examined in more detail in Chapter 2). Nevertheless, as will be seen from the rest of this section, the relevant areas are likely to include:

- political events;
- financial safeguards;
- change of law;
- timely provision of utilities;
- legislative authority;
- licences, consents and competent authority actions;
- inflation and economic dislocation;
- potential competition;
- subsidies and pricing risk; and
- legislative authority.

The real challenge to the participants in the negotiation process is to find an appropriate balance. Each side needs to strive to impose as much risk on the other as it thinks it can get away with. Governments will sometimes try to shy away from accepting any clear-cut obligations, and concessionaires will try to protect themselves against any adverse developments. The resulting tug of war will drive much of the negotiations, and do much to shape the final pattern of risk allocation. The process is more of an art than a science. The danger, however, is that if the process is mishandled, the resulting assumptions of risk may ultimately do real damage to the project. The sponsors may factor a high level of risk protection into their prices; friction and conflict may result as parties seek to escape unwelcome responsibilities; eventually the whole arrangement may break down. In the end, there is no real substitute for a rational approach to risk allocation, leaving risks where they can be managed and controlled most effectively.

Indeed, it is often the case that the most constructive approach is to foster a 'partnership ethic' – to put in place mechanisms that encourage a spirit of cooperation rather than confrontation. The relationship between the parties will be a long-term one, and unforeseen problems will inevitably arise over time. At some stage, revisions will almost certainly be needed to the agreement. If incentives and procedures are structured in such a way as to allow both sides to gain if possible from problem solving, much will have been done to provide for the project's long-term success.

Practical controls

One notorious area of difficulty in negotiations is the extent of the government's control over the SPV's activities as the project is implemented. This applies both to construction and operation. The SPV will usually seek maximum freedom to implement the project as it sees fit. The concession agreement will contain a number of parameters that the SPV will have to meet. There will be a 'specification' or 'government minimum requirements' document defining the project in technical terms, under which certain minimum performance standards will need to be satisfied, and rights of access and inspection given to the government's representative. But the SPV will be reluctant to go beyond this. Governments, on the other hand, often demand more. The government entity may insist on a right to approve all the (key) project contracts, for instance, and to veto any changes to them. It may try to participate in the negotiation of these documents. It may also seek a right to approve all the design documents as they are produced, and even to supervise and direct the detailed construction works on a day-to-day basis. In addition, it may try to determine much of the operational regime.

The SPV's position is that, given the extensive nature of the risks it is taking on, and the nature of the undertakings given to government, it must have the freedom to manage its responsibilities as it thinks best. If things go wrong, it will have the problem of finding the additional finance necessary to put them right. Too much government control may actually prevent the SPV from discharging its obligations. The 'parameters' contained in the agreement will give the government sufficient protection, the SPV may say, and to seek more is inconsistent with the underlying philosophy of a BOT project. Ultimately, if the SPV fails to perform, the agreement can be terminated and the project taken back into public ownership.

On the other hand, the government entity will have statutory duties and a public interest to protect, and a complete 'hands-off' approach is unlikely to be acceptable to it. Government entities sometimes have difficulty in adjusting to the cultural changes that a BOT project involves. They sometimes view a concession as just another form of public procurement. The political sensitivities frequently involved can heighten the temptation to meddle. This can be very damaging.

The result is usually a carefully crafted compromise. As with risk allocation, the aim should be to find an appropriate balance that recognises both the SPV's need to manage its own affairs and the government's protecting of its legitimate interests. 'Micro-management' is generally not appropriate. It may create financial uncertainties which lenders will regard as unacceptable and may indeed frustrate the whole purpose of transferring the project to the private sector, by depriving the latter of the flexibility, incentives and opportunities it needs to benefit from its investment. But equally, the government will want to ensure that the project is being implemented and operated as envisaged.

The resources available to the SPV will be a relevant consideration. If the SPV has very significant resources at its disposal, its 'non-interference' arguments may be more difficult to rebut; there will be little doubt about its ability to discharge its concession agreement undertakings. If there is a 'pin-point' equity arrangement, on the other hand, involving an SPV with minimal financial and human resources of its own, the government entity will be in a stronger position to assert a high degree of control.

Economic control

Not surprisingly, the area where this issue of control tends to cause the greatest anguish is in the context of the charges levied by the SPV for the completed facility (fares or tolls). In what circumstances will the SPV be allowed to increase them? If the project includes an offtake agreement (as in the case of a pipeline project), the issue may not concern the concession agreement at all. Prices will be determined in the context of the offtake agreement. On the other hand, if the payments for use of the facility are to be made by the government entity (as with many PFI projects in the UK) there will at least be no question of the SPV revising them unilaterally.

The main difficulty arises where third-party users of the facility (ie the public) are charged fees or fares by the SPV. Keen political sensitivities often colour the picture. An initial increase in the level of fares may be necessary (in the case of a tolled road for example) as the project is transferred from the public to the private sec-

tor, to ensure its economic viability. That can be difficult enough in itself (as the Bangkok Expressway project demonstrated). However, the main negotiating point will concern the SPV's ability to increase those fares subsequently over the life of the concession, in response to given events – eg higher than expected construction or operating costs, falling profits, inflation or other 'exceptional events'. In reality, this will be a key issue of risk allocation. When should the consumer be asked to bear the risks which, *prima facie*, are to be borne by the SPV?

Exceptional events

The aim of any fare-revision clause would be to compensate the SPV for the occurrence of identified risks – to allow it to recover losses and costs and/or protect profits. There are various ways of approaching this subject in the concession agreement. Indeed, a variety of different mechanisms are likely to be included, reflecting the range of different risks to which the SPV may be exposed and the appropriate response to them. It is usually convenient, however, to draw a number of these threads together in a single provision, sometimes labelled 'exceptional events' (or a 'financial balance' clause).

The purpose of a provision of this kind will be to restore the SPV's financial position – to put it in the same position financially (to a greater or lesser extent) it would have been in had the relevant event not occurred. The clause usually makes a number of different remedies available in order to achieve this result. The SPV may be entitled to an increase in the level of charges, an extension of the term of the concession, or a cash payment (or a combination of these). The accurate calculation of the SPV's losses following an 'exceptional event' is unlikely to be easy. Nor may providing for suitable compensation. It may make sense to link these calculations to the project's financial model (or one of them) and its assumed rates of return. In fact, there will be three distinct questions to address as the clause evolves:

1 What events should entitle the SPV to compensation?
2 How should its loss be calculated?
3 What compensation should the SPV receive?

The first question will essentially be a matter of risk allocation. The answers can therefore vary enormously. Two events will nearly always feature amongst those listed, however; political *force majeure* and change of law. The SPV will have to have a degree of protection against political interference with the project – loss of permits, expropriation, nationalisation, alteration to the relevant legislation, fundamental changes of policy, and so on. Secondly, the SPV will seek at least some protection against changes in law, because these can transform its cost assumptions and therefore the project's economics. The extent of that protection will be a matter for intense negotiation. Other events that might be encountered in this context include variation orders, 'non-political' events of force majeure and competition.

The scope of clauses of this kind tends to differ markedly between emerging market and developed nation projects. In the former, the SPV will sometimes try to protect itself against any material adverse event beyond its control. In the latter, protection is likely to be much more limited. Ultimately, the perception of risk in a particular environment will be the key factor.

Dispute resolution

Concession agreements are complex, long-term commercial agreements, giving effect to a difficult process of risk allocation. For that reason, the dispute resolution mechanisms they embrace need careful consideration. In fact, three distinct kinds of dispute resolution are likely to be addressed:

1 legal disputes involving arbitration or litigation and questions of law;
2 expert determination; and
3 revisions to the agreement – in particular to give effect to financial balance clauses (eg revisions to tolls).

In projects in emerging markets, the proper law and system of arbitration adopted or which courts will have jurisdiction to consider disputes can be hotly contested issues. Governments will always prefer local law and local courts or arbitration, while lenders and investors may regard this as unacceptable. Provisions which address disputes about breach of contract are merely part of the picture, however. Arguably, greater effort and skill will go into the crafting of provisions referred to in the third point above dealing with exceptional events, the calculation of loss

and compensation, revisions to charges and so on. This is, of course, a very different business from the application of legal remedies. What is needed is a mechanism for reaching a fair commercial result, based on a proper understanding of the impact of the events in question, the parties' respective interests and the intent of the agreement.

The exact approach adopted for dealing with revisions to the agreement will differ from agreement to agreement. The mechanisms are usually based on a form of expert determination, but with much more wide-ranging powers. A 'panel' system is quite common. For instance, the agreement may provide for a panel of suitably qualified experts to be put in place with responsibility for applying the 'exceptional event' clause. Depending on the nature of the event they may be 'financial experts', 'engineering experts', 'industry experts' or a combination of experts. Their task would be to calculate the SPV's loss and to determine which of the available remedies (eg increases in fares, extension to the concession period, etc) should be adopted. Their decision would be final and binding.

Termination

Termination clauses in concession agreements tend to be debated at length because their effect would be to collapse the entire BOT structure. In what circumstances should either party have the right, in effect, to cancel the project? Some of the termination events will be straightforward – the insolvency of the SPV, for example, or the nationalisation or expropriation by the government of (key) project assets. Others may cause greater difficulty. Termination provisions are often used to reinforce the protections provided by the agreement against political risk. Political *force majeure* is typically included, but the clause might be widened to cover the loss of certain essential permits or exemptions, or disruption caused to third party suppliers. Unremedied breach of contract will also usually feature.

The subject is greatly complicated by the lenders' typical insistence on step-in rights. These are explained in detail in Chapter 7 but, put simply, they will allow the lenders, in identified circumstances and subject to specified conditions, to pre-empt a termination by 'stepping into the shoes' of the SPV in order to cure a default. Where they are exercised, the government entity will agree in effect to suspend its termination rights as the ostensible grounds of termination are put right. If the attempt fails and the termination is allowed to go ahead, its effect on a project financing will be to sever the cash flow on which lenders depend for their repayment and investors for their return.

For that reason, perhaps the most contentious area of all in the context of this clause is the subject of compensation. What, if any, compensation should be payable to the SPV if termination takes place? Where a government default is involved, the SPV and its lenders and investors will obviously seek maximum compensation – sufficient to pay out the lenders and provide the shareholders with at least a substantial part of their expected return. The more difficult question concerns an SPV default. Here, the government entity's position is often that no compensation whatever should be payable. The SPV has failed to perform, and must live with the consequences. Shareholders are often ready to accept this, but lenders find it more difficult. After all, they will say, they have provided (probably) most of the necessary finance; why should they suffer a crippling loss, and the government a huge windfall gain, just because of a termination event which they may have been powerless to rectify? The government will get a completed project 'free of charge', as it were, and the lenders will be unable to recover more than a fraction of their funding. The value of the assets transferred will bear no resemblance to the loss actually caused to the government. If this is indeed the position, the parties may be able to challenge the clause on legal grounds, as amounting to:

- an unenforceable penalty clause;
- expropriation without compensation;
- unjust enrichment.

Perhaps the most rational approach is to consider the question of compensation from the perspective of the ability of the government to recover the amount paid subsequently – eg by continuing to charge tolls for the completed facility. But the issue is usually a highly emotive

one. The government entity may simply find the idea of 'default compensation' profoundly unpalatable. As with so many of these provisions, the outcome will depend on the course of the commercial negotiation.

CONCLUSION

Not surprisingly, any number of issues can arise as concession agreements are structured and negotiated. The lack of standardisation of these agreements (at least in the international field) exacerbates this problem. The more familiar the parties are, though, with their typical provisions and objectives, the better. No one wishes to waste time unnecessarily in fruitless argument and negotiation. The contents of the concession agreement will be crucial to the success or failure of a BOT project. A well-informed, constructive approach on the part of all project participants will achieve the best results.

Chapter 6
Sources of Finance

There are likely to be a number of different potential sources of finance for the SPV and they may be available at different stages in the life of the project business.

These sources include the following, each of which is examined further in this chapter:

- equity;
- mezzanine finance;
- commercial lending;
- bond finance;
- project leasing;
- development finance institutions;
- export credits or finance supported by and political risk insurance provided by export credit agencies; and
- derivative products.

Each entity providing finance to the SPV will be taking different types of risk for different levels of reward. Some of the financing parties will not, on analysis, be taking very much or any risk of failure of the project business: for example, a development finance institution such as the European Investment Bank (EIB) will normally insist on a state guarantee, or failing that, a guarantee given by commercial banks, during the construction period of the project, in which case EIB is taking credit risk in respect of the guaranteeing banks rather than on the project business. Again, many 'project lessors' of the UK's IPPs have relied primarily on bank guarantees, letters of credit or secured cash deposits ('cash collateral') where they have taken the credit risk on banks rather than the project business. Certain providers of finance will accept risks that commercial banks are unwilling to take, such as the political risk in certain countries – hence the participation of export credit agencies in most large projects, particularly in emerging markets, because it is a function of such agencies (one of whose purposes is to facilitate exports) to take such risk (although within established guidelines).

EQUITY

It is normal for BOT projects to be funded at least in part by equity, and this will invariably be a precondition to the host government granting the concession to the SPV and to the availability of commercial debt funding. In its true sense, an equity investment is a subscription for share capital in the SPV. The expression is, however, often used in a wider sense to describe forms of investment in the SPV which are akin to equity in terms of the rights which they confer on the holders. Different forms of investment may be more appropriate to the circumstances, depending in part on the jurisdictions involved. In the UK, project sponsors will commonly consider lending debt to the SPV which is subordinated to all other borrowings of the SPV. This might be as an alternative or in action to subscribing for the SPV's equity, and is normally based on tax considerations and that loans are more easily repaid than equity.

The principal equity investors in a BOT project will be the sponsors, although other parties might contribute equity to the SPV – for example, the host government, institutional investors and, in some cases, the general public (for example, the Eurotunnel and Eurodisney financings). Equity is the lowest ranking form of capital because the claims of the equity investors will rank behind those of other creditors of the SPV. In addition, as a matter of contract, the lenders to the project are likely to restrict the amount and timing of payments of dividends and other distributions from the SPV to the equity investors. The equity investors, therefore, bear the greatest risk of loss if the project is unsuccessful and for this reason will seek a much higher rate of return from the project than, for example, lenders of senior debt. On the positive side, they stand additionally to gain if the project performs better than expected, although where the government is liable to pay tolls or for power or other supplies through a tariff mechanism, the latter could be structured to provide a maximum limit to the shareholders' rate of return. It should be noted that the equity investors will not necessarily benefit from any increase in the value of the SPV's

assets in a BOT project either, given that these assets will be transferred to the host government at the end of the concession period in a BOT project at either little or no cost. They will therefore need to be satisfied that the return on their investment can be realised from the project revenues during the life of the concession.

In the short term, the sponsors are likely to fund their capital contributions to the SPV either internally or from on-balance sheet borrowings, although the expectation is that the amount invested will be at least partly matched by the profits that the sponsors expect to derive from their project contracts with the SPV. If it can be completely matched in this way, dividends received by the sponsors will be pure profit. The extent to which the sponsors can restrict their equity contributions and maximise their contract price will depend on a number of factors, but is likely to be more limited where the concession is awarded on the basis of a competitive tender.

The proportion of a project's anticipated funding needs which will comprise equity investment will vary from project to project and will be influenced by a number of factors:

- *Project economics.* One factor will be the anticipated source of project revenues. If the project is to be exposed to market risks, such that its ability to sell its product and the price which it obtains for that product depend on prevailing market conditions, the lenders to the project will require the sponsors to contribute a greater percentage of the project cost by way of equity than where the SPB is to enter into a take-or-pay arrangement whereby a creditworthy third party has contracted to purchase, or at least pay for, the project's entire product;
- *Market perception.* As a general rule, the greater the risks perceived by the market to be associated with the project, the greater the proportion of equity that will be required. For example, a power project or any other project for the provision of essential services might be viewed as representing a lower risk than, say, a leisure-based project;
- *'Cost' of Equity.* As equity investors seek a higher rate of return on their investment than commercial lenders to a project, a higher proportion of equity is likely to render the project more costly for the host government. The government will wish to strike the right balance when considering whether the project offers value for money;
- *Country risk.* The increased risks perceived to be associated with implementing projects in certain jurisdictions, particularly in emerging market countries, will often lead to the demand for a greater equity investment;
- *Requirements of the jurisdiction of the SPV.* The amount and nature of the investment in the SPV, whether by the sponsors or others, will depend partly on the accounting standards and the laws of the jurisdiction of incorporation of the SPV. For example, some jurisdictions do not recognise the ability of a company to issue more than one class of equity. Others require special permission to issue equity to foreigners. A particularly important factor in structuring project investment will be the tax treatment of distributions to investors and any moneys realised on a sale of shares, and the availability of double tax treaties would be relevant. Equally important is the risk in certain jurisdictions that third party creditors might be able to look through the corporate structure and seek repayment of their debts from equity investors, or that equity investors might incur environmental liability or liability for taxes if the SPV does not comply with local law. In certain circumstances, therefore, an alternative form of investment to equity might need to be considered;
- *Host government requirements.* The host government will normally require a minimum equity investment by the sponsors in order to incentivise them to ensure the project's success. The government might also require investment by parties other than the sponsors, including local investors;
- *Lender requirements.* Commercial lenders to the project will also normally require a minimum equity investment by the sponsors, as a measure of their commitment to the project's success.

As has been mentioned in previous chapters, it is sometimes possible to finance and implement projects on the basis of a 'pinpoint' or minimal capital contribution.

Relevant documentation

The documentation relating to sponsors' equity contributions is likely to include the following:

- *Constitutional documents of the SPV* – see Chapter 4;
- *Shareholders agreement* – see Chapter 4;
- *Subordinated loan agreement* – where the sponsors contribute by way of subordinated debt, they are likely to enter into a relatively simple form of loan agreement with the SPV setting out the basic terms of the lending. In their capacity as subordinated lenders to the SPV, the sponsors will invariably be required to subordinate their rights under an intercreditor agreement;
- *Financing documents* – the finance documentation is likely to contain provisions that stipulate the amount of equity which the sponsors and any other investors are to contribute, the timing of those contributions and the amount and timing of dividends and other distributions which the SPV can make to its shareholders. These issues are discussed further below.

THE SPONSORS AND DEBT FINANCE

One of the key requirements of sponsors of most infrastructure projects is to limit at the outset their prospective financial exposure on an underperforming project to a finite amount known in advance. The main reasons for this are as follows:

- The financial resources needed to construct the project will often be beyond the means of a single sponsor. Raising additional debt could breach a sponsor's existing financial covenants to its bankers and security requirements may run contrary to existing negative pledges. Increased borrowing will have adverse implications for a number of key financial ratios, such as gearing (debt:equity) and have consequent adverse implications for the attractiveness of its equity.
- An understandable reluctance to have unlimited liability for the possible failings of others who have a significant involvement in the development or operation of the project.
- To enable the sponsors to forecast their returns from the project in a variety of scenarios and determine whether the prospective rates of return are adequate in relation to the risk being taken and the assumptions on which they are based. As the equity providers, they are in theory the greatest risk-takers to the project and seek the highest rates of return.
- To retain funds for other projects, which, for whatever reason, are less suitable for non-recourse finance.

This absence of a 'big balance sheet' committed to support underperformance forces the lenders to the project to assume a part of the project risks. The remainder of this chapter addresses the characteristics of different types of debt finance that are theoretically available to finance a BOT project, the role of each type and the legal and practical advantages and limitations imposed on their use.

The chapter's focus is predominantly on the construction stage of projects. Once the project is an established operating entity, it is income generating and it is likely that the amount of that income can be forecast more accurately. At that time, the SPV and its sponsors will want to reconsider the basis of its formative finance, and prospective debt or equity providers will analyse the project from a fresh perspective.

MEZZANINE FINANCE

Nature and sources of mezzanine finance

Mezzanine finance has characteristics of both debt and equity, and in terms of the risks involved in contributing this type of capital, it normally falls somewhere between senior debt and equity. Examples of mezzanine capital are subordinated debt and preference shares. It should be noted that the type of subordinated debt often lent by sponsors to the SPV is strictly a form of mezzanine finance. This section, however, focuses on mezzanine finance made available by parties other than the project sponsors for the purposes of achieving a commercial return from the finance alone.

In the same way as debt, under normal circumstances regular payments akin to interest and/or principal will be made to the mezzanine providers. These payments will, however, be subordinated to the senior debt and will only be made if specified conditions are satisfied. These

conditions will need to be carefully considered, but generally they relate to the performance of the project and the availablility of funds to make the payments. The position of the mezzanine holders where funds are not available, however, is more characteristic of equity than debt. Mezzanine debt, however, ranks ahead of equity in that, if funds become available, holders of the mezzanine capital will be entitled to payment ahead of any distributions that might otherwise be available for holders of equity.

The risks in the project taken by mezzanine providers are greater than those taken by lenders of senior debt (see below), and the required returns of mezzanine providers will be higher. These returns might take the form of an increased rate of interest on loans and/or some share in the profits of the project, though the returns that mezzanine providers can expect will be less than those required by the providers of equity as they take a greater risk in the project. The mechanics by which mezzanine providers might share in the profits of the project include taking share options or warrants to enable them to subscribe for shares in the SPV, usually at a low or nominal price, so that they will benefit from any appreciation in the capital value of the shares and should be in a position to benefit from distributions of the SPV by way of dividend.

Mezzanine capital might be provided by venture capital specialists or certain investment trusts and insurance companies. The benefit to the sponsors is that the amount of equity that they are required to contribute is likely to be reduced. Lenders of senior debt should also welcome the additional investment in the SPV. The mezzanine providers themselves have the opportunity to earn a reasonable rate of return without taking the full risks of providing equity.

Documentation

The documentation relevant to mezzanine finance will vary according to the type of finance provided, but typical examples include:

- *Preference shares.* Where the finance is to be provided by way of subscription for preference shares in the capital of the SPV, the rights and obligations of the preference shareholders, as amongst themselves, the holders of other classes of shareholder and the SPV itself, will normally be set out in the SPV's constitutional documents. In certain jurisdictions preference shares are not permitted; and
- *Subordinated debt.* Where the finance is to be provided by way of subordinated debt, the SPV and the mezzanine providers will usually enter into a loan agreement that sets out the terms on which the loan will be made. The basis on which the loan will be subordinated to the rights of the senior debt providers and any other lenders to the project will need to be documented separately, and these will normally also be contained in the intercreditor agreement between the SPV and all lenders to the project (see Chapter 7).

COMMERCIAL LENDING

Characteristics of commercial loans

Syndicated term debt

Loans to finance BOT projects will invariably be committed term loans, with a structured repayment profile. What are the alternatives? Project sponsors will be unwilling to accept the risk of an uncommitted facility such that funds may not be made available when needed. Revolving credits – where funds are drawn and outstanding for short periods (typically six months) before becoming repayable and are capable of being redrawn on the repayment date or at a later date provided certain specified conditions are met – are also not entirely suitable for project finance. The SPV will not want, even in theory, to be liable to repay debt on maturity of the advance.

In general, the senior debt to a project will be syndicated to a number of commercial banks, and each of the syndicate banks will be willing to lend on the same terms and conditions. The syndicate will be subject to the same priority of debt, sharing receipts and willing to accept that a high degree of consensus is reached between them before those terms are changed, the debt becomes immediately repayable or security is enforced.

Drawdown as needed to pay project costs

Funds will be needed to meet costs in the construction phase of the project, but project revenue at this stage will be non-existent or

inadequate. The relationship between permitted drawings of commercial debt as against drawdown of equity or other shareholder contributions is a matter for negotiation at the term sheet stage for the commercial loan(s). Those negotiations will be driven by differing perceptions of the appropriate debt:equity ratios and the commercial lenders' desire to reduce their risk by having the earliest stages funded out of equity. This issue is discussed in Chapter 4.

The major expenses will be payments under the construction contract as each stage (or 'milestone') is passed and, increasingly, accrued interest costs. In addition to initial drawdown, there will be the expenses of putting the financing in place and, throughout the construction phase, the ongoing management expenses and fees of the supervising architects and engineers.

Further drawdowns are not usually permitted once the project has been handed over by the contractor to the SPV. At this stage the project will be revenue earning and can begin meeting liabilities itself.

Linkage to anticipated project cash flows

In a 'pure' project financing, the ability to pay interest, repay principal and any of the multiplicity of liabilities for which the SPV is potentially liable, is entirely dependent on the receipt of adequate revenues. Debt is usually at its highest on handover of the project to the SPV and includes interest accrued during the construction phase, which will have been capitalised. The profile of debt service and loan repayments needs to follow the expected trends of the revenue earning of the project and this often requires project sponsors to forego dividends in the early years of operation. In many respects, the classic repayment profile – six months grace after the commencement of operations, equal six-monthly instalments thereafter throughout the repayment period, while interest is also to be paid in full on the same dates – is illogical. It presupposes that revenues will be at their highest for the first six months after operations start (the principal amount on which interest accrues will be at its highest before any principal is repaid), whereas the reality is usually that as experience of operations increases and the reputation of the project's product or service rises in the market-place, revenues rise.

Limited lender appetite for long-term debt

Commercial lenders see themselves as only medium-term lenders for project development, usually expecting to be repaid between five and seven years from the beginning of operations. The number of projects worldwide that are capable of paying back debt in this period is strictly limited, and as experience and understanding of BOT projects has increased, together with competitive pressures, so typical repayment periods are extending to seven to 10 years and, in some instances, beyond.

Usually single currency

Commercial lenders will always seek to limit their exposure to a project by lending in the currency that is most naturally hedged by the project's income. Where that is a different currency from that of the construction contract, it will be easier for the currency costs to be hedged over the relatively short construction period than the much longer repayment period for the debt. Difficulties arise where the project's income is in a soft currency, because currency depreciation and limited currency availability make it unattractive for non-local banks to lend, despite higher interest rates. The opportunities to hedge soft/hard currency exposures on a project in the financial markets are very limited and, where available, are (as would be expected) very expensive.

Unlike commercial borrowers, projects have very limited ability to repay additional amounts of principal if the overall facility limit would otherwise be exceeded because of currency movements. This is why multi-currency facilities do not provide a solution.

Usually floating rate of interest

Because commercial banks fund themselves in the main by raising short-term funds at a floating rate of interest, they are not in a position to lend long-term funds at a fixed rate without hedging their interest rate exposure. However, making the project bear the risk arising from movements in interbank interest rates is unattractive to prospective lenders and investors. Adequate hedging by debt providers would enable them to provide fixed rate funding. But availability of hedging in the markets reduces with lengthening maturities, while the cost will of course need to

be capable of being absorbed within the project economics. SPVs without additional credit enhancement are most unlikely to be acceptable counterparties for the swaps market.

Sophisticated participants

The arranging of project financings is limited to a relatively small group of experienced commercial banks, well able to analyse the commercial and political risks of a project but with a limited appetite to accept them. The amount of management time that each will have spent in the past working with, or trying to restructure, underperforming projects is usually sufficient to ensure that members of this group are only attracted to projects which in theory are financially robust.

Greater lender unanimity needed for action

The amount of authority that commercial lenders are willing to delegate to either the facility or security agent is strictly limited. Similarly, lenders do not find it desirable to be outvoted by other members of the syndicate. But no lender likes decisions to be 'held to ransom' by one or a few other lenders, or to be consulted on trivial matters. So how are these issues usually balanced?

- The facility agent will usually be entitled to take decisions which it is satisfied are of a formal, minor or technical nature, or to correct mistakes. However, the management of SPVs invariably consider that covenants are too tightly drafted, thus preventing them from being able to take decisions on operational matters that do materially affect matters of creditworthiness, and obliging them to seek waivers from lenders.
- All other amendments, consents or waivers requested require approval by lenders representing 66.66 per cent or 85 per cent by value of the loan, except for amendments or waivers affecting commitments, repayments, interest and release of security, which require the approval of all lenders.

Commitment fees accrue from signature, not loan availability

Banks expect to be paid any fees arising from their commitment to lend from the date of signature of the loan agreement, even though numerous conditions precedent are likely to remain outstanding at this stage. The theoretical justification for this is that from then on the timing of when and if funds must be made available is in the hands of the SPV. In practice, a number of these conditions are controlled by third parties – not least approvals from central and local governments – and the obtaining of them is often a cause of substantial delay.

Perceived undersupply of commercial funding

There is, and will always be, more loans being sought by sponsors for projects than funds available to be lent. There are three main reasons for this:

- project financing is riskier than many other forms of finance;
- there will always be a significant difference between the project risks that sponsors believe lenders should be willing to accept and those risks they *are* willing to accept; and
- the limited recourse nature of the lenders' exposure means prospective lenders need carefully to identify and assess the risks attaching to the project. This increases the time and skills needed to carry out the necessary review procedures.

Advantages and disadvantages of commercial loans

Very flexible drawdown possible

The drawdown period for borrowing funds will be designed to be lengthy. This will permit borrowing to make each 'milestone' payment under the construction contract, as well as other initial and ongoing expenses incurred and interest costs during the construction phase, unless the project is in receipt of other income during this period which is intended to meet any of those liabilities.

Conditions may render financing undrawable

Conditions precedent fall into two categories:

1 Initial general conditions covering such issues as:
   - effectiveness of project contracts;
   - provision of the project site;
   - feasibility studies;
   - third party approvals; and
   - insurance.

2 The representations and warranties given by the borrower continuing to be true, there being no events of default, the required progress in construction having been achieved and the required levels of funding from shareholders or other lenders having been met.

It is often the third-party approvals that are the most problematic. Bureaucratic inertia plays its part, but often the lenders want all approvals necessary for the entire project to be issued up front. However, the government may be unwilling or unable to give any approval or to provide land for elements of the project until work for which it is actually relevant is about to start.

Once drawdowns begin, their suspension becomes less likely

Because in its purest form project finance is limited recourse development finance until the development is operational, the project infrastructure is likely to be worth considerably less than the amount spent to develop it to date. Depending on how much of that spending is raised through debt, the realisable value may even be insufficient to repay that debt. While it is a difficult decision to make, it is often felt to be in the lenders' self-interest to continue to support a project through unexpected difficulties that arise in the construction phase.

Control issues

Substantial control over activities of the SPV make the technique attractive for banks but inhibiting to the SPV. Throughout the negotiations of debt financing the arrangers of loan finance to a project will be preoccupied with the risks the lenders are taking and that the new SPV is a new operation with management newly hired or seconded. The arrangers will insist on substantial controls over all those aspects of the project that may have financial implications. Management, which is naturally entrepreneurial and optimistic, find it frustrating to seek approval for budgets and other actions from the naturally cautious (though they would say prudent!) bankers. That frustration is barely reduced by advice that covenants can be renegotiated when the project is a successful operating company.

Substantial default events of limited assistance without credit support

Failure to seek consents and a lengthy list of other events, many of which are completely outside the control of the SPV or the project sponsors, will be 'events of default'. The occurrence of such an event is designed to strike terror into the hearts of the SPV's shareholders, entitling the lenders as it does to seek immediate repayment of their loan. With project financing, the decision to lend is made by the lenders on the basis of projected future revenues. Events of default are an opportunity for lenders to review their options. The most likely results of that review are that subsisting defaults are ignored for practical purposes or, if the project economics are fundamentally off course, a call for the sponsors to invest more equity.

Lender/SPV communication via the agent bank

The flexibility that a project loan offers as regards communicating with lenders and changing documentation is one of the great advantages over a bond issue. The facility agent has the role not only of acting as a permanent intermediary between the SPV and the syndicate, with both groups positively intending to communicate with each other from time to time, but also informally representing 'its' syndicate in discussions with the SPV. In comparison, the investors in bonds have a positive desire to be passive, simply receiving interest and principal payments. In keeping with this, it is difficult to communicate with them (typically achieved through newspaper advertisements to call them to a meeting), difficult to have quorate meetings and to reach the required consensus to make changes to documentation. Their 'agent' – the trustee of the bond issue – has a role typically limited to enforcement of security.

Obtaining waivers to documentation possible but often tortuous

While it is easier to communicate with the lending syndicate, it does not mean the syndicate is quick to respond. With the high degree of consensus required to give approvals by lenders, the process goes at the pace of those syndicate members with other distractions at the time the request is made. To resolve this problem, docu-

mentation now often provides for deemed approval by an individual lender if it fails to respond within a specified period. This can lead to immediate rejection of a request, in practice giving the particular lender as much time as it wants to consider the merits of the application more fully at a later date.

Failure to fund

Significant participation by individual lenders causes substantial difficulties if one fails to perform. A lender being unable for financial or legal reasons to provide funds when called on to do so is fortunately not a problem that often affects a project. It is more of a possibility for a project in an emerging market which is susceptible to an international embargo for political reasons or where local fledgling banks are participants. A failure to fund would leave a gap in the financing of the project which would need to be filled if it is to reach its operational stage. Lenders will not accept joint and several responsibility for providing the loan.

Change of law, tax regime and lender regulation risks left with SPV

Lenders to a project will expect the project to meet additional costs (or compensate reduced return) incurred by changes in law, tax regime (other than changes in the rate of corporation tax) or regulation affecting the project loan not only in the country of the project but also in the domestic jurisdiction out of which each particular lender is making its funds available for the project. By their nature these costs are unquantifiable and unpredictable, and therefore what impact they will have on the project economics is unknown at the outset. It is sometimes contentious at what level of priority a lender should be entitled to recover these costs as against normal debt service and whether a lender should be entitled to be prepaid, and if so at what level of priority, if these costs are ongoing and unacceptable to the SPV.

Familiar and easily understood technique

The making of finance available through a term loan is an easily comprehensible mechanism that will be familiar to all participants in a project. However, sensitivities to particular provisions that may be offensive to local legal or cultural requirements need to be accommodated. The most obvious of these is the sensitivity of *Sharia* law to interest liabilities.

The technique is so well recognised that, while the degree of enforceability of various individual provisions varies considerably, lenders are sometimes comfortable lending under the local law of the project or under a so-called neutral system of law (instead of the more usual New York or English law) if local pressures so dictate. In comparison, bond investors would find any unusual governing law unacceptable.

Transferring participations

The signing of a transfer certificate by the facility agent, transferor and transferee and the registration of the certificate by the facility agent as a method of transferring a loan participation is more cumbersome than simply the delivery of a bond, if necessary duly endorsed by the transferor. The transfer of a loan participation (and a bond), however, both need to be accompanied by an effective transfer of the security for the loan (or bond) obligations. (Security is discussed in detail in Chapter 7.)

Lender Liability?

There are three aspects of projects in respect of which lenders need to be sensitive about potential liabilities:

- advising on project feasibility;
- allegations that they control the SPV and thus are liable to meet any liabilities the SPV cannot meet; and
- arising out of use of the project assets by reason of the lenders' security interest, such as for environmental damage or industrial accidents.

Whether there is potential liability will depend, among other things, on the governing law of relevant contracts, where the SPV is incorporated, where any wrong is alleged to have occurred and the location of the project facilities. These need to be considered on a project-by-project basis. Investors in a bond financing of a project, but not necessarily underwriters or the trustee, are further removed from the project and are thus less susceptible to these concerns.

Business activities in SPV's country may have implications for lenders

Lending to a project is a business activity. Apart from the taxation of income in a lender's domestic jurisdiction, subject to any exemptions which are granted and the terms of any applicable double taxation treaty, income arising from the project is likely also to be subject to income tax in the country of the project.

Quite apart from exchange control regulations, lending may be a regulated activity in the project location. In order to be permitted to lend or recover a loan it may be necessary to be licensed, or local banks may have claims ranking with higher priority than non-local banks, as in India where it is also intended for them to have a fast-track recovery procedure through tribunals separate from the usual court system.

The increased use of embargo as a political weapon may also impose restrictions on continued funding to a project, recovery of outstanding sums or other dealings with the SPV.

BOND FINANCE

The traditional Eurobond is now one of the principal financing tools for many leading corporates in managing their treasury and funding operations. As a major source of finance, it is perhaps surprising that only a very small proportion of finance allocated to projects is funded through the capital markets, particularly taking into account pricing, average life and maturity characteristics, which would all point to bonds being an appropriate source for meeting project needs. The development of significant interest in applying bond finance for projects has been tempered by difficulties in successfully applying traditional Eurobond financing techniques to the project structure. However, an increasing sophistication in financing techniques for projects, the development of a number of approaches to the application of bond finance and an increased risk appetite among institutional investors looking for higher-yielding assets is leading to accelerating growth in the project bond sector.

Advantages of using bonds

The Eurobond is a relatively standardised financing instrument which has been an important factor in the rapid growth of the bond market in recent years. Some of the advantages put forward for using this form of finance in BOT projects are as follows:

1 The bond markets provide a cheaper source of funds. On a comparative basis longer maturities and a traditionally fixed rate instrument may have significantly favourable pricing implications for sponsors' internal rate of return requirements than shorter-term bank lending, particularly when taking into account any additional costs required to provide fixed rate hedging in respect of floating rate bank funding.
2 Traditionally, Eurobonds contain less extensive covenants aimed at restricting and controlling the business of the borrower. However, it should be noted that this is both a function of the strength of the corporates accessing the Eurobond market and a consequence of the lack of active monitoring and control available to be exercised in the bond structure.
3 The bond market provides a deeper market with a much broader investor base than is available in the commercial bank market. The application of project finance techniques to major infrastructure projects with very large financing requirements may mean that expanding the source of funds beyond the bank market is an essential requirement.
4 Greater standardisation and a consistent approach to commercial covenants leads to a shorter negotiation period and the ability to reach financial close more quickly.
5 Bonds are tradeable instruments easily transferred through the international clearing systems, whereas loan instruments, even if provided with transfer certificates (see above), tend to be less actively traded.
6 Project bonds provide a new asset class of investment enabling investors to acquire very specific exposures to industries, technologies and countries, thereby establishing risk profiles which currently are not easily available.

Of all these factors it is likely that the development of the project bond sector will largely flow from the ability to finance major capital projects at lower cost, and in some cases, on a more rapid basis. The need to understand and maintain control over the risks inherent in any particular project will require a different

approach to covenants and negotiation of documentation for project bonds to that prevailing in respect of general corporate bonds. These issues are considered further below.

Disadvantages of bond finance

Despite of some of the clear advantages of bond finance considered above, the use of bonds as a source of project finance has been slow to develop. In Europe it is only recently that sizeable issues have been financed in this way. Some of the perceived disadvantages of using bonds for project finance are:

1 The single up-front bond subscription reduces the flexibility for staged payments compared with a syndicated facility which may provide for staged drawdown to meet the project's needs as and when they arise. This may result in a negative carry (investment returns lower than those expected from an investment in the project due to employing cash in safe and liquid investments) of finance raised and is particularly relevant during the project construction period.
2 The project structure is crystallised at the time the final offering circular goes to press. The sponsors have no central party from whom they can seek waivers, discuss amendments or generally agree an approach that may differ from the original project structure.
3 Bondholders tend to have a passive interest in their bond investments and do not, as a general rule, have specific industry expertise, thereby restricting the sponsors from making changes of a technical nature to the project even where this will benefit the project in the long run.
4 Disclosure requirements in public offerings are more burdensome than those imposed in the bank market. Political and commercial risks need to be presented and, while waivers may be available from the relevant stock exchange in respect of some contractual sensitivities, care is required to ensure all relevant requirements and disclosures are adequately complied with.
5 Potential volatility, particularly in emerging or difficult markets, may restrict the timing of offers and require fall-back arrangements to be established should particular difficulties arise.

Although the commercial issues such as negative carry and investor volatility will ultimately be resolved as a matter of pricing, the structural issues of enabling the differing approach and interests of sponsors and bondholders to be catered for in the same instrument have proved difficult to resolve effectively.

Approaches to solving the structural issues

The traditional bond structure does not provide any mechanism for flexibility in the monitoring and control of the investors' interests in the project. This presents a problem, as the ability to react to the changing circumstances affecting the project is an integral part of a successful project financing. Sponsors require a central point of contact. Although the bonds may be constituted by a trustee, the trustee is unwilling (in normal circumstances) to take decisions on any but the most routine questions. Active decision making is reserved to the bondholders, but the process of calling a bondholders' meeting is cumbersome and does not provide a mechanism for accessing a knowledgeable focal point that is willing and able to take decisions regarding the project. Also, bondholders on the whole are willing to acknowledge that they have little technical expertise in the relevant industry or country sector and are generally looking to defined yield against defined risk with a minimum of active involvement in the activities of the issuer.

Although a number of project bond issues have been completed without specifically addressing these problems, this has largely been as a result of focusing on private placements to a narrow, sophisticated investor market such as major US institutional buyers. In order to extend market interest in project bonds and to address more specifically the difficulties posed, three main structures have been developed:

- bond issues guaranteed by a monoline insurer;
- mixed bank and bond finance regulated by intercreditor agreements; and
- introduction of a project agent.

Monoline insurers

Monoline insurers are companies providing financial guarantees to investors. Their business usually involves insuring municipal bonds, asset-backed and mortgage-backed bonds and

certain corporate bonds. By guaranteeing the payment obligations of the bond issuer the monoline insurer applies its own credit rating to the guaranteed debt. Typically it will have a triple A rating from the principal rating agencies based on its level of capital and ability to meet potential claims and the diversification and quality of its risk portfolio. The bonds will generally be required to be investment grade before the monoline insurer will provide insurance to enhance their credit rating.

By providing insurance, the monoline insurer will become the central focal point with whom the sponsors can negotiate, seek waivers and discuss changes affecting the project. The bondholders will be able to rely on the guarantee and will therefore be less concerned with the management and monitoring of the project. The bondholders' exposure is converted primarily to the monoline insurer's balance sheet and away from project risk (except to the extent that a project failure may impact the monoline insurer).

Introduction of a project agent

The introduction of a division of a bank or other entity to take on an agency role on behalf of a bondholder is a relatively inexpensive approach to solving the problems outlined earlier. A number of banks have already acquired a degree of expertise through acting as syndicate agent on projects, and could carry out this role. The introduction of a project agent would require a single additional agency agreement and some modification to the terms of the bond documentation, but otherwise would involve relatively little amendment to the existing structure.

The project agent is the agent of the bondholders with responsibility solely to the bondholders, and should have a good understanding of the relevant project sector, project finance issues and the underlying structure and documentation. A rating agency will provide an objective view of the current position of the project. By combining the activities of the project agent and the rating agencies, bondholders can allow their investment to run its course with little or no active involvement. The sponsor can deal directly with the project agent relying on it to be knowledgeable and experienced in its specialist area.

Issues relating to the precise scope, responsibility and liability of the project agent require careful consideration. To be effective, the scope of the project agent's authority requires the terms of its appointment on behalf of the bondholders to be sufficiently wide to enable it to exercise extensive discretionary powers on their behalf.

Outlook for the future

With the introduction of new approaches and the increasing interest in project bonds it is likely that the next few years will see an accelerating growth in project bonds as an entirely new asset class in the investment markets.

PROJECT LEASING

The concept of leasing

The basic concept of leasing – where ownership of an asset is vested in one party (the lessor) who provides a right to use and exploit the asset to another party (the lessee) for a fixed period of time in exchange for payments for use and exploitation over time (rental) – is generally recognised and provided for in the laws of most countries.

The accounting treatment of leasing differs in following either legal ownership under some conventions or economic benefit under others. The accounting treatment affects such matters as whether the leased asset appears on the balance sheet of the lessor or the lessee, and how the acquisition cost, rental and sums payable on termination of the lease are treated. Tax treatment of the acquisition cost of the asset, rental and sums payable on termination does not necessarily follow the accounting treatment.

While the basic concept described above contains the common elements of leasing, additional characteristics may be essential in some jurisdictions. For example, under the French form, *crédit bail*, it is necessary for the lessee to have the right to acquire ownership of the asset, whereas in UK finance leasing it is generally considered that the lessee should neither have the right to, nor acquire, the asset on termination of the leasing.

Project applications

The three main reasons for using leasing in the financing of large-scale infrastructure projects are:

- the financial benefit of the availability or earlier availability of tax allowances (depreciation allowances) to the project business;
- the introduction of new sources of finance (eg manufacturers or financing institutions, which are not normally project lenders, may be involved); and
- the advantage for the lessor of retaining ownership of the leased assets where law recognising security interests is under-developed.

The combination of these features makes leasing a structured financial product which can enhance, or even ensure, the economic viability of a BOT project.

Depending on the relevant jurisdiction (which will be either that of the place where the asset is used or that in which the supplier or manufacturer of the asset operates), most of the assets required for the project business – eg tangible assets such as industrial buildings or equipment, and some of the intangibles, like computer software and even brands – can be leased, provided that the concession period is longer than the term of the lease: a recent UK example is the lease financing of both rolling stock and infrastructure for the Croydon Tramlink, a BOT scheme under the Private Finance Initiative.

Two transaction types

The term 'project leasing' is applied to two types of transaction. In the first the lessor is the sole or main funder, both providing the finance for the acquisition of the leased asset, and relying on the cash flow of the project by way of covenant from the SPV to pay the rental and any sum payable on termination (often referred to as 'stipulated loss value' or SLV). On analysis, many such structures contain some element of sponsor covenant or guarantee so they are not strictly limited recourse.

In the second type of transaction (which has occurred in the UK much more often) a leasing structure is used within a project financing where the project risks are taken primarily by project lenders or sponsors, not by the lessor. In such cases the lessor relies primarily on a guarantee or letter of credit provided (usually) by some or all of the project lenders to meet the SLV, or on security over cash deposits ('cash collateral') which may also be provided by the project sponsors. The amount recoverable from such sources will frequently be subject to a maximum (related to the SLV or current rentals) so that an element of project risk is taken by the lessor. This is normally related to changes in rates of taxation applied to the project business or to structural failure of the leasing product.

Project leasing in this second sense has been widely applied in the UK in the financing of independent power plants – IPPs – the cable sector and in various transactions under the PFI. Either form can be employed within BOT projects.

Tax benefits from project leasing

In the UK, these benefits arise where the lessor can obtain depreciation allowances in respect of the leased asset and either:

- the allowances would not be available to the SPV as asset owner; or
- the allowances would not be available to the SPV as early as they are available to the lessor (eg because the SPV has no trading income against which the allowances can be set, or has insufficient trading income to absorb them).

The lessor will either allow the entire benefit of the tax saving to the SPV or to the SPV and its sponsors, or will share the benefit on the basis that the lessor makes its profit from its margin on funding, not from the receipt and retention of the tax benefit.

There may be the potential to exploit the depreciation or other tax allowances of more than one jurisdictions (called a 'double dip') depending on the different rules of the jurisdictions. This may be possible because of differences in tax laws. For example:

- because allowances to an asset owner in one jurisdiction may be available at the same time as other depreciation allowances to a party with a right to acquire ownership of the asset (eg hire purchase) in a second jurisdiction; or
- because of differing characterisation of the same asset in different jurisdictions (eg plant which is treated as fixed to land – 'a fixture' – under English law may be treated as 'a moveable' in another jurisdiction).

Advantages and disadvantages

Advantages of project leasing

The main advantages are:

- improved cash flow, thus enhancing or ensuring project viability (see the tax benefits section above);
- new or additional source of project finance;
- a supplier or manufacturer lessor will be more closely involved in the success of the project business.

The benefits of project leasing are often considered to accrue exclusively to the equity investors/sponsors rather than to the lenders to an SPV (eg because sponsors receive part of the leasing benefit direct or because the enhancement of cash flow improves the return on equity and the return may begin earlier). However, to the extent that leasing reduces the cost of financing or the amount required to be financed, project lenders will benefit in that the SPV's cash flows will be more robust.

Disadvantages of project leasing

The main disadvantages are as follows:

- The introduction of further complexity to the negotiation and documentation of projects. Often additional consents will be required from the host government in BOT projects where project assets are to be owned by a third party (the lessor) and a direct agreement may be required in order to ensure that the leased assets remain available on termination of the concession (see Chapter 7).
- The introduction of a third-party owner of key project assets (ie the lessor) will raise concerns with project lenders as to the creditworthiness of the lessor and whether the lessor company is itself a single-purpose company, leading project lenders to require security over the leased assets (particularly where they are key assets of the project business).
- The owner of the leased asset will have rights to terminate the leasing and to repossess the asset in circumstances defined in the lease (eg default termination). Such rights will need to be controlled through intercreditor arrangements with the project lenders.
- The lessor may require security over the SPV's assets in circumstances where the lessor is taking project risk. This will lead to the need to agree priorities and subordination with the project lenders (see Chapter 7).
- Early termination of the leasing may result in an obligation to pay termination fees to the lessor and in a clawback of the depreciation allowances from the lessor, leading to a direct claim on the SPV. The SPV will also face claims from the providers of any guarantee, letter of credit or security which is called as a result of the termination.
- The terms of the leasing may impose additional performance and financial obligations on the SPV (eg indemnities to the lessor) leading to increased costs and liabilities or contingent liabilities.
- Changes in tax law or its interpretation may lead to unexpected financial burdens falling on the SPV which would not have occurred had leasing not been used as a method of financing.

Conclusion

The technique of project leasing can be used in BOT as well as other projects. Although there are a number of disadvantages of project leasing, there are well-established methods of dealing with most of these in the course of structuring and documenting the project financing without materially increasing the risks on the SPV.

Those risks that remain (eg related to increased obligations and consequences of changes in taxation laws or their interpretation) need to be analysed by both sponsors and lenders and weighed against the cash flow or other advantages of the project lease. Generally this exercise is better undertaken as part of the initial modelling and analysis of the project so that all parties consider the effects of the use of leasing and alternatives (such as, in the UK, consortium relief) from the outset. While, depending on the jurisdictions, the benefits of leasing can be obtained if the leasing is inserted in the structure after the initial financing has been put in place, it has in practice proved more difficult to introduce at a later stage. Where, as in the UK, project leasing in one or other form is extensively used, the economic advantages may be assumed to have outweighed the perceived risks.

DEVELOPMENT FINANCE INSTITUTIONS

When we speak of multilateral institutions in the context of financing BOT projects, we are usually referring to development finance institutions (DFIs), which play an important role in infrastructure projects in the emerging markets. DFIs are by definition limited to projects in developing countries, and central to all DFIs is a common remit or mandate to assist in the development of the markets in which they operate. In this respect their objectives contrast with those of export credit agencies (ECAs), the primary focus of which is to promote the development of export markets for national industries, thus fostering their national economy. Whereas ECAs are country-specific, most of the DFIs involved in the larger project financings are multinational and hence not tied to the interests of any one country or government. ECAs are discussed in detail in the following section of this chapter.

This section briefly discusses the general characteristics of DFIs and what they are able to contribute to a multi-sourced project financing. Whether a project is developed as a BOT project or as a non-concession based one will make little difference to a DFI's approach (except to ensure that the length of the concession is sufficient to cover their loan repayment period). Hence, this discussion will deal with DFI involvement in all project financings, not specifically BOT projects. It also covers certain DFIs in some detail, highlighting the history, objectives and current role of the International Finance Corporation (IFC), the European Bank for Reconstruction and Development (EBRD), the Asian Development Bank (ADB) and the European Investment Bank (EIB).

Details of the political risks cover offered by the Multilateral Investment Guarantee Agency and the World Bank are included later in this chapter.

What are DFIs?

At their very simplest, DFIs are creations of governments mandated to assist in the development of the economies of those countries in which they operate. This assistance usually takes the form of loans to commercially viable projects in the developing world; currently, there is an increased emphasis on private sector investment over that in the public sector.

DFIs are usually creatures of treaties entered into by governments and are sponsored by multi-governmental institutions such as the World Bank or the European Union. Treaty members are divided roughly between donor countries (being developed countries that provide or guarantee the bulk of the DFI's capital) and recipient countries (being developing countries in which the projects are carried out). Although often viewed as aid organisations or part of aid programmes, most DFI financing is in the form of non-concessionary rate funding and is geared towards commercially viable projects, with only a small portion of the DFIs' portfolios reserved for aid or concessionary financing for certain sectors or countries. Where this concessionary financing is available, it normally takes the form of low interest rate loans with very long tenors (often referred to as 'soft loans'). In most of the large multi-sourced project financings, however, DFI interest rates are no lower than those charged by the commercial banks, and it is not uncommon to see them slightly higher. In addition to loans, most DFIs are willing to consider taking an equity stake in a project, again in a declared effort to provide another source of finance and to contribute to the development of a shareholding culture in the host country.

The role of DFIs in project financing

DFIs' *raison d'être* of assisting in the development of emerging economies raises the issue of what they can bring to a multi-sourced project financing and whether their involvement will hinder the objectives of the other lenders. If a DFI's sympathies are allied to the local economy and if its primary interest in becoming involved in a project is not driven by a profit motive, could it not be a divisive force among lenders by overtly supporting the sponsors' and/or the host government's objectives? This question, if not articulated, is at least on the minds of many commercial banks in projects that have DFI involvement. The answer is more equivocal than yes or no: it is true that DFIs will often support a sponsor's or government's position on an issue, but this is usually offset by the

political comfort, country knowledge and 'catalytic' benefits DFIs bring to a project.

Whether by virtue of treaty provisions or practice, most DFIs will have a close relationship with the host government. Such governments generally accept that DFIs are interested in helping their economies and they are consequently often perceived in a better light than other foreign financiers. As such, a DFI may have better access to, and receive a more sympathetic hearing from, government functionaries. Many DFIs have set up local representative offices and have been making investments in developing countries for years longer than foreign commercial lenders. While not always the case, they may have a better knowledge of local politics, bureaucracy, legal constraints and business customs than their co-financiers in a project.

The natural outgrowth of these relationships and this knowledge is what the IFC terms the 'honest broker role'. By being close to host governments, by understanding the sponsors' objectives (often by being a shareholder in the SPV) and by having similar concerns to the other lenders, DFIs are uniquely placed to act as a mediator or arbitrator in a project. This role, in turn, is inextricably linked to what DFIs view as their main non-financial contribution – the 'added value' or 'additionality' they bring to a project. As their involvement is not intended to take the place of commercial lenders, DFIs try to carve out a niche for themselves by emphasising the catalytic effect they can have on a project. For the reasons mentioned earlier, their involvement may convince commercial banks, ECAs, local investors and/or governments to take an interest in a project which they might not have without the DFI being present.

Being tied to its member countries by the arrangements in their treaties or constitution, DFIs contribute another level of political comfort to complement the political risk cover provided to the commercial banks by the ECAs. This political comfort is more intangible than political risk insurance in that a DFI will not give any specific assurances to other lenders,[1] the sponsors or the SPV that DFI involvement will protect them from political events. Rather, it is the presence of a DFI in a financing that may give those parties some comfort that the DFI will be able to exercise a degree of influence over the decisions of a host government.

DFIs active in project finance

International Finance Corporation

The IFC is part of the World Bank Group and was created in 1956 after the World Bank saw a need to assist the private sector in developing countries. As at June 1997, there were 172 member countries of the IFC that had adopted its objectives and accepted its constitution as set out in its articles. In contrast with the World Bank, the IFC can only lend to private enterprise and all lending must be without the direct support of any governmental guarantee. This principle of adopting a business approach and taking full commercial risk without government guarantees became the first of three guiding principles for the IFC. The second is to play the role of honest broker between management, investors and government, and the third is to play a catalytic role, investing only in those projects where 'sufficient private capital is not available on reasonable terms'.

In its attempt to achieve these objectives, the IFC views itself as a neutral investor, working with the sponsors and protecting the interests of all parties. The IFC also requires greater transparency in the project structure and documentation and a higher level of corporate disclosure from sponsors. There is an emphasis on high standards of due diligence and investment selection and, in return, sponsors have a lender that is willing to take greater political and commercial risks in a project, often providing loans with longer maturities than would be available from other lenders.

The IFC's conditions of investments are set out in its articles, the highlights of which are that the IFC:

- will not finance a project if sufficient private capital is available on reasonable terms;
- will not invest if the host government objects;
- will not impose conditions that funds be spent in any particular country;
- will not assume responsibility for managing any enterprise or exercising voting rights in respect of management for any purpose within management's control; and

- will seek to revolve its equity funds by selling to the private sector on satisfactory terms when appropriate.

The IFC's greatest involvement in projects is on the debt side by way of financing its 'A loan' facility and arranging participation in its 'B loan' facility. The A loan facility is funded from the IFC's own resources, whereas the B loan facility is a participation arranged by the IFC for a fee. The IFC will not arrange a B loan unless there is also an A loan component. The IFC markets the B loan as falling within the IFC 'umbrella'. While the IFC's investments are not (by virtue of its articles) free from a country's foreign exchange restrictions, regulations and controls in force, none of the IFC's loans, including the portions held on account of commercial bank B loan participants, have ever been included in a country's general rescheduling of its debt. This has proved to be an effective marketing tool, emphasising the IFC's influence in developing countries and thus giving comfort to its B loan participants.

Originally, the IFC was not allowed to invest in equity. That prohibition has now been removed although, as noted above, the IFC will not become involved in the day-to-day management of an SPV and will vote its shares in an SPV, or exercise its directorships, only in certain limited circumstances relating to broad policy matters. The exception would be its directorships in capital market institutions or investment funds specifically promoted by the IFC. The IFC resists paying a premium on shares in a greenfield project and seeks to have an exit available for its equity in all projects.

Finally, the IFC will also often act as financial adviser to an SPV, advising on structuring and sourcing of finance for the project. It is this role that has led to criticism from some investment banks, which have recently complained that the IFC is usurping their traditional role.

European Bank for Reconstruction and Development

Whereas the IFC has a global investment focus, the EBRD is a multinational institution set up with the specific aim of assisting the countries of central and eastern Europe. Also in contrast to the IFC, the EBRD is able to fund both public and private sector projects.

Established in 1991, the EBRD was created to assist the countries of the former Soviet Union and those within its erstwhile sphere of influence to transform their command economies to market-oriented ones. As at December 1996, the EBRD's membership comprised 58 countries, the European Union and the European Investment Bank. It provides advice, loans and equity investment and debt guarantees to qualifying applicants in order to promote private and entrepreneurial initiative and foster the transition towards democracy and market-oriented economies in those countries in central and eastern Europe that are members of the Bank. The focus is on project-specific direct financing for private sector activities, restructuring or privatisation, or financing infrastructure that supports these activities. Not less than 60 per cent of its funding is directed to private sector enterprises or to state-owned enterprises implementing programmes to achieve private ownership and control; not more than 40 per cent of its funding is directed to public infrastructure or other public sector projects.

There is an emphasis on co-financing in projects in which the EBRD is involved. The EBRD will limit its involvement in a project to a maximum of 35 per cent of the total project cost, whether the project is a greenfield one or the expansion of an existing enterprise. Significant sponsor support is generally required, both in high equity contributions (typically 2:1 debt:equity ratio) and completion support during the construction stage. Like the the IFC, the EBRD has facilities either to lend on its own balance sheet or to syndicate a participation but, unlike the IFC, the EBRD has a treaty requirement that EBRD debt will not form part of the general rescheduling of a member country's foreign debt.

The EBRD does not have any requirement that goods and services be procured in any member countries. Instead, the EBRD has developed two thresholds over which there must be an open and fair competition for goods, works and services procured under EBRD-financed operations without discrimination between local and foreign firms. The threshold for goods and services is ECU0.2 million and for works is ECU5 million. The EBRD can provide loans, equity or guarantees. The

loans are in hard currency and vary between secured, unsecured, subordinated, convertible or equity-linked loans with a maximum maturity of 10 years for commercial enterprises and 15 years for infrastructure projects. Both fixed and floating rates are offered.

An equity investment can be either in ordinary or preference shares or quasi-equity: subordinated loans, debentures, income notes or redeemable preference shares. Again similar to the IFC, the EBRD will seek to have a clear exit route and will not take a controlling interest or direct responsibility for managing an enterprise as a shareholder. For smaller projects the EBRD has established a number of regional funds which will take equity and quasi-equity stakes in small to medium-sized private enterprises. These funds will then source smaller investments which meet the EBRD's standard guidelines; the EBRD retains the right to veto any of the funds' proposed investments.

The EBRD also offers various types of guarantees, ranging from all-risk guarantees to partial risk-specific contingent guarantees. But the risk must be quantifiable and the credit risk must be acceptable.

Finally, the EBRD offers advisory services to potential borrowers and central and eastern European governments. It has technical cooperation resources available to assist an SPV in financing project preparation and implementation. Also, the EBRD can help to identify eligible projects and secure additional funding for projects from public and private sources.

Asian Development Bank

The ADB began operations in 1966 with the aim of promoting the economic and social progress of its developing member countries (DMCs) in the Asian and Pacific region. The ADB is owned by the governments of 40 countries from the region and 16 countries outside the region. The DMCs number 37. The ADB's principal functions are:

- to provide loans and equity investments for the economic and social advancement of DMCs;
- to provide technical assistance for the preparation and execution of development projects and programmes, and for advisory services;
- to promote the investment of public and private capital for development purposes;
- to respond to requests for assistance in coordinating DMC development plans and policies;
- to cooperate with the United Nations and other international organisations and institutions which also provide loans, and give or invest funds in the region; and
- to support other development activities.

The majority of ADB financing is designed to support specific projects. The ADB's Charter contemplates cooperation with other international and national bodies to promote investment in the region, and the ADB co-finances development projects with traditional aid donors, aid agencies, ECAs and the commercial sector. Like the EBRD, the ADB is able to fund both public and private sector projects. In its early years, the ADB concentrated on public sector project lending, with agriculture and natural resources taking priority. Over time, the scope of the ADB's operations has expanded to include the energy, financial, industrial, non-fuel minerals, social infrastructure and transport and communications sectors.

The ADB's financial resources consist of ordinary capital resources, borrowings and special funds, including the Asian Development Fund (ADF), which comprises contributions from member countries and net income. In the early years of operation, the ADB's capital was the major source of funds for ordinary capital resources lending, but since the early 1980s borrowings have accounted for a greater share than capital and reserves. Technical assistance is funded by the ADB through grants, loans or a combination of the two. The major objectives of the ADB's borrowing and liability management strategy are to ensure the availability of long-term funds for lending operations, to fund the liquidity portfolio and to minimise the cost of borrowing for the ADB and the DMCs.

Loans from ordinary capital resources tend to be made to member countries which have attained a somewhat higher level of economic development. These loans carry a variable interest rate reflecting the cost of the ADB's borrowings from the capital markets. Loans from the ADF are made on highly concessionary terms and almost exclusively to the poorest DMCs with low per capita gross national product and limited capacity to repay debts.

These include interest-free loans, repayable over 35 to 40 years with a service fee of 1 per cent per year.

Normally, all loans made to DMCs are government guaranteed. The ADB will lend to private companies without a government guarantee for projects that produce essential items or provide vital services. Similarly to the EBRD, the ADB does not provide majority funding for private sector projects and is not able to take on responsibilities associated with ownership, except if this is necessary to safeguard its investment. Where the ADB makes an equity investment in a private company, it will try to sell its equity at a fair price as soon as possible.

European Investment Bank

The EIB was set up in 1958 under the Treaty of Rome. It is the European Union's financial institution owned by the members of the EU. It operates on a non-profit making basis, granting loans and giving guarantees which facilitate the financing of the following projects in all sectors of the economy:

- projects for developing less-developed regions;
- projects for modernising or converting undertakings or for developing fresh activities called for by the progressive establishment of the common market, where these projects are of such a size or nature that they cannot be entirely funded by the various means available in the individual member states;
- projects of common interest to several member states, which are of such a size or structure that they cannot be entirely financed by the various means available in the individual member states.

The EIB's main task is to promote balanced development within the EU, completion of the EU's internal market and greater competitiveness of the EU's economy. In this sense, it is distinguished from the likes of the IFC, the EBRD and the ADB. Whereas those institutions invest in developing countries only, the EIB invests in the member countries of the EU – not really emerging markets. However, the similarities are found in the preponderance of EIB investments in the poorer EU countries and the least-developed areas of the richer EU countries. The objects of the EIB are the same as those of the other DFIs – to promote development.

Although the EIB's initial capital was provided by its member countries, its funding is by way of borrowing on the capital markets. The EIB is the world's largest non-sovereign borrower and enjoys a triple A credit rating. The benefit of this credit rating (in the form of lower interest rates on its own borrowings) is passed on to borrowers who enjoy rates of between 30 and 50 points over sterling gilts.

The EIB is not limited to financing projects within the EU. While most EIB funding goes to EU members, the EIB will also lend to capital projects outside member countries if there is a perceived direct benefit to the EU. This latter programme has a rather wide remit – together with the EU countries, the EIB offers finance to projects in 120 countries worldwide. Outside the EU, the EIB helps to implement the financial aspects of EU cooperation policies with non-member countries. For example, the EIB has financial protocols with a number of non-member Mediterranean states. Each protocol is on a bilateral basis and each lists a number of priority areas or sectors for EIB funding. The result has been a significant involvement by the EIB in infrastructure projects in these Mediterranean countries, with an emphasis on transport, telecommunications, energy and the environment. In setting its interest rates for these projects, the EIB does not differentiate between type of project, location, economic sector or the nationality or status of the borrower. The lack of any distinction is largely because the protocols provide for subsidised interest rates, which subsidies are then passed on to the borrower. Further, the protocols usually provide for a government guarantee of the loan.

The key features of the EIB's other infrastructure financings are:

- maturities up to 25 years with long grace periods;
- fixed, floating or convertible rates of interest;
- currency availability; and
- a willingness to lend up to 50 per cent of the project costs (although usually limited to 35 per cent for infrastructure projects).

It is the EIB's policy not to take construction risks in infrastructure projects and so there

is a requirement for third-party guarantees during construction. In addition, the host government must approve the project. There is no requirement for the SPV to procure goods or services in any EU member country.

It is common for the EIB to provide its funding through intermediaries, particularly for smaller projects. The EIB operates a programme of global loans, being funds lent to a financial institution which then on-lends the money to small or medium-sized enterprises in compliance with EIB lending criteria. In this sense the programme is similar to one offered by the EBRD. Secondly, the EIB does not make equity investments in projects; instead, risk capital is made available by way of loans to specialised financial institutions who in turn will make direct equity investments in EIB-approved projects.

Historically there has been a greater emphasis on lending to the public sector rather than the private sector, although this practice has changed somewhat in the past few years as the EIB has shown a greater willingness to lend directly to the private sector. The question remains whether, if the EIB is to take on more commercial risk, it is to increase its due diligence capabilities for analysing a project.

EXPORT CREDIT AGENCIES AND POLITICAL RISKS INSURANCE

An export credit agency (ECA) is a government entity established with a view to promoting and supporting exports by manufacturers operating in its own country. Essentially, an ECA protects exporters or their financiers against a default in payment by buyers of goods, whether the default is due to commercial or political causes.

In practice, an ECA serves the following primary purposes for its government:

1 It provides an economic advantage to exporters; because of ECA support, exporters are willing and able to offer more competitive business terms.
2 It can satisfy local political needs; principally this arises out of the preservation of employment in the home economy.
3 It can assist in the diplomatic aims of the relevant government; where an ECA supports exports to a particular country, this can enhance the political relationship with that country.

OECD guidelines

In order to create an orderly market in ECA-supported financing of exports, all OECD countries that have official ECAs (other than Mexico and Turkey), as well as certain non-OECD countries, are party to the 'Arrangement on Guidelines for Officially Supported Export Credits' (the 'Arrangement', also referred to as the 'Consensus') of April 1978. The Arrangement applies to officially supported export credits relating to contracts for the sale of goods and/or services, and to leases of equivalent effect, which in each case have a repayment term of two years or more. Special guidelines, not covered here, apply to export credit support for ships, nuclear power plants, other types of power plants and aircraft. The Arrangement does not apply to exports of military equipment and agricultural commodities.

The basic terms and conditions of the Arrangement (which is currently subject to review) can be summarised as follows:

- *Cash payments.* The buyer must make a cash payment of at least 15 per cent of the export contract value before the 'starting point' (ie the delivery date of goods under a sale of goods contract or the completion of construction under a construction contract, unless the supplier has a contractual responsibility for commissioning in which case the 'starting point' is the completion of preliminary operational tests).
- *Repayment term.* The maximum repayment term for supported export credits is eight-and-a-half years for relatively rich and most intermediate countries, and 10 years for some intermediate and all relatively poor countries.
- *Repayment.* Repayments of principal of a supported export credit should be equal and made at regular (at least six monthly) intervals, the first repayment to be not later than six months after the 'starting point'.
- *Interest.* Interest should not normally be capitalised during the repayment term and should be payable at least every six months,

commencing not later than six months after the 'starting point'.

- *Minimum interest rate.* Support consisting of direct credit, refinancing or interest rate support (see further below) must apply a minimum interest rate based on the Commercial Interest Reference Rate (CIRR). This rate is quoted monthly in different currencies closely corresponding to the market rate for long-term, fixed rate export finance for first-class corporate borrowers of that currency.
- *Content requirements.* ECAs should not support credit for more than 100 per cent of the value of the goods and services exported, including goods and services supplied by third countries.
- *Commitments.* ECAs may not fix credit terms for a period of more than six months in advance.
- *Tied and partially untied aid financing.* ECAs must give notification to the other parties to the Arrangement if they intend to support tied aid financing (ie grants or concessionary loans or other financing that is tied to the procurement of goods and/or services from the donor country) and partially untied aid financing (ie grants or concessionary loans or other financing that is tied to the procurement of goods and services from the donor country and a restricted number of other countries).
- *Derogations.* Certain derogations from the provisions of the Arrangement are permitted, subject to prior notification to other parties to the Arrangement and subject to those other parties having the right to match the credit terms and conditions so notified. Parties to the Arrangement also have the right to match credit terms and conditions offered by ECAs which are not parties.

ECA support

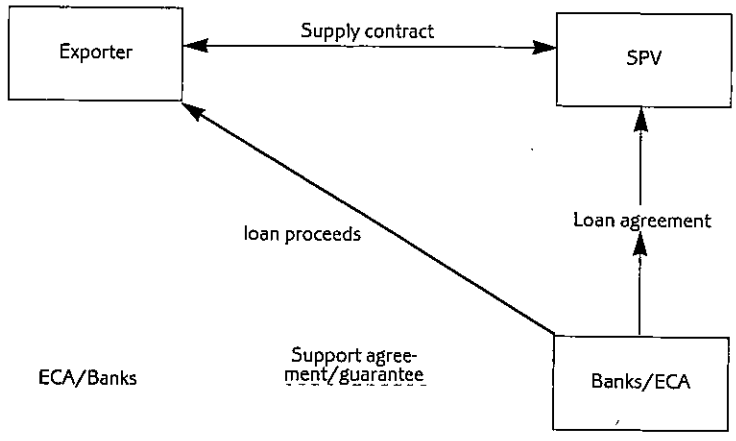
The various ECAs offer a broad range of products and services. The forms of support most commonly available which are relevant to the financing of BOT projects are detailed in the following sections.

Buyer credits

The basic structure of a buyer credit support arrangement (see Exhibit 6.1) is as follows:

1 The exporter and the SPV enter into a contract for the supply of goods on terms that the goods are paid for in full at the outset.
2 One or more commercial banks or the ECA enter into a loan agreement with the SPV whereby they agree to lend to the SPV up to 85 per cent of the contract price. Each ECA will have a minimum national content requirement which it will support, or to put it another way, there will be maximum limits for third country content and content of the importer's country, for the contract or that part of the contract value. The proceeds of the loan are paid directly to the exporter as a part payment

Exhibit 6.1
BUYER CREDIT



under the supply contract against qualifying certificates certifying that the goods or services have been shipped or delivered or that a certain stage of work has been reached.

3 Where the ECA is not the sole lender, the ECA enters into a support agreement with the commercial banks under which it guarantees or insures the obligations of the SPV under the credit agreement. This may be in respect of a failure by the SPV to pay by reason or specified political risks manifesting themselves or by reason of stated political risks of commercial risks manifesting themselves. Where the ECA is the sole lender but is not assuming 100 per cent of all commercial and political risks of the SPV not meeting its liabilities under the credit agreement, the ECA should benefit from a guarantee from those entities bearing the balance of the risk. The ECA may provide guarantees for or be exposed for differing percentages of losses depending on whether they arise from political or commercial risks.

The above is a generic description and each country's system will differ in detail.

Pure cover

'Pure cover' is the term used to describe support given by an ECA to an exporter or bank by way of guarantee or insurance, without any other financing support in addition (see further below).

Other financing support

ECAs can make available more direct forms of financing support, including:

- *Refinancing.* Here the ECA will agree to refinance the initial commercial bank funding after a given period.
- *Interest rate support.* Here the ECA provides interest make-up subsidies, whereby the ECA will make up any shortfall between the rate of interest required by lending banks (normally a floating rate) and the agreed benchmark rate of interest (normally a fixed rate) payable by the SPV. Conversely, any excess of the agreed rate over the banks' rate will be paid by the SPV directly or indirectly to the ECA. In many countries, interest rate support is provided by a different entity from the ECA.
- *Performance bond risk cover.* Here an ECA will provide insurance against loss sustained by a seller as a result of an improper claim by the SPV under a performance bond provided on behalf of that seller.
- *Investment insurance.* An ECA might provide insurance against losses in respect of investments in overseas entities which result from political events. Political risks are discussed further later in this section.

Project finance

Traditionally, ECAs have tended to support short- and medium-term, single-source finance, often backed by a sovereign guarantee. More recently, however, ECAs have demonstrated considerable flexibility in adapting their products and can now offer support for longer-term, multi-sourced and limited recourse financing which is characteristic of large-scale BOT infrastructure projects. The nature and extent of the support available varies according to the ECA and will always be tailor-made to the individual project. It might be in the form of one or more of the types of support referred to above, with or without some adaptation.

ECAs will often wish to conduct their own assessment and analysis of the commercial, legal and other risks inherent in an individual project. This may require the appointment by the ECA of its own consultants to provide legal, financial and other specialist advice. For this reason, and because of the ECA's own resources that will need to be committed to each individual project, many ECAs are unwilling to support projects below a threshold capital value.

Most ECAs will require some risk sharing by the commercial lending sector and by equity investors, and possibly by other ECAs. Some ECAs are willing to take pre-completion project risk, although others are not. Some will provide support in respect of both commercial and political risks, while others will cover political risks only. These issues are addressed in more detail later in the section.

Insurance/guarantees

Some types of support offered by ECAs might, technically, amount to the provision of insurance, while others can be characterised as guarantees. The two terms are often used interchangeably when referring to ECA support,

but it can be important to distinguish them (though the distinction is often a fine one). The importance of the distinction will depend on the law governing the ECA support agreement. Under English law, a contract of guarantee has an established body of law applicable to its interpretation, validity and enforceability. The principles of the English law of guarantees are generally protective of the guarantor (in this context the ECA), and a whole host of events can operate to release the guarantor from its obligations (for example, a change to the underlying financing agreements without the guarantor's consent). Consequently the guarantee document (ie the support agreement) will normally provide that the occurrence of any one of these events will not operate to release the guarantor. A contract of insurance, on the other hand, is under English law a contract 'of the utmost good faith' and imposes on the insured party (ie the beneficiary of the ECA support) certain duties of disclosure to the insurer (ie the ECA). Essentially, if the insured fails to disclose material information to the insurer, the insurer has the right to avoid the contract.

ECA premia and recourse

An ECA will charge a fee or premium for the provision of support. The amount of the premium should normally reflect the ECA's evaluation of the risks involved in giving the support in terms of the jurisdictions involved, the nature of the project, its duration and the types and scope of the risks to be covered. The ECA will normally enter into a premium agreement with the exporter or commercial banks setting out the amount of the premium and the basis on which it is to be paid, which may be by instalments.

The setting of premia has long been an issue of contention. As it falls outside the scope of the Arrangement, ECAs have considerable flexibility in setting premia. Many commentators believe that ECAs have used this flexibility to enhance the appeal of their services and therefore their local exporters, and that this has led to an erosion of the intentions behind the Arrangement of creating an orderly market. The issue of premia is currently under review at EU level with a view to obliging ECAs to set their premium rates by reference to their evaluation of the risks.

It should be noted that where an ECA pays a claim under its support agreement which has been caused by the default of the seller, the ECA will often reserve the right to claim against the seller for all or part of its loss, depending on the practice of the particular ECA.

Risks

As stated earlier, depending on the ECA, cover can be provided against certain commercial risks, certain political risks or both.

Commercial risks

Commercial risks are probably best described as the risks of loss associated specifically with the individual SPV. These include payment default by the SPV which is not attributable to a political risk and also insolvency-related events.

Political risks

Political risks, on the other hand, are those associated with a particular jurisdiction and its political environment generally. As outlined in Chapter 2, potential lenders to or investors in a project will invariably assess the risks associated with implementing the project in a particular jurisdiction. Political changes that occur during the life of a project in the host jurisdiction could have a serious and adverse impact on the ability of the SPV to repay its debts and to provide its investors with the required rate of return on their investment. The type of jurisdiction-related or 'political' risks with which the parties to a project might be concerned fall into the broad categories of expropriation; exchange control; and war/political violence. Each ECA will, however, have a differing scope of risks it will cover under each heading.

Expropriation

This category includes acts of the host government that have the effect of depriving the SPV of its ownership of the project facilities, or the ability to control or operate or to dispose of the project facilities. Such acts might include the expropriation or nationalisation of the project facilities, or the termination of the concession. Legal and regulatory risks are generally grouped with expropriation and are sometimes referred to as 'creeping' expropriation. This would cover changes of law or regulation

which are specific either to the project or the industry sector in which the project operates. These legal and regulatory risks might include:

- the revocation or alteration of essential government licences, concessions and permits;
- the imposition of import or export restrictions;
- changes in the tax regime;
- the imposition of more stringent environmental requirements;
- the imposition of regulatory controls generally, which might be seen as a cheaper alternative to nationalisation;
- measures that prevent the project having access to necessary infrastructure support;
- the imposition of employment controls, for example on the employment of non-nationals in connection with the project;
- the introduction of an obligatory participation at government or local level;
- restrictions on the production level of the project facilities, normally imposed in order to favour other local industries;
- deregulation risk where the industry sector is effectively privatised;
- social policies.

The very limited extent of creeping expropriation risk cover ECAs are willing to provide is a contentious issue.

Exchange control

There are probably three main types of currency-related political risks which might be relevant to a BOT project financing:

- *Inconvertibility.* Participants in the project might be unable to convert local currency into a hard currency for the purpose of repaying debt and repatriating equity contributions on sale or liquidation and paying interest on debt and returns on equity.
- *Restrictions on remittances.* This is where the host government places restrictions on moneys being taken out of the host country. These restrictions might take the form of additional procedural requirements, a cap on the amount of the remittances or a complete bar for a certain period.
- *Discriminatory exchange rates.* Here the host government might impose a rate of exchange of the local currency for the required hard currency that discriminates against lenders to or investors in the project.

It should be noted that adverse movements in exchange rates are generally considered to be financial risks of the project, rather than political risks.

War and political violence

This category includes losses due to war in which the host government is a participant, or revolution or insurrection in the host country itself. This might also include other forms of civil strife, terrorism and sabotage.

Structures for political risk mitigation

There are a number of structural considerations which should be taken into account in attempting to minimise the potential impact of political risks on the project. These include:

- *Involvement of development finance institutions and bilateral institutions.* Experience has shown that projects in which certain development finance institutions and bilateral institutions are participants, particularly the World Bank and its associate the International Finance Corporation, are less likely to default in making payment, whether for commercial or political reasons.
- *BOT structures.* It is arguable that a BOT structure is less likely to prove politically sensitive than, for example, a BOO structure, given that the project facilities will ultimately revert to the host government.
- *Contractual provisions.* Where a project can generate an income stream in a hard currency, particularly where the hard currency is generated outside the host country, the project lenders and investors might be able to control and retain the hard currency offshore and apply it directly in discharge of the SPV's payment obligations to them. It is also likely to assist lenders and investors if the financing documents (including the sponsor support documents) are governed by a law other than local law. Also, to protect against currency risks, a provision might be inserted that ties the local currency prices of the product of the project to an exchange rate based on a basket of currencies. Additionally, adjusting the output price to reflect adverse local tax increases might protect project rev-

enues from certain regulatory changes.

- *Undertakings.* Undertakings could be sought from the central bank of the host country to the effect that foreign exchange will be available to enable the SPV to meet its hard currency payment obligations. The host government could also be required to give assurances in relation to expropriation and undertakings that compensation will be paid if the assurances are breached.
- *Commercial insurance.* Some insurance cover against political risks might be available in the insurance market. Commercial political risk insurance is discussed further below.

Project financing support from the major ECAs

Set out in the following sections is an outline of the types of support that certain of the major ECAs are able, in principle, to provide to a BOT project.

United Kingdom: ECGD

Project finance

The Export Credits Guarantee Department is becoming increasingly involved in project finance, particularly since the re-launch of the Project Finance Scheme in 1994. The key features of ECGD support are as follows:

- The project financing scheme is based on buyer credit techniques.
- ECGD can provide up to a 100 per cent guarantee of the export credit loan value against losses arising from both political and commercial events either in the pre-completion or post-completion stage, or political risk cover only pre-completion and post-completion. The latter cover protects lenders against non-payment directly caused by reason of specified political causes of loss, to be determined case by case, but which may include the following:
  - war and other disturbances;
  - currency transfer;
  - general moratorium;
  - expropriation;
  - events within the United Kingdom, such as the cancellation or non-renewal of any export licence;
  - default by the host government in fulfilling its payment obligations.

  All the above events are subject to the ECGD being satisfied that the event was not instigated or provoked by the SPV or any of its shareholders (other than the host government).
- Although each project will be considered on an individual basis, to give an all-risks guarantee the ECGD will normally require:
  - some international commercial bank finance to be available on the basis of the same security as that offered on the ECGD-backed finance;
  - acceptable performance and financial obligations of the host government, the sponsors, contractors, operators, off-takers and so on;
  - a satisfactory independent appraisal of the project's feasibility and viability;
  - some recourse against the project sponsors and other key project participants in limited but clearly defined circumstances and amounts;
  - at least 25 per cent of the project's total capital costs should be financed in the form of equity or its equivalent, such as subordinated loans;
  - the involvement of a development finance institution such as the International Finance Corporation, the European Bank for Reconstruction and Development or the Commonwealth Development Corporation and/or a preliminary investment grade rating will also be seen as positive factors.
- ECGD's participation will usually be restricted to loans representing not more than 40 per cent of the total project capital requirements, and all lending cover by ECAs should not normally exceed 60 per cent of total project capital costs;
- Only projects with a minimum UK export credit loan value of at least £20 million will normally be considered, though the ECGD is fairly flexible in respect of this requirement.

Investment insurance

ECGD is prepared to provide political risks insurance of new investments in overseas enterprises. Investments which can be insured include not only subscriptions for shares, in cash or in kind, but also loans and loan guarantees (not related to an export) advanced under a

formal agreement. The insurable political risks include certain types of expropriation, war and restrictions on remittances, with other political risks being subject to negotiation case by case.

Germany: Hermes and C&L Deutsche Revision

Project finance

Hermes Kreditversicherungs-Aktiengesellschaft ('Hermes') and C&L Deutsche Revision Aktiengesellschaft Wirtschaftsprüfungsgesellschaft ('C&L Deutsche Revision'), a consortium of which Hermes is the leading partner, has been involved in providing cover for project financing since 1988. The main features of the project finance support available are as follows:

- Generally, the support available for other types of export credit can be applied to a project financing. In particular, export credit cover, buyer credit cover and preshipment risk cover (which protects the exporter from the inability to complete or deliver the goods for political or economic reasons) are normally the most appropriate, though others are available.
- Direct loans may be granted through any German bank.
- 100 per cent cover is not available, though cover is given in respect of commercial and political risks.
- Political risk cover will generally include:
  - legislative or administrative measures, war, riots and revolution in the host country;
  - the non-conversion and non-transfer of local currency as a result of restrictions placed on international money transfer;
  - the loss of entitlement to payment due to the inability to fulfil contractual obligations for political reasons;
  - the loss of goods due to events caused by political circumstances before the risk passes to the buyer.
- Foreign exchange risk insurance is available for certain currencies.
- The following criteria must be satisfied:
  - the goods and services financed must be supplied to an independent economic unit in a foreign country with the aim of creating a profit-earning project;
  - sufficient cash flow must be generated by the project to ensure, on the basis of an independent evaluation, coverage of the operating costs and repayment of the loans.
- Other criteria are likely to apply, with two of the most significant being:
  - the establishment of an offshore escrow account to receive and distribute the project earnings in hard currency;
  - the establishment, funding and maintenance of a debt service reserve.

Investment insurance

A special programme exists, which is led by C&L Deutsche Revision. The programme provides cover against political risks such as:

- nationalisation and expropriation and payment moratoria;
- war and rebellion;
- inability to convert or transfer remittances.

Cover can be provided for up to 20 years and for up to 95 per cent of the investment.

United States: Eximbank

Project finance

The Export/Import Bank of the United States has become involved in the support of project finance since the establishment of its Project Finance Division in 1994. The main features of Eximbank support are:

- Eximbank is able to offer any combination of direct loans or guarantees for commercial bank loans with both commercial and political risks cover, or political risks cover only, though during the construction period it will provide guarantees to cover only political risks. The political risks that can be covered are:
  - expropriation;
  - political violence.
- Eximbank will offer the maximum support allowed within the parameters set out in the Arrangement, including:
  - financing of interest during construction;
  - 15 per cent foreign content allowed;
  - 15 per cent of local costs allowed;
  - maximum repayment term.
- There are no minimum or maximum transaction amount limits.
- Equity requirements are determined case by case, though equity must be contributed in cash rather than in kind and Eximbank will not allow the transfer of a sponsor's equity interest without its consent.

- Shareholders in the SPV should have significant experience and significant real equity at risk.
- Eximbank's environmental procedures and guidelines will apply.
- A financial adviser will be appointed from a panel that includes PMB International, Inc., Schroders and Taylor-DeJongh, Inc.
- Financing and security documents must be subject to New York law.
- Projects should generally have long-term contracts from creditworthy entities for the purchase of the project's output and the purchase of its major inputs, such as fuel, raw materials and operations and maintenance.
- The project should contain an appropriate allocation of risk to the parties best suited to manage the risks, and satisfactory debt service cover ratios will be required.
- Total project cost should be comparable to projects of a similar type and size for a particular market.
- Currency devaluation risks should be substantially mitigated in a satisfactory manner.

Investment insurance

Political risks insurance for investors in overseas projects is provided by the Overseas Private Investment Corporation (OPIC).

OPIC is a US government agency, established in 1971, to encourage American private business investment in developing countries. To be eligible for OPIC assistance, a project must have a positive effect on US employment, be financially sound and promise significant benefits to the social and economic development of the host country.

The principal features of OPIC's investment insurance programme are as follows:

- It is available to US investors, contractors, exporters and financial institutions involved in international transactions: generally, they must be US citizens, US-incorporated entities or foreign entities which are US owned.
- It is available for investments in new ventures or the expansion of existing enterprises and can cover equity investments, parent company and third party loans and loan guarantees, technical assistance agreements, cross-border leases and other forms of investment.
- Cover extends to the following types of political risk:
  - *Expropriation.* This includes nationalisation and confiscation, as well as 'creeping' expropriation, but excludes losses due to lawful, regulatory or revenue actions by host governments and actions provoked or instigated by the investor or foreign enterprise.
  - *Currency inconvertibility.* This applies to new currency restrictions which prevent the conversion and transfer of remittances from insured investments. The cover insures earnings, returns of capital, payments of principal and interest, technical assistance fees and other similar remittances. Cover does not include currency devaluation.
  - *Political violence.* This includes declared or undeclared war, hostile actions by national or international forces, civil war, revolution, insurrection and civil strikes (including politically motivated terrorism and sabotage). Loss of business income and damage to property are covered.

France: COFACE

Project finance

Compagnie Française d'Assurance pour le Commerce Extérieur established a specialised project finance division in 1995. The principal features of COFACE support are as follows:

Exhibit 6.2

COVERAGE OF COMMERCIAL AND POLITICAL RISKS BY OFFICIAL ECAS (%)

	Pre-completion		Post-completion	
	Political risk	Commercial risk	Political risk	Commercial risk
ECGD	100	0-100	100	0-100
Hermes	90-95	85-95	90-95	85-95
Eximbank	100	0	100	0-100
COFACE	95	0-95	95	60-95
J-EXIM	0-100	0-100	0-10	0-100
MITI	95	0-60	97.5	0-90

- COFACE is able to offer support of the same type as that given in relation to any export credit. This includes a wide range of insurance schemes covering commercial and/or political risks, though COFACE does not cover commercial risk during the construction period without any recourse to the sponsors. However, commercial risk coverage can be considered where there is strong sponsor support or the SPV is creditworthy. Commercial risks include non-payment as a result of insolvency or protracted default. Political risks include war and currency transfer and can be extended to some specific government undertakings on a case-by-case basis. Export finance is provided by commercial banks and official interest make-up support is provided by NATEXIS acting on behalf of the French Treasury.
- COFACE is able to offer the maximum support allowed within the parameters set out in the Arrangement, including:
  - financing of interest during construction;
  - 15 per cent of local costs allowed;
  - 30 per cent EU content allowed, and some non-EU content allowed on a case-by-case basis;
  - maximum repayment term allowed.
- There are no minimum or maximum transaction limits, although COFACE recommends that only projects with a capital value of more than Ffr100 million are likely to benefit from project finance support.
- The scope of cover is determined on a case-by-case basis. The main features of COFACE's political and commercial risk cover are as follows:
  - Political risks: 95 per cent cover;
  - Extended political risks: determined case by case. If the project is guaranteed, 95 per cent cover is available.
  - Commercial risks:
    - pre-completion: determined case by case;
    - post-completion: determined case by case up to 95 per cent, depending on the amount of risk sharing with the guaranteed banks.
- Currency exchange and transfer risks should, where possible, be subject to state or appropriate bank guarantees.
- There should be some element of risk sharing.

COFACE will need to be satisfied in relation to the following:

- the political and legal framework of the host country;
- the existence of a market for the product of the project;
- broad-based political support for the project in the host country;
- the host country presenting an acceptable credit risk or the project having the support of a development finance institution;
- the SPV to be structured within the economic/legal framework of the host country;
- satisfactory country risk analysis in respect of foreign exchange reserves, and acceptable exchange risk and currency transfer risks;
- the quality of sponsors and their experience with similar projects;
- experienced and reliable contractors and operators;
- the credit standing of offtakers;
- the proposed credit structure of the SPV;
- satisfactory methods for dealing with cost overruns during construction or delays in the completion;
- satisfactory appraisal of project assets;
- satisfactory sources of supply and contractual arrangements for feedstocks or raw materials;
- feasibility study and financial projections;
- conservative base case projections to be used and justified;
- no new technology to be used;
- adequate third-party insurance and *force majeure* risks addressed;
- projected financial ratios;
- satisfactory security package;
- project monitoring and follow-up.

Investment insurance

COFACE is able to insure new investment abroad against political risks on the following basis:

- Cover is available for equity investments contributed in cash or in kind, as well as for long-term loans, shareholders' advances and loan guarantees.
- The risks insured include interference with property rights resulting from expropriation, direct nationalisation or confiscation, war,

revolution and changes of legislation relating to foreign investment, and non-payment and non-transfer risk occurring when, because of political events, the investor cannot recover or convert earnings or principal or interest on a loan or cannot repatriate capital.
- Cover is for a minimum of five and a maximum of 15 years.
- The usual percentage of cover is 95 per cent.

Japan: J-EXIM and MITI

The central role in financing exports is undertaken by the Export-Import Bank of Japan (J-EXIM). The forms of support that J-EXIM is able to provide include the following:
- *Export credits.* These fall within the scope of the Arrangement and take the form of:
  - supplier credits, where J-EXIM will make a loan, in conjunction with one or more commercial banks, of up to 90 per cent of the deferred payment;
  - buyer credits, which are also normally provided in conjunction with one or more commercial banks.
- *Overseas investment credits.* J-EXIM is able to make loans to Japanese corporations for their overseas investment activities and overseas projects, and to overseas joint ventures involving Japanese capital. These credits are not tied to the procurement of goods and services from Japan and so fall outside the scope of the Arrangement.
- *Untied loans.* Loans are made by J-EXIM to foreign governments, foreign governmental institutions, foreign financial institutions, foreign privatised corporations and foreign public utility corporations and the like for high priority projects and economic restructuring programmes in developing countries. These loans are not tied to purchases of goods and services from Japan and are therefore also outside the scope of the Arrangement. They are often made by J-EXIM in the context of multi-sourced financings with development finance institutions, such as the IMF, the World Bank and the EBRD.
- Guarantees. J-EXIM can provide guarantees to financial institutions in Japan.
- *Equity investments.* J-EXIM is able to make equity investments in entities carrying out business outside Japan.

Factors to be taken into account by J-EXIM in assessing whether a project should benefit from support under its project finance programme include:
- the project is to be viable with a full security package satisfactory to J-EXIM;
- the parties involved in the project should share project risks to an appropriate extent;
- the host government should acknowledge the importance of the project for the economic development of the host country;
- the project should be significant for the external policy of the Japanese government;
- priority will be given in accordance with the significance of the project to Japan's national interests and the degree of involvement of Japanese companies in the project.

The Export-Import Insurance Division, Ministry of International Trade and Industry (MITI) is able to offer the following types of insurance:
- Insurance for exporters covering both political and commercial risks, including the following:
  - General export insurance. This covers the failure to export after the signing of an export contract because of political risks, such as restrictions on foreign exchange transactions, war, civil disturbances or import restrictions by the government of the country of destination, and commercial risks, such as the insolvency of the foreign party. Up to 95 per cent cover is provided against political risks, and up to 60 per cent for commercial risks.
  - Export proceeds insurance. This covers the exporter's failure to collect export proceeds because of political or commercial risks. Political risks can be covered up to 97.5 per cent of the contract value, and commercial risks up to 90 per cent.
- Insurance for banks in the form of export bill insurance, covering losses incurred by an authorised foreign exchange bank if an export bill is not honoured after purchase by that bank. Up to 82.5 per cent cover is provided in respect of political risks and 80 per cent in respect of commercial risks.

In principle, both commercial and political risks can be covered both prior to and following completion, to be assessed on a case-by-case basis.

Investment insurance

MITI is able to offer investment insurance covering both political and commercial risks in the following circumstances in respect of:

- equity investments in overseas subsidiaries or joint ventures with foreign partners;
- the provision of long-term loans to foreign companies which the lender either manages or in which it holds an equity interest;
- obtaining property rights in a foreign country, for example real property or mining rights;
- the giving of guarantees of long-term loans obtained by a foreign company which the guarantor either manages or in which it holds an equity interest.

The maximum coverage is 95 per cent for political risks and 40 per cent for commercial risks. Normally, the term of cover is between 3 and 15 years.

Other providers of political risks insurance

In addition to the official ECAs, a number of development finance institutions and private export credit insurers are able to provide political risks insurance for exporters.

Development finance institutions

MIGA:

Perhaps the most well known of the development finance institutions offering political risks insurance is the Multilateral Investment Guarantee Agency (MIGA). MIGA was created in 1988 as an affiliate of the World Bank Group with the objective of facilitating the flow of foreign direct investment into developing countries by providing investment, marketing and advisory services and also investment guarantees against major political risks. MIGA membership is open to all World Bank members and includes some 135 industrialised and developing countries.

The main features of the political risks cover that MIGA can provide are as follows:

- The risks which can be covered are:
  - *War and civil disturbance.* This covers losses arising out of damage to or destruction or disappearance of tangible assets caused by politically motivated acts of war or civil disturbance in the host country, including revolution, insurrection, *coups d'état*, sabotage and terrorism.
  - *Expropriation.* This covers partial or total loss of the insured investment as a result of acts by the host government that may reduce or eliminate ownership of, control over or rights to the insured investment. In addition to outright confiscation and nationalisation, 'creeping' expropriation or a series of acts which over time have an expropriatory effect is also covered. (Bona fide non-discriminatory measures taken by the host government in the exercise of legitimate regulatory authority are not insured.)
  - *Transfer restriction.* This covers delays and losses arising from an investor's inability to convert local currency (profits, principal, interest, capital and other remittances) into foreign exchange for transfer outside the host country. The coverage insures against excessive delays in acquiring foreign exchange caused by host government action or failure to act, changes in exchange control laws or regulations and by deterioration in conditions governing the conversion and transfer of local currency. Currency devaluation is not covered.
- Coverage is long term, with the standard term 15 years, extendible to 20 years.
- The maximum liability that MIGA can assume per project is $50 million.
- For each risk category, MIGA can insure:
  - equity investments for up to 90 per cent of the investment contribution, plus an additional 450 per cent to cover earnings attributable to the investment;
  - loans and loan guarantees for up to 90 per cent of the principal, plus an additional 135 per cent to cover interest that will accrue over the term of the loan;
  - technical assistance and similar agreements for up to 90 per cent of the total value of payments due under the agreement.
- Regardless of the nature of the project, the investor is required to remain at risk for at least 10 per cent of any loss.
- MIGA requires host government approval prior to providing cover.
- MIGA can insure new investments originating in any member country and destined for any developing member country other than the country of its origin. New investment contribu-

tions associated with the expansion, modernisation or financial restructuring of existing projects can also be covered, as can acquisitions involving the privatisation of state enterprises.
- MIGA has also provided political risk coverage to banks for their loans to large projects in developing countries. Where MIGA cover is available, the financing is more attractive to commercial banks in terms of risk allocation. In addition, it can have a cost benefit for banks. MIGA has obtained a waiver from 10 or so countries of the provisioning requirements for country risk established by banking regulators in many OECD countries.
- MIGA insurance cover can be used, through reinsurance and co-insurance arrangements, in conjunction with the cover offered by the ECAs and the private insurance market.

World Bank

The World Bank is also able to offer certain political risks cover under its guarantee programme launched in 1994. The bank offers partial guarantees, the intention being to share risks with the private sector. Its 'partial risk' guarantees are particularly relevant to the BOT financing of infrastructure projects. They are given in favour of lenders to a project and cover the non-performance by the host government of contractual obligations undertaken by it (or its agencies) in favour of the SPV which results in a payment default by the SPV to its lenders. The main features of the partial risk guarantee programme are as follows:

- the scope of the guarantee will vary according to the project, the sector and the host country concerned, but typical host government obligations which can be guaranteed include:
  - maintaining an agreed regulatory framework, including tariff setting;
  - the supply of feedstocks and raw materials to the project;
  - the performance of offtake obligations;
  - compensating for delays or interruptions to the project caused by host government actions or political events;
- guarantees can also extend to currency transfer risks;
- the guarantees can be used to support a range of financing structures, including commercial banks loans, bond issues in the capital markets and private placements;
- generally, guarantees can be given for projects in any country which is eligible to borrow from the World Bank;
- up to 100 per cent of principal and interest can be covered, though the coverage will be set at the lowest level necessary for the private sector financing to be made available;
- the World Bank will require a counter-indemnity from the host government;
- the World Bank does not guarantee equity capital or loans from other development finance institutions or ECAs.

Although outside the scope of this section, the World Bank is also able to offer partial credit guarantees which cover all events of non-payment for a designated part of the financing. Often these guarantees cover the later scheduled repayments, enabling the project to attract longer-term financing.

The private market

A number of private insurance companies have for some time offered limited political risks cover in relation to project finance. Traditionally cover has been available only for limited amounts, for a limited duration and often at a cost which has made it unattractive to lenders and investors. Since early 1997, however, the extent of coverage available in the insurance markets has expanded and costs have fallen slightly.

Political risk has traditionally been divided into two areas: (1) asset risks, relating to the physical assets of the SPV; and (2) trade contracts, relating to the frustration of contracts entered into in the foreign jurisdiction. The two types of cover are offered in separate underwriting markets.

Asset risks (commonly known as confiscation cover)

The cover is intended to extend to organisations that own or operate foreign assets or have investments abroad, and which are potentially exposed to financial loss caused by the action or inaction of the host government. The type of cover currently available in the confiscation cover market is as follows:

- expropriation;

- nationalisation;
- confiscation;
- deprivation of mobile assets;
- war;
- forced divestiture;
- forced abandonment;
- selective discrimination;
- strikes, riots, civil commotion, malicious damage and terrorism;
- currency inconvertibility/transfer restrictions in respect of dividends, proceeds of sale of equity and repayment under inter-company loans;
- non-honouring of government guarantees;
- government abrogation of production or concession agreements.

Contract risks (commonly known as contract frustration cover).

Default under contracts with foreign counterparties can be mitigated by cover, which is available for the following:

- contract repudiation or frustration;
- import/export embargo;
- war;
- licence cancellation;
- currency inconvertibility/exchange transfer;
- non-payment by government buyers;
- non-honouring of letters of credit by a government bank;
- non-honouring of government guarantees;
- arbitration award default;
- buyer insolvency or protracted default;
- wrongful calling of guarantees/standby L/Cs;
- fair calls of guarantees/standby L/Cs following war, embargo or licence cancellation.

Currently, the maximum capacity for the two markets is

- asset risk: $1 billion; and
- contract risk: US$175 million.

Capacity for combined contract and asset risk is in the region of $175 million. The maximum period of coverage is seven to 10 years for asset risk and up to five years for contract risk.

Particular issues relating to political risks insurance

Extent of cover

When reviewing the precise extent of the cover that is being offered, it might be helpful to consider whether the following risks in particular are covered:

- the non-payment of interest on loans;
- discriminatory actions on the part of the host government in relation to the industry sector in which the project will operate (as opposed to action taken in respect of the project itself);
- actions of the host government in its capacity as a shareholder in the project;
- currency transfer risk (ie non-availability of foreign exchange to cover payment obligations);
- currency devaluation;
- economic loss resulting from expropriatory action of the host government (as opposed to the loss of rights and title);
- peaceful civil disobedience leading to economic loss.

It should be borne in mind that the cover which is available from the ECAs and the development finance institutions is often negotiable.

Intercreditor issues

As with any insurance policy, political risks insurers will normally be entitled to acquire rights of subrogation against the insured parties to whom the insurers pay a claim. This can give rise to difficult intercreditor issues, which are discussed in Chapter 7.[2]

DERIVATIVE PRODUCTS IN PROJECT FINANCING

The use of derivatives to manage risk is increasingly viewed as an important element of providing a bankable proposal for financing major infrastructure projects.

Broadly defined, a derivative is a financial contract the value or worth of which depends on the value of one or more underlying assets or indices. It may be traded on an exchange or structured specifically for a particular purpose. Used properly, derivatives provide an essential means of manipulating financial and commercial risk in order to stabilise and protect a company's business from unexpected market movements. In a business that is dependent on a secure and defined cash flow such as in a BOT project financing, it is all the more important that all parties analyse the risks that the business is subject to and agree on an acceptable approach to the different risk exposures that arise.

Principal uses in BOT projects

The requirement for derivatives to be applied in BOT project financing arises largely as a result of four main features:

1 Project cash flows will generally be independent of movements in interest rates, resulting in exposure to interest rate fluctuations if the project is funded on a floating rate basis.
2 Projects tend to produce local currency revenue while financing costs may be entirely or partly in foreign currency (eg for importing equipment).
3 Raw materials may be required in the project business that are subject to high levels of price volatility and the same may apply to the finished product (eg power projects using gas as their main fuel supply may be subject to volatile price movements both in terms of electricity produced and in the gas they require).
4 Projects generally involve a number of risks which different parties may interpret and price on a different basis resulting in opportunities to divide up project risk in different ways (eg pre- and post-construction risk).

These features are addressed in the following four sections.

Interest rate swaps

The most common need to incorporate derivative products in BOT project financing arises as a result of the SPV borrowing from commercial lenders on a floating rate basis. Financing costs are therefore subject to the inherent volatility of interest rates over the life of the project. The project cash flows may be variable in line with costs of raw materials or changes in the sale price of the finished product, possibly rising in accordance with some indexation formula but otherwise subject to movements unrelated to changes in interest rates.

Financing debt on a floating rate basis creates a potential risk to the project structure. In the event of a rise in interest rates the project may be unable to finance its debt service requirements; as a minimum such a rise will put added pressure on loan life cover and debt service cover ratios (see Chapter 7), which could make the project more risky than was originally envisaged.

In order to remove this additional risk from the structure, the SPV may hedge the floating rate exposure by entering into a swap with one of its lending banks or an unconnected counterparty. Under the swap the SPV will receive floating rate payments (to match its debt service requirements) and will pay fixed rate payments (based on a predicted cash flow arising from projected revenues accruing to the project business). The increased availability of bond finance for projects (traditionally fixed rate instruments) may make it easier for projects to finance the debt portion of the project on a long-term fixed rate basis. The inclusion of export credit agencies in project financing often has the added benefit of favourable terms on the interest rate swap or even direct fixed rate loans.

Currency swaps

The increased activity in cross-border financing of major infrastructure development has resulted in an increasing need for mechanisms to deal with currency exposure. In general terms, BOT projects (particularly infrastructure projects in sectors such as transport, electricity and water) tend to generate local currency revenues, while a significant amount of the financing may be raised in international currencies such as US dollars. This may be because the project requires US dollars to purchase equipment and machinery or to pay foreign contractors and advisers, or simply because a cost advantage may arise in raising finance in one currency and swapping it into another. As a result, movements in currency rates may seriously affect the ability of the project to meet its foreign currency commitments.

Here, the principle is similar to that applied for interest rate exposure. The SPV may hedge its currency exposure by entering into a swap with a lending bank or an unconnected counterparty. The project will receive the relevant foreign currency under the swap (in order to meet its foreign currency debt service requirements) and will pay amounts in local currency (arising from revenue generated by the project). The ability to hedge clearly requires finding a counterparty that is itself willing to accept the local currency exposure; this can prove difficult in emerging markets where appropriate counterparties may be difficult to find. A number of projects entered into on an unhedged basis suffered greatly from moves

in 1995–1996 in the relative value of the US dollar against the Japanese yen.

Commodity derivatives

The inherent volatility of commodity prices has led to the development of some long-established markets in commodity goods (eg for oil, corn and copper).

The ability to fix forward prices in respect of raw materials and finished products will clearly affect the overall volatility of project cash flow. Classically, projects have been financed on the basis that the price of raw materials and products will be fixed or fixed with some room for movement by reference to inflation or other acceptable index values by the use of long-term offtake contracts. The movement in some areas into real commodity price risk (such as the increase in merchant generation projects in the UK electricity sector) suggests that financiers are increasingly willing to accept levels of commodity price risks in projects.

The typical method of hedging commodity risk is through the operation of traded futures contracts. By using futures contracts a party can lock in a fixed price today under a standard contract for delivery of a quantity and quality of the relevant product at a specified future date. The futures market and the physical market run in tandem. The future purchased to hedge a position will tend to be sold or closed out prior to maturity. The relevant goods will either be delivered against the forward price, or if the futures contract is closed out, delivered in the physical market for cash with the payment to or receipt from the counterparty under the futures contract providing the balance of any rise or fall in the price of the commodity. In some markets, derivative products have been established that fall between true standard futures contracts and long-term offtake agreements, for example, the development of contracts for differences in the UK power sector which are neither standardised nor generally traded. Work is currently being carried out to develop a standard contract.

Credit enhancements, default options and credit derivatives

The increasing sophistication of financing techniques applied to BOT projects is opening new areas of opportunity. Many large-scale infrastructure projects require some form of credit enhancement in order to make the project 'bankable'. This may involve completion guarantees, government guarantees in respect of tariffs or terms of a concession, supply agreements or offtake arrangements in respect of the end-product. Any of the counterparties to these arrangements, either alone or in combination, may affect the credit of the project. Different market perceptions of the participating parties and the overall risk in the project will present opportunities for the development of a market in derivatives linked to projects based on these different perceptions of project risk. To date the forms of credit enhancement have been limited to guarantees and similar products. The development of the credit derivatives sector may enable new products to be introduced.

Issues to be addressed

The effect of the SPV entering into any kind of hedging arrangement is to introduce an added element to the financing structure which will need to be addressed in the financial documents. A number of the issues that arise are referred to in the following sections.

Will the financiers require that the currency and/or interest rate exposure is completely or partially hedged?

The extent to which lenders to a project, and also in some cases the host government, will require the SPV to enter into interest rate or currency hedging arrangements will depend largely on their analysis of the project economics, the economic climate at the time the project documents are finalised and their views on potential changes in that economic climate over the life of the project.

For example, the lenders might consider interest rates to be at a favourably low level for the project, or might predict that they will rise. If so, they might require the full amount of the lending to be hedged at the outset. The same might also apply if the project economics indicate that even a small rise in interest rates will lead to the project becoming economically unviable. If the situation is less clear-cut, the SPV may be required to hedge only a part of the lending.

An alternative formulation would be for all or part of the lending to be unhedged at the outset, but for the credit agreement to require hedging to be put in place if interest rates rise by more than a set percentage. The SPV might be given the option in the credit agreement of entering into hedging arrangements within given parameters or it might be considered appropriate for the SPV to enter into a 'swaption', enabling it to enter into a swap in the future at a predetermined price.

The same principles apply to currency hedging. In similar circumstances, the lenders might require the SPV to enter into hedging arrangements for all or part of its anticipated revenues, or give it the option of doing so within clearly defined parameters. There are, however, additional considerations in relation to currency hedging. The hedging will normally be by way of a cross-currency swap (under which the SPV will, after the initial exchange, receive from the swap counterparty currency to pay its financing costs against payment of a specified amount of local currency arising from its business activities) or through forward foreign exchange agreements (under which the SPV will agree to sell a given amount of one currency for another currency at an exchange rate that is stipulated in the agreement). Difficulties can arise where the SPV has not earned sufficient currency to meet its obligations. The risks of the SPV defaulting under this type of hedge are probably greater than with a fixed/floating interest rate swap, and it is essential that the counterparty to the currency hedging agreement is made a party to the intercreditor arrangements with the other parties financing the project to ensure that the project does not collapse as a result of this default (see Chapter 7).

An alternative would be for the SPV to enter into a forward exchange option, so that it has the right to call on the counterparty to make the exchange if the SPV wishes to do so. This type of option contract is likely to involve a higher cost (as a premium will be payable for the option), but less risk, to the SPV.

Will it be a requirement of the financing that hedging agreements are between the SPV and a member of the banking syndicate?

If hedging arrangements are to be entered into, careful thought will need to be given as to the identity of the hedging counterparties. In principle, it can be advantageous for the counterparties to be members of the banking syndicate. This avoids the complications of involving a different set of parties in the transaction, which can lengthen the time required for negotiations, and of introducing a further set of creditors of the SPV. This is particularly the case where standard market terms of dealing, especially in relation to interest rate swap/cross-currency swap agreements, are adapted for the purposes of the individual project (see Chapter 7).

Where the counterparties are to be members of the syndicate, a problem can arise in relation to the pricing of the relevant swap agreement. Those syndicate members will to some extent have a conflict of interests. As lenders to the project, they will wish the SPV to secure a hedging agreement that is competitively priced, while, as swap agreement counterparties, their interests will lie in securing pricing which gives them the maximum profit. Consequently, a procedure will normally be agreed whereby the swap agreements are priced on a reasonable basis. This may be a screen-based rate where available. It will not normally be possible to set the pricing of an interest rate swap/cross-currency swap agreement by reference to a specific market price, as prices are not normally quoted for the type of agreement required for a typical amortising project loan repayment profile.

How will intercreditor issues be dealt with?

Priority

As creditors of the SPV in their own right, the hedging counterparties should be party to the intercreditor arrangements. The intercreditor arrangements should clearly set out the rights which the counterparties would have on, for example, a default by the SPV under the hedging agreement or an insolvency-related event in relation to the SPV, and the circumstances under which they are entitled to exercise the rights. One issue that invariably falls to be discussed is whether the hedging counterparties should have the benefit of the security granted to the lenders. If they are to be secured creditors, the intercreditor arrangements should deal

with the priority ranking of that security and should set out the circumstances under which that security can be enforced.

Voting rights

Where the hedging counterparties are to share in the lenders' security, the intercreditor arrangements should state whether the counterparties should be entitled to voting rights when the lenders are asked to take decisions on enforcement and related issues. The current market practice is that counterparties do not have voting rights, the rationale behind which appears to be that as market conditions change the counterparties could, at the time of a vote, in fact be debtors and not creditors of the SPV.

How will hedging contracts be included in project ratio calculations?

If the SPV has entered into an interest rate swap/cross-currency swap agreement, the lenders will need to consider how the agreement should be reflected in the project cover ratios (see Chapter 7). One issue will be whether the payment of the floating rate of interest payable under the loan or the fixed rate of interest under the swap agreement should be taken into account in determining debt service cover ratios and, possibly, the net present value of project revenues.

Other issues to be addressed will include whether 'out of the money' positions on hedging contracts (which would oblige the SPV to make a payment to the swap counterparties if the swap was immediately terminated) should be counted in the gearing ratios.

What replacement or transfer arrangements will be provided (limits on counterparty credit rating)?

The credit agreement will normally contain provisions controlling the transfer of a counterparty's interests under a hedging agreement. Where it has been agreed that the counterparty should be a member of the banking syndicate, the credit agreement will usually provide that a counterparty may only transfer its interests to another bank within the syndicate, and that it will transfer those interests if it ceases to be a syndicate bank. Other restrictions might be applicable – for example that the counterparty must have a minimum credit rating given by a recognised rating agency.

Traditional ISDA documentation structure

The majority of interest rate swaps in the international markets are documented on the basis of standard form documentation produced by the International Swaps & Derivatives Association, Inc. (ISDA). Typical documentation for a fixed/floating interest rate swap and/or cross-currency swap will be the following:

- *ISDA master agreement.* This is the principal document setting out a standard set of terms and conditions which will, subject to any express modifications and supplementary provisions, apply to the swap. Of the two types of master agreement in existence, the most appropriate will be *the Multicurrency – Cross-Border* form (the most recent edition of which is dated 1992). The master agreement includes the following provisions:
  - the basic two-way payment obligation, conditionality of payments language and an election to enable settlement netting of the two payments (subject to the payments being in the same currency);
  - payments are to be made without deduction or withholdings unless required by law, in which case they are (generally) to be grossed up;
  - default interest for late payment;
  - representations relating to issues such as corporate authorisations, binding obligations and consents and tax representations;
  - undertakings relating to, for example, the provision of documents, the maintenance of authorisations and compliance with laws;
  - events of default and termination events, which include payment default, cross-default, credit support default, misrepresentation, insolvency, merger without assumption and credit and tax events upon merger, illegality and general tax events;
  - early termination and the calculation of early termination payments;
  - transfer provisions;
  - currency provisions;
  - miscellaneous administrative provisions and governing law.

- *ISDA schedule.* This is a schedule to the master agreement which supplements and varies its provisions as the parties may agree.
- *Confirmation.* The master agreement and schedule together make up the terms and conditions on which the relationship between the SPV and the hedge provider is concluded. The economic terms of the swap transaction are documented by means of a confirmation which sets out details such as the payment dates, the fixed interest rate, the initial floating rate and the notional principal amount (normally a schedule of amortising amounts) applying to an interest rate swap and the currencies and exchange rates applying to a currency swap and administrative details such as bank account particulars. The confirmation will, for ease of drafting, cross-refer to a standard set of ISDA definitions, depending on the type of swap.

As touched on earlier, however, it is normal for the credit agreement to provide that any permitted swap will be on terms which vary the standard ISDA terms. In addition to varying the transfer provisions as outlined above, the credit agreement is also likely to require that:

- the majority of the events of default under the ISDA master agreement will only apply on a failure to pay under that agreement and the only additional event of default will be the acceleration of, or prepayment (in full) under the credit agreement;
- appropriate adjustment provisions apply in relation to the swap to cater for voluntary prepayments/amortisation/further drawings under the credit agreement (otherwise the hedge becomes asymmetric); and that
- the master agreement will terminate once the financing has been repaid (and therefore stipulate that the master agreement will be restricted in its scope to the single swap entered into between the SPV and the hedge provider).

NOTES

1. With the limited exception of the EBRD, the constitution of which protects EBRD loans – including B loan participations – from being part of a member country's general rescheduling of debt.
2. While every effort has been made to ensure the accuracy of the information contained in this section, the nature and scope of the support and services offered by the entities referred to should always be checked directly with them.

Chapter 7
Finance Documents

This chapter is divided into six major sections, examining:

- loans;
- bond issues;
- project leasing;
- security;
- direct agreements; and
- intercreditor agreements.

LOANS

Structure of credit agreements

As outlined in Chapter 6, a principal source of funding for a BOT project is likely to be a committed term loan from the commercial sector provided by a syndicate of banks which will lend to the SPV on the terms set out in an agreement, usually referred to as a 'credit agreement'. There might, however, be other commercial credit facilities required by the project. For example, the SPV might need:

- a working capital facility, to be available throughout the period of the term loan;
- a standby facility to be called on if certain events occur, such as the host government requiring a variation to the concession agreement which increases the construction cost of the project facilities;
- other credit facilities, such as for the provision of letters of credit that might be required by suppliers to the project.

The syndicate will normally be represented by one bank that acts as their agent (normally referred to as the 'facility agent'). The role of the facility agent is discussed in Chapter 6.

Other parties to the project credit agreement might include:

- the bank, normally a bank within the syndicate, which will hold and operate the SPV's bank accounts (see further below);
- the entity, also normally a bank within the syndicate, which is to act as security agent or security trustee by holding the benefit of the security on trust for the bank syndicate;
- the sponsors, if they are providing a limited or complete guarantee or other support to the project.

As a general principle, the term loan will be available for drawing throughout the construction period and will be repayable from project revenues during the operation phase of the project. The construction phase of the project is regarded by banks as being the period of greatest risk. Depending on the level of sponsor support available during that period and any available host government support, the interest rate and other fees applicable to the loan during the construction phase might be different (often higher) from those that apply during the operation phase.

Many of the provisions of the typical credit agreement will be similar to those found in a typical syndicated term loan agreement with a corporate borrower in the London banking market. A credit agreement for the financing of a BOT project, however, will invariably be a more detailed and comprehensive document and will in addition address issues particular to the financing of the project. As the banks will be lending to an SPV, the only activity of which will be the implementation of the project, the banks will by definition have their recourse for repayment limited to the SPV and its assets and income, except to the extent (normally limited) to which sponsor or host government support is provided. The banks will therefore insist on a much greater degree of control over the activities of the SPV than would be the case with a corporate borrower.

Conditions precedent

As with a corporate loan agreement, a project credit agreement will contain two different types of conditions that must be satisfied before the SPV can draw all or part of the funds to be lent – general conditions precedent and conditions precedent to each drawdown.

General conditions precedent

There will always be numerous conditions that must be satisfied before the facilities become available for drawing. A corporate loan agreement is likely to contain conditions precedent relating to the delivery by the borrower and any third parties which are to provide security and/or guarantees of their corporate documentation relating to their existence, status and the authorisation of the documents to be entered into, the delivery of all licences and consents relating to the borrowing and all required security documents and/or guarantees.

A BOT related credit agreement is likely to have many additional conditions precedent, such as the delivery of:

- all the other finance documents;
- the concession agreement and all the other project documents (with confirmation that they have become unconditional) and evidence that these have been duly authorised and entered into;
- documentation relating to the land on which the project facilities are to be built (typically a certificate of title from the SPV's legal representatives and possibly the report of a specialist environmental consultant);
- reports from all other specialist consultants to the banks, such as an insurance report, an engineer's report, feasibility studies and an audit of the computer model which will produce the project forecasts (see further below);
- all licences and consents required for the implementation, financing and operation of the project, both for the construction and operation phases;
- a project forecast demonstrating a satisfactory loan life cover ratio (see Chapter 2 and below);
- a satisfactory construction budget;
- evidence that the required amount of equity of the SPV has been subscribed by the sponsors and any other investors.

The delivery of the conditions precedent will be the culmination of the extensive due diligence exercise undertaken by the banks. The contents of the documentation produced will always need to be satisfactory to the majority of the banks. For the less fundamental documents, the agent will in practice exercise substantial discretion in approving them on their behalf.

Conditions precedent to each drawdown

In both a corporate loan agreement and a project credit agreement there will normally be additional conditions precedent to be satisfied in relation to each drawdown.

In a corporate loan agreement these will typically be restricted to there being no default outstanding and to the representations and warranties in the agreement remaining correct. In a credit agreement it is common to find additional conditions, such as compliance with project ratios, the injection of equity (often pro rata to the amount to be drawn down) and the banks being satisfied that the SPV has sufficient funds available to it to complete construction. Where funds are to be drawn for the payment of construction costs, the banks are likely to require certifications, both from the SPV and an independent engineer (often the banks' own consultant) that amounts equivalent to those to be drawn are properly payable under the construction contract and that construction has reached the relevant 'milestone'.

Drawdown procedures

A typical corporate loan agreement is likely to contain provisions relating to the mechanics of making drawings under the facility, such as the giving of notice by the borrower, the agent's role in collecting funds from the syndicate banks and limits on the amount and timing of drawings. The period during which drawings may be made will normally be limited in time.

A project credit agreement might in addition specify that the proceeds of drawings are to be paid directly to the contractor or into a nominated bank account of the SPV. The period for drawings is normally limited by an event, typically the date on which the project is handed over by the contractor to the SPV, unless construction has not been completed by a long-stop date specified in the credit agreement, in which case the long-stop date will apply. This would leave a funding shortfall and the project will not be completed unless the sponsors agree to make up the difference.

Debt service and repayment

Debt service

Under both a corporate loan agreement and a project credit agreement, the borrower will normally pay interest at a floating rate, which is made up of two components. The first is the rate of interest which the lending banks must pay on short-term borrowings made by them in the interbank market were they to fund their respective shares of the loan in this way, and most commonly in the London market this will be Libor (the London interbank offered rate). (This rate will be set by one or more lending banks in the syndicate (the 'reference banks') or by reference to a quoted rate appearing on a financial information service (typically 'Telerate' or 'Reuters'.) The second is the margin, which represents the banks' profit, and its level will reflect the banking market at the time and the perceived risks inherent in the project. In practice, however, banks will often not borrow in the interbank market to fund themselves on a loan-by-loan basis (often referred to as 'match-funding'). In addition, the method for determining Libor in the loan or credit agreement may not reflect the Libor actually paid by each individual bank. The consequence is that the profit received by a bank might be more or less than the amount of the margin received by it.

In the London interbank market, funds can generally be easily borrowed overnight or for periods of a week, a month, three months or six months. Under a corporate loan agreement, the borrower will normally be permitted to choose the period for which the banks will borrow in the interbank market. Interest is payable at the end of each such period (though normally not less frequently than six-monthly) and so the periods (the 'interest periods') chosen by the borrower will dictate the frequency and timing of its interest payments.

These principles may apply under a project credit agreement for the construction phase of a project – but, unless the project has another source of revenue or interest is being paid out of capital, interest is typically being capitalised in this phase. During the operation phase, however, the interest periods need to coincide with the intervals at which project forecasts are prepared – commonly six-monthly (see further below) – and the interest periods of other loans to the project and need to be structured to reflect revenue patterns of the project.

Repayment

Under a corporate loan agreement, the repayment of the principal amount of the loan might be by instalments or in one amount. Under a credit agreement, however, it is normal for the term loan to be repaid by equal six-monthly instalments, usually commencing six months after the project becomes operational. The timing and number of repayments will need to be structured to reflect the revenue forecast for the project. This will need to take into account that the liability for interest payments will, of course, be highest in the early years of project operations.

Changes in circumstances

Under both a corporate loan agreement and a project credit agreement the banks will wish to guard against any change of circumstances that could erode their profits, and it is their practice to require the inclusion in the loan agreement or credit agreement of the following types of clause:

- *Increased costs.* This provides that the borrower will compensate an individual bank if the cost to that bank of participating in the loan is increased or its return is reduced as a result of a change of law or regulatory requirements.
- *Market disruption.* This clause applies where a specified majority of the banks are either unable to obtain funding in the interbank market to meet a request for funds from the borrower, or they are able to obtain funding but only at a rate of interest which would exceed Libor as determined under the loan or credit agreement. Essentially, the borrower is obliged to compensate the banks for their additional cost in obtaining funds. This type of provision is not intended to operate for the benefit of an individual bank, but only in relation to circumstances affecting the interbank market more generally.
- *Tax gross-up.* A loan or credit agreement will operate on the basis that payments will be

made to the banks without any deductions or withholdings unless required by law. If a deduction or withholding is required by law, the borrower will be obliged to increase, or 'gross up', the amount of the payment so that, after taking the deduction or withholding into account, the banks receive the amount that they would have received if the borrower had not been obliged to deduct or withhold. The same principles will apply in respect of any deductions or withholdings that the facility agent is obliged to make in respect of payments made by the borrower and which are channelled through it to the syndicate banks. These 'withholding taxes' are in force in many countries and, because of the extra payment burden of the grossing-up, the sponsors normally seek an exemption for the SPV from the government where the project is situated.

Of course, the project revenues do not increase when any of these changes in circumstances arise and consequently they provide an unanticipated burden on them.

Representations and warranties

A corporate loan agreement and a project credit agreement will both contain representations and warranties given by the borrower and possibly by other parties giving security or other assurances in respect of the borrower. Some will relate solely to the state of affairs as at the date of the credit agreement, whereas others might be repeated at intervals throughout the life of the financing. They have three principal functions:

- to enable the banks to elicit relevant information at the negotiation stage and before any commitment is entered into;
- (if provision is made, as it invariably will be) to enable the banks to refuse to allow drawings if a representation or warranty proves to have been untrue or a repeating representation or warranty becomes untrue; and
- to enable the banks to accelerate repayment of the loan if a representation or warranty proves to have been untrue or a repeating representation or warranty becomes untrue.

In a typical corporate loan agreement the representations and warranties are likely to relate to the status, powers and authority of the relevant party to enter into the finance documents, to the information provided by it to the banks and to the non-contravention by that party of its contractual obligations. It is also likely to represent and warrant that it has not suffered any insolvency-related event, it is not the subject of any significant litigation or other similar proceedings, that there is no security over its assets which is not permitted and that it is in compliance with all applicable laws.

The following additional representations and warranties are commonly found in a project credit agreement:

- the security documents are legal, valid and binding and create proprietary interests in the SPV's assets which rank in accordance with their terms. This is particularly important in the context of a limited recourse financing of this nature where the banks are heavily reliant upon the effectiveness of their security to enable them to take control of the project;
- all authorisations, consents and rights necessary for the implementation of the project are in place and have been complied with to date;
- the SPV has good title to the land on which the project facilities are to be built;
- the SPV has not traded, acquired any assets or liabilities or entered into any contracts other than in relation to the project;
- all the insurances required under the credit agreement are in place; and
- the project forecast delivered as a condition precedent has been compiled with due care and the computer model on which forecasts are based takes account of all relevant factors.

Undertakings

Information undertakings

Under a typical corporate loan agreement, the borrower is likely to have to provide to the banks financial information (annual, interim and management accounts), documentation circulated to creditors and shareholders, information relating to defaults, litigation, security, any other occurrence likely to have a material adverse effect on it and any other information reasonably requested by the banks.

In a typical project credit agreement, the following additional information undertakings are likely to be included:

- regular reports during the construction phase (typically monthly) detailing such matters as the works completed in the last month, whether or not construction is proceeding according to schedule, the latest estimated construction costs and whether the SPV is likely to have sufficient funds to complete the project;
- regular reports during the operation phase (typically six-monthly) detailing all costs and revenues of the project for the last six-month period;
- details of all material events relating to the project contracts – for example the breach of a project contract by another party, any proposed amendment to a project contract or requested waiver, any notice of termination or default under a project contract or whether any *force majeure* event has happened under any of the project contracts;
- details of any interruption to the construction or operation of the project; and
- details of any insurance claims made, the receipt of insurance proceeds or the receipt of other specific items of revenue.

Positive undertakings

A typical corporate loan agreement is likely to contain a few positive undertakings, probably the most significant of which are the maintenance of all authorisations and approvals necessary for its business and for the performance of its obligations under the finance documents, the maintenance of insurances and compliance with laws, notably environmental laws.

Under a credit agreement some or all of the following additional positive undertakings are likely to be included:

- undertakings relating to construction – principally that it will be in accordance with the project documents;
- undertakings relating to the operation and maintenance of the facilities – for example, that they should be properly operated and maintained in accordance with all applicable laws and good industry practice and generally maintained in good condition;
- an undertaking to exercise or refrain from exercising certain of its rights under the project contracts in accordance with the wishes of the banks. Increasingly, the practice is to compile a 'controls matrix' that lists every provision of the project documents giving rights to the SPV and over which the banks require some control. The concession agreement is of particular importance in this context. In respect of each provision, the controls matrix will specify the level of control that the banks will have. For example, the banks might require that the SPV will not exercise the right to terminate a project contract without the prior written consent of the facility agent, but will exercise the right if the facility agent requires. The exercise of other, less fundamental rights by the SPV might be subject only to its giving prior notice to the facility agent, or to the SPV notifying and consulting with the facility agent;
- undertakings to provide information in relation to the project documents. Again, this can be done by way of a matrix (an 'information matrix') that sets out the events under the project documents of which the banks would like to be informed and, for each event, the notification obligation (for example, whether notice is to be given immediately or within a given time limit);
- undertakings relating to the land on which the project facilities are located – for example undertakings to pay outgoings, not to alter the use of the land and to deposit the title deeds with the security trustee; and
- an undertaking to allow the facility agent and its representatives access to the site and to all records of the SPV.

Negative undertakings

The principal negative undertakings included in a corporate loan agreement are likely to be a negative pledge provision (an undertaking not to create or allow any security interest or similar interest over any of its assets except to the extent permitted in the loan agreement), an undertaking not to dispose of any of its assets other than in the ordinary course of its business and other specific circumstances, an undertaking not to change the nature of its business,

merge with any other entity or undergo any reconstruction, and an undertaking not to incur any indebtedness or give guarantees other than as specifically permitted (although with stronger borrowers specific prohibitions are likely to give way to reliance on more general financial covenants). The aim behind undertakings of this kind is to ensure that the borrower essentially remains the same entity, carrying out the same activities, which the banks considered creditworthy in reaching their decision to lend.

Additional negative undertakings on the part of the SPV likely to be included in a project credit agreement are, without the consent of the 'majority banks':

- not to abandon or suspend the project or agree to any amendment or termination of any project contract;
- not to make distributions except as specifically permitted. For these purposes the term 'distributions' is normally widely defined to include not only dividends to shareholders but also any payments or set-offs, in cash or in kind, made by the SPV to any of its affiliates (other than payments under a project contract), including any payments in respect of subordinated debt. The making of distributions is unlikely to be permitted until construction is completed and there are sufficient funds available in the project, eg, the required level of debt service reserves or heavy maintenance reserves are held in the project accounts. As additional conditions, distributions are unlikely to be permitted if the project ratios are not at or better than given levels or if a default is outstanding;
- not to incur any expenditure which is not contemplated in its most recent budget approved on behalf of the banks; and
- not to enter into any contract other than as specifically contemplated and not to acquire any additional assets or investments or to incorporate any subsidiary or enter into any joint venture or other business association.

The aim behind these undertakings is to give the banks additional control over the project and the SPV itself, in particular by ensuring that the SPV remains a special-purpose entity.

Events of default

All corporate loan agreements and project credit agreements will set out the events which, if they occur, will entitle the lending banks to cancel the facility and accelerate their loan (ie, to make the loan immediately repayable). The main objectives are three-fold:

- to enable the banks, if certain events happen in relation to the borrower, to require the borrower to involve them in attempting to resolve the issues and continuing with the facilities on the same or a different basis acceptable to the banks;
- to crystallise the banks' debt claims against the borrower, which is particularly necessary where there is a danger of the borrower becoming insolvent; and
- to enable the banks to maximise the amount due from the SPV prior to enforcing their security over the assets of the SPV or the shares in the SPV.

Typical events of default in a corporate loan agreement include non-payment in relation to the facility, breach of any other undertaking or any representation and warranty given to the banks, illegality, cross-default at a specified level with other borrowings of the borrower or provider of security for the borrower, any insolvency-related event, change of control, cessation of business or any other material adverse change in the borrower's financial condition.

Under a project credit agreement, the events of default are likely to be more extensive, the aim being to enable the banks not only to exercise a greater degree of control over the SPV's activities, but also to enable them to 'take over' the project in a wide variety of circumstances. In addition to the events likely to be found in a corporate loan agreement, a typical project credit agreement is likely to include the following events of default:

- failure by the sponsors and/or any other investors to contribute equity into the SPV on the agreed basis;
- nationalisation of the project facilities or other state action detrimental to the project, including the effect of environmental law;
- construction not having been completed by the long-stop date;
- shortage of funds available to the SPV to

complete construction or lack of liquid funds to meet payment obligations as they fall due;
- events adverse to the continuation of the project, such as industrial action, the suspension of construction or operation for any reason, the abandonment of the project or the non-availability of necessary approvals and licences;
- the loss of the project facilities;
- the breach or other failure of the concession agreement or another project contract;
- breach of a project ratio (see further below); and
- failure to maintain the required insurances.

Governing law and dispute resolution

Under a corporate loan agreement syndicated in the London market, the governing law of the loan agreement and any security documentation will be English law, and the English courts will normally have jurisdiction to hear any disputes relating to those documents.

Under a project credit agreement, it is likely that international commercial banks will require the finance documents to be governed by English law or New York law, depending on where syndication takes place. The position is more complicated where there is more than one source of finance for a project. Where local finance is to be provided, it is likely that the finance documentation will be governed by local law. Equally, finance might be provided by banks located in the jurisdiction of an export credit agency giving support to the project and it might be an agency requirement that the law of that jurisdiction is used (although many agencies are increasingly flexible).

The aim should be to achieve consistency between the finance documents and to seek appropriate legal advice on the effects of the documents under the relevant law. A compromise that is increasingly used, however, is a 'common terms agreement'. This is an agreement between the SPV, all lenders, the agents for the various facilities, the security trustee and an intercreditor agent for all lenders containing the provisions which are common to all the financings. Common terms agreements are discussed in a later section of this chapter, but for this purpose one of the benefits of such an agreement is that it is likely to be governed by a law which is acceptable to the senior lenders.

The principal method of dispute resolution under the financing documents will be recourse to the courts of the jurisdiction of the chosen governing law of the relevant finance document. This is subject to specific dispute resolution procedures for particular issues. For example, a credit agreement might provide for disputes relating to the technical assumptions to be used in a project forecast (see further below) to be referred to an independent engineer. Disputes relating to the availability of insurance cover might be referred to a third party insurance expert.

Project forecasting and ratios

A typical corporate loan agreement is likely to contain financial covenants on the part of the borrower, the breach of which will constitute an event of default. Typical undertakings relate to cash-flow, gearing and the maintenance of a minimum tangible net worth, their common feature being that they concern the general financial health of the borrower (or the group of companies of which the borrower forms part) on the basis of its commercial activities taken as a whole.

As the lenders under a project credit agreement will be most concerned with the ability of the project to produce sufficient income to service and repay their debt, the more traditional financial covenants are replaced by project specific ratios. By definition, the ratios essentially relate to the operation, or income-producing, phase of the project. These ratios can be based on historic or projected financial information, and most project credit agreements will contain both types and possibly a combination of the two, depending on the type of project. It is normal for the ratios to be tested on the basis of information contained in a 'project forecast' prepared every six months during the operation phase, and in addition at other times on the occurrence of certain events, such as a default. The timing of the forecasting should tie in with the payments of interest and repayment instalments due during the operation phase.

As outlined in Chapter 2, a project forecast is essentially a forecast of all the income and

outgoings of the SPV from the date of the forecast to the maturity of the financing. In order to prepare such forecasts, certain assumptions will need to be made. These assumptions will normally include:

- *economic assumptions* such as rates of inflation, rates of interest, foreign exchange rates, corporation tax rates and bank deposit rates; and
- *technical assumptions* relating to outgoings, such as operation and maintenance costs, insurance premia and consultants' fees and relating to the performance or use of the project facilities.

It is normal and most practicable for economic assumptions to be determined by the agent bank and for technical assumptions, at least initially, to be prepared by the SPV. The banks will normally wish to retain the right to challenge the assumptions prepared by the SPV and, ultimately, to have them referred to a third party for expert determination.

The actual calculation of the projected cash flows will invariably be carried out by a computer programme, or 'financial model', the format of which will be agreed as a condition precedent to the facilities becoming available and will be used throughout the life of the financing.

There are various ratios that can be used, but the most common are:

- *Debt service ratio.* This is a ratio of project revenues over a given period (normally 12 months) to the amount of debt service (ie, interest and principal) over that period. The test is aimed at ensuring that over the past 12 months the SPV has been able to make debt service payments with a comfortable margin. The test is historic and will be carried out at the same time as each project forecast is prepared, but it does not rely on the information produced by the forecast.
- *Projected debt service cover ratio.* This is the ratio of projected project revenues over a given period to the amount of debt service projected to be paid for that period, and is designed to test whether the SPV will have sufficient revenues to pay debt service over, typically, the next 12-month period with a comfortable margin. As the test is forward looking, it will be based on the relevant figures in the project forecast for the 12-month period starting on the date of the project forecast.
- *Loan life cover ratio.* This is the ratio of the net present value of all cash flows available for debt service over the life of the financing to the ratio of the principal amount of the SPV's debt as at the date on which the project forecast is prepared. It is aimed at testing whether the SPV will generate sufficient revenues over the life of the financing to repay the debt. The objective of the net present value calculation is to be able to compare 'today's' value of the projected cash flows with 'today's' principal amount of the debt. The net present value of the cash flows will be calculated by applying a 'discount rate' to them, which might be determined by reference to inflation (specifically, the Retail Prices Index), to the yield on government securities or to the rate of interest on the debt. If the latter, this should take account of the effect of any applicable interest rate hedging arrangements. The overall effect is that 'inflation' (in the broadest sense) in relation to the project cash flows is removed from the calculation, as is interest on the loan.

In a typical project credit agreement, the ratios may serve several functions and are likely to be set at different levels depending on those functions:

- *Events of default.* A breach of a project ratio will commonly trigger an event of default, though in this context the ratios are likely to be set at levels which, if breached, would indicate that the project is in serious difficulties.
- *Conditions to drawdown.* As mentioned earlier, it might be a condition to drawing funds that certain ratios be met. For this purpose, the ratios are likely to be set at levels which, if not met, might give lenders to the project some cause for concern but which would not trigger a default.
- *Conditions to a distribution.* As mentioned above, it is likely that the project ratios will need to reach certain levels before the SPV can make distributions to its investors, and to remain at those levels after the distribution is made. For this purpose, the levels will

normally be set at their most stringent under the credit agreement.

- *Applicable margin.* The interest margin charged by the lenders might vary according to the levels of the ratios, as their risk in lending to the project will also be varying as the ratio levels move.

Project accounts

Unlike a corporate loan agreement, a credit agreement will normally contain detailed provisions as to the bank accounts which the SPV should maintain and how those accounts are to be operated, the aim of the lenders being to control the SPV's finances and cash flows to the maximum extent possible while allowing the SPV to continue its day to day operations.

The SPV will usually be required to maintain numerous bank accounts with funds earmarked for different purposes, the objective of the numerous accounts being to assist the lending banks and the account holding bank to monitor and control all receipts and payments. These accounts are likely to include:

- *Proceeds account.* The proceeds of drawings under the facilities will be required to be paid into this account, and moneys can only be withdrawn from this account for the purposes set out in the credit agreement (normally, construction costs). Withdrawals will often be subject to the SPV demonstrating that the expenditure has been properly incurred or will be incurred in the near future.
- *Revenue account.* The SPV will be obliged to pay all project revenues into this account and may only withdraw amounts from it to pay operating costs (including debt service), to transfer amounts to one or more reserve accounts (see further below) or, in the event of a surplus, to pay the surplus out as a distribution.
- *Compensation account.* All capital receipts of the SPV will be required to be paid into this account. These would normally include compensation for any nationalisation, requisition or similar events occurring in relation to the project facilities, insurance proceeds paid in respect of physical loss or damage to the project facilities and any liquidated damages payable to the SPV under a project contract (other than liquidated damages payable purely in respect of delay). The SPV will normally be required to apply compensation and liquidated damages towards the early repayment of the senior loan financings. The position in relation to the use of insurance proceeds is more complex and is referred to below.
- *Equity account.* The SPV will be obliged to pay the proceeds of all equity contributions and subordinated debt into this account, to be withdrawn only for specified purposes, normally to meet construction or capital expenditure and other project costs.
- *Maintenance reserve account.* The objective of maintaining and funding a maintenance reserve account is to apportion the likely heavy costs of major maintenance work, which might be required only once in each period of several years, over those years, and to pay an apportioned amount at the required intervals, normally every six months, into the maintenance reserve account. Funds can be withdrawn from the account to meet major maintenance costs when due, and the cycle then recommences.
- *Debt service reserve account.* During the operation phase, the SPV will normally be required to make payments of interest and principal every six months out of the balance standing to the credit of the revenue account. The aim of establishing a debt service reserve account is to pay surplus funds from the revenue account into the debt service reserve account as and when available, which can be called on to meet debt service in circumstances where there are otherwise insufficient funds in the revenue account. There will normally be a ceiling on the level of the reserve equal to the following six or 12 months debt service liabilities.

Lenders will often, at the outset, specify a requirement that funds may only be withdrawn from the revenue account in a given order of priority (also referred to as a 'payment cascade'). For example, the banks might wish payments to the operator and to any suppliers of raw materials to take precedence over other payments, other than debt service and repayments which are to have first priority. A strict order of priorities could only be achieved if all

such payments were due on the same date, which will not be the case. The normal order of events is for the SPV to make payments of both operating costs and debt service costs as and when they fall due, and it is only transfers to reserve accounts and payment of distributions that can truly be prioritised. These will normally be made six-monthly and on the basis of a project forecast. Once the forecast figures are available, amounts can be transferred to the reserve accounts in a given order of priority. As the balance on each account reaches its maximum required level, surplus amounts can then be paid into the next, and so on. Once all reserve accounts are at their maximum, any surplus should be payable as a distribution to investors if the conditions are met. If the conditions are not met, the SPV might be obliged to apply the surplus towards the early repayment of the senior loan financings.

Investments

The SPV might be permitted to invest the balances on the reserve accounts in 'safe' investments, normally held in the name of the account holding bank, but taking into account the liquidity requirements of the project.

Insurance

Unlike a corporate loan agreement, a project credit agreement is likely to contain extensive and detailed provisions in respect of the insurances which the SPV is to maintain throughout the term of the financing. Although a discussion of these provisions is outside the scope of this report, it should be noted that the requirements will need to be consistent with those contained in the concession agreement, the construction contract, the operation and maintenance agreement and any other relevant project document.

One issue that invariably falls to be resolved is how insurance proceeds paid in respect of physical loss or damage to the project facilities should be applied. In practice, the interests of the host government and the lenders will be conflicting and it will be necessary for an agreement to be reached between them. This is discussed further in a later section of this chapter.

Other provisions

A project credit agreement will, in addition to the above, include provisions relating to:

- illegality affecting the ability of one or more banks to make or continue with the financing;
- payment mechanisms;
- the role of the agent, the security trustee and the account bank; and
- the transfer by lenders of their interests in the loan facilities.

Each of these provisions, while performing an important function, are not discussed in detail here.

BOND ISSUES

The remarkable success of bonds as a financing instrument has been based on the ability to package a debt instrument in a form that is readily acceptable and tradeable in the domestic and international markets. The development of a relatively standardised product was therefore a prerequisite. With the increasing sophistication of issuers, intermediaries and investors, the debt capital markets have seen the development of a wide range of instruments, although the basic bond structure has remained a relatively constant theme. This section describes the principal parties and documentation involved in the bond structure.

A bond is, in simple terms, a negotiable instrument evidencing indebtedness. It is a legal contract between the issuer and the investor whereby the issuer promises to repay to the holder of the certificate the face value of the bond together with interest. The instrument will tend to be referred to as a 'bond' if the tenor is of a longer duration – say five to seven years or more – or as a 'note' if of a shorter duration. Also, market convention dictates that floating rate instruments are described as notes – specifically 'floating rate notes' – rather than bonds.

Bonds may be domestic (if issued on the market of a particular country by a resident of that country), foreign (if sold by the issuer on the market of a single country in which it is not resident and denominated in the currency of that country) or international (if sold to investors in various countries other than the country of the currency in which the bond is

issued). Bonds are characteristically in bearer form and, by convention, pay interest without deduction for withholding or similar taxes in the country of the issuer.

The parties to a typical bond issue

Investors

Investors in the bond market fall into two categories: (i) institutions such as commercial banks, government agencies, international financial organisations, investment and pension funds, insurance companies and corporations and (ii) individuals. Bonds provide investors with internationally tradeable securities that can be held anonymously and allow them to match maturity, risk and yield profiles to their needs. The development of project bonds is providing an opportunity for investors to invest in a new asset class of bond securities with long maturities and risk profiles specifically linked to industry and country sectors.

Issuers

Traditionally, bond issuers were banks, building societies, companies, governments or quasi government bodies. The development of the asset-backed market and specialised financing products has led to a large amount of bond finance now going to special-purpose vehicles based on cash flow and security assessments backed by appropriate credit ratings.

In the context of bonds issued to finance a BOT project, the issuer may be the SPV or a finance vehicle established for the purpose of funding the project. The issue may further be covered by a parent company guarantee or may stand alone based on and secured by the cash flow and assets in the SPV.

Lead manager

The lead manager will be responsible for arranging, syndicating and documenting the issue. With a large number of international banks capable of carrying out this role, the principal considerations in relation to project bonds will be to provide an appropriate syndication strategy alongside distribution capability based on an understanding of the relevant risk sensitivities and structuring issues relevant to the project. Other qualities of a lead manager that the issuer will be looking for in respect of a project bond, as with a traditional bond, will include a commitment to the ongoing success of the project, an innovative approach, organisational strengths and financial stability.

Trustee/fiscal agent

Bonds are essentially individual contracts between the issuing company and the holder. In the event of a breach of that contract by the issuer it would be possible for each separate bondholder to bring a claim against the issuer. Similarly in the event of any desired waiver of a technical breach or desired amendment to the documentation it would be necessary for the issuer to obtain the agreement of each individual bondholder. This problem is compounded by the fact that bonds are generally bearer instruments and a number of holders will be concerned to ensure that their anonymity is preserved. Because of these difficulties English law bond issues are generally constituted by a trust deed. Where a trustee is appointed (this can be one of a number of trust companies who regularly carry out this service) the trustee will be responsible for the interests of each of the bondholders.

An alternative to the trust structure is to issue the bonds pursuant to a fiscal agency agreement – effectively a paying agency agreement with some additional provisions relating to the mechanics of issue of the bond. Each of the bondholders has the right to call an event of default. In circumstances where a fiscal agency agreement is used, issuers will aim to negotiate 'softer' default events as there is much less flexibility than in the trustee structure where the trustee can be given discretion to waive minor or technical breaches and to take a view as to the materiality of even some major breaches.

Paying agents

Under either the trustee or fiscal agent structure it will be necessary to appoint paying agents in each jurisdiction where there is likely to be significant investor interest, in order that investors are able to go and present their bonds and coupons and receive the relevant payment. (This system will be simplified where, for example, the certificate remains in master

global form with payments of interest and principal being credited through clearing systems.) The issuer will also appoint a principal paying agent to which it will make payments of the relevant amounts on the agreed dates. The paying agents will accept bonds and coupons, making payment to the holder the same day and applying for reimbursement from the principal paying agent, who will have received the relevant amount from the issuer.

It is important to recognise that the paying agents will act as agents of the issuer and not the bondholders, so that the paying agent will have no relationship of agency or trust with the individual bondholders.

Listing agent

Subject to limited exceptions, the issuer will be required to appoint a listing agent. In the UK a listing agent must be an authorised person under the Financial Services Act 1986, or be a European Institution as defined by the Banking Co-ordination (Second Council Directive) Regulations 1992 which is authorised or permitted within the meaning of those regulations to carry on in its home state the activity of participation in securities issues and the provision of services relating to such issues. This will normally be a corporate broker, investment bank or the lead manager to the relevant issue.

The listing agent's duties are:

- to ensure that the issuer is guided and advised as to the application of the listing rules issued by the relevant stock exchange on which the bonds are to be listed and traded;
- to complete a declaration to the exchange to the effect that: (i) all documents required by the listing rules to be included in the application for listing have been supplied to the exchange; and (ii) all other relevant requirements of the listing rules have been complied with;
- to communicate with the exchange;
- to lodge all documents supporting the application;
- to seek exchange approval of the listing particulars or equivalent offering document; and
- to carry out such other duties as may be required.

Project agent or intercreditor agent

As discussed in Chapter 6, although not a requirement for traditional bonds, the dynamic nature of a project together with the passive nature of bondholders' interests may require the appointment of an agent to act as a point of contact for and to negotiate with the project sponsors. The agent will be authorised by and have responsibility for looking after the interests of the bondholders.

Lawyers and technical advisers

The lead managers' lawyers will be responsible for preparing documentation in relation to the issue. The issuer may also appoint lawyers to advise on the issue. In the context of project bonds their role will predominantly be to finalise project documents and ensure the relevant risks are adequately disclosed in the offer documentation. An understanding of the relevant cash flows and project risks will be an essential requirement for appropriate disclosure in the offer document.

Unlike traditional corporate bonds, it is likely that the project business will be based on specific technical applications that will require analysis by technical experts. A technical expert in the relevant industry will provide a report, details of which will be set out in the offer document.

Principal documentation and terms

Engagement letter

This confirms the fundamental terms of the issue, authorises the lead manager to announce the issue and to form a syndicate with the co-managers.

Offering circular (listing document)

The offering circular will contain a description of the terms and conditions of the bonds, a description of the project, details of the SPV, any listing arrangements, any rating information on the relevant country in which the project operates and, particularly, should highlight any specific risks to which the project is subject. The offering circular will also provide other information required either specifically by any relevant regulatory authority (eg, rules of any relevant stock exchange) or generally as

may be required in order for investors to make an informed decision as to whether or not to invest in the bonds. These areas are described in the following sections.

The terms and conditions of the bonds.

Information is likely to be included in relation to the following:

- the form of the bonds (ie, bearer or registered) and their denomination;
- the status of the bonds (ie, secured or unsecured, and their priority ranking). Brief details of any guarantees of and/or security for the issuer's obligations under the bonds should be included, together with any intercreditor arrangements which will impact on the bondholders;
- the rate of interest payable on the bonds (which is likely to be a fixed rate) and interest payment dates, together with a provision for the payment of default interest on late payments;
- the date(s) scheduled for the redemption of the bonds, and any other events entitling the issuer to redeem the bonds early (most commonly if the issuer is obliged to gross up interest payments as a result of the imposition of withholding tax on interest payments);
- payment mechanisms and any provision for the redemption of the bonds by instalments;
- the tax treatment of the bonds;
- events of default rendering the bonds immediately redeemable;
- provisions for the convening of bondholder meetings and the procedures for decision making at those meetings; and
- governing law.

A description of the project

The offering circular will need to contain a detailed description of the project and the project documentation, and is likely to include:

- a summary of the main provisions of the concession agreement, an analysis of the allocation of risks under the concession agreement and details of the performance criteria that the SPV will be required to meet;
- details of the financing structure of the project, including its sources of finance for the construction of the project facilities and sources of income during the operation phase of the project. Where the project will not rely on long-term offtake agreements, the offering circular should include some detail of all market or user forecasts on which the project economics are based, though the level of detail is likely to vary according to the level of credit support available (see further below);
- a summary of the terms of the principal project contracts – particularly the construction contract, the operation and maintenance agreement and any long-term supply or offtake contracts;
- a summary of the terms of the principal financing documents, including any loan documents, the security documents, all direct agreements and any intercreditor arrangements, particularly those that will impact on the bondholders;
- A summary of the terms of the documentation under which the sponsors will contribute equity to the project and any guarantees or other support to be given by third parties in respect of the obligations of the SPV; and
- a summary of the documents relating to the bond issue, and in particular a note of the undertakings to be given by the SPV in favour of the bondholders.

The offering circular should make adequate disclosure of the risks inherent in the project which could prejudice the rights of the bondholders, such as market and user risks, *force majeure* events leading to delay in completion and country risk (see below), and any restrictions on the bondholders in the exercise of their rights (eg, intercreditor arrangements).

Details on listing and rating

The offering circular will specify whether the bonds will be listed in any jurisdiction and will provide details of any credit rating that has been applied in respect of the relevant securities.

A description of the SPV

The offering circular should provide details of the SPV, and any financing vehicle through which the bonds are to be issued. These should include details of:

- the date and jurisdiction of incorporation;
- any activities to date;
- its share capital and capitalisation;
- its constitutive documents and/or where they may be inspected; and
- its directors.

Unlike a bond issue by an established corporate entity, the offering circular will contain very little information on the issuer itself. Its main role in the project is as a party to the project documents. It will have no established trading record and is unlikely to have any financial history.

More information is likely to be included on the shareholders of the SPV (and the project sponsors, if different), including:

- their corporate structure;
- their principal activities and financial standing; and
- their project finance experience.

The offering circular should also include a description of any other entity providing guarantees or other credit support for the benefit of the bondholders, such as a monoline insurer.

Financial information required by the relevant listing regime

The financial information that can be provided in relation to the SPV itself will necessarily be limited, and is likely to extend only to a balance sheet which will show its capitalisation. The requirements of the relevant listing regime are likely to apply to the shareholders of the SPV, particularly where the shareholders are giving assurances in relation to the completion of the project facilities, and also to any guarantor of the bonds.

Information as to the economic, political and regulatory regime

Depending on the jurisdictions involved, the offering circular should give some information on the environment in which the project is to be implemented. Particularly in respect of emerging market countries, information should be given in respect of that country's financial standing and credit rating and its taxation and other economic policies insofar as they impact on the project, its political stability and the laws and regulations of that country which are relevant to the project. This should extend to matters such as the ability of the SPV to obtain and remit hard currency to meet its payment obligations under the bonds.

Boilerplate information required to be included in the listing documents

This is likely to include details of the subscription arrangements between the issuer and lead managers, selling restrictions applicable to the bonds and general information, including the location where all relevant documents can be inspected.

Subscription agreement

The subscription agreement is a conditional contract to underwrite the issue and will include amongst others the following provisions.

Subscription and offering

This provides the basic subscription contract: the issuer agrees to issue and the managers jointly and severally agree to subscribe and pay for the bonds at the subscription price (together with accrued interest) less the selling concession. The issuer will also agree to pay the underwriting commissions by allowing a deduction from the subscription price.

Listing

The issuer will agree that the lead manager is given authority to apply for listing on the relevant exchange and agrees to provide documents and to maintain the listing on the relevant exchange (or where that is not possible, to agree an alternative exchange for listing of the bonds). The managers will often require full information about any change or matter affecting the issuer and will require the issuer to publish supplementary listing particulars in a form approved by the lead manager. The issuer will usually argue that the content of supplementary listing particulars is the issuer's responsibility alone, although an agreement to consult with the managers may be acceptable.

Representations and warranties

The representations and warranties will generally cover that the financial information has been properly prepared, that the offering circu-

lar contains all necessary information and that there is nothing in it or omitted from it which would make the information stated misleading. Warranties will also normally cover incorporation, no breach of law, no infringement of any documents or agreement, valid and binding obligations of the issuer, no event of default, a statement that all consents and approvals have been obtained and are in force, no material litigation, that the financial statements present accurately, in accordance with the national law and accounting practice, the results of the operations of the issuer and that, since that date, there has been no material adverse change in the financial position of the issuer.

Conditions

The obligations of the managers to pay for the bonds will be conditional upon a number of conditions being satisfied. These will include amongst others:

- no material adverse change in the condition of the issuer at the payment date;
- no event rendering any of the misrepresentations and warranties untrue or incorrect to any extent which is material in the context of the offering of the bonds;
- that the relevant stock exchange has approved the securities for listing; and
- the issue receiving an appropriate rating.

Selling restrictions

The subscription agreement will contain selling restrictions effectively requiring the managers to sell the securities only in accordance with the relevant securities laws.

Termination

The subscription agreement will generally contain a right for the lead manager to terminate the agreement and the obligation of the managers in the event of certain changes occurring in the international financial markets. The issuers will generally require to be consulted before the managers exercise their right of termination. The market guide produced by IPMA in respect of standard provisions in bond documentation provides optional clauses for termination. IPMA *Standard Form 2* is generally adopted for this purpose.

Closing

The subscription agreement will also deal with the closing mechanics. It is important that sufficient attention is given to the closing mechanics, particularly where the issuer and the common depositary (the custodian on behalf of the clearing systems) are in different time zones. The issuer will generally agree to deliver the temporary global note to the common depositary for Euroclear and CEDEL Bank to be held to the order of the issuer until payment has been effected.

Invitation telex

The invitation telex to prospective underwriters and its contents is the first public document and should conform with IPMA recommendations. To the extent that information is not contained in the invitation telex it would be reasonable market practice to assume that IPMA terms would apply. It is essential therefore to ensure that the invitation telex accurately reflects the details of the proposed issue. It is no longer usual to have a separate agreement among managers and the invitation telex will simply refer to one of the IPMA standard form managers agreements being applicable.

Trust deed

The principal difference between a trust deed and a fiscal agency structure is that whereas the trustee owes its duties to and is legally answerable to the bondholders, the fiscal agent is purely the agent of the issuer. While the fiscal agent may purport to undertake certain duties for the benefit of the bondholders it has no contractual or trust relationship with the bondholders and it is legally answerable only to the issuer.

Trust deeds are generally fairly lengthy documents covering in detail the relationship between the trustee and the issuer. The trust deed will cover such matters as the issuer's covenant to pay, the forms of the definitive and temporary global bonds, rights of acceleration and enforcement of the bonds, order of payment of funds recovered by the trustee and provisions with regard to protection and remuneration of the trustee. The trust deed will also set out the provisions for meetings of bondholders.

Paying agency agreement/fiscal agency agreement – payment mechanics

The paying agency agreement is largely a mechanical document dealing with the mechanics and administration of the payment mechanism.

Legal obligations and rights

Most sophisticated jurisdictions will have in place a raft of complex legislative provisions to ensure that the general public in the relevant jurisdiction is adequately protected from spurious offers of securities based on inadequate, inaccurate or misleading information. The UK is no exception.

It is important therefore that the structure of the offer and the underlying documentation contain detailed provisions restricting the marketing and sale of securities of the issuer otherwise than in compliance with specified circumstances based on the legislation of relevant jurisdictions. Because it is not possible to address every jurisdiction in which the issuer's securities may be sold, a general restriction will usually be included in the documentation. The documentation will, however, be likely to address specifically UK and US restrictions. It is important for both the issuer and the relevant organisations selling the offer to understand what restrictions will apply and how to avoid breaching them.

Regulations under English law

The principal UK restrictions on the issue and sale of securities are contained in the Public Offer of Securities Regulations 1995 ('POS Regulations'), the Financial Services Act 1986 ('FSA') and the Banking Act 1987. Further restrictions are found in the rules of regulatory bodies set up to regulate the securities industry under the FSA and the Stock Exchange Listing Rules.

POS Regulations

The POS Regulations came into force in June 1995 and replaced the provisions of the Companies Act 1985 to bring English law into line with the EC Prospectus Directive of 1989. The issuer will be required to publish a prospectus (the form and content of which is specified in the Regulations) and also to deliver a copy to the Registrar of Companies, if there is an offer to the public made in the UK of unlisted securities or an offer to the public made in the UK, before admission to listing, of securities which are to be listed.

Various exemptions apply which an issuer may wish to rely on in order to avoid providing the lengthy and detailed information required:

(a) the offer is to professionals whose activities involve holding and disposing of investments for the purposes of their businesses; or
(b) the offer is to not more than 50 persons in the UK; or
(c) the bonds are offered in connection with a bona fide invitation to enter into an underwriting agreement – eg, the invitation telex; or
(d) the bonds are denominated in amounts of at least ECU40,000; or
(e) the offer is to a restricted group reasonably believed to be sufficiently knowledgeable to understand the risks.

Financial Services Act 1986

An issuer will need to ensure that it does not, either directly or through its agent or advisers, fall foul of what can be fairly draconian measures introduced by the legislation.

The principal restrictions relevant to a securities offering are Section 57 which makes it an offence to issue an unauthorised investment advertisement, and Section 47 which makes it an offence to make certain misleading statements.

A listing on the exchange will avoid most of the Section 57 problems as the exchange listing regime will apply to the listing particulars and any other documents required or permitted to be issued by the listing rules (Section 58). If not covered by the listing rules, the issuer will need to rely on other specific exemptions such as those contained in Article 11 of SI 1996/No. 1586 covering 'advertisements issued to persons sufficiently expert to understand the risks involved'.

Section 47 states that:

(1) Any person who:
(a) makes a statement, promise or forecast which he knows to be misleading, false or

deceptive or dishonestly conceals any material facts; or

(b) recklessly makes (dishonestly or otherwise) a statement, promise or forecast which is misleading, false or deceptive,

is guilty of an offence if he makes the statement, promise or forecast or conceals the facts for the purpose of inducing, or is reckless as to whether it may induce, another person (whether or not the person to whom the statement, promise or forecast is made or from whom the facts are concealed) to enter or offer to enter into, or to refrain from entering or offering to enter into, an investment agreement or to exercise, or refrain from exercising, any rights conferred by an investment.

(2) Any person who does any act or engages in any course of conduct which creates a false or misleading impression as to the market in or the price or value of any investment is guilty of an offence if he does so for the purpose of creating that impression and of thereby inducing any person to acquire, dispose of, subscribe for or underwrite those investments or to refrain from doing so or to exercise, or refrain from exercising, any right conferred by those investments.

A person found guilty of an offence under this section may be liable to a fine or imprisonment.

It is therefore essential that a thorough due diligence exercise be completed (a) to avoid any statement giving a false or misleading impression and (b) to provide an arguable defence under Section 47(3) if a claim is made. Due diligence is discussed further later in this chapter.

If the issue is to be listed on the exchange, Section 146 of the FSA requires the offering circular to contain:

... all such information as the investors and their professional advisers would reasonably require, and reasonably expect to find there, for the purpose of making an informed assessment of:

(a) the assets and liabilities, financial position, profits and losses and prospects of the issuer of those securities; and

(b)the rights attaching to those securities.

The exchange's listing rules (which are briefly discussed above) state only the minimum that must be disclosed: the general duty of disclosure under Section 146 must always be complied with, and the London Stock Exchange cannot grant a derogation from it. If Section146 is not complied with, subsequent purchasers of the bonds, as well as the original investors, will be able to bring a claim under Section 150 of the FSA for compensation if they can demonstrate that they suffered loss as a result of the incorrect statement or omission. However, as time passes and the bonds pass through different hands, it will become increasingly difficult for an investor in the secondary market to prove.

In a normal issue, the persons who may be held responsible are the issuer itself and, where any expert opinions are expressed in the document, such experts. If the bonds are classified as 'international securities', the exchange is empowered to exempt the directors of the issuer from responsibility under Section146 and 150.

Banking Act 1987

Where the bonds are sterling debt securities it is important to ensure that the sterling is not raised in the course of carrying on a business which is a deposit-taking business, unless there is an applicable exemption from the Banking Act's provisions.

Common law

In addition to the above, a variety of common law, contractual and statutory rules may determine the civil or criminal liability of an issuer for the contents of any offering document (and, indeed, the liability of the lead manager or other persons involved in the issue). Briefly, they are:

- damages for negligent misstatement (and liability may extend to the underwriters and their legal advisers because they have a duty to investors to use reasonable care to ensure the accuracy and completeness of the offering circular);
- rescission and damages for misrepresentation; and
- breach of contract (if it can be proven that the incorrect statement was a term of the contract).

Due diligence

Proper due diligence and verification of the contents of the offering circular should ensure that all material facts are stated and that the necessary information is presented without omitting any material information or being misleading in any material way. If something does slip through the net, the ability to show that proper due diligence and verification was carried out should provide a defence to most claims.

The method of due diligence and verification adopted in a typical corporate bond issue by English lead managers and their legal advisers follows the Euromarket practice. It is based on a 'question and answer' session with the issuer's senior management and its auditors which takes place over several days. The notes kept of this session form the major part of the verification record. Documentary evidence will be required to support any particularly significant statements in the offering circular. Projections, together with the assumptions on which they are based, must be supplied to the lead manager so that it can verify the description of the issuer's future prospects. However, the issuer's board is not asked to sign any formal verification notes (and the practice differs in this respect from the practice with domestic UK issues). In the case of a company with a financial record, the lead manager will also require a 'comfort letter' from the issuer's auditors confirming, among other things, that, following the performance of agreed review procedures, they are not aware of any material decrease in the net assets since the date of the last audited balance sheet or in the net sales, gross profits or operating income in the period since the last balance sheet date when compared with the same period in the preceding year.

In the case of a project bond, considerable due diligence will be required with regard to the underlying project contracts and the description of principal risks described in the offering circular. In view of the fact that a number of important risk factors in projects will be based on assumptions, it will also be an important feature of the project description that the fact that assumptions have been made, which may prove to be inaccurate, and the basis on which those assumptions have been made, is clearly stated in the offering circular.

Timetable

For practical purposes the procedure and timetable relating to a typical Eurobond issue can be divided into three parts:

- *launch* – announcement – selling efforts and moral commitment;
- *signing* – execution of subscription agreement/(underwriting); and
- *closing* – funding.

Launch and pre-launch

The pre-launch period will involve the issuer, lead manager, legal advisers and accountants preparing the initial documentation, carrying out any due diligence required in respect of the issuer, and the project, pulling together the management syndicate and agreeing the terms and conditions of the issue. It will also be necessary to assure that all technical analysis is accurately reflected in the offer document. In relation to project bonds the launch and pre-launch period will be significantly longer than under the traditional Eurobond structure due to the very specific nature of the credit to be sold and the very detailed risk profile that will need to be described arising from the interplay of contractual and structural issues affecting the project. The precise timing of the process will depend on the novelty of the project and whether the project contracts have been substantially finalised prior to the banks being approached. Substantial pre-launch marketing is likely to be required in the case of project bonds. Because of the need for certainty that finance will be available over an extended period in respect of projects, the bond option will only be a viable alternative if there is substantial interest from prospective investors at the pre-launch marketing stage.

Signing

At signing the managers (ie, the lead manager and co-managers) and the issuer will enter into formal legal documentation binding the issuer to issue the bonds and the managers to subscribe and pay for the bonds at closing. It is important

to note that even at this stage the subscription agreement, and therefore the managers' obligation to purchase the bonds, will be conditional on a number of events taking place on or prior to closing, some of which are listed above.

Closing

Closing will involve execution of the trust deed (or fiscal agency agreement) and paying agency agreements. The closing comfort letter, legal opinions (if not already delivered) and no material adverse change certificates will be delivered to the managers and any other conditions precedent will be complied with. A representative of the common depositary will take delivery of the temporary global note (a single certificate usually in bearer form in respect of the entire issue held for a limited period prior to the bonds being represented by definitive certificates, or now more commonly, a permanent global certificate) and authorise payment of funds to the issuer following closing. The printer will then be instructed to print the definitive notes (if any are to be produced) and the closing of the issue will be announced in the press.

PROJECT LEASING

The following section identifies the principal documents that will be required where a BOT project financing includes a leasing structure under which project risk is taken primarily by parties other than the lessor (ie, a lease of the second type described in the 'Project leasing' section in Chapter 6). It assumes that the project business is located in the UK and that UK depreciation allowances only are relevant. All the documents referred to below will need to be negotiated with and/or consented to by the project lenders and the host government.

Acquisition or Reimbursement agreement

A contract between the lessor and the SPV containing:

- the obligation of the lessor to acquire the asset to be leased (or, in the case of a reimbursement agreement, to repay to the SPV the costs associated with acquiring the asset);
- a description of the asset and, where it is to be constructed or assembled by the lessor, detail as to the construction or assembly;
- the expected acquisition cost (reimbursement amount) specifying the maximum amount to be paid by the lessor;
- timing of the expenditure;
- arrangements for the vesting of ownership rights in the lessor; and
- the agreement of the parties to enter into an agreement to lease and/or lease of the asset (see below).

Agreement to lease

A contract between the lessor and the SPV containing:

- the obligation to enter into a lease of the asset in an agreed form;
- arrangements for the insurance of the asset during the period between the lessor beginning to incur expenditure and the start of the lease period; and
- provisions as to the start date for the lease.

This agreement may be dispensed with and the form of the lease be an annex to the Acquisition or Reimbursement agreement.

Lease

A contract between the lessor and SPV containing:

- the obligation to lease the asset, granting the SPV as lessee exclusive possession for a specified period of time;
- covenants or undertakings as to the use and operation of the asset;
- insurance provisions – these should be compatible with the provisions of the credit agreement;
- the obligation of the SPV to pay a variable rental – there will be a detailed schedule setting out the assumptions on the basis of which the illustrative rental has been calculated and explaining how the rental will vary with changes to these assumptions (eg, changes in corporation tax rates, interest rates and acquisition cost);
- provisions as to the security (eg, guarantee, letters of credit, cash collateral) to be provided to the lessor;
- where there will be variations in the amount

of security required over time, the mechanics for implementing these and parameters set by the lessor as to the categories of banks which will be acceptable as issuers of guarantees or letters of credit;

- default and termination events, many of which will be similar to events of default in the credit agreement – eg, the abandonment of the project or termination of the concession;
- provisions as to termination (voluntary, total loss and default) and detailed provisions as to the stipulated loss value (SLV) and other amounts payable on termination, and as to the disposal of the asset following termination; and
- indemnities from the SPV to the lessor in respect of both general and taxation matters.

Guarantees, letters of credit or cash collateral

Appropriate documentation for the agreed form of security to the lessor in respect of, for example, all sums due, or SLV, or current rentals.

Where bank guarantee(s) are required, issues of principle will include the question of whether a payment guarantee or a performance guarantee is required, the maximum amount that can be claimed, whether the guarantee is an obligation independent of the underlying obligation of the SPV (in English law, an indemnity) and whether or not the amount that can be claimed under the guarantee can be grossed up to take into account the tax treatment of receipts by the lessor under the guarantee.

In the case of letters of credit, the maximum sum that can be claimed and the period of validity of the letter of credit will be clearly set out. Clarity of the form of demand and the ability of the lessor to comply strictly with that form will be important issues.

Cash deposits will normally be required to be held in a specified bank account charged to the lessor with provision for release or retention of interest earned.

Security over project assets

This may take the form of fixed and floating security over all the SPV's assets and a charge over the shares in the project company – as described in a later section of this chapter.

Where the lessor is taking only limited project risk, the security will rank behind that of the project lenders (see the next section).

Intercreditor arrangements

Intercreditor agreements between the lessor and the project lenders will invariably need to be concluded. Intercreditor arrangements are discussed in the final section of this chapter.

Security over the leased asset

The senior lenders to the project may require this in order to protect the asset from creditors of the lessor and to keep it available for the project. The preferable form would be a first fixed charge – although in practice in the UK many lessors are resistant to granting security over their assets. A negative pledge (which in English law does not amount to security) may be available and the direct agreement with the lessor may give the lenders an option to purchase the asset in specified circumstances.

Relationship to the project credit agreement

All the principal leasing documents will be identified in the project credit agreement. Entry into them may be conditions precedent to drawdown under the project credit agreement, depending upon the timing of introducing leasing into the project. Changes to the leasing documents (or at least material changes) will require the consent of the project lenders.

A material breach of the acquisition agreement (or reimbursement agreement), the agreement to lease or the lease can be expected to be an event of default under the project credit agreement.

SECURITY

How important is project security?

Commercial banks will not contemplate lending to a project without assurances that they have effective security over the project assets and, often, the SPV itself. Other lenders to the project are also likely to require equivalent security.

One of the primary aims of taking security over a borrower's assets, in both corporate and project lending, is to protect those assets against the claims of third parties. Where all or

most of the SPV's assets are secured in favour of lenders, unsecured creditors of the SPV will be discouraged from taking action to recover their debt, and the lenders will to a great extent be protected from the effects of any such action which is taken.

Commercial lenders, both to the corporate and projects sectors, will also to some extent rely on the ability to enforce their security in a default situation to assist them in recovering their loan, but in different ways. Lenders under a corporate facility traditionally attach considerable importance to the value of their borrower's assets and the ability to take possession of those assets and sell them, the proceeds of sale to be used to repay the financing. In a BOT project financing, the value of the SPV's assets is of secondary importance. Lenders accept that these assets are likely to have a limited market value, depending on their location, the extent to which the project facilities have been completed and the types of assets in question, and to have a distress sale value which may be less than the amount of the outstanding debt. As with any project financing, the value in a BOT project for the lenders is the anticipated cash flows, which will only be realised if the project facilities are completed and operated. Ideally, the lenders will wish to have the ability to take the project over with a view to completing the construction of the project facilities and/or operating them in order to ensure that these cash flows are generated. This is discussed in more detail later in this section.

In addition to taking security over the assets of the SPV, lenders will wish to enter into direct agreements with the parties to the principal project contracts. These contracts will normally include the concession agreement, the construction contract, the operation and maintenance agreement and any major supply contracts and offtake contracts. Direct agreements are discussed in detail in the next section of this chapter, but essentially they delay the parties to the project contracts terminating the contracts because of a default by the SPV and allow the lenders the opportunity to take over the position of the SPV under the contracts. Although often referred to as forming part of the lenders' 'security', direct agreements are purely contractual and do not create a true security interest. They can, however, enable the lenders effectively to assume control of the project. This is a particularly important remedy where the security laws of the relevant jurisdiction do not allow a secured lender to assume control of the secured assets on an enforcement of the security.

Where more than one lender or group of lenders is to have the benefit of the security, they will normally wish to set out their rights and obligations as between themselves in an intercreditor agreement. Intercreditor agreements are discussed in more detail in the final section of this chapter.

Cash management

In addition to taking security over the SPV's cash and receivables (discussed further below), lenders to the project will wish to see adequate procedures and controls in place for the management of the project's cash flows. This will normally be achieved by imposing on the SPV either lender or independent approval requirements for its annual budgeted expenditure and requiring the SPV to maintain a series of bank accounts and by controlling, in the project credit agreement, the payments which can be made into and out of those accounts. This is discussed in an earlier section of this chapter.

Governing law

In the interests of certainty, security documents should contain an express choice of governing law. Determining what that choice of law should be, however, can be difficult and will, to a great extent, depend on the type of assets which are to be secured and their location. The law governing the creation of the security interest will determine (but not exclusively if it is not the law of the place of incorporation of the SPV and of the location of assets) such matters as:

- any registration requirements and formalities that need to be observed for the creation of a valid security interest (see further below);
- the effect on the security of insolvency and insolvency-related events in relation to the SPV;

- the amount of the debt that can be secured;
- the type of asset over which the security can be granted;
- the creditors who are entitled to the benefit of the security;
- the priority of the security against other secured and unsecured creditors of the SPV;
- the remedies available to the lenders on an enforcement of the security; and
- the nature of the security interest created.

The principle adopted should be that the governing law of security interests should be that of the location of the secured assets (though the resolution of conflicts of laws relating to the location of different types of assets can differ considerably between jurisdictions). This is due to the fact that a local court might not recognise the validity of a foreign security interest in assets located within its jurisdiction, nor might it facilitate the enforcement of a foreign judgment in relation to those assets. In addition, where the SPV's assets are located in the jurisdiction of its incorporation (as will most often be the case), local law will apply in relation to any insolvency of the SPV. In certain cases, however, it might be beneficial to the lenders to take separate security interests in a project asset under more than one governing law, particularly where the asset is located and the SPV is incorporated in different jurisdictions. This should allow the lenders greater flexibility by enabling them to select which security instrument over the particular asset to enforce, reducing the likelihood of the courts of the preferred jurisdiction refusing to recognise the security.

Recognition of trusts

Where security is to be given in favour of more than one party, it is advantageous for the security to be granted in favour of a trustee who will hold the security on trust for the ultimate beneficiaries. This is the case in syndicated debt financings as well as financings in the bond markets. The main advantage of a trust mechanism is that the security can be held for the benefit of a class of persons the members of which change over time (the syndicate banks or bondholders), without the need for new security to be granted or the transfer of the existing security. A trustee will normally take custody of the security documents and act as the representative of the individual syndicate members or bondholders in dealings with the SPV and other parties to the project, with the power to deal with the secured assets on the terms of the trust. Security trustees will require similar protections against liability and indemnities as provided to the facility agent in the project credit agreement.

The concept of a security trustee is recognised in common law jurisdictions, but the extent to which it is recognised in other jurisdictions varies. The Convention on the Law applicable to Trusts and on their Recognition signed at The Hague in July 1985 (commonly known as the *Hague Convention*) provides for the recognition of trusts created under a foreign law. The number of parties to the Hague Convention is increasing, though full recognition of the trust is not widespread outside common law jurisdictions. Where a trust is not recognised, an effective mechanism will need to be put in place for the transfer of interests in the security.

Types of project assets

The type of security that lenders will take over the project assets will depend not only on the governing law of the security but also the type of asset. As a guide, an SPV implementing a BOT project is likely to own or possess the following types of asset:

- land and assets affixed to land;
- loose plant and machinery and other moveable assets;
- cash;
- rights under project contracts; and
- stored fuel and raw materials, spares and product.

In addition, it is likely to acquire further assets over the life of the project. Each of these classes of assets is examined further in the following sections.

Land and assets affixed to land

In a BOT project, the SPV will need rights over real property on which to build the project facilities. It might be the owner of the land or, depending on the system of law, the holder of a

leasehold or other interest which gives it a right of occupation. English law allows for interests in land to be mortgaged as security for a loan, and the position appears to be the same in very many jurisdictions. Under English law, a mortgage of land will include all equipment and other items affixed to the land, as they are considered to form part of the land. This is the case in many other jurisdictions, though certain systems of law go further and provide that a mortgage of land includes moveable machinery and equipment used in connection with the land.

Moveable assets

Taking security over moveable assets can be more difficult. While many jurisdictions with developed commercial laws recognise the concept of a security interest where the beneficiary of the security takes possession of the assets, the extent to which such jurisdictions recognise security that would allow the SPV to retain the assets varies widely. Under English law and other common law jurisdictions, the concept of a mortgage of a moveable asset which does not require a transfer of possession of the secured creditor is well established (although it has weaknesses when compared to security available over other forms of asset). In others, particularly civil code jurisdictions, this form of security is virtually unrecognised.

In practice, the availability of security which relies on possession by the secured creditor is of very little value in a BOT project, given that the SPV will need to use its assets in the course of the project. In these circumstances, it might be possible in certain jurisdictions to circumvent this to some extent by, for example, the lenders retaining documents of title to goods.

Cash

In this context, 'cash' refers to bank deposits. Many jurisdictions will recognise the ability of the SPV to create security over the credit balances on its bank accounts (although in some cases it is not possible to create security over future cash balances). One issue likely to be of particular significance is whether any of the accounts is held by the bank to which the secured debt is owed. The English law position was thrown into some confusion by the decision in *Re Charge Card Services Limited* [1987] 1 Ch 150. On a legal analysis, a bank deposit is an intangible asset of the depositor in the form of a debt owed by the account holding bank to the depositor. In the *Charge Card* case, the court said that it was 'conceptually impossible' for a depositor to grant security to a bank over a debt owed to it by that bank. The situation appears to have been largely resolved by the House of Lords decision in the case of *Morris v Agrichemicals Limited* (30th October 1997) (also referred to as *BCCI (No.8)*). The decision is persuasive (though not binding) authority to the effect that the analysis applied in the *Charge Card* case was defective and that it is possible to create at least a valid 'equitable charge' over a cash deposit in favour of the deposit-holding bank, thereby establishing a security interest in the deposit.

Many other common law jurisdictions recognise that security can be created over a deposit in favour of the deposit-holding bank, and the concept is also to some extent developed in certain civil law jurisdictions.

Where the deposit is held by a bank which is not the lending bank, the position is less complex and in principle such a security right should be recognised in many jurisdictions. This can be of assistance in a syndicated or multi-sourced financing where security is held for the benefit of groups of banks and other lenders by a security trustee. Although the entity acting as trustee might also be a lender to the project, it is acting as such in a different capacity. This was confirmed under English law by the Court of Appeal in the *Morris v Agrichemicals* case.

Rights under project contracts

Many jurisdictions recognise the ability of the SPV to create security over its receivables. The formalities to create the effective security will differ according to the jurisdiction involved. In some jurisdictions a valid security interest can only be taken if notice of the security is given to the debtor and/or the lenders take possession of any document evidencing the debt and/or the lenders collect the receivables on the SPV's behalf. Other jurisdictions do not require any of these formalities.

In addition to taking security over the receivables payable under a project contract, lenders to a project will invariably wish also to take security over all the other rights of the SPV under the contract. Essentially, this amounts to the right to compel the performance of the contract by the other party or parties to it. The laws of many jurisdictions, including English law, permit such rights to be assigned.

It should be noted that the SPV's ability to assign its rights under a project contract might be restricted. For example, the SPV might be required to obtain the consent of the other party or parties to that contract. Very often the consent of the host government will be required to the assignment of the concession agreement.

Taking security over the project contracts will only be of benefit to the lenders provided, if they wish to enforce their security, the project contracts are ongoing. The lenders derive their rights from the SPV and so cannot be put in a better position under the contracts than the SPV itself. So, for example, if the other party to the project contract has a right to terminate that contract or has terminated it as against the SPV, the lenders will have security only over a terminable or terminated contract. For this reason, the practice of entering into direct agreements with other parties to the project contracts has evolved (see the following section of this chapter).

Stored fuel and raw materials, spares and product

The extent to which lenders can take security over these types of asset will vary according to jurisdiction, but the principles that apply are similar to those relating to moveables. The crucial issue will be whether the lenders must take possession of the items in order to have an effective security interest in them. The security must also be of a type which, for practical reasons, allows the SPV to deal with these assets on a day-to-day basis for the purposes of the project. This can be achieved under English law by taking a floating charge over these types of assets (see the further discussion on floating charges later in this section).

Future assets

In addition to taking security over the initial assets of the SPV, the lenders will wish to have a security interest in any assets which the SPV acquires during the course of the project. In this situation, it should normally be possible to oblige the SPV to create new security over these assets as and when it acquires them, but there are disadvantages:

- from a practical point of view, the SPV is likely to acquire assets on a regular basis, particularly during the construction phase, and it would be administratively inconvenient (and consequential stamp duty liabilities prohibitive) to enter into fresh security documents each time a new piece of equipment is acquired;
- the SPV might simply fail to fulfil its obligations without the lenders being aware of the fact; and
- in certain jurisdictions, the creation of further security after loan facilities have been made available might be open to challenge if the SPV becomes insolvent.

Some jurisdictions, including England and Wales and certain other common law jurisdictions, allow for a general security to be taken over the whole of the assets and undertaking of a debtor which will, to some extent, cover future assets. This is preferable for the lenders as they will be granted a *present* security interest which will attach to *future* assets as soon as they are acquired by the SPV. It is an essential requirement of this security, however, that the future assets are sufficiently identifiable. Certain jurisdictions have more stringent identification requirements.

Management control

The lenders to a project will wish, to the maximum extent possible, to take security over the whole of the project, which will enable them, if a default occurs, to take management control of the project and continue with its construction and/or operation until they have been repaid.

English law allows a creditor to take security over the whole of a company's assets and undertaking and to appoint a receiver and manager to manage the company with a view to repaying the debt. Typically, lenders will take a

combination of fixed and floating security from the SPV. The fixed security will relate to specific assets over which the lenders have the requisite degree of control – essentially controls over the disposal of the assets and over the creation of further security. Fixed security is therefore only suitable for assets that will be retained by the SPV on a relatively long-term basis and not for assets which, in the general course of business, will need to be dealt with and disposed of. These unsuitable assets will include fuel and raw materials, the produce of the project, other goods, smaller items of equipment and non-specific receivables of the SPV, together with any other assets which it is impossible or impracticable to identify on an individual basis. Security can be taken over these latter assets by way of a floating charge. The essence of a floating charge is that it applies to assets by class and 'floats' over those assets allowing them to be dealt with in the ordinary course of business until the charge 'crystallises' (or attaches to the individual assets) on the occurrence of certain events. Under normal circumstances, therefore, the SPV is free to acquire and dispose of the assets without the consent of the lenders. A floating charge will crystallise on the liquidation of the SPV and the SPV ceasing to trade. Other crystallising events can (and invariably will) be specifically included in the security documents. At that point, the security becomes a fixed security and the SPV is no longer able to deal with the assets without reference to the lenders. A disadvantage of a floating charge is that on enforcement it ranks in priority after certain preferential creditors.

Where the lenders take a floating charge over the whole, or substantially the whole, of the SPV's property, they will, certainly where the SPV is an English company, be able by the appointment of an administrative receiver to prevent the appointment of an administrator of the SPV. During an administration, no steps can be taken by secured creditors to enforce their security without the administrator's consent or the leave of the court. Such an appointment is likely to be disadvantageous for secured creditors in that they lose control over their security and over the way in which the business is run.

Not all jurisdictions permit security to be taken over the whole of a company's property and, of those that do, not all allow the creditor to take management control, through a receiver and manager (or equivalent) or otherwise. An alternative solution might be for the lenders to take security from the shareholders in the SPV over their shares in the company. If the security over the shares was to be enforced, the lenders could, as shareholders of the SPV, appoint its directors. Although in theory this is an attractive proposition and may be the only way in which the lenders can take control of the SPV, it could lead to the lenders incurring potential liabilities for the actions of the SPV. It should be noted that where, in the exercise of their security, the lenders appoint an English law receiver and manager of the SPV's assets, that receiver and manager is deemed to be acting on behalf of the SPV, and not the lenders, in carrying out its management role.

Security over shares in the SPV

Commercial lenders to a project have become accustomed to taking security from the shareholders of the SPV over all the issued shares in the SPV, and where the shareholders are the project sponsors this will often be accepted. This security will usually support a direct obligation of the shareholders to the lenders (typically the obligation to provide funds to the SPV during the construction phase) and, once this has been completed, a guarantee (usually limited) of the SPV's obligations to the lenders. It is, however, becoming a difficult issue as an increasing number of BOT projects attract investors other than the sponsors. These investors are often unwilling to grant security over their shareholdings, and where the investors are members of the public this type of security will not be available.

The advantages for the lenders of enforcing security over the shares in the SPV, rather than its assets, are as follows:

- it might allow them to take management control of the project in circumstances where they would not otherwise be able to do so;
- valuable tax losses in the SPV can be retained; and
- there is a better prospect of any licences and

special permissions held by the SPV that are necessary for the project, particularly those granted by the host government, being retained by the project.

Taking security over shares in the SPV can give rise to difficult intercreditor issues where the shareholders have the benefit of political risks insurance against the loss of their investments in the SPV. In addition, certain types of institutional investor will not be permitted by their constitution to grant security over their assets.

Stamp and registration duties

The requirements of the relevant jurisdictions in relation to stamp duty and other documentary taxes on the granting of security should be verified in advance. In certain jurisdictions, these costs could be a significant disincentive to taking certain types of security, particularly where the duty payable is a percentage of the value of the security or the amount of the secured debt.

In addition, there might be other significant duties, taxes or fees. Substantial registration fees or notary's fees might, for example, be payable in respect of the security, again linked to the value of the secured assets or the amount of the secured debt.

In addition, it is advisable to take advice on any duty/tax liability which would be incurred in connection with the enforcement of the security.

Meeting the formalities for effective security

Once security documents have been entered into, the lenders might need to comply with certain formalities required by the relevant jurisdictions before the security becomes valid or enforceable or has priority over other creditors of the SPV. This is often referred to as 'perfecting' the security. These formalities might include:

- *Service of notice.* Particularly in relation to the assignment of a contract debt, the lenders might need to give notice of the security to the debtor, either to create a valid security interest or to enhance that security interest and the remedies available on an enforcement. The actual method of serving notice might be subject to specific requirements – for example where notice has to be served in person by an officer of the court.
- *Notarisation.* A qualified notary might be required to notarise, or authenticate, the security document, normally for it to be admissible in evidence.
- *Taking possession.* The lenders will need to take possession of assets where this is a requirement of the security interest.
- *Registration.* It might be necessary to register the security in a public register. Broadly, there are two types of registration – registration by asset and registration by debtor. Registration by asset involves the indexing of assets in an ownership register and it will often, for example, be necessary to register a mortgage of land with a local land registry. Registration by debtor might be required if there is a commercial or companies registry where security can be entered on the company's public file. Registration will, as a general rule, often be required where the secured assets are retained by the SPV for use in the project. In certain jurisdictions, more than one type of registration might be required in respect of a single item of security. Some jurisdictions also require registrations to be renewed periodically.

Impediments to asset realisation

Although the lenders to a project might have valid and perfected security over the SPV's assets or the shares in the SPV, the ability of the lenders to realise their security and the procedures open to them are likely to vary according to the jurisdictions involved.

Events of default

Although the loan documents will specify the events that will entitle the lenders to enforce their security, this might not be conclusive. In certain jurisdictions, the courts have the power to override the provisions of the loan documents and apply different criteria to determine whether the security can be enforced. In some jurisdictions, the only circumstances in which security can be enforced are those specifically provided for by legislation.

Stays on enforcement

The SPV might have the option, if it gets into financial difficulties, to commence some type of judicial procedure with the aim of ensuring the survival of its business as a going concern. Under many such procedures, including the administration procedure under English law referred to above, secured creditors cannot enforce their security without the leave of the court.

Management control

As discussed above, certain jurisdictions will not permit a secured creditor to take possession and control of secured assets.

Public auctions

Under many jurisdictions, the only method open to a secured creditor of realising its security is by the sale of the secured assets at public auction, often on the order of the court. The restrictions and delays inherent in this procedure will need to be considered when the security is taken.

Foreclosure

Foreclosure is the term used to describe the outright transfer to the secured creditor of the secured assets. There is no sale or valuation of the assets. As this remedy could operate unfairly against the SPV, foreclosure is likely to be available only if ordered by the courts and such orders are not frequently given. Restrictions on foreclosure do not generally apply to receivables.

Security documentation

The security documentation that will be required in respect of a given project will vary according to the nature of the project, its assets and the commercial agreement which is reached, as well as the various considerations outlined above. In a typical BOT infrastructure project, however, where the security documentation is governed by English law, the security documentation is likely to include the following:

- A fixed and floating charge given by the SPV over its assets, including:
  - a mortgage of land;
  - a fixed charge over project equipment;
  - a fixed charge over the SPV's bank accounts;
  - a fixed charge over all permits and consents required by the SPV for the project;
  - a fixed charge over book debts;
  - a fixed charge over other relevant assets, such as intellectual property rights, goodwill, investments and uncalled capital;
  - an assignment by way of security of the project insurances;
  - an assignment by way of security of all project contracts;
  - an assignment by way of security of other relevant agreements, including hedging agreements and sponsor support agreements; and
  - a floating charge over the remainder of the SPV's assets and undertaking.
- A mortgage given by the sponsors over their shares in the SPV.
- A security trust deed (where the security is given in favour of a trustee to hold it for the benefit of the parties entitled to share in the security) which:
  - establishes the trust; and
  - sets out the terms of the trust and the duties of the trustee and rights of the beneficiaries.
- An intercreditor agreement.

DIRECT AGREEMENTS

What are direct agreements?

As outlined in the previous section of this chapter, one of the main concerns of lenders to a BOT project is to ensure that the project realises its projected cash flows. If the project gets into difficulties and there is a danger that those cash flows will not be generated, the lenders will, to the maximum extent possible, want the ability to ensure the continuance of the project until their loans have been repaid.

One way in which lenders will commonly seek to do this, in addition to taking security over the assets of the SPV, is to enter into direct agreements with the parties to the key project contracts. These contracts will almost invariably give the contracting party the right to terminate the contract if the SPV defaults under it. Common default events will include non-pay-

ment, failure to perform obligations and insolvency-related events. One of the main objectives of a direct agreement is to suspend the exercise by the contracting party of a termination right that has arisen so as to allow the lenders the opportunity to take remedial action and ensure that the contract continues. The other principal objective is to allow the lenders to take action in relation to the contract if the SPV defaults under the loans. In either case, this action might consist of the lenders themselves taking over the SPV's role under the contract or nominating a third party to do so.

The project contracts with which the lenders will be most concerned are likely to be the concession agreement, the construction contract, the operation and maintenance agreement, any significant supply and offtake agreements and any other agreements which the lenders consider are of vital importance to the project, for example an equipment lease. They will generally be less concerned with project contracts which, on a termination, will not result in the SPV incurring penalties or which can be relatively easily replaced by equivalent agreements.

It should be noted that a direct agreement with a party to a project contract will not be considered by lenders as an alternative to taking an assignment or other security interest over that contract. Lenders will require both. As discussed in the previous section, the disadvantage of an assignment is that it will give the lenders only those rights which the SPV has under the contract. An assignment, therefore, of a contract which can be easily terminated or has been terminated is of little benefit to the lenders. On the other hand, an assignment or equivalent security interest will give the lenders proprietary rights which should withstand the insolvency of the SPV.

Key provisions

The parties to a typical direct agreement will be the lenders, the contracting party and the SPV. A typical English law direct agreement is likely to contain the following provisions:

- *Notice of assignment.* Notice of the assignment of the underlying project contract will be given by the SPV to the contracting party and will encompass the following provisions:
  - an instruction to pay all moneys due to the SPV under the contract into a specific project account (typically the revenue account or the compensation account);
  - notice of any restrictions or undertakings given by the SPV in the project credit agreement in relation to the underlying contract – for example, undertakings not to amend the contract, or exercise any termination rights, without the lenders' consent – which could enable the lenders to take action against the contracting party if it knowingly participates in a breach of such restrictions by the SPV;
  - an acknowledgement of the assignment by the contracting party;
  - an acknowledgement by the contracting party that it is not aware of any other third party interest in the project contract; and
  - a statement to the effect that, notwithstanding the assignment, the SPV is entitled to exercise its rights under the contract and remains liable under it, to the exclusion of the lenders, except as provided in the direct agreement.
- *Representations and warranties.* These are given by the contracting party and the SPV in relation to the validity of the project contract.
- *Suspension.* An obligation by the contracting party to give prior notice to the lenders of its intention to terminate the contract or take any other action (including taking legal proceedings to recover outstanding debt and commencing insolvency proceedings) against the SPV, together with a prohibition on termination or the taking of other action for a given period after the lenders have received that notice. The contracting party will also have to provide details of the grounds for termination.
- *Step-in rights.* During the period of any suspension or if the loans are accelerated, the lenders can nominate an entity (normally a receiver or an entity controlled by the lenders) to 'step in' to the contract. The entity will be entitled to exercise the SPV's rights under the contract and become jointly and severally liable under the contract with

the SPV. The step-in will normally be subject to the approval of the contracting party and to the new entity discharging the SPV's outstanding obligations. The new entity will wish to be able to retire, or 'step out', of the contract, when the lenders are prepared to allow the SPV to continue with the contract, to avoid further liabilities or when the loans have been repaid. It will normally be entitled to step out if it discharges the obligations that have accrued during the step-in period, whereupon the contract will revert to the SPV. This process can, in theory, happen more than once during a project contract's life.

- *Novation.* In addition, the lenders will normally have the right, subject to the contracting party's consent, to require the novation of the contract to another entity. This right is likely to be exercisable in the same circumstances as the step-in rights and during the step-in period itself. Here, the new entity will assume all the rights and obligations of the SPV under the contract to the exclusion of the SPV. There will be no provision for the retransfer of the contract to the SPV.
- *Revival.* If no step-in or novation occurs, or the contract reverts to the SPV at the end of the step-in period, the contracting party's rights to terminate the particular project contract revive.

If the contracting party's obligations under the contract are guaranteed by a third party (for example, its parent company), it is normal for the guarantor to be a party to the direct agreement and for the rights of the lenders to step into or novate the project contract to apply equally to the guarantee.

Lenders wishing to exercise their rights under a direct agreement will usually be obliged to comply with strict time limits and procedures in order to do so. The time limits should be realistic and take account of consultation procedures which the lenders will inevitably need to follow before taking action.

Concession agreement

The lenders to the project will be particularly concerned to agree a satisfactory direct agreement with the host government to ensure the continuation of the concession, notwithstanding the default or insolvency of the SPV.

In addition to the provisions outlined above in relation to BOT project contracts generally, a typical direct agreement with the host government might include one or more of the following provisions:

- *Termination of project contracts.* The host government acknowledges the rights of the SPV and the lenders to terminate a project contract, either under the project contract itself or a direct agreement with the contractor, and to appoint an alternative contractor (normally subject to the host government's approval of the new contractor).
- *Transfer of shares or assets.* The host government acknowledges the rights of the lenders to dispose of the shares in the SPV or its assets on an enforcement of the lenders' security, and agrees that the purchaser of the shares or assets has the right to take over or to continue the SPV's role under the concession agreement (again, normally subject to the host government having some power of approval of the purchaser).
- *Replacement of management of SPV.* The lenders will also wish to obtain the host government's acknowledgement that they have the right to replace the management of the SPV on an enforcement of their security over the shares in the SPV.
- *Insurance.* One or more of the following provisions might be included in relation to insurance:
  - both the concession agreement and the project credit agreement are likely to impose detailed insurance obligations on the SPV. In order to confirm that there is no conflict between these requirements, the host government is often requested to acknowledge that compliance by the SPV with the obligations under the credit agreement (usually the more onerous of the two) will be sufficient to ensure compliance with the insurance provisions of the concession agreement; and
  - agreement needs to be reached on the application of insurance proceeds arising out of the physical loss of or damage to the project facilities so that the project can

continue, albeit subject to a delay. The host government will inevitably wish the proceeds to be used to reinstate the facilities so that the project can continue, albeit subject to a delay. The lenders will wish to have the option of requiring the reinstatement of the facilities or using the proceeds to repay their debt. The reasoning behind this is that, depending on the delay involved, their evaluation of the project could be quite different and they might not under the circumstances wish to continue with the financing (or might only wish to continue with it on revised terms). A compromise is normally reached whereby, once all the facts are known (for example the amount of insurance proceeds payable, the extent of damage, the anticipated cost of reinstatement and the timetable for reinstatement), an objective test can be applied to determine whether the project will continue to be viable from the lenders' viewpoint if the reinstatement is carried out. The test is normally based on the project ratios attaining certain levels once the reinstatement is taken into account. This might involve the lenders determining whether or not the maturity of the loan may be extended.

- *Other matters.* The direct agreement might also contain other provisions in relation to matters requiring a direct contractual link between the host government and the lenders.

Consents and licences

Where the SPV has the benefit of government consents, licences or similar rights which are necessary for the implementation of the project, the lenders will often also seek to conclude a direct agreement with the host government in relation to them. Governments will often, by the terms of licences, retain the right to revoke them or to impose other sanctions or penalties on a breach of their terms by the licensee. The lenders to a project will seek the government's agreement to suspend these rights and to allow a step-in or novation of the licence on terms similar to those outlined above in relation to project contracts.

It is rare for government departments to agree to such arrangements. They will often, however, be prepared to offer some comfort to the lenders – for example by giving non-binding statements of current policy in relation to the revocation and grant of licences.

Project leases

Project leases also merit particular consideration.

The lenders

In accordance with the principles outlined above, the lenders to a BOT project will wish to enter into a direct agreement with any finance lessor providing equipment leasing facilities to the SPV. It is particularly important for the lenders to seek to control the occurrence of an early termination of the lease to the extent possible, given that such a termination will inevitably render the SPV liable to make substantial termination payments to the lessor which it is unlikely to be able to make (if guaranteed by the lenders, it will substantially increase the lenders' actual exposure to the project).

In addition to the provisions outlined above in relation to direct agreements with counterparties to the general project contracts, a direct agreement between the lenders to the project and a lessor is likely to include one or more of the following:

- covenants for the exchange of information between the lenders and the lessor relating to the loan facilities and lease facility respectively, particularly, in the case of the lessor, in relation to the amount of the rentals and termination payments calculated under the lease and the calculations supporting any demand by the lessor for further cash collateral or other security from the SPV;
- a distinction between those termination events under the lease which will be subject to a suspension period and those which will lead to an immediate termination of the lease, the latter of which are likely to include such events as the lessor ceasing to be covered by the third party liability insurance required to be placed by the SPV; and
- a right, in certain circumstances, for the lenders to bring about a termination of the

lease. This is likely to be exercisable only where the loans are in default or the SPV is required to increase the amount of security required under the lease to a level which it is unable to meet or which would have such an impact on the project economics as to render the project no longer viable.

The host government

The host government might also wish to enter into a direct agreement with the lessor with the aim of protecting its position on the termination of the concession. It operates in a similar way to the direct agreements referred to above in relation to project contracts, by controlling the circumstances under which the lessor can terminate the lease (particularly on an insolvency event affecting the SPV) and enabling the host government to step into the lease or novate it to a third party. In addition, it is likely to provide for a means of making the leased assets available to the SPV or the host government on a voluntary or default termination of the lease or its expiry by lapse of time.

Advantages and disadvantages

There are both advantages and disadvantages associated with direct agreements.

Advantages

- By providing for step-in rights and novation rights, they offer the lenders considerable flexibility. Step-in rights enable the lenders to take temporary control of the project and, increasingly, lenders are requiring the right to step in not only on the acceleration of the loans but also on any event of default, the intention being that they will step out if the default is cured. Novation rights give them the opportunity to transfer the contracts to a purchaser of the SPV's assets or to an entity controlled by the lenders.
- A direct agreement can be advantageous to the contracting party, in that it will normally have the right to approve a proposed step-in or novation, and the lenders or their nominated entity will both remedy the SPV's default and assume additional liabilities to the contracting party. This is likely to occur in circumstances where the SPV is unable to continue with the contract and the contracting party would otherwise not receive any further payments under it or the benefit of the SPV's performance of its obligations.

Disadvantages

- Although contracting parties will often be accustomed to the requirements for direct agreements, the negotiation of the terms of the agreements can be protracted and therefore costly.
- Where the lenders exercise their step-in rights through a lender-owned entity, this may expose them to liabilities to the contracting party under the contract. This is likely to be of concern in jurisdictions that do not allow for the appointment of a receiver or equivalent which acts as the agent of the SPV.

INTERCREDITOR AGREEMENTS

As discussed in earlier chapters, the financing for a BOT project will normally be derived from different sources that are likely to include a number of the following:

- *equity*: traditionally provided by the sponsors, but also by institutional investors, the host government, contractors, equipment suppliers and offtakers;
- *bank debt*: provided by a syndicate of commercial lenders;
- *loans, guarantees and other forms of support*: provided by export credit agencies;
- *loans and other forms of support*: provided by development finance institutions;
- *mezzanine capital*: provided by institutional investors;
- *bond financing*: provided by members of the public in the local and international capital markets and sometimes guaranteed by a monoline insurer or the commercial lenders;
- *finance lease facilities*: provided by finance lessors; and
- *hedging instruments*: provided by the commercial lenders and other commercial counterparties.

The interests of the various providers of funding to these multi-sourced projects are diverse and their inter-relationship is likely to

be governed by the terms of an intercreditor agreement to which they are all party. The principal objectives of the intercreditor arrangements are to achieve a fair balance of power in determining what course of action should be taken by the funding providers in a given set of circumstances and a fair distribution of the SPV's assets on an enforcement of the project security or a liquidation of the SPV. There is some overlap with the issues typically covered in direct agreements (see the earlier section of this chapter).

Intercreditor issues

Although the specific intercreditor issues that fall to be addressed will to some extent vary from project to project, some issues are common to almost all BOT projects:

- the order in which the SPV is permitted to draw down funds under the various facilities;
- the maturities of the loans;
- the order in which project revenues are to be disbursed to the funding providers;
- the respective voting powers of the funding providers in relation to waivers and amendments to the financing and project documents;
- the restrictions on the rights of funding providers to amend their own financing documents;
- the rights of the funding providers to accelerate their loans and enforce their security; and
- the order of distribution of the proceeds of an enforcement of the security and the dividends available on a liquidation of the SPV.

As an increasing number of multi-sourced BOT projects reach financial close, a pattern for the intercreditor arrangements appears to be emerging. In addition, a number of the above issues will be dictated by the structure of the financing.

Funding sources

Equity

As discussed in Chapter 6, share capital is the lowest ranking form of capital and, under established systems of law, the claims of the shareholders in the SPV will rank behind the claims of all other creditors in a liquidation.

Where practicable, the shareholders will be parties to the intercreditor agreement and will undertake not to receive any dividends or other distributions in contravention of the terms of the financing documents.

Equally, where the sponsors make available subordinated debt to the SPV, the financing documents will impose restrictions on the repayment and servicing of that debt. In addition, the intercreditor agreement is likely to subordinate this debt to all other lending to the SPV. Their subordinated debt will be unsecured.

Subordinated debt provided by parties other than the sponsors is discussed under the heading 'Mezzanine capital' below.

Senior debt

The lenders of senior debt are generally considered to be the parties taking the greatest risk in a BOT project in exchange for relatively low returns. For this reason, the senior lenders will wish to have priority over all other providers of funding and in particular will wish to :

- control the ability of other funding providers to take action against the SPV to recover their debt (whether by accelerating the debt, enforcing their security or commencing judicial or insolvency proceedings) in order to ensure the continuation of the SPV's existence and its involvement in the project;
- ensure that on any enforcement of the security, the senior lenders have first priority over the enforcement proceeds and that the security trustee has regard primarily to the interests of the senior lenders in realising the security; and
- ensure that on any liquidation of the SPV, the senior lenders have first priority over the distributions.

The intercreditor agreement will normally set out the arrangements between the different types of senior lenders. For example, a BOT project involving a syndicate of banks, an ECA and a DFI might provide that decisions are to be made according to the wishes of a majority in value of the total amount financed by those parties and that proceeds of enforcement or liquidation dividends are to be shared between the parties pro rata to the amounts owing. In particular, the way in which decisions are made is likely to require careful consideration by

each group of senior lenders to ensure that they have the degree of control which is acceptable to them. One approach which ECAs appear to be keen on is if security becomes enforceable, it is enforced unless there is a substantial degree of support against enforcement.

The arrangements as to decision-making and sharing of proceeds as between the individual members of a bank syndicate are likely to be set out in the project credit agreement. The credit agreement is also likely to address certain intercreditor issues between the parties to it, such as the imposition of controls over the SPV and its ability to repay other debt and make distributions to its shareholders. If any holding company of the SPV is party to the Credit Agreement, it can also be made subject to restrictions. These issues are discussed in the 'Loans' section of this chapter.

Export credit agencies

In BOT projects involving one or more ECAs, the principle behind the intercreditor arrangements is not usually in dispute, but some difficulties do nevertheless arise. Most of the more experienced ECAs recognise that democracy should prevail as much as possible (based on the amount of the loans outstanding). However, many ECAs prefer to use their standard form loan agreement (sometimes in the national language and governed by national law). If each ECA were to use its own loan agreement and the terms and governing law were different from those agreed with the other senior lenders, the democracy principle would be difficult to implement because the decisions needed for amendments, waivers and enforcement would arise at different times and for different reasons under each loan agreement. Where ECAs have insisted on separate loan agreements, there is often an attempt to match some of the more important provisions across loan agreements, and to use intercreditor agreements governed by English or New York law. The best solution, however, is the use of a common terms agreement (discussed below).

Development finance institution support

The issues outlined above in relation to ECAs and the way in which they may each choose to lend to the SPV on the basis of their own form of loan agreement apply equally to DFIs. Again the most satisfactory way in which these issues can be resolved is by establishing a common terms agreement to which the DFIs are party (see further below).

DFIs will nevertheless often have their own requirements in relation to a particular BOT project, normally dictated by their constitutions. For example, the key characteristic of loans made by the European Investment Bank (EIB) is that EIB does not usually take construction risk. It requires guarantees from creditworthy banks until the project has a successful operational track record. As a result, the commercial lenders need to provide both a loan facility and a guarantee facility to the SPV.

EIB usually ranks *pari passu* with respect to security, but does not have voting rights for the portion of its loan that is guaranteed. The commercial lenders have votes for their guarantee exposure. EIB will often concede control over amendments and waivers to the majority (determined on the basis of outstandings of EIB and the commercial lenders), but will want to determine itself whether to waive conditions precedent to drawdown of its loan facility.

Political risks guarantees and insurance

As discussed in Chapter 6, some ECAs and DFIs provide guarantees or insurance of loans in relation to political events. Political risks insurance can also be obtained in the private market.

All operate in a similar fashion. Where the political risks cover relates to the SPV's borrowings, if the SPV cannot make a payment of principal or interest due to the occurrence of a political event (see Chapter 6), then the guarantor or insurer will make that payment. The guarantor or insurer will then become entitled to recover the payment from the SPV, either by virtue of subrogation principles or an express assignment (which might be required by certain providers of cover, for example the Multilateral Investment Guarantee Agency).

There should be no difficulty in this if the project is totally expropriated by the host government, but it can cause problems in the case of 'creeping expropriation'. The political event may mean that the SPV cannot meet the full

amount of its debt payments, but there may be good prospects of future improvement, or the political event may only be temporary (but long enough to meet the 'waiting period' requirements before a claim can be made under the guarantee or political insurance policy).

If the SPV cannot make an interest payment in full due to a 'minor' political event, the sponsors will want to structure the project so that no loan accelerates and the sponsors preserve their equity investment in the project. If the project is not properly structured in such circumstances, the sponsors will be left with the choice of injecting more equity into the project to cover the shortfall, or losing their equity.

One structure is to provide that upon the occurrence of non-payment due to a 'minor' political event, the banks can claim under the political risks cover, thereby averting an event of default under the loan facilities. Once the insurer pays, however, it becomes entitled to recover the payment from the SPV at a time when the SPV will not have the funds to pay. To ensure that the SPV does not become insolvent or the political insurer does not attempt to collect the payment, the payment to the insurer is subordinated, and is only payable out of 'surplus cash' when it becomes available.

An alternative that is sometimes used is to structure the documentation so that the insurer cannot enforce the security in respect of the payment that is owed to it, or start any legal proceedings to collect the payment. However, this structure does not ensure that the project remains solvent.

An equally difficult intercreditor issue often arises with political risks insurance of equity. An insurer will generally refuse to pay a claim in respect of a political event affecting shares in the SPV until those shares have been transferred to it. But the senior lenders will want to have and retain security over the shares in the SPV. If the senior lenders enforce their security over the shares, the sponsor cannot obtain the benefit of the political risks insurance of the equity. The only solution is an agreement sharing the proceeds of enforcement between the banks and the political risks insurer. Such agreements are difficult to achieve. When there are several sponsors and either (a) only one of those sponsors has insured its equity or (b) the sponsors have insured their equity with different insurers, resolution of this problem is yet more difficult.

Mezzanine capital

As discussed in Chapter 6, mezzanine capital has characteristics of both debt and equity and is most commonly provided by venture capital specialists and other institutional investors. Where the mezzanine funding can be characterised as debt, its holders will as a matter of English law rank ahead of the holders of share capital in the SPV on any liquidation of the SPV. Where the funding is in the form of share capital, its ranking as against the ordinary share capital of the SPV is likely to be set out in the SPV's constitutional documents.

The mezzanine lenders are likely to require the benefit of the security provided to the senior lenders which means it is more likely that they will provide some form of subordinated debt. The proceeds of enforcement of the security will be distributed first to the senior lenders and any surplus will be left for the mezzanine lenders, though the mezzanine lenders may have first-ranking security over some limited cash collateral (such as a mezzanine debt service reserve account which would operate in a similar way to the debt service reserve account discussed in an earlier section of this chapter). The intercreditor agreement is likely to provide that payments of principal and interest cannot be made to mezzanine lenders if the senior debt service is not current, if security accounts are not fully funded or if project cover ratios are too low. The negotiation usually revolves around how long the payment suspension should last.

Mezzanine lenders typically do not have voting rights but will want to ensure that key elements of the project structure, such as the payment cascade and the method of calculating forecasts and project ratios, cannot be substantially amended without reference to them and to ensure that the amount of the senior debt cannot be increased. They will also want to make sure that the senior lenders do not have a right after an event of default immediately to accelerate the senior loan and enforce the secu-

rity, because in such circumstances repayment to the mezzanine lenders will be more likely if the default is remedied. This is normally achieved by providing for a standstill period during which the senior lenders may not accelerate or enforce, with the length of the standstill period varying according to the type of default.

Mezzanine lenders will also want to be able to compel enforcement of security if the mezzanine debt has been in default for a period of time, and will want the security trustee (who is controlled by the senior lenders) to take account of the interests of the mezzanine lenders when enforcing the security.

Mezzanine lenders will usually agree not to amend the mezzanine financing documents without the senior lenders' consent. A more difficult issue is whether the mezzanine lenders must consent or be deemed to have consented to a waiver or an amendment of their financing documents if the senior lenders waive or amend a similar provision in their project credit agreement.

Bonds

As discussed in previous chapters, bond financing is difficult to accommodate in a BOT project financing for the following key reasons:

- Bonds tend to be structured so that all the funds are received by the SPV at the date of issue. If the SPV defaults before those funds are used, the issue arises as to whether the bondholders should have preferential security over the unused funds. They usually do not.
- Bondholders are not accustomed to monitoring projects and participating in the regular decision-making that is often needed.
- Bondholders can be anonymous. This is especially the case with bearer bonds, or bonds held in a clearing system.
- Bonds tend to have less onerous covenants and events of default when compared with project loans.
- Bondholders' decision making is time-consuming and cumbersome, usually involving meetings of bondholders (after 21 days notice) and it is often difficult to obtain sufficient attendance to meet the trust deed's requirement for a binding vote to be passed.

In multi-source projects, a number of patterns for intercreditor arrangements seem to be evolving. The first is the use of a monoline insurer for the bonds, which centralises decision making in one entity. The second is the delegation by bondholders of non-material decision making to a coordinator which is also a senior lender to the project, but this may give rise to conflicts of interest. A further alternative which is in its infancy in the bond market is the use of a project agent (see Chapter 6).

Where the bonds are guaranteed by a monoline insurer, the insurer will need to be a party to the intercreditor arrangements.

Equipment leasing

As discussed earlier, UK tax-based equipment leasing is becoming increasingly common in UK PFI projects.

The intercreditor arrangements between lenders and equipment lessors are the most complex of all the different types of intercreditor arrangements in multi-source projects. The lenders and the lessor take separate security over the project, with the ranking of the security subject to negotiation. In some projects, they rank *pari passu*, while in others, the lessor has second-ranking security. The lessor is also likely to have first-ranking security over cash collateral to secure the difference between the amount payable to the lessor on a termination of the lease and the amount of any guarantee, and might have cash collateral to secure rental payments.

As discussed in the previous section of this chapter, the lenders will have step-in rights in respect of the equipment lease and controls over its termination. In addition, the intercreditor arrangements might include:

- controls in favour of the lenders in respect of changes to the leasing documents and, conversely, controls in favour of the lessor in respect of changes to the finance documents;
- provision for the leased assets to continue to be available to the SPV on a voluntary termination of the lease, its expiry by lapse of time or other specified circumstances;
- provisions relating to the destination of any sale proceeds of the leased assets, to ensure

that where the lenders have paid the lessor under a guarantee they receive the proceeds in priority to the lessor and other creditors of the SPV; and
- the coordination of insurance arrangements.

Hedging Instruments

As discussed in the 'Derivative products' section of Chapter 6, interest rate hedging instruments are commonly used in the financing of BOT projects. Currency hedging instruments are occasionally used, as is commodity price hedging, and there is scope for the use of other derivative products.

It is normally accepted that a default by the SPV under a derivative contract should not of itself be capable of collapsing the project, and each counterparty to a derivative contract will need to be a party to the intercreditor arrangements in order to restrict its rights on a default by the SPV. It is common to provide that the only events of default under the derivative contract are the acceleration of the senior debt and the liquidation of the SPV, and any default provisions contained in standard market contracts (such as in the documentation produced by the ISDA relating to interest rate swaps) will be disapplied. The calculation of termination payments under the derivative contract may also need to be tailored for the purposes of the project. For example, it may be provided that a defaulting party must make a termination payment if its counterparty has suffered loss as a result of the termination, but will receive a termination payment if that counterparty has made a gain. In practice, as it is more likely that the SPV will be the defaulting party, this type of provision is aimed at ensuring that it gets the benefit of any favourable market movements. This type of arrangement can be achieved under the ISDA Master Agreement (Multicurrency Cross Border) (1992 Edition) by electing that termination payments will be made in accordance with the 'Second Method/Loss' basis.

As the derivative products will inevitably be tailored to suit the individual project's needs, it is common to provide that only the lenders to the project may act as counterparties to the derivatives contracts. This is aimed at reducing the number of parties involved in the negotiation of the project documentation and avoiding any risk that the derivative contract might be unattractive to potential counterparties when viewed in isolation. Any concerns which the project sponsors might have in relation to the possibility of collusive and/or anti-competitive pricing of the product can normally be resolved by the use of what has become known as 'open-book' pricing, whereby the sponsors have disclosed to them and are able to review the basis on which the products have been priced in relation to prices generally available in the market.

The counterparties to the derivatives contracts will normally have the benefit of the project security, but will not have any voting rights in their capacity as such. Payments to the counterparties will usually rank equally with the senior debt in terms of both cash flow and distribution of enforcement and liquidation proceeds.

Common terms agreement

It is in the interests of all the parties to conform the finance documents to the maximum extent possible in order to streamline the administration of the facilities, and the common terms agreement has become the preferred method of documenting multi-source projects. This is an agreement between the SPV, all lenders, the agents for the various facilities, the security trustee and an intercreditor agent for all lenders, setting out the terms which are common to all the financings. It is likely to be governed by a law that is acceptable to the senior lenders. Typical provisions include:
- definitions;
- conditions precedent;
- the order of drawdown between facilities;
- representations and warranties, undertakings and events of default;
- financial and project information;
- budgets and financial projections;
- insurance;
- project accounts provisions, including the order of disbursing revenues to creditors;
- intercreditor provisions covering the matters discussed above; and
- general agency and account bank provisions.

Where a common terms agreement is used,

each facility will continue to be documented in a separate loan agreement. That loan agreement will either incorporate the provisions of the common terms agreement or simply refer to them, and otherwise only contain the unique aspects of the facility (eg, the amount of the loan, repayment terms, fees and interest rates).

Common terms agreements have become more widely used, partly to help reduce intercreditor issues, but also as an attempt by sponsors to simplify documentation, expedite financial close and to rationalise the advisers of the funding providers. With a common terms agreement, there is less justification for each set of funding providers to have their own lawyers and other specialist advisers.

However, common terms agreements cannot be used:

- when a set of creditors does not get involved in a project until after financial close, as it is difficult to formulate a common terms agreement that takes account of their interests in advance. In the United Kingdom, most projects that involve EIB or equipment lessors have introduced that funding after financial close; or
- when a project is being structured with a future refinancing (either in whole or in part) in mind, as is increasingly the case. Often sponsors expect to refinance bank debt after construction is completed, with fixed rate, long-term funds from the bond market. Again, it is difficult to anticipate the requirements of the future set of creditors.

Conclusion

Intercreditor agreements are, as with all project documents, unique – no two are the same. The final form of the intercreditor agreement is determined by the bargaining strengths of the parties, and the debt providers, particularly the senior lenders, will have a large say in the final form of the document. As discussed in this section, there are a number of common issues that most intercreditor agreements deal with, but by no means is the list exhaustive. Intercreditor agreements are complex and involve intensive negotiations to settle their final form.

Closing Observations

Not so long ago, on a visit to South Africa, one of the authors of this report suggested to a commercial banker friend that there might be opportunities to use project finance to develop the country's infrastructure. The response was negative; the potential project sponsors would always borrow on balance sheet. Within a year the South African government had embarked on an ambitious road-building programme using BOT techniques, and the particular commercial bank had built up a team to serve this new market!

Writing in December 1997, governments around the world are intrigued by the possibilities of this new financing technique; contractors are still complaining about business opportunities but have adopted it with a zest which suggests that a well-structured project can produce high rates of return; and bankers are looking at ways to develop this product further using bond finance and more derivatives, while, in some cases, fearing the implications for their business of this increased appetite of the bond markets.

But the product is still in its teenage years and we wait with interest to see how the market will cope with a government which insists on re-negotiating the terms of its early generation of power purchase agreements, for instance, on the grounds that a government elsewhere has managed to negotiate a more advantageous tariff structure.

All those involved in this business continue to find it interesting, and often frustrating at the same time, and we hope that this report has made a contribution to furthering the knowledge of some of the issues involved.

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