ALSF
ACADEMY

Public-Private Partnerships and Infrastructure

Developed by

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CHAPTER 1

INTRODUCTION TO PPP IN THE INFRASTRUCTURE SECTOR

1. INTRODUCTION TO PPP IN THE INFRASTRUCTURE SECTOR

This module provides an overview of the concept of PPPs and their key characteristics as well as an insight into how the concept has developed over time. The section explores the sectors in which PPPs are mainly used and how the PPP procurement method compares to traditional procurement methods.

The key learning objectives of this module are as follows:

(a) to understand the concept of PPPs and their use across different industries;

(b) to appreciate the way in which PPPs can be contrasted with the concept of privatisation and conventional procurement methods; and

(c) to understand the key advantages and disadvantages of PPP procurement.

1.1 What is PPP and how is the concept defined?

1.1.1 Why are PPP projects so important?

Public-private partnership, or PPP, projects are a fundamental concept used by a large number of countries around the world to deliver vital public services, develop new assets and ensure economic growth, across a variety of sectors including energy, transport, public services, education, health, waste, water, etc.

The size and nature of the assets for these projects may warrant outsourcing services to private entities, because the government is not always the best direct procurer of projects. There may be existing challenges with how projects are selected, funded, delivered and maintained.

The increased size and complexity of the projects require increased scrutiny by the government of its long-term risk and the most efficient way to deliver and maintain its infrastructure. Procurement procedures must respond to this by ensuring that these projects are robust in themselves, and in the hands of potential bidders.

Complex contracts, such as PPP, often provide an enhanced level of control that is better focused than general regulation, which may allow the government to target and address specific needs in terms of controlling the delivery and scope of service.

1.1.2 What is PPP?

(i) Form of public-private partnership

The acronym PPP stands for "public-private partnership" and could literally be interpreted as any form of contractual collaboration between the public and private sector. Such

collaborations are nothing new – it has been said that the construction of the national railway network in the U.K. in the 19th century was a good example of a public-private partnership, and many of the bridges in central Paris built in the 16th and 17th centuries were financed and operated on a public-private partnership model. In reality, governments have always been dependent on partnerships with private sector contractors and financiers to develop public infrastructure.

(ii) Form of public procurement

That said, the acronym PPP is most commonly used to refer to a ***specific form*** of public procurement. This guide will generally discuss the form of PPP being rolled out by numerous governments around the world. Namely, one where a single contract is established for the development, financing and long-term operation of a single asset on a project finance basis.

This can be contrasted with "looser" forms of public-private partnership, such as joint venture arrangements (which can be quite common for urban regeneration / property development projects, where the project outcomes are somewhat looser) and perhaps even looser "handshake" partnerships. Most practitioners would not consider these arrangements to constitute a "PPP", as commonly understood, and are not considered further in this guidebook, but it should be noted that some governments do take a much more expansive view of what constitutes a PPP.

(iii) What is the difference between PPP / P3 / PFI / DBFM / BOT, etc?

PPP is the umbrella term used by most countries to refer to public-private partnerships (whether in the narrower or broader senses referred to above). P3 is the term generally used in North America, but with the same meaning.

The concept of a traditional PPP is also defined by way of its funding from the public sector, for example in "government-pays" PPP projects funding is typically sourced from taxes; this can be contrasted with "user-pays" PPP projects (which are very common in Africa) whereby it is the public who use the infrastructure / service offered by the PPP who provide the government with an additional source of funding for the project.

PFI (Private Finance Initiative) is the term that was used for PPP in the U.K. where central government funding was used. If only local government funding is being used then it is often referred to as PPP, but the distinction is not always consistently made. Some other countries like Japan also use the term PFI.

Most European countries refer to their current private finance infrastructure programmes as PPP, which are very similar to the U.K. model. There is no magic in the name.

Other terminology that is commonly seen in a PPP context includes:

DBFOM / DBFM / DBOM / DBF: being combinations of **D**esign – **B**uild – **F**inance – **O**perate – **M**aintain.

A DBF (Design Build Finance) contract is a form of PPP contract which focuses on the

construction phase only, where the procuring government pays out the financiers on construction completion. The Kenyan Affordable Housing Programme being promoted by the State Department of Housing and Urban Development since 2018 is being structured on a DBF basis, whereby a new Housing Fund would pay an agreed sum to financier/developers upon completion of new housing units; the Housing Fund effectively takes the demand/offtake risk, which it manages by letting or re-selling the properties to appropriate purchasers, with appropriate mortgage instruments or right-to-buy schemes.

If a project involves construction and long-term maintenance of an asset (but not its operation), it might be termed a DBFM, whereas if operations are included (such as tolling operations or passenger-carrying operations) it may be termed a DBFOM.

The Lekki-Ikoyi Link Bridge in Lagos, Nigeria was constructed under DB (design build) terms and then operated under OM (operation maintenance) terms, through a tendered operating concession evaluated on the share of toll revenue that the operator-concessionaire was willing to share with the state government. This contract was let under local PPP legislation. Since construction and operations had been let under separate contracts, its status as a "PPP" was challenged, but it was upheld in the state courts as a valid procurement under the PPP legislation, showing that the understanding of what constitutes a PPP can sometimes vary from jurisdiction to jurisdiction.

BOT, BOOT, BOO: being combinations of **B**uild – **O**wn – **O**perate – **T**ransfer. The principal point of reference for these definitions is the timing of private sector ownership and transfer back to the public sector. The ownership aspect may be very relevant for the project structure in a utility context (e.g. power generating assets), but in an infrastructure PPP context, the asset is typically an important piece of public infrastructure, such as a road, railway, airport or government building, and rights of ownership are less important, because on a termination the asset should always revert to the public sector without any hindrance. Accordingly, on infrastructure PPPs there may be no full legal ownership by the private sector during the project term, and it may only have a lease or licence, co-terminous with the concession agreement.

1.1.3 How is the term "PPP" defined?

(i) - One definition of "PPP" is as follows:

The establishment of a long-term contractual partnership

… between public and private sector bodies

… where the private sector provides a significant portion of the financing, bears significant risks and takes substantial responsibility for designing, building, financing, operating and maintaining a major public infrastructure asset

… in accordance with an agreed output specification

… in return for the right to recover some or all of the revenues deriving from the asset ("user-pays PPP").

and/or

… in return for a fee based on the continued availability of the asset ("government-pays PPP").

There is a considerable overlap between the concept of a **"user-pays PPP"** described above and the **concession** of a right to build and operate. The terms are essentially synonymous – many civil/administrative jurisdictions widely refer to concessions but this approach is also found in common law jurisdictions. In this guidebook "PPP" has been used as a catch-all term, reflecting the approach used in many international publications on the subject.

Although the definition above contrasts "user-pays PPPs" from "government-pays PPPs", many projects may sit somewhere on a spectrum between these two extremes. For example, the concession for a toll road project may be unviable without a measure of government subsidy to ensure that the project debt can always be repaid (the Kampala-Jinja Highway in Uganda is being structured on this basis), or the government may agree to subsidise certain difficult to predict costs, like the risk of dealing with undiscovered antiquities. Conversely, a "government-pays" PPP project for a non-revenue generating asset such as a public court or public school building may be able to be subsidised by some element of private income, such as revenue from catering services provided to users of the facilities.

(ii) Graham Vinter[1] defines PPP as "a partnership between the private and the public sector that tends to involve the delivery of services by the private sector to the public or private sector rather than the exploitation of an asset. PPPs usually involve some form of capital expenditure by the private sector followed by the delivery of a service, usually involving the asset the subject of such expenditure."

(iii) The World Bank defines PPP as arrangements, typically medium to long term, between the public and private sectors whereby some of the services that fall under the responsibilities of the public sector are provided by the private sector, with clear agreement on shared objectives for delivery of public infrastructure and/or public services.

(iv) The Canadian Council for Public-Private Partnerships[2] defines PPPs as a cooperative venture between the public and private sectors, built on the expertise of each partner, which best meets clearly defined public needs through the appropriate allocation of resources, risks and rewards.

(v) Infrastructure Australia defines PPPs as a long-term contract between the public and private sectors where the government pays the private sector to deliver infrastructure and related services on behalf, or in support, of the government's broader service responsibilities.

(vi) The National Council for Public-Private Partnerships (U.S.)[3] defines PPP as a contractual

[1]*Project finance: a legal guide', graham d. Vinter, gareth price, sweet & maxwell, 2006*

[2]The Canadian Council for Public-Private Partnerships (CCPPP) is a national organisation that aims to collaborate with all levels of government and communities to facilitate smart, innovative approaches to public infrastructure development and service delivery that achieves the best outcomes for Canadians. It achieves this by conducting research in various PPP sectors, educating the public and stimulating dialogue between public and private sector decision-makers on the financing and delivery of public services.

[3]The National Council for Public-Private Partnerships (NCPPP) is a non-profit organisation that advocates for and supports PPPs at the federal, state and local levels in the United States. The organisation also aims to raise the awareness of governments and businesses of the means by which their cooperation can cost-effectively provide the public with quality goods, services and facilities.

arrangement between a public agency (federal, state or local) and a private sector entity. Through this agreement, the skills and assets of each sector (public and private) are shared in delivering a service or facility for the use of the general public. In addition to the sharing of resources, each party shares in the risks and rewards potential in the delivery of the service and/or facility.

(vii) The U.S. Federal Highway Administration defines PPPs as contractual agreements between a public agency and a private entity which allow for greater private participation in the delivery of transportation projects. Typically, this participation involves the private sector taking on additional project risks, such as design, construction, finance, long-term operation, and traffic revenue.

Summary of key points

The importance of PPP projects

- PPP projects are a fundamental mechanism used around the world to deliver vital public services, develop new assets and stimulate economic growth in a variety of sectors. The size, nature and complexity of an asset or public service sometimes warrants outsourcing the project to private entities.

What is PPP

- PPP could be interpreted as any form of public-private partnership, but it is also commonly used to refer to a specific form of public procurement where a single contract is established for the development of a single asset on a project finance basis. However, it must be noted that PPPs are not the only way in which private entities can contribute to the financing of public infrastructure projects – other forms of collaboration and partnership do exist and vary according to local laws and regulations of the respective jurisdiction.

- PPP can be defined as: the establishment of a long-term contractual partnership between public and private sector bodies where the private sector provides a significant portion of the financing, bears significant risks and takes substantial responsibility for designing, building, financing, operating and maintaining a major public infrastructure asset in accordance with an agreed output specification. This is usually in return for the right to recover some or all of the revenues derived from the asset, or in return for a fee based on the continued availability of the asset (i.e. the performance and/or demand for the use of the public asset or service), or a combination of both.

- There are various other definitions of PPP which depend upon the jurisdiction where the project is located.

1.2 What sectors is PPP used in?

Economic PPPS	Social PPPS
Roads / Bridges / Bus Rapid Transit	Healthcare facilities (hospitals, clinics)
Railways / Metros / Trams	Educational accommodation (schools, universities, student accommodation)
Airports	Secure accommodation (prisons, court buildings, police buildings)
Ports (seaports, dry ports)	Government buildings (ministries, departmental headquarters, customs/border posts etc)
Agriculture (e.g. irrigation and forestation schemes)	Defence projects (planes, ships, accommodation, simulators)
Telecoms (telecom towers, undersea cables)	Leisure facilities (sports centres, libraries)
Waste to Energy (incineration, waste collection and sorting, offtake of recyclates)	Social Housing, Public markets

Fixed-infrastructure projects with a long lifespan form the majority of PPP projects, and "economic" PPPs – i.e. those which have an inherent ability to generate a meaningful revenue stream through user charges – will be more common in emerging markets where the government may not have the budget available to develop purely social infrastructure.

PPP projects tend to be easier to structure – that is, easier to allocate risk between the parties – when the project requirements are easier to define, and the concessionaire has greater control over how it meets those requirements. That said, the PPP model has been applied to some novel sectors, but the newer the sector, the more bespoke the contract, and it may be difficult to achieve a successful risk allocation without a good precedent to follow.

For example, the U.K. government tried to procure IT equipment and services through PPP in the early 2000s. Unfortunately, this was not a great success because the rate of technological change meant that the initial contract requirements soon became obsolete, and the contracts were not flexible enough to address this in a way that ensured that value for money could be guaranteed. Similarly, a lot of waste-to-energy schemes were based on optimistic expectations as to what could be achieved with new technology to sort and reduce waste or convert it to energy or recyclates, and some of these projects are in default or in dispute proceedings.

However, a good counter-example to this were the contracts let by the U.K. National Health Service in the mid-2000s to reduce operation waiting lists, which sparked some innovative delivery methodologies. In order to cut eye surgery waiting lists at around 90 hospitals nationwide, one successful contractor proposed touring the country with a mobile hospital in a special-purpose truck that unfolded itself into a full surgery clinic in each hospital car park, and then moved on when the waiting list had been addressed. This allowed a politically sensitive problem to be addressed in a very targeted way.

In Africa, the PPP model has been applied to some novel sectors which have not been the subject of PPPs in the developed market; such as BRT (bus rapid transit) schemes in Senegal and Tanzania; forestation schemes in Nigeria; public markets in Ghana and public parks in Malawi. Nigeria is also considering creating a PPP approach to complete and kick-start production at the Ajaokuta Steel Mill, which would be a unique endeavour (and also bringing unique challenges).

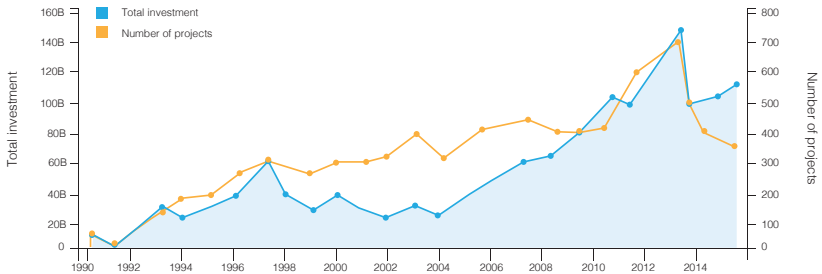
Some projects also involve multiple sectors. The Nacala Project in Mozambique and Malawi involves the rehabilitation of existing railways, the creation of some new railways and the creation of a new port, in order to service an anchor coal mining client in Mozambique; the infrastructure project involves the complex connection of 4 separate rail concessions and 1 new port concession. This unique and challenging project was supported by the African Development Bank.

1.3 The growth of PPP from an historical perspective

PPP investment has shown a steady growth in many countries worldwide; the graph below shows an example from low and middle-income countries where growth was steady until about 2011. The combined effect of falls in the price of oil and other natural resources, as well as the knock-on effects of the credit crunch (loss of liquidity) brought on by the global financial crisis may have slowed progress somewhat.

In the U.K., about 750 PPP projects were signed over this period, and many other developed countries adopted a similar model and also have impressive tallies of projects. Some countries, such as the US, have come later to the game as different financing structures such as municipal bonds have become an option instead of external financing. Nevertheless, it is clear that in the US market a large infrastructure deficit exists, so PPP is increasingly being seen as an answer to increase the pace of delivery.

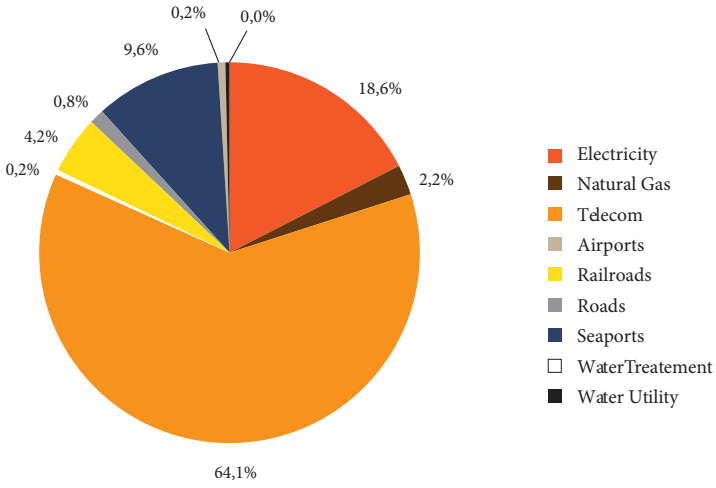
Total investment (billions of U.S. dollars) and number of PPP projects in low and middle middle-income countries,
1990-2015 – World Bank Private Participation in Infrastructure Database



Source: Esteban Ortiz-Ospina and Max Roser (2018) - "Public Spending". Published online at OurWorldInData.org. Retrieved from: 'https://ourworldindata.org/public-spending'

The diagram above illustrates the growth of private investment in PPPs in Africa over the past few decades; however, concession agreements and forms of PPP have existed in Africa for more than a century, if not always so named. As such, the above figures may not provide a fully accurate picture. In any event, these figures from 2015 show where the majority of private investment has been directed in the region, and it is not surprising to see that telecoms had the highest investment given the rapid expansion of mobile telephony in Africa and a rapid growth of telecom towers and undersea cables provided by private initiatives.

Private Investments in infrastructure in Africa by sector



Source: World Bank & PPIAF

PPP is still a relatively small component when it comes to private investments in infrastructure in Africa as is demonstrated in the diagram above:

(a) Energy infrastructure forms the next highest level of investment. This can be seen as a form of PPP, in so far as the government promotes private investment by guaranteeing an offtake of generated power.

(b) Outside of energy, ports represent the next-largest investment sector – this is perhaps not surprising given the increasing desire for manufactured goods and container traffic as economies improve and increasing middle class populations drive demand.

(c) However, the number of financially closed projects in the non-energy infrastructure space remains low. One recent World Bank study from 2017 concluded that only 14 PPP projects had reached financial close in the preceding five years in Africa, with a total investment of $8bn. Another study put the success rate of projects in Africa – from publication of concept to financial close – at a mere 8%.

Summary of key points

Sectors where PPP is used

- Fixed-infrastructure projects with a long lifespan form the majority of PPP projects because the project requirements are easier to define, the concessionaire has greater control over how these requirements are met, and therefore it is easier to allocate risk between the parties.

- The PPP model has been applied to some novel sectors, but the newer the sector, the more bespoke the contract and the harder it is to allocate risk without a good precedent to follow.

Growth of PPP projects

- As can be seen in the graph at section 1.4, PPP has shown a steady growth until 2011 when the combined effect of falls in the price of oil and other natural resources, as well as the knock-on effects of the credit crunch (loss of liquidity) brought on by the global financial crisis slowed progress.

- The pie chart at section 1.4 illustrates how private investment in infrastructure in Africa has grown. Telecoms had the largest amount of investment, PPP had a relatively small amount of investment, but this included energy infrastructure projects where the government often promotes private investment by guaranteeing an offtake of generated power and ports, which is not unsurprising given the more frequent container traffic, the growth of economies globally and the increasing desire for manufactured goods.

1.4 The concept of privatisation in the context of PPPs

Is PPP a form of privatisation? It's a question of degree, as is shown by the diagram below.

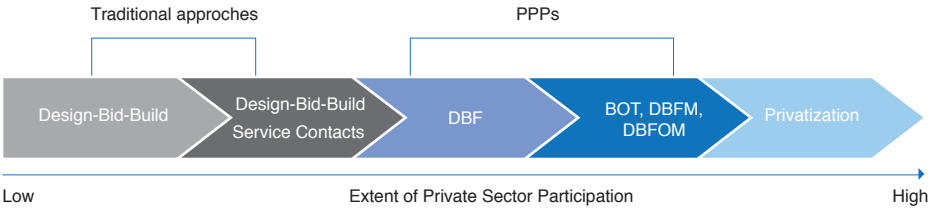
Full privatisation of a publicly-owned enterprise would normally involve a complete transfer of ownership and risk of the business to the private sector. This may also occur by way of a private sale (through a tender process) or a public flotation of the enterprise.

Very often, a public sector enterprise that is being privatised will have a monopoly or a very strong market position. To avoid market abuse (price-raising), a privatisation process will often involve the establishment of an appropriate regulatory regime to supervise service delivery and ensure prices are fair. Subject to this regulation, the licence to operate may be indefinite in term.

Therefore, it is a common public perception that PPP projects are a "step in the road" towards full privatisation due to the increased involvement of private sector entities in a public service or asset. However, a key feature of PPPs (which can be distinctly contrasted with the concept of pri-

vatisation) is the fact that the asset will ultimately be transferred back to the contracting authority at the end of the PPP contract, as opposed to remaining permanently in the hands of the private sector entity.

Consequently, the key point to emphasise when comparing and contrasting PPPs and the concept of privatisation is that there is a time limit on the project: the concessionaire needs to be certain that it will recover its investment over the fixed term of the project before the asset reverts to the contracting authority. Therefore, the concessionaire and its lenders will be more sensitive to risk, so the contract will tend to be more detailed. This also allows the government party to be more prescriptive in terms of the level and nature of service delivery it expects. The government therefore remains in control to a greater degree. Termination of a PPP contract for service failure is a less blunt instrument than nationalisation of a fully-private enterprise. That said, the consequences may be similar: in the case of the Rift Valley Railway concessions in Kenya and Uganda which were terminated in 2018, the respective governments will no doubt be expected to compensate the investors and lenders which reflects the investment made in the project, whether through any initial concession fee or subsequent capital expenditures in fixed infrastructure or rolling stock.



Summary of key points

The concept of privatisation and PPPs

- Full privatisation of a publicly-owned enterprise would normally involve a complete transfer of ownership and risk of the business to the private sector, which could be through a private sale of a public flotation of the business.

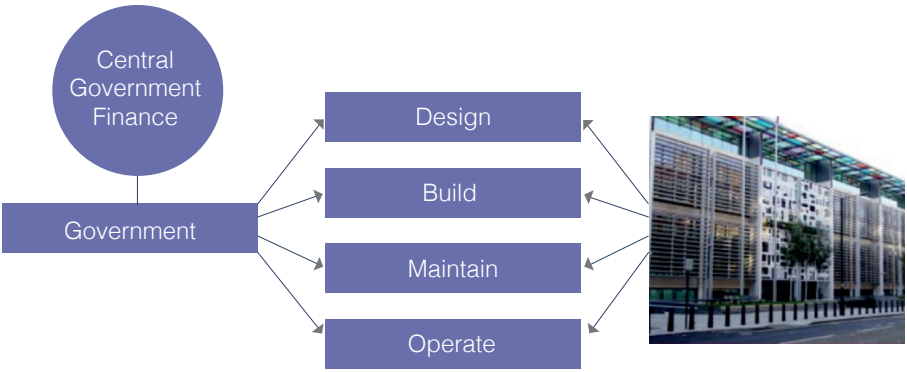
- The business in question usually has a very strong market position and so if privatisation occurs, a regulatory regime is also often established to ensure adequate levels of service are delivered and prices are fair and not distorted by the lack of competition.

- PPP projects cannot be categorised as "privatisation" because the project is for a fixed term within which the concessionaire must recover its investment, there is no permanent transfer of the public asset to the private sector and the government must specify the type and level of service which must be delivered. After this point, or if it is terminated earlier due to service failure, the PPP contract expires and the government typically regains complete control and ownership of the asset. Such PPPs therefore only constitute a temporary transfer of the asset to the private sector.

1.5 Conventional procurement and PPP procurement

1.5.1 Conventional procurement

Under a conventional procurement, the government would have taken responsibility for separately procuring and integrating the various elements of works and services required to develop and operate a new facility. Some of these tasks would be carried out in-house, but in some cases government authorities may have begun to lose or outsource many of their in-house capabilities, such as their design team. This increases the integration risk on the government as it makes it more difficult to manage the interfaces between the contracts. The government would also be reliant upon the availability of an adequate budget to be able to carry out these tasks. Restrictions on public sector borrowing may prevent large capital outlays for major projects, so this may slow down the delivery timetable.

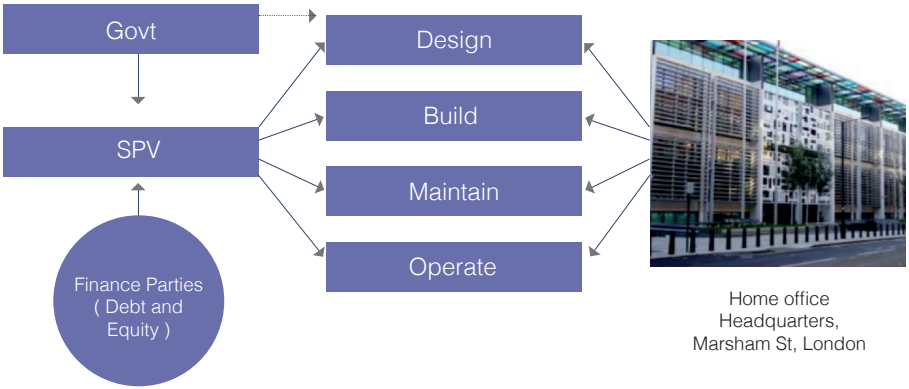


In recent years, conventional procurement has made a comeback in the U.K., for "mega-projects" too big to privately finance, such as Crossrail in London (£15bn) and High-Speed 2 rail line (>£40bn). In these cases, the government has sought to address the interface management risk by "upskilling" itself, namely by taking on one or more "development partners" – these are engineering companies who effectively second a long-term team into the client and who are incentivised to manage the delivery of the project to achieve price and timeliness outcomes.

1.5.2 PPP procurement

Under a typical PPP project, the private sector entity (in the diagram below termed "SPV" but it can also be referred to as "Project Co" or "PPP Co") enters into a long-term contract with the government to provide all aspects of the project lifecycle – design, build, financing, operation and maintenance, providing "single point responsibility".

The dotted arrow at the top represents the fact that while the completion of the design is managed by the private sector, the government retains the responsibility for determining the outline design – the output specification that it wishes the private sector to achieve. However, the detail of how this output is achieved is usually left to the private sector.



Home office
Headquarters,
Marsham St, London

Summary of key points

Conventional procurement

• In this situation, the government arranges the separate procurement of works and services required to develop and operate a new facility. It would also be responsible for integrating the works and services provided by different entities.

• The integration risk is placed on the government as it can be difficult to manage the interface issues between the various contracts and entities.

PPP procurement

• The government only enters into one long-term contract with a single private sector entity (usually a special purpose vehicle set up specifically to oversee the PPP project) which will provide all aspects of the project lifecycle - design, build, financing, operation and maintenance.

• The government retains control over the initial design and output specifications and the private sector entity manages the completion of the project, ensuring the specifications are met.

1.6 Advantages and disadvantages of PPP procurement

1.6.1 - Benefits of PPP procurement

(i) Access to private sector funding lending to faster investment

Governments may have significant funds, and it is often cheaper for governments to borrow money than the private sector due to the government having a higher credit rating. However, if it borrows funds for projects in this way, the government loses the opportunity cost of investing its money for the use of the wider economy i.e. on projects that cannot be financed by private finance.

(ii) Access to private sector expertise

Projects previously designed by in-house government design teams with limited exposure to major projects are now being designed by external consultants with nationwide or international exposure to different construction methods. The private sector is also seen as having better project implementation skills – a survey of UK Department of Health projects between 1997 and 2007 showed that 123 PFI projects had been signed of which 69 had become operational, whereas only 23 publicly funded projects had become operational, providing some evidence of the effectiveness of bringing in such expertise.

The collaboration between the public and private sector also facilitates the transfer of management and structuring skills, which is implemented and nurtured by the private sector, back to governments in a seamless and timely manner.

An important aspect in many African PPP contracts is a requirement for localisation of employment (e.g. a minimum percentage of local employees or subcontracts), which will help facilitate the transfer of expertise from international contractors to local employees, for the benefit of future projects. In Liberia, for example, such clauses are a mandatory part of the PPP contract template to be used by government departments.

(iii) Improves infrastructure for public assets and services

The increased pace of delivery of projects in turn enhances the availability and resilience of infrastructure and the quality of public service delivered. It may be good for public popularity as well as improving long-term outcomes; for example, through increased educational achievement, studies carried out on new school projects show improved attainment; new hospitals should decrease mortality / sickness and reduce strain on the public purse; new roads are shown to stimulate local economies through more efficient transport links, etc.

(iv) Project may not sit on government's balance sheet

This is a function of accounting rules and concepts of prudential borrowing. In early U.K. PPP projects one of the prime motivators was for projects to achieve an off-balance sheet accounting position so that the project would not be seen as a liability on the government's balance sheet, and thus affecting the government's public sector borrowing requirement.

Different countries have different rules for establishing whether a project is on or off the government's balance sheet; for example, the EU's position is that if (1) construction risk and (2) demand or availability risk are both taken by the private sector, then the project should not be on the government's balance sheet. Also, if the project involves the private sector taking a significant risk of the residual value of the assets created, then this can also create an off-balance sheet treatment.

That said, if the government is required to provide substantial guarantees of the project debt (even in a concessionaire default scenario) in order to achieve bankability, these contingent liabilities should be recognised by the government within its accounts. This is a current issue affecting a number of African countries, where a variety of guarantees or other support instruments have been issued for project-financed projects, and where the potential contingent liabilities are not being properly recognised. This has led to some countries giving much more scrutiny to what type of support they are able to give; Kenya, for example, published in October 2018 a new policy on Government Support Measures, in order to coordinate and prioritise the issue of such support across government ministries and departments.

(v) Allows for whole life costing

Conventional procurement assumes that the constructor and the maintainer will be different entities. The constructor will usually be motivated to build cheaply, which may give rise to a greater overall cost in the long term through reduced life expectancies and increased maintenance costs. By requiring the private sector to manage both roles, they can select the optimum model of build quality and maintenance quality.

(vi) Increased competition as services are outsourced

In-house services are often seen as underperforming compared to the private sector, which is probably due to a number of factors such as lack of profit motive, job security, high unionisation, etc. These services are highly attractive to the private sector because they will be able to deliver a higher quality service relatively easily and the public sector market represents a large new market.

(vii) Greater risk taken by private sector means greater cost certainty

Traditionally procured contracts tend to be more contractor-friendly, partly because contractors tend to be more experienced negotiators and there are numerous standard forms available which are mostly drafted from a contractor's viewpoint.

The standardisation of PPP contracts by central government bodies has in many jurisdictions produced a very government-friendly form which can achieve widespread acceptance in the market. Such forms can contain significant penalties for non-compliance with construction time periods or quality requirements, or for operational non-performance, which incentivises building delivery on time and on budget.

In 2003, the National Audit Office in the U.K. surveyed a number of conventional projects and PPP projects which had completed the construction phase. The results showed that 70% of conventionally procured projects were late and 73% were over budget. For the PPP projects however, only 12% were late, and 100% were on budget, the only exceptions being for client-driven changes.

This is in part due to the fact that construction period cost-risk sits very firmly with the private sector except in extreme circumstances, and the consequences of a PPP project going into delay are usually more severe than that of a conventional project due to the way in which the project is funded.

1.6.2 - Drawbacks of PPP procurement

(i) Costly to set up

Advisers' costs can be large on both sides. PPP is usually only seen as value for money for larger projects (e.g. min $30m USD). Procurement costs are said to be up to 3% of project costs, compared with 1% for conventionally procured projects.

Costs attached to the project must be borne by the customers or the government.

(ii) Procurement times are slower

This is a function of the complexity of the process, the number of parties involved, the amount of due diligence required, etc. A year from announcement to financial close would be quick. Two years would be more typical in developed markets.

Although a delayed procurement process is a clear drawback for those wishing to push through new infrastructure within a political term, it is notable that some projects have benefitted from the additional time taken to structure the project. The Dakar-Diamniadio Toll Road Project in Senegal, for example, took about seven years from inception to financial close, with continued governmental support as well as detailed support and grant funding from development finance institutions, which ultimately ensured that the final project structure and governance arrangements were robust, and the project is seen as a successful one.

(iii) Inflexible contract structure

The complexity of the contract structure and the dependence of the concessionaire on external funding and its limited ability to take quick independent decisions mean that major variations (e.g. adding or removing part of the facilities) can also be time-consuming and costly. This is due to the fact that each affected party needs to go through a smaller version of the original due diligence process to ensure that the variation is not adversely affecting its risk profile.

Due to the fact that the concessionaire is responsible for lifecycle replacement over 25-30 years, even a small capital change in year one could have a large implication for the project (e.g. if the carpet specification is changed in year one so that it now has a life span of five years rather than seven years, it is likely that an extra replacement cycle will be required).

Similarly, a seemingly small change to a facility's use could have a large implication for the costs of running the facility (e.g. use of a school out of hours for evening classes could change the assumptions made for the cost of providing heating/cooling to the facility). In some jurisdictions, guidance has matured on this and now requires concessionaires to deliver small value changes without an administration charge unless it can show that the concessionaire has actually delivered a service over and above the external implementation cost.

(iv) Long term arrangement - difficult to cancel

Sponsors and lenders are making a large investment on the basis that this will be repaid for good performance over the project period. In the event of an early termination (e.g. government voluntary termination) they will usually expect to be repaid all or a substantial portion of their investment. This will require the government to produce a large capital sum from its budget. This was an issue for the Lagos State Government when the Lekki Expressway Toll Road concession in Lagos failed and needed to be "bought back" by the government party.

In most African jurisdictions there is an expectation that the debt should be wholly or mostly repaid in a concessionaire default scenario, which means that even a termination for cause needs careful consideration by the government party from a budgetary perspective.

(v) Public perception

PPP is often seen as a form of "creeping privatisation". Unions are often anti-PPP as PPP projects often involve a transfer of staff from the public sector to the private sector where there is then less control over terms and conditions.

PPP is also seen as creating unduly large profits for the private sector, although most government authorities appear to be very happy with the projects delivered. There have been some high-profile PPP failures which have led to greater questioning of the model (even though conventionally procured projects can show similar issues).

If PPP projects operate on a toll basis then often there is a problem if the costs of the PPP financing need to be instantly reflected in higher tariffs. Often this is an issue because the government was previously subsidising the actual cost of the service through other funds, storing up the problem. For example, part of the reason for the failure of the Lekki Toll Road in Lagos, Nigeria, was that the tolls were higher than expected, partly due to construction costs being unduly high, which may in turn have been due to the lack of competition (the project being an unsolicited proposal). The public failure of the project has also affected public perception of PPP as a means of delivery of projects.

(vi) Risk of abuse

In projects without an external revenue stream from users, payments for the PPP service will come from government budgets. PPP contracts tend to be weighted in the government's favour, and a strict interpretation can give the government party the ability to withhold payments until it has received satisfactory service.

Cashflow is critical to the concessionaire, so a withdrawal of funds can put it in a very difficult position. Even if the government's grounds are clearly challengeable, formal dispute resolution is costly, time-consuming and risky, so the concessionaire may be forced to compromise.

(vii) Need for clear regulatory framework

If no such regulatory framework already exists, the need to put one in place (and to do it in a way that satisfies new investors) will add complexity to the PPP route.

(viii) No unlimited risk bearing

PPP concessionaires and their lenders will only be able to take a certain amount of risk, particularly for uninsured losses. The government party needs to bear this in mind when considering whether it is likely to achieve its outcomes if the project fails in a major way.

In some projects the government has had to accept that it needs to be an "equity investor of last resort" in order to avoid the project failing to reach completion.

Summary of key points

Advantages of PPP procurement

- There are various advantages to PPP procurement which include the possibility of obtaining access to private sector expertise and funding which allows the government to invest public funds in alternative areas for the use of the wider economy where private finance cannot be used.

- Such collaboration enhances the quality, resilience and availability of infrastructure in addition to the quality of public service provided, which benefits society as a whole.

- It allows for whole-life costing as the private sector entity will ensure that the optimum model of build quality and maintenance quality is used, creating greater cost efficiency.

- It also increases competition as services are outsourced to the private sector which can deliver higher quality services relatively easily. The public sector market represents a large new market.

Disadvantages of PPP procurement

- The PPP procurement process is often costly in time (due to the complexity of the process and number of parties involved) and in money (due to the adviser costs for each party, which must ultimately be borne by the customers or the government).

- PPP project contracts tend to be inflexible due to the complexity of the contract and the fact that the private sector entity will usually have external funding in place; this means it cannot make quick, independent decisions to implement major variations to the contract without liaising with its external lenders.

- It is a long-term arrangement, sponsors and lenders agree to invest in the project provided that they can recoup the monies owed throughout the project period when it performs successfully. Therefore, it is difficult to cancel and early termination often requires the government to produce large capital sums of compensation.

• Some argue that there is a negative public perception of PPPs as it is sometimes viewed as a form of "privatisation" which can involve a transfer of staff from the public to the private sector (where there is less control over terms and conditions of employment contracts). PPPs are also sometimes considered to create unduly large profits for the private sector and some high-profile PPP project failures have led to greater questioning of the model.

• There is a risk of abuse of power in availability-based projects because PPP companies receive their revenue stream from the Government and a strict interpretation of the PPP contract could allow the Government the ability to withhold payments until it has received satisfactory service. This can put the concessionaire in a difficult position if there is a withdrawal of funds and dispute resolution is timely and costly.

• A clear, regulatory framework is required and will need to be implemented if it does not already exist.

• There is no unlimited risk bearing and so the Government needs to consider whether it is likely to achieve its outcomes if the project fails because the PPP company and its lenders only take on a certain amount of risk.

1.7 Summary of key characteristics and criteria of PPPs

The criteria listed below are the expected outcomes of a well-structured PPP project.

1.7.1 - Criteria

(i) - Economically viable for the public sector

(ii) - Financially viable for the private sector

(iii) - Appropriate balance of risk and reward

(iv) - Value for money

1.7.2 - Key elements of a successful PPP

(i) - Political commitment

(ii) - Focused, dedicated and experienced public sector team

(iii) - Clear legal and institutional framework

(iv) - Transparent and competitive procurement

(v) - Realistic risk sharing

The key elements listed above fall across a number of disciplines: political, commercial, financial, legal and technical. A co-ordinated team approach is required by the government parties throughout the planning, procurement and implementation process to secure the best outcome.

Conclusion

To summarise, the key issues relating to PPP projects which must be kept in mind are that they are very versatile and can be used across a variety of sectors; they allow the government to have recourse against a single private sector entity throughout the project's lifecycle and it can benefit from the funding opportunities, expertise and experience of the private sector. However, the costs and time involved in setting up a PPP project cannot be underestimated and the long-term commitment by way of an inflexible contract could also be viewed as disadvantageous.

CHAPTER 2

STRUCTURING A PPP PROJECT

2. STRUCTURING A PPP PROJECT

This module provides an overview of the way in which a PPP project is structured, how it is implemented at governmental level and how such projects fit into the wider economy of a country.

The key learning objectives of this module are as follows:

(a) to understand the importance and use of a PPP policy framework and legal framework;

(b) to appreciate the concept of project structuring, using a case study on a pre-feasibility study; and

(c) to develop an understanding of PPP economics.

2.1 PPP policy and legal frameworks

A PPP framework consists of the policies, procedures, institutions and rules that together define how PPPs will be identified, assessed, selected, prioritised, budgeted for, procured, monitored, and accounted for. The framework will also identify who will be responsible for these tasks.

Establishing a PPP framework communicates the government's commitment to PPPs and it fosters efficiency in the governance of the PPP programme. By doing so:

(a) it promotes accountability, transparency, and integrity.

(b) it ensures that selected projects are aligned with the government's development strategy.

(c) it aims to generate the greatest economic returns for society as a whole, and does not expose the government to excessive fiscal risks.

(d) it seeks to guarantee that consultation with stakeholders will be systematically undertaken and fair compensation awarded to those that are entitled to receive it.

A PPP framework should guide the government methodically through three key questions which will be explored in more detail in the case study below:

(a) What are the project's scope and requirements?

(b) Can the project be delivered as a PPP?

(c) Should the project be delivered as a PPP?

The overall PPP policy framework should be supported by a suitable PPP legal framework.
This could be through a specific PPP law, or through a series of existing laws that address each of these key issues.

(a) Government to award concessions: The law should identify who is empowered to grant concessions, what concessions may be granted and what other existing sector-focused legal frameworks should apply.

(b) Administrative coordination: Institutional mechanisms should be established to coordinate issuing approvals, licences, permits or authorisations.

(c) Government to regulate infrastructure services: The regulation should be independent to avoid conflicts of interest, political interference and other inappropriate pressures.

(d) Risk allocation: No unnecessary statutory or regulatory limitations should be placed on the government's ability to agree on allocation of risks.

(e) Government support: The law should state which public authorities may provide support and the extent of the support.

(f) Selection of concessionaire: There should be efficient and transparent procedures. Bidders should demonstrate that they meet pre-selection criteria focused on professional and technical capacity, ability to manage the finance and organisational capacity. The bidders should be allowed to form consortia.

(g) Requesting proposals: Upon completion of the pre-selection proceedings, the contracting government should request the pre-selected bidders to submit final proposals. The criteria that the government expects should be made clear to the shortlisted bidders.

(h) Concession without competitive procedures: The law should set a narrow framework for dealing with exceptional circumstances where the government may award concessions without the competitive procedure.

(i) Unsolicited proposals: The law should deal with management of unsolicited proposals.

(j) Confidentiality: Negotiations between the contracting government and bidders should be confidential.

(k) Notice of project award: The contracting government should publish a notice of the award of the project.

(l) Records: The contracting government should keep an appropriate record of the process.

(m) Review: Bidders who claim to have suffered loss or injury should be able to seek review.

(n) Construction and operation of infrastructure: The law could also identify the core terms to be provided in the project agreement. Unless otherwise provided, the project agreement should be governed by the law of the host country. The law should also deal with organisation of the concessionaire, project site, assets and easements, financial arrangements, security interests, assignment of the concession, transfer of controlling interest, construction work, operation of infrastructure.

(o) Duration, extension and termination of project: The law should set the duration of the concession, circumstances for extension and consequences of termination by either party.

(p) Settlement of disputes: The contracting government should be free to agree to dispute mechanisms.

Summary of key points

PPP policy framework

- This consists of the policies, procedures, institutions and rules that together define how PPPs will be identified, assessed, selected, prioritised, budgeted for, procured, monitored, and accounted for.

- A PPP framework communicates the government's commitment to PPPs and fosters efficiency in the governance of the PPP programme. It promotes accountability, transparency, and integrity, ensuring that selected projects are aligned with the Government's development strategy. The framework aims to generate the greatest economic returns for society as a whole and does not expose the government to excessive fiscal risks.

- A PPP legal framework should also support a PPP policy framework. This could take the form of a specific PPP law or existing laws that address certain key issues such as: identification of who is empowered to grant concessions and what concessions can be granted, the duration of the concession, core terms of the project agreement, circumstances for extension of the concession and consequences of termination by either party. This is in addition to the establishment of certain regulations to avoid conflict of interest or political interference in infrastructure services and outlining how a concessionaire is selected using an efficient and transparent procedure to ensure the process is fair.

This case study is a summarised and simplified version of a real case study prepared by the government of Puerto Rico, which can be found here: http://www.p3.pr.gov/assets/2010-6-desirability---convenience-study-toll-roads-of-prhta.pdf

2.2 Project structuring: feasibility study

A PPP project should not be pursued by the government without a suitable feasibility study having been carried out. A feasibility study should ideally:

- determine the service needs of the end users, i.e. where is the current system not serving the needs of the public;
- analyse various options for meeting those needs;
- assess general government policy goals;
- if PPP is being considered, assess the advantages and drawbacks of a PPP against a financing with public funds; and
- select the most efficient of those options that meets government policy goals.

This approach will be considered in the context of a case study of a Highway Government's (the "Government") assessment of whether to procure a toll road as a PPP.

In this case, the Government prepared a feasibility study which was structured in four parts:[4]

Part A: explores what needs to be done to improve mobility on the roads and the degree to which the roads need to be expanded to enhance economic development and job creation.

Part B: analyses potential options to meet these objectives detailed in Part A.

Part C: compares the preferred alternative established in Part B with the other alternatives available to the Government and determines which alternative is in the best interests of the public based on the goals of the Government.

Part D: reviews whether or not it is actually possible to deliver the services via a PPP.

These will be reviewed in turn:

Part A – what are the objectives?

(i) Part A of the study explores what needs to be done to improve mobility on the roads and the degree to which the roads need to be expanded to enhance economic development and job creation.

(ii) It provides a definition of the key objectives of the Government and the key service needs of the proposed toll road. For example, what traffic volumes are currently being experienced on the current road and surrounding roads. What Level of Service (LOS) is currently being achieved, and what is desired?

This case study is a summarised and simplified version of a real case study prepared by the government of Puerto Rico, which can be found here: http://www.p3.pr.gov/assets/2010-6-desirability---convenience-study-toll-roads-of-prhta.pdf

Level of Service means:

A: free flow. Traffic flows at or above the posted speed limit and motorists have complete mobility between lanes. The average spacing between vehicles is about 550 ft (167 m) or 27 car lengths. Motorists have a high level of physical and psychological comfort. The effects of incidents or point breakdowns are easily absorbed. LOS A generally occurs late at night in urban areas and frequently in rural areas.

B: reasonably free flow. LOS A speeds are maintained, manoeuvrability within the traffic stream is slightly restricted. The lowest average vehicle spacing is about 330 ft (100 m) or 16 car lengths. Motorists still have a high level of physical and psychological comfort.

C: stable flow, at or near free flow. Ability to manoeuvre through lanes is noticeably restricted and lane changes require more driver awareness. Minimum vehicle spacing is about 220 ft (67 m) or 11 car lengths. Most experienced drivers are comfortable, roads remain safely below but efficiently close to capacity, and posted speed is maintained. Minor incidents may still have no effect but localized service will have noticeable effects and traffic delays will form behind the incident. This is the target LOS for some urban and most rural highways.

D: approaching unstable flow. Speeds slightly decrease as traffic volume slightly increase. Freedom to manoeuvre within the traffic stream is much more limited and driver comfort levels decrease. Vehicles are spaced about 160 ft (50m) or 8 car lengths. Minor incidents are expected to create delays. Examples are a busy shopping corridor in the middle of a weekday, or a functional urban highway during commuting hours. It is a common goal for urban streets during peak hours, as attaining LOS C would require prohibitive cost and societal impact in bypass roads and lane additions.

E: unstable flow, operating at capacity. Flow becomes irregular and speed varies rapidly because there are virtually no usable gaps to manoeuvre in the traffic stream and speeds rarely reach the posted limit. Vehicle spacing is about 6 car lengths, but speeds are still at or above 50 mi/h (80 km/h). Any disruption to traffic flow, such as merging ramp traffic or lane changes, will create a shock wave affecting traffic upstream. Any incident will create serious delays. Drivers' level of comfort become poor.

[1] This is a common standard in larger urban areas, where some roadway congestion is inevitable.

F: forced or breakdown flow. Every vehicle moves in lockstep with the vehicle in front of it, with frequent slowing required. Travel time cannot be predicted, with generally more demand than capacity. A road in a constant traffic jam is at this LOS, because LOS is an average or typical service rather than a constant state. For example, a highway might be at LOS D for the AM peak hour, but have traffic consistent with LOS C some days, LOS E or F others, and come to a halt once every few weeks.

Most design or planning efforts typically use service flow rates at LOS C or D, to ensure an acceptable operating service for facility users.[5]

[5] *https://en.wikipedia.org/wiki/Level_of_service*

Other key objectives in the study include: (i) whether there were any major gaps in the highway network that needed to be filled for strategic reasons; (ii) there was no desire to build new roads in an intrusive manner or in a way which would encourage further urban sprawl; (iii) reduction of congestion; (iv) improving road surface quality and maintenance programmes; and (v) improving tolling technology.

(iii)- Part A of the study also highlights the constraints on the Government in achieving these key service needs. This may focus on physical constraints, such as whether the Government has sufficient land to implement the road expansion scheme or would need the assistance of other authorities, or compulsory purchase powers, as well as financial constraints.

Part A – Conclusion

The conclusion of Part A of the study is that the Government must increase capital expenditure to improve road quality on existing roads and improve connectivity and mobility through some new connections and road widening. This will allow the Government to improve economic conditions and promote economic development and job creation.

To accomplish these goals, the Government must:

(i) reduce its debt burden to improve the availability of funding;

(ii) build new facilities more efficiently in terms of cost and timeliness (compared to existing procurement approaches);

(iii) improve its maintenance programme; and

(iv) reduce revenue leakage on existing toll roads through increased electronic toll collection penetration and better cash receipt procedures.

Part B – what are the options to meet the objectives?

Part B of the study then analyses potential options to meet these objectives detailed in Part A. Part B includes:

(i) An analysis of procurement options – the study looked at the whole spectrum of procurement options from conventional procurement by the Government and a variety of PPP structures including design-build, design-build-finance, design-build-maintain, design-build-finance-maintain, design-build-finance-operate-maintain.

(ii) In the context of a private sector procurement, the benefits and disadvantages of combining certain assets in one procurement. In this case, the Government had a number of existing (brownfield) toll roads – two large and two small – as well as two to three new greenfield road projects that it wished to construct.

(iii) A thorough identification of project risks, focusing on risk description and potential mitigation. This included financial viability, technical viability and permitting/land acquisi-

tion risk. The concessioning of the brownfield projects passed the risk assessment for procurement, but the greenfield roads did not as they had not yet reached a sufficient level of planning and preparation to be tendered.

(iv) Results of market soundings - the market sounding exercise with potential investors, operators and contractors showed a healthy interest for the projects. Operators and long-term institutional investors (such as pension funds) showed more interest in the concessioning of the existing brownfield projects with existing track records. Construction contractors, as expected, showed more of an interest in investing in the new build schemes. The market sounding also revealed investor concerns as to whether the concession would be let on market standard terms and with a sensible, index-linked tolling regime.

(v) A recommended path forward.

Part B - conclusion

Part B concludes that a PPP delivery model broken into four phases is the most effective way for the Government to achieve its goals.

The first and second phase would involve the concession of existing revenue-generating toll roads to generate the resources needed to maintain those facilities and to provide some capital to support the building of subsequent phases.

The next two phases would involve the concession of two new toll roads.

This phasing allows the Government to maximise immediate-term value, mitigate the need for additional debt and accelerate construction of the highway system, producing jobs and economic development.

This phasing was in line with the feedback from investors for deal size expressed in the market sounding exercise.

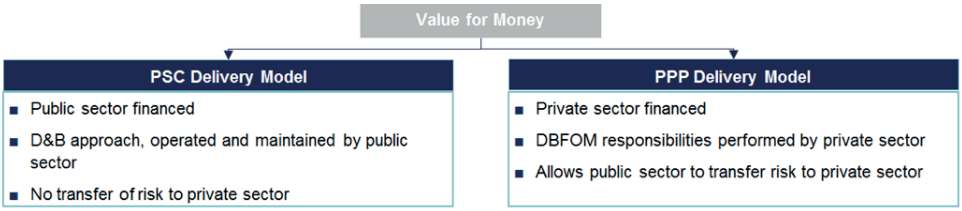
Part C – is the preferred option in the best interests of the public?

Part C of the study then compares the preferred alternative established in Part B with the other alternatives available to the Government and determines which alternative is in the best interests of the public based on the goals of the Government.

Part C also quantitatively evaluates the various delivery models that can be deployed by the public with the preferred PPP alternative.

Value for money analysis

This section may involve a value for money analysis



This kind of analysis can help to identify whether a PPP delivery option actually provides value as compared to traditional delivery methods (which are termed the Public Sector Comparator or PSC) on both a quantitative and qualitative basis.

A PPP project is likely, on the face of it, to be more expensive than a project procured directly by the public sector due to the typically higher cost of finance and the complexity of the project structure, increasing transaction costs, and the increased risk allocation. The PPP project will however involve a material risk transfer to the private sector and the value for money analysis will aim to assess whether the factors listed here are likely to result in a longer-term net benefit to the public sector. The analysis will include weighting the assumed public sector cost with the likely downside costs experienced on similar transactions procured in that sector in a traditional manner, such as delays, cost overruns and disputes. If the total weighted public sector cost exceeds the anticipated PPP price by a material amount, then the PPP route may be favoured.

In the U.K., post-transaction audits have borne out that PPP projects can generate significant savings compared to the public sector comparator model, although it should be borne in mind that the public sector comparator price is only a hypothetical figure.

It must also be noted that, at project preparation stage, the assumed PPP price is also a hypothetical figure based on a desktop analysis of how costs and risks will play out against the assumed risk allocation.

Part C - conclusion

In this case, the conclusion of Part C is that the assumed value of the PPP approach would significantly exceed traditional procurement, generating millions of dollars in benefits.

Obviously, once the private sector bids are received and evaluated, the PPP framework may require a re-assessment of the best price against the public sector comparator to confirm that the proposed PPP contract will indeed represent value for money.

Part D – is it possible to deliver the project as a PPP?

Although Part C determined that the project should be delivered through a public-private partnership, Part D of the study reviews whether or not it is actually possible to deliver the services via a PPP.

In other words, while the PPP delivery option may offer greater value for money than a traditional procurement, it may not be affordable in terms of public funding constraints.

At the present time, the Highway Government has a significant amount of debt in relation to the existing toll roads that must be taken over, so the value paid by the private party for the existing toll roads must ideally be sufficient to cover this.

Other tests in Part D include ensuring a suitable accounting treatment of the project (for example, to keep the project off balance sheet) and considering the project's budgetary impact.

Part D - conclusion

Fortunately, Part D of the study concludes that a PPP delivery route passes all required affordability thresholds.

A PPP model would not appear to trigger any negative budgetary impact given that the first phase will result in a significant upfront payment to the Government.

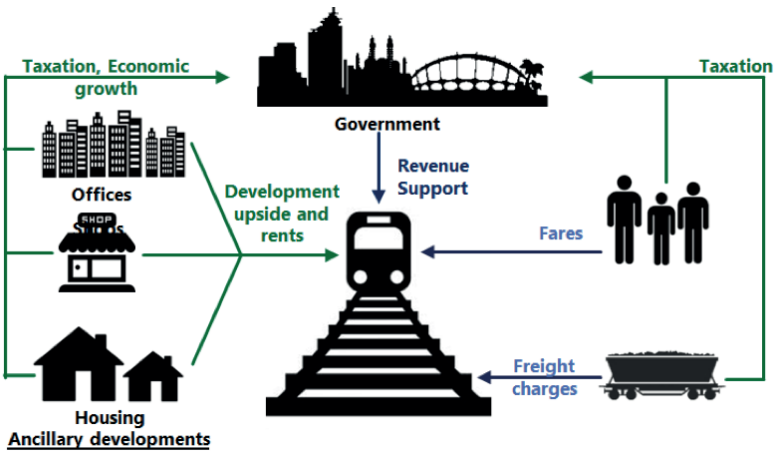
The likely quantum of the upfront payment to the Government (based on the future revenue stream available to bidders from the existing toll roads) should exceed the accounting value of the assets, and the risk allocation to the private sector is sufficient to ensure that the contingent risks of the project stay off balance sheet.

Finally, the PPP transaction must ensure that the upfront private sector payment exceeds the amount of Government's debt on the existing toll roads.

Assuming this, the projects in the contemplated package can and should be carried out under the PPP model.

2.3 PPP economics

The economics of PPPs must also be considered; one example for a hypothetical rail project is depicted in the diagram below.



Governments are often keen on PPPs because they believe that the private sector can take all of the risk and can deliver a project that the government has been unable to deliver to date. However, PPPs are a funding mechanism, not a mechanism for creating affordability. There is a distinction between whether a project can finance itself and how you finance it. Some projects are simply unviable from the start.

Governments need to acknowledge that there are limited sources of revenue for financing a PPP project. There is only so much the public will be willing to pay for an asset through tolls or taxes. In most cases, these are the only two realistic sources of revenue. In an emerging market context, it is more likely that the project will need to be self-financing through tolls or other user charges rather than government budgets funded by taxation.

Another funding option outside of user charges or taxation is property development. For example, the land alongside a new PPP road could be acquired by the government and sold for development, which in turn generates more growth by promoting business along that road. Similarly, a rail project could give opportunities for transit-oriented development such as offices, shops or housing above or near stations.

However, property development is not a common source of revenue for PPP project concessionaires because lenders tend to view the risk profile on property developments differently to project finance, so it is not straightforward to combine these in a single project. The upsides may also be longer-term and not available in time to defray the high capital and financing cost of the road or railway. Nevertheless, the government party may be able to take a long-term view where the concessionaire cannot.

The government also needs to consider the private sector's ability to assume demand risk. There have been a number of projects in the road and rail sectors where the private sector has grossly overestimated the demand and the projects have essentially failed. If demand cannot be predicted – which is particularly difficult for greenfield projects that have no existing demand history - then this may suggest that the government needs to find another solution to procure the project, which may involve taking back or sharing in the demand risk to a level that is comfortable for the private sector. A good example of this is the Kenyan Annuity Roads Programme, which will involve a relatively long pipeline of small PPP road projects (c. $30m to $100m), each of which will be procured on an "availability" or non-demand basis, with a two year construction period and an 8 year operation and maintenance period, during which the concessionaire is paid a fixed "annuity" for the proper maintenance of the project road. This approach has been taken because the routes would not be sufficiently revenue-generating if tolled (because of their rural location), or because tolling would be impracticable in their location (e.g. urban areas). The government intends, however, to raise a fuel levy, the receipts of which will be placed into a statutory road fund, whose administrator will have the obligation to make annuity payments directly to the concessionaire; this approach provides comfort to investors that payments are ring-fenced from constraints in government budgets,

No doubt with these considerations in mind, a number of projects in Africa have proceeded not on a long-term PPP basis but on a split basis (design and build first under one contract, then short-term operation and maintenance under a second contract). The Lekki-Ikoyi Link Bridge

was mentioned as one such example earlier in this Guidebook. Other examples could include the Addis Ababa Light Rail project in Ethiopia, and the Nairobi-Mombasi Standard Gauge Railway line, both funded and constructed by Chinese contractors and banks. In the Addis Ababa case, it was always clear from day one that the fare revenue would not be sufficient to repay the capital cost of the system, even with a concessionary government-to-government interest rate; in the case of the Standard Gauge Railway, the lower-than-expected freight revenues seem to have been less well anticipated. In both cases, the government has to give serious consideration to how it will meet the long-term funding costs where the project is not self-sufficient in revenue terms.

Summary of key points

PPP economics

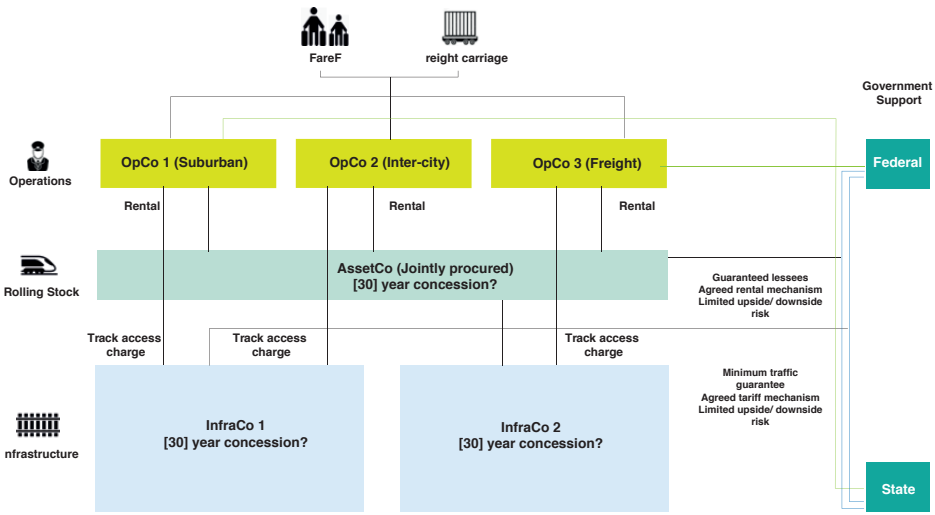
- PPPs are a common way of funding public projects on the basis that the private sector is perceived to take all of the risk and deliver the project successfully. However, certain projects are often unviable and the public will not always want to pay excessive amounts for an asset through tolls or taxes.

- An alternative option to fund projects is property development, capitalising on land surrounding the location of the project to construct additional attractions such as offices, shops or housing to, in turn, generate more growth and promote business at the site. However, it is difficult to combine property development and project finance into one single project because lenders view the two risk profiles very differently.

- Demand risk is often assumed by the private sector and gross overestimation of the use of projects can be problematic and lead to failure of the project.

2.4 Alternative ppp structure: rail project case study

The diagram below illustrates a proposed structure for a hypothetical rail PPP project in a country where the existing railway network was underfunded and underused. Most freight traffic goes by road and most passenger traffic by car or plane. The country wishes to implement a new rail project to encourage freight and passenger traffic onto the rails for reasons of cost efficiency, as well as reducing road congestion and road maintenance costs.



The initial proposition of a full Design **Build Finance Operate and Maintain** (DBFOM) solution was not seen as practicable because the passenger fare and freight income were not predictable due to a lack of a demand history.

Nevertheless, the government is keen to support the project and considers that it may be possible to restructure the project in the future if demand picks up. In the meantime, it needs to find a solution that allows each of the components to be procured.

In this case, it considers that a split procurement may work as follows.

(a) The infrastructure can be procured under a Design Build Finance Maintain (DBFM) route – the infrastructure company would be given a long-term concession and would receive track access charges for each passenger or freight train movement based on the loading of the relevant train. The infrastructure company would need to be given a minimum revenue guarantee by the government to make this economic. The principal risks it is taking are construction completion risk and asset availability risk, rather than demand risk.

(b) The rolling stock can be procured under a separate Design Build Finance Maintain (DBFM) or lease route. The principal obligation is to make the vehicles available for use by the respective operators in return for a fixed rental fee, set by the government in the procurement phase. The government would ensure that there are available lessees at all times during the concession (or at least, during the debt repayment period). However, unlike the infrastructure company, the rolling stock asset company has greater options to find another home for the rolling stock (more so if the infrastructure and rolling stock is built to standard gauge and can be quickly moved to other networks), so a different risk profile may be possible here.

(c) Different types of operations can be let to different franchisees under short-term concessions ("operations only"), in this case divided between suburban, inter-city and freight use. The infrastructure companies would be obliged to manage track path usage between the different operators. The franchisees would have a fixed track-access charge and fixed rental to contend with, and otherwise would need to account for the cost of operating staff and other operating expenses. The government may need to subsidise the cost of operations in the early years to ensure that the passenger and freight charges passed to users are low enough to encourage demand. As the operating franchises do not involve a material capital outlay they could be kept relatively short, and if demand has picked up at the end of the short concession the government can re-let the franchise on the basis of the lowest subsidy offered (or even on the basis of the highest royalty to be paid back to the government).

This model clearly involves a level of retained risk by the government to manage the different cashflows between the project components, and so affordability of the project will be an issue in the early years. However, by structuring the project in this way the government may be more likely to achieve sufficient interest from suitable bidders for the respective components, and it may therefore be more likely to be financed.

One of the concerns that the concessionaires may nevertheless have with this structure is that it assumes that there is a predictable transfer of goods and passenger traffic from road to rail. This may be difficult to achieve without some government involvement, because competing routes by road may effectively be subsidised (in so far as road users are usually not required to bear the full cost of their impact on public roads). Zambia, for example, is considering imposing minimum requirements on businesses to transport a minimum level of goods by rail in order to assist with this modal shift.

Summary of key points

Alternative PPP structure: rail project case study

- The case study was based on a new rail PPP project in a country where the existing railway network was underfunded and underused. Most freight traffic goes by road and most passenger traffic by car or plane. The government wanted to encourage freight and passenger traffic onto the rails for reasons of cost efficiency, reducing road congestion and road maintenance costs.

- The initial proposition of a full Design Build Finance Operate and Maintain (DBFOM) solution was not practicable because the passenger fare and freight income were not predictable due to a lack of a demand history. The project would require restructuring.

- To resolve the issue in the meantime, each component could be procured separately:
    - The infrastructure can be procured under a Design Build Finance Maintain (DBFM) route under a long-term concession where track access charges would be given for each passenger or freight train movement based on the loading of the relevant train.
    - The rolling stock can be procured under a separate Design Build Finance Maintain (DBFM) or lease route where vehicles would be available for use by the respective operators in return for a fixed rental fee.
    - Other types of operations can be let under short-term concessions to different franchisees that would have a fixed track-access charge and fixed rental to contend with, and otherwise would need to account for the cost of operating staff. The infrastructure companies would be obliged to manage track path usage between the operators. Subsidies may be required by the government to ensure passenger and freight charges are low enough to encourage use.
- With this temporary model, the government retains the risk of managing the different project components and cashflows, but it could generate sufficient interest in the project from potential bidders for the respective components.

Conclusion

To summarise, the way in which PPPs are implemented is usually through a policy framework and legal framework which communicates the government's commitment to PPPs and facilitates the governance of the PPP programme by promoting accountability, transparency and efficiency. The importance of a feasibility study cannot be overstated, it is fundamental in the process of: identifying the service needs of the public and the options available to meet those needs; analysing the benefits and drawbacks of using a PPP to fund the public asset or service required; and, selecting the most efficient method which meets government policy goals.

CHAPTER 3

FINANCING AN INFRASTRUCTURE PPP PROJECT

3. FINANCING AN INFRASTRUCTURE PPP PROJECT

This module provides an overview of the way in which infrastructure PPP projects are financed. Infrastructure projects are, by their very nature, large scale projects requiring vast investment, and governments around the world have realised that the contribution of taxpayers' money to develop these types of projects can be reduced if investment is encouraged from the private sector.

Therefore, governments have had to consider the benefits and drawbacks of a variety of sources of finance flowing from the private sector, the public sector and third-party entities, as well as the use of project finance structures.

The key learning objectives of this module are to understand:

(a) the variety of sources of financing for an infrastructure PPP project;

(b) the key features of a project finance transaction;

(c) the structure, key parties and timeline for financing; and

(d) the drawbacks of a project finance structure for key parties to the PPP project.

3.1 Sources of financing for an infrastructure PPP project

Funding for large scale infrastructure projects comes from a number of different sources:

3.1.1 - Public

(i) Traditional public financing

The government may raise finance for the project on its own balance sheet and use this to fund the capital costs of the project. Please see the ALSF Academy Sovereign Debt Handbook for more details on how traditional public financing is achieved by way of loans and capital market issuances.

(ii) Direct support

The government may choose (or be required by private investors) to offer direct support to the project, usually to assist with attracting additional private investment or to bear some of the risk in the project where the project would not be bankable without the support. This may be done by way of subsidies, grants, equity investment or loans to the project. Examples include:

(a) payment of cash e.g. to reimburse bid costs or assistance in kind e.g. to procure land;

(b) the provision of mezzanine loans or viability gap financing (see further below);

(c) waiving fees and other payments due to the government e.g. tax holidays or waiver of tax liabilities; and

(d) equity investment in the project – becoming a shareholder in the project vehicle (see section 5.9 below).

Most infrastructure PPP projects will involve some technical or financial government support, particularly those in emerging markets. The level and nature of the support will depend on the type of project, the risks involved and the private sector appetite for undertaking the transaction.

(iii) Viability Gap-Financing (VGF)

This is a grant by the government to support projects which are economically justified but not financially viable, for example because of long gestation periods or because the end-users are not able to pay the necessary user charges to support the level of private finance required to complete the project. VGF schemes help to make a project bankable and attract private investment to the project. The government provides funding for a percentage of construction costs, usually after equity contribution by private investors, and shares the project risk. Usually the government will have strict eligibility criteria for when VGF can be provided, for example, a completed pre-feasibility study showing the project is economically justified and will be financially viable with the provision of VGF.

The grant may be disbursed in line with agreed milestones during construction, usually alongside private sector loan disbursement, taking advantage of lender due diligence and performance monitoring.

In some cases, the grant may be deferred and paid as part of a long-term fixed payment stream.

Many countries have VGF schemes, for example, India has had a VGF scheme since 2004; Indonesia since 2013; Ghana since 2017. Certain credit institutions may provide VGF, such as the Private Infrastructure Development Group (PIDG) through its Technical Assistance Facility.

3.1.2 - Private

Finance from the private sector is usually necessary to enable large scale infrastructure PPP projects to go ahead. Private finance can take a number of different forms and can be provided by different entities in the market.

(i) Senior or mezzanine debt

Debt can be provided to fund a project in many different ways, for example:

(a) as loans - either corporate finance or project finance. These can be "senior," taking prio-

rity in terms of payment and security position, or "mezzanine", which means that they rank behind the senior debt but above any loans or equity provided by the project investors; and

(b) capital markets issuances – a capital markets issue by the project company (or issuing subsidiary or sister company) to investors (individuals or more likely specialist infrastructure investment funds).

The rest of this section will focus on loan financing rather than capital markets issuances.

(ii) Equity

The project investors (also called "sponsors") will usually invest some of their own money into the project by way of equity and/or shareholder loans. The amount of money invested will depend on the type of project and the risks involved. The riskier the project, the more banks or other financial investors involved in the project will require the project investors to contribute.

Project investors may be third party investors who have no other involvement in the project, or they may be the sponsors of the project, with an interest in the construction or maintenance contracts or any of the other material project arrangements.

Please see section 5.3 below for further discussion on the equity arrangements on a project finance transaction.

3.1.3 Multilateral Development Banks / Development Finance Institutions / Export Credit Agencies

These types of institutions may provide direct funding by way of loans or they may provide risk mitigation products which will attract commercial bank participation in the project. The African Development Bank has been an important co-funder in many African PPP projects for this reason.

Please see section 3.6(g) below for further discussion on these types of institutions.

Summary of key points

Sources of financing for an infrastructure PPP project

- Funding for large-scale infrastructure projects comes from public and private sources.

- "Public sources" include traditional public financing where the government raises funds on its own balance sheet; direct support from the government by way of subsidies, grants or loans to the project; viability gap-financing, which is a grant by the government to support projects which are economically justified in the long-term but not financially viable initially, the government's support makes the project bankable and attracts private investment.

- "Private sources" includes senior or mezzanine debt in the form of loans or a capital markets issuance by the project company to investors; it can also include equity invest-

ments where project investors put their own money into the project by way of equity or shareholder loans.

• Other institutions such as multilateral development banks, development finance institutions and export credit agencies, may also provide shareholder equity funding by way of loans or risk mitigation products to attract commercial bank participation in the project.

3.2 What is Project Finance?

Project finance is a technique to negotiate and establish the long-term debt financing of a project based on the cash flow generated by the project itself, rather than on the balance sheet of the project investors. There is no single project finance solution, but rather a typical structure that is adapted on a project- by-project basis to fit the particular requirements of a project. There are, however, certain defining characteristics which are common on most project financings.

There are a limited number of financial institutions committed to project financing in the market. They are attracted to the higher margins and fees prevalent on these types of transactions to compensate for the higher risks involved.

3.3 Key features of a project financing

3.3.1 Cashflow is king

Lenders look primarily at the performance of the project and the cashflow it generates for comfort that the debt will be repaid, rather than to the balance sheet of the shareholders or assets of the project. So, in an infrastructure transaction, the lenders will carefully assess whether the revenues generated by the project (e.g. an availability payment by the government or tolls collected) will be sufficient to repay the finance provided to cover the capital costs of constructing the project.

The lenders will assess the capacity of the project company to repay the debt by using a financial model which is prepared at the outset of the project and which shows all the costs (e.g. taxes, interest payments, construction and operating costs) and projected revenues in relation to the project.

This also helps the parties to identify whether there are any funding shortfalls which may need to be plugged through risk mitigation products or government or project investor support.

This structure is very different to a traditional "balance sheet" or corporate financing where a lender looks at the balance sheet of the borrower, its shareholders and wider group. Lenders have comfort that this type of financing will be repaid by looking at the proven cashflow and established asset base of the borrower group, over which they take security and group guarantees for repayment.

3.3.2 Off balance sheet

Project finance borrowing is a debt of the project company so it will not appear on the balance sheet of the project investors. The "off balance sheet" loan is therefore outside the scope of any

borrowing restrictions imposed on the project investors by their own corporate lenders, such as negative pledge and financial ratio requirements and will not affect the credit rating of any project investor.

By contrast, corporate financing is often provided to a parent, which on-lends to its subsidiaries. This type of financing will be "on balance sheet".

3.3.3 Special purpose vehicle

With a corporate loan, lenders satisfy themselves as to the credit-worthiness of the borrower by looking at the balance sheet of the borrower and its group and they take security and guarantees to cover the full amount of the loan. The borrower will usually be an established trading entity.

In a project financing, the borrower is typically a company established specifically for the project which has no assets outside of the project and no credit standing. This is why the financial model referred to above is vital in establishing that the project economics stack up – that the projected future revenues of the project will cover the debt.

3.3.4 Non/limited recourse

In a project financing, the project investors will be required to contribute equity in a proportion agreed with the funders. See section 5.3 below. In many projects this is the only support which the project investors provide. The lenders are reliant on the performance of the project for repayment of the debt, the security granted by the project company over its assets and security over the shares in the project company. The project investors do not provide any guarantees of the debt or security over their own assets, other than over the shares in the project company. The lenders' ability to seek repayment of the debt is limited to the project company itself.

In some transactions, the project investors will be required to provide further financial support, for example, completion guarantees but this depends on the particular project and the risk allocation agreed between the parties. This is discussed further in section 5.6(c).

3.3.5 Risk allocation

Funders embarking on a project financing will want to minimise their risk in relation to the project. In practice this is a balancing act between the interests of each of the parties and will involve lengthy negotiations between the parties.

The risks associated with any project vary according to the life cycle of the project which is divided into two main stages - the construction phase and the operating phase. The general rule in project finance transactions is that the person best able to manage the risk carries the risk, for example, a government should be accountable for changes in law and the construction contractor should assume the risk for delays in completion of construction.

See section 4 for further discussion on risk allocation.

3.3.6 Size

Most project financings relate to large-scale projects requiring substantial capital for their development. The funding required for an infrastructure project may well run into the billions, necessitating a multi-sourced financing solution and a very large syndicate of lenders.

3.3.7 Control

Given the importance of the project cashflows in repaying the debt, the lenders retain significant control over the assets of the project company and how the project company operates. The lenders are particularly concerned with ensuring that the cashflow is applied only towards certain costs and that the project investors are only able to take cash out of the project e.g. by way of distributions only if the project is performing well and after scheduled payments of debt have been made.

Contrast this with a corporate financing where the borrower and its group retain flexibility to manage their business and its cashflows in accordance with normal operating practice.

3.3.8 Repayments of debt and payment of interest

In a corporate financing, the project company is typically required to pay interest on the loan at stated intervals after drawdown.

In a project financing, the borrower is unlikely to have any funds to pay interest or make debt repayments until after the project has been completed and is generating cashflow. For this reason, project finance loans usually provide that, although interest is payable during construction, it will be "capitalised" until after construction completion i.e. added to the amount of the funds drawn down, until a revenue stream is available. It is common that the loan will be sized to provide for this capitalised interest.

Since the project does not generate any cashflow which could be used for repayment until after construction completion, repayment of the loan is delayed until the operational phase.

3.3.9 Cost

Project finance transactions can be very costly. The time and complexity involved in finalising the documentation can lead to high costs and the lenders expect higher fees and margins to compensate for the risks inherent in project finance transactions.

3.3.10 Time

Construction of an infrastructure project is likely to take several years, with a concession for operation perhaps running to 25 years. Funders are therefore required to commit to long term funding with repayment due in instalments over a period similar to the concession. Corporate loans will have shorter tenors, usually no more than 5-7 years and often much shorter.

Most infrastructure projects are very complex in terms of the financing and commercial arrangements. The time taken to agree and finalise the documentation on a project finance transaction can be very lengthy, taking a number of years. Corporate loans tend to be less complex and can be transacted quickly, often in a matter of weeks or months.

Summary of key points

Key features of a project financing

• The lenders base their credit analysis of the project on the projected cashflows of the project.

• Project finance borrowing is a debt that sits with the project company itself, it does not feature on the project investors' balance sheets or impact their own respective borrowing arrangements.

• The borrower is usually a special purpose vehicle, a company set up specifically for the project.

• The lenders' ability to seek repayment of the debt is limited to the project company; they have no recourse against the project investors other than for the amount of equity they have agreed to contribute to the project. The project investors will provide security over their shares in the project company, but they typically do not provide any guarantees of the project company's debt.

• Risk must be allocated between the parties which can often lead to lengthy negotiations because lenders want to minimise their risk exposure. The general rule in project finance transactions is that the person best able to manage the risk carries the risk.

• Lenders want to retain control over the assets of the project company and its operation because the cash revenue generated funds the project company's debt repayments. There may be restrictions over how the cash generated by the project company is spent and when project investors can extract cash by way of a return on their investment.

• Interest on the project company's loans is usually "capitalised" (rolled up and paid after construction completion) because the borrower is unlikely to have funds to pay interest on its debt repayments whilst the project is being built. Repayment of the loan is usually delayed until the project is operational and generating cash to fund the debt repayments.

• The complexity of project finance documents and the time it takes to negotiate and finalise them can lead to high costs, lenders also expect high fees and margins to compensate for the risks inherent in project finance transactions.

• Constructing an infrastructure project and generating enough cashflow to repay the debt during its operation can take several years, so lenders commit to long-term funding and repayment schedules.

3.4 Drawbacks of using project finance in infrastructure PPP transactions

The benefits of PPP transactions for governments have previously been discussed in section 1.7 above. Using project finance has its drawbacks for the various parties:

3.4.1 Project investors/project company

PPP and project finance transactions are all about allocating risks, with the aim that the project company passes down most of the risks to other project parties. However, the project investors and/or project company may still be required to share some risks if they have not been allocated elsewhere e.g. the project investors may be required to provide a completion guarantee to mitigate the risks of using unproven technology.

Project financing is expensive. For example, funding costs are higher than traditional corporate financing and fees are payable to the funders and their advisers. Costs can spiral, for example, bid costs and the costs of legal advisers. The project company will be obliged to pay all lender costs.

One of the features of project financing referred to above is the amount of control the funders exert over the project company and its assets. Lenders achieve this in the finance documents by including many various representations and undertakings (often a complex "controls matrix" will be included which governs the amount of discretion the project company is able to exercise in relation to project decision-making). This makes it incredibly hard for the project company to manage the project on its own terms. All but the simplest decisions will require input from the funders which adds a level of time and cost to managing the project that doesn't occur with more traditional financing methods.

3.4.2 Funders

The funders are at an information disadvantage. Although they attempt to exert a high degree of control over the assets and the project company through the provisions of the finance documents, they are dependent on the project company complying with these provisions and providing them with regular and detailed information.

The lenders want to exert control but this control gives rise to its own issues:

(i) do the lenders have the capacity and ability to answer frequent requests for consent or instructions from the project company on potentially technical issues relating to the project? This can be mitigated by the employment of the lenders' technical adviser to assist on technical matters and, perhaps, the recognition that one or two experienced project finance banks will take the lead on assessing information provided by the borrower;

(ii) is there a risk that the lenders will be held liable in respect of claims against the project, for example, environmental damage, or that they might be considered to be "shadow directors" with liability for the project company's actions? This can be mitigated to some extent in the drafting of the finance documents with indemnities provided by the project company to

the funders for any claims against them and a careful tightrope being walked by the lenders in their control over the project company, particularly where the project is in distress.

These types of projects are high risk for lenders, albeit managed by appropriate risk allocation and mitigation. Large sums of money are lent on the basis of projected outcomes in respect of the project over a very long tenor. Even with risk mitigation and allocation, there is the possibility of unforeseen change in the project economics which could result in non-payment of the debt.

Although the lenders will have taken extensive security over the project assets, achieving a valuable sale of these assets on enforcement in order to repay the debt is extremely difficult. See further section 5.7 below.

3.4.3 Government

The government will expect to deal only with the project company, but will need to build lender involvement into project company response times. The project company is likely to need to seek consent or instructions from the lenders for most decision-making under the concession agreement. This can mean that variations etc. take longer than expected.

The government may come under pressure from funding institutions, particularly international commercial banks and multilateral development banks, to act in a certain way regarding the project. It will need to consider the response of these entities when dealing with the project, particularly in times of project distress.

The government is likely to be required to provide some form of government support for the project e.g. direct support by way of grants or subsidies or changes to tax treatment of the project company.

For all parties the time and complexity involved in project financing can significantly delay the project.

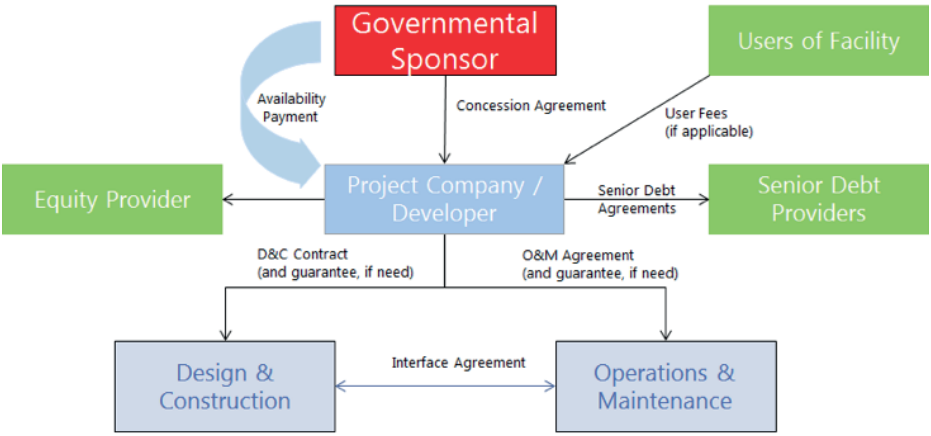
Summary of key points

Drawbacks of using project finance in infrastructure PPP transactions

- Despite the benefits of project finance in infrastructure PPP transactions, there are various drawbacks for the parties including the high level of lender control, the time and cost involved in transactions and the need for certain parties to retain certain risks.

3.5 Structure

See the diagram below which represents a typical infrastructure PPP project finance structure. Please refer to section 3.6 for a description of the key parties and section 5.2 for a description of the main finance documents.



3.6 Key parties

Material Project Parties

The main parties to the documents, other than the finance parties, will usually be called the "Material Project Parties" given their importance to the transaction. Default by or insolvency of these parties will lead to a default under the loan agreement.

3.6.1 Project investors

The project investors are the ultimate shareholders of the project company. They will invest equity into the project. See section 5.3 for a discussion on the equity arrangements in relation to a project financing.

The project investors may be third party investors who have no other involvement in the project other than the contribution of equity, or they may be the "sponsors" of the project with an interest in the construction and maintenance arrangements through other of their operating subsidiaries or in any offtake or supply arrangements.

It will be important for both the lenders and the government to be satisfied that the project investors have the specialist expertise to undertake the project, in terms of the delivery of large-scale projects on time and on budget.

Given the specialist expertise of the project investors, the lenders and government will also want to ensure that the project investors remain involved in the project until a point in time when the project is performing in accordance with forecast expectations. To achieve this, the project investors will be required to retain their equity ownership until at least some years after construction completion. The concession agreement and the equity contribution agreement (referred to in section 5 below) will provide for the change of control of the project company.

The project investors may hold their investment in the project company through one or more holding companies. These may be interposed between the project investors and the project company for a number of reasons e.g. tax structuring. It is common to include a holding company where the project investors are restricted from granting security under their own corporate financing arrangements, but the project finance lenders require security to be granted over the shares in the project company. In this scenario, the holding company will grant the requisite share security.

3.6.2 Government

The government will be required to grant a concession (which is, in effect, a licence) to the project company to construct the project and derive a profit from it once completed and for a set period thereafter.

The project may require governmental consents, or indeed legislation to be passed, in order to proceed. Further, the government may need to grant tax concessions and rights to the intended site of the project (which may need to be compulsorily purchased from third parties). The government may be required to provide some form of government support for the project.

3.6.3 Project company/borrower

As seen above in section 3.3(c), the project company is usually a special purpose vehicle set up specifically for constructing and operating the project. It will have no assets outside of the project and no established history of trading. The project company will also be the borrower under the loan agreement.

The form of the project company will often depend on the legal framework of the host country. Certain jurisdictions may prescribe the structures required for foreign investment, for example, it may be that a certain percentage of the project company's equity has to be held by local participants in order to satisfy foreign investment laws or to enable hard currency profits to be transmitted abroad. It may be that the project company does not need to be incorporated in the host country and, if so, the project investors may decide to incorporate the project company in a tax-efficient jurisdiction.

3.6.4 Financial Adviser

If a financial adviser is appointed by the project investors, it will provide advice on the bankability of the project and the structuring of the financing. It is usually a bank experienced in project finance. It will also prepare the financial model which is used to assess the financial viability of the project and any information memorandum which will include a detailed description of the project for potential funders to the project.

3.6.5 Construction contractor

As mentioned above, the construction contractor will often be a subsidiary of a project investor (although not in every case). It will be responsible for ensuring that the project

construction completes on time and will enter into a construction contract with the project company. See further, section 6.1 below.

3.6.6 Operator

As mentioned above, the operator will often be a subsidiary of a project investor (although not in every case). It will be responsible for operating and maintaining the project for the duration of the project term. It will enter into an operating and maintenance agreement with the project company. See further, section 6.1 below.

3.6.7 Suppliers

Significant suppliers may be relevant to the transaction – this is less common on infrastructure projects compared to other sectors e.g. renewable energy transactions. Where they are relevant e.g. municipal energy from waste transactions, the key is to ensure a long-term and certain source of supply from a reputable and reliable supplier, with financial support in the event of any failure to supply.

3.6.8 Offtakers/purchasers

On many infrastructure PPP transactions, the "offtaker" will be the government paying the availability payment for the finished asset e.g. hospital or school. On some transactions e.g. municipal energy from waste transactions, the identity of the offtaker will be important because they are the main source of revenue for the project. The key is to ensure a long term and certain offtake contract with a creditworthy entity, with financial support in the event of any failure to take or pay for the power or product.

Finance Parties

3.6.9 Arranger

Where there is a loan financing, the arranger is the lender or financial institution mandated by the project company to arrange the financing. It will also typically be a lender. The arrangers (there are usually more than one) will be brought in by the project company before the other lenders to structure the financing in a way considered attractive enough to encourage other lenders to participate (e.g. in terms of margin, commitment fees, tenor, types of facilities). The arranger will take an active part in negotiating the credit and security documents. The project company will pay the arrangers an arrangement fee for their services.

3.6.10 Lenders

Most project financings are so large that they will need to be syndicated. This means that the debt will be shared by a number of lenders. The arranger will approach other lenders to participate in the funding. The identity of the lenders will depend on a number of factors:

(i) Whether a bank wants to transact in that sector and/or jurisdiction

(ii) Whether a bank has a relationship with the project investors that would encourage it

to lend

(iii) Whether the law of the host country restricts who can lend (e.g. are local banks required to lend, or hold the security assets?)

(iv) Whether any multilateral development banks or export credit agencies will be involved (see below)

Lenders on project finance transactions are usually very experienced in the market. As seen above, project finance lending is very different to corporate lending with an entirely different risk profile and the potential to make significant fees. Some banks do not have the appetite for such long-term risk.

3.6.11 Multilateral development banks (MDBs) and development finance institutions (DFIs)

MDBs are institutions such as the World Bank, the African Development Bank and the European Bank for Reconstruction and Development and other international agencies established to assist in the development of economies. MDBs will support governments in the development of projects through risk mitigation products such as political risk cover, or in other ways (e.g. direct lending, providing funds for government support).

DFIs are bilateral, regional or multilateral institutions that are supported by developed countries with a mandate to provide finance to private sector participants to promote economic growth and support social development. These are institutions such as the African Development Bank, International Finance Corporation and European Investment Bank, as well as smaller institutions such as the Africa Finance Corporation.

Many large infrastructure PPP projects involve MDBs or DFIs. Their involvement is advantageous to the project company because they typically charge lower interest rates than commercial banks and they can lend for longer tenors or their presence attracts further private finance either because of the direct support provided by these entities e.g. by way of guaranteed financing or through their indirect support (preferential creditor status on insolvency of borrowers or political pressure they can bring to bear on the government).

3.6.12 Export credit agencies (ECAs)

ECAs are institutions (often public or quasi-public) that provide government backed support (loans, guarantees and insurance) to encourage the export of goods from their home country. For example, JBIC (the Japanese ECA) may lend to a PPP project for the supply of Japanese built trains.

Their assistance takes the form of guaranteeing loans to be made to the exporter or the purchaser of products, insurance cover for projects (either for political or commercial risks or both) or, in some cases, direct lending to a project.

3.6.13 Agent

The agent will usually be one of the lenders. In this capacity, it carries out a mainly administrative role and is responsible for co-ordinating drawdowns, dealing with communications between the parties, serving notices, calling meetings and disseminating information.

It is not the agent's role to monitor the performance of the project. Each lender will have to do that itself.

The agent is paid an annual fee by the project company. Given the significant information flow on a project finance transaction, the fee will be higher than on a traditional corporate finance transaction.

3.6.14 Security agent or trustee

The security granted in respect of the project will usually be granted in favour of an agent or trustee, which holds the security on behalf of all the funders from time to time. Using this structure means that changes to the lender group (e.g. transfers by a lender to a new lender) will not result in a discharge of the security or necessitate new security to be granted.

The security trustee/agent is often one of the lenders but may also be an independent trust company. Whether the project has a security agent or security trustee will depend on whether the relevant jurisdiction recognises the concept of a "trust" (as a general rule, common law jurisdictions typically do, but civil law jurisdictions do not).

Other Parties

3.6.15 Experts and advisers

Technical experts will be engaged by the lenders to review all critical aspects of the project. They will undertake a technical feasibility study, which will analyse the technology backing the project. Lenders are extremely cautious before lending against untried technology. Lenders will also be keen to ensure that the local infrastructure is capable of supporting the project.

The lenders' technical adviser will advise on all aspects of project construction, confirming if milestones are being met and that the project is being constructed in accordance with the agreed parameters. They will usually provide a technical report to the funders before any money is lent and will then report on a monthly basis during construction.

Other advisers may be required depending on the project, for example, environmental consultants will be required to report on the environmental impact of the project.

3.6.16 Legal advisers

Lawyers are closely involved in any project financing from an early stage. Their advice is sought in relation to the structure of the transaction, to instruct and guide local counsel and to draft, review and negotiate the myriad documents that will be required. All parties will have their own separate legal advisers.

3.6.17 Insurers

It is essential that insurance is put in place to cover certain risks in relation to the project. These will include physical damage to the project, delay in start-up of operations and business interruption. Both the project company and the lenders will be advised by insurance advisers regarding what insurance is necessary and available in relation to the project. Lenders will be co-insured so that they can be indemnified out of insurance proceeds if one of the risks insured against arises e.g. the project is damaged or construction delayed.

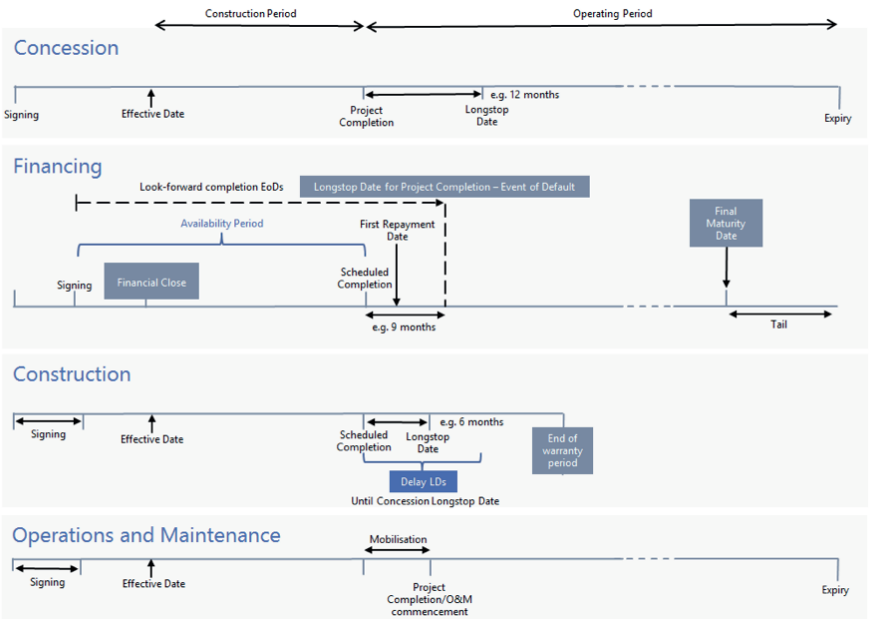
Summary of key points

Key parties

- There are many parties to a project finance transaction – the major project parties and the finance parties, as well as experts, advisers and insurers who all have an important part to play.

3.7 Timeline for financing an infrastructure PPP project

The image below depicts a simplified version of the different timelines for the workstreams that will be carried out on a project financing.



Conclusion

The main points to note are:

(a) The concession will be negotiated for sometimes several years and maybe even signed before the financing is arranged. The project investors and government counterparty need to be mindful of the requirements of funders when putting the concession package together.

(b) The effective dates of the various contracts should ideally align, although in some projects early works may be contracted and undertaken before the financing has been entered into.

(c) Although the O&M contract will not kick in until the end of the construction period, it will need to be signed at the same time as the other project documents to ensure that the operator is lined up and the relevant risks adequately transferred to the operator.

(d) Financial close is the date on which all the conditions of the lenders to financing have been met – these include all consents, corporate and other authorisations to be in place; all relevant documents to have been entered into; legal opinions provided; feasibility, due diligence and environmental studies to have been done and reports from the relevant experts provided, etc. Following satisfaction of these conditions, the lenders will be ready to fund.

(e) Funding will be in line with an agreed construction schedule, with payment usually being made monthly against construction invoices. The lenders' technical adviser will sign off on the progress of the works before payment will be made by the lenders. The lenders will make payments during the availability period – usually the period from financial close to expected construction completion. The lenders may want to include a "look forward test" as a condition to drawdowns – if the technical adviser certifies that the project is unlikely to complete by the longstop date (i.e., the last date by which a contractual condition(s) must be met or performed), then it will be a default under the loan agreement. They won't want to throw good money after bad. This type of test is also linked to a "funding shortfall" test – which looks at whether there is enough money to achieve construction completion – if there isn't (perhaps because of delays) the lenders will want to drawstop the loan (stop making disbursements) or call a default (unless further funding can be found).

(f) At the outset of construction, the different documents will provide for an expected completion date. It is well known that construction projects rarely run on time, so some flexibility for delays is built into the documents. However, the documents will provide for an ultimate longstop date, by which time construction must be completed. This longstop date will be different under each document. The first longstop date to occur will be under the construction contract, for example, 6 months after the expected completion date; then the loan agreement, for example, 9 months after the expected completion date and then the concession contract, for example, 12 months after the expected completion date. This gives the project company time to resolve the issues before it becomes a default under the loan agreement, and then the lenders time to resolve the issue (using any step-in rights under a direct agreement – which are discussed in section 5.2(f)) before the concession agreement is terminated.

(g) The operator's obligations will arise just before the expected completion date with a mobilisation period to get on site and prepare for completion when the project will effectively be handed over to the operator to run. There will be a period of warranty by the construction contractor when it will be obliged to return and rectify any issues with construction, after which the construction contract will terminate. A detailed interface agreement is usually entered into between the construction contractor and the operator to deal with this period and to address any issues between them, for example, who is liable for an issue and how it will be dealt with.

(h) The O&M agreement will typically continue until expiry of the concession agreement. The loan agreement will however terminate some years before that – this is to ensure that the loan is repaid while the project is still performing and that the lenders are out of the picture before any handback obligations kick in (the obligations relating to the conditions of the project assets when they are transferred back to the government at the end of the concession).

CHAPTER 4

DOCUMENTING THE TRANSACTION: ANATOMY OF A PPP CONCESSION AGREEMENT AND KEY RISK ALLOCATION ISSUES

4. DOCUMENTING THE TRANSACTION: ANATOMY OF A PPP CONCESSION AGREEMENT AND KEY RISK ALLOCATION ISSUES

The documentation of a PPP transaction is quite complex, it is necessary to first consider the anatomy of a typical PPP concession agreement, some of the key provisions found in the agreement and the issues surrounding them.

This module will look at the key provisions typically found in a PPP concession agreement in more detail, against the following headings:

(a) scope and term of a PPP concession agreement;

(b) construction period obligations;

(c) operation period obligations;

(d) payment regimes;

(e) rights of the contracting parties;

(f) supervening events;

(g) termination and compensation;

(h) liability and insurance;

(i) dispute resolution;

(j) government controls;

(k) government support obligations; and

(l) additional terms and conditions.

The key learning objectives of this module are as follows:

(a) to understand how a PPP project is documented by way of a concession agreement;

(b) to be able to identify fundamental provisions in a traditional PPP concession agreement relating to key issues such as payment regimes, risk allocation, government controls and support obligations, and the distribution of liability; and

(c) to appreciate the commercial rationale and power play between the contracting parties that underlies such provisions.

4.1 Scope and term of a PPP Concession Agreement

4.1.1 Scope

In many cases, the scope of the project will be clear in both geographical terms (outlined in a site plan) and in the scope of the obligations (in terms of the works to be delivered, and services to be performed at the completed facilities).

In some cases, however, the geographical and services scope may differ throughout the project. A common example is where the contract obliges the concessionaire to carry out off-site works (for example, improvements to local roads to facilitate greater traffic caused by the project) but where these works are not to be maintained over the longer term but handed back to municipal authorities.

In some projects there may be an expansion of the project scope. A common example would be an airport project involving the construction of a new passenger terminal. As passenger numbers rise, the contract may require a second terminal to be constructed to manage the passenger flow. Scope reductions are less common, but they are sometimes seen. One example is where a government wishes to have the option to take part of the service provision back in-house. This was done on a recent tramway project where the government wanted the flexibility to integrate the tramway operations within its wider bus operations.

4.1.2 Commencement

Since most PPP projects are dependent on private finance, the effectiveness of the concession agreement and the obligations thereunder are usually subject to a series of conditions precedent (CPs), which will typically include the achievement of all conditions for effectiveness of the finance documents, save only for the effectiveness of the concession agreement itself.

CPs may be split by responsibility; those for the concessionaire, those for the government, and those of joint responsibility. In some cases, there may be a penalty on the concessionaire if CPs within its responsibility cannot be met by a longstop date; for example, the concessionaire's bid security may be forfeited to compensate the government for the costs of the failed tender process. Occasionally there may be a penalty the other way – the government may be obliged to compensate the concessionaire for some of its wasted bid costs, but this is not universal.

4.1.3 Duration

A typical PPP contract duration is 25-30 years, as this is usually seen as an optimal time to amortise the capital cost of the project and achieve life-cycle efficiencies between construction and operation, assuming lending rates are sufficiently low and that such long-term finance is possible. In an emerging market context, these circumstances may not exist, and some projects are structured over a shorter duration. Conversely, some projects may be structured over longer periods (such as 50-year concessions), but this is less common. In some African jurisdictions, the laws and regulations which govern PPP projects set out the required duration of a PPP contract. Governments should be cautious about tying up their assets over too long a term, as this may affect their ability to make legitimate changes to their infrastructure base to reflect changes in policy or demographics. For example, in Lagos State in Nigeria, the Federal Government had issued a concession

for a domestic airport terminal, with exclusivity over domestic air traffic for over 30 years. This existing exclusivity arrangement made it difficult to develop a business case for a second international airport within the city.

When does the project duration start? Most projects operate on the basis that the project duration is inclusive of the construction works period. If the project is late then the delay will eat into the assumed operating period and this acts as a powerful incentive to ensure punctual completion.

In some cases, however, the expiry date is only measured from completion of construction (sometimes termed COD – commercial operation date). In this case, a delay to construction does not cause a reduction to the operating period, but the concessionaire will still need to meet the additional interest costs on its debt until operations do start.

Summary of key points

Scope and term of a PPP concession agreement

- The scope of a project in terms of its geographical location, the works to be delivered and the services to be performed are usually very clear. Scope expansions might occur throughout the duration of the project, for example if the contractor needs to carry out off-site works for the benefit of the project or increased demand warrants expansion.

- The concession agreement will not become effective until the conditions precedent (CPs) are satisfied. CPs may be split by responsibility: those for the concessionaire, those for the government and those of joint responsibility. Penalties may be applied if the responsible party does not achieve the CPs within the time period set.

- A representative PPP project typically has a very long term of duration to enable the capital costs of the project to be amortised. Projects may be structured over a longer or shorter period depending on the jurisdiction of the project and market conditions. The "project duration" often includes the construction period, meaning delays in construction impacts on the operating period which usually incentivises punctual completion.

4.2 Construction period obligations

4.2.1 Construction and design risk

The general principle on PPP projects is that the concessionaire designs and constructs the asset at its own cost (using external finance) to meet an agreed output specification. When the facility is complete, the operation period will start and project revenues will begin (whether from user payments or from payment of an availability fee by the government).

The government clearly has an interest in the quality of the final product. A concession agreement can therefore be expected to contain similar provisions to those found in a standard construction contract, but these are often less extensive in a PPP contract, for reasons discussed below.

4.2.2 Payment regime during construction

Firstly, a PPP contract does not usually have the same type of payment regime during the construction period as a construction contract. To the extent the concessionaire is expected to raise private finance, valuation and certification of payments for completed works are a matter to be agreed between the concessionaire, the EPC contractor and the lenders.

Some projects do involve a capital contribution from the government (for example, to meet a viability gap that cannot be secured through private funding), but in this case the government's payments are often back-ended toward the end of the construction period. To the extent that the government is required to make direct capital contributions during construction, it increases the government's risk of exposure on a termination if payment is made before the assets are fully developed and the full value not materialised.

That said, the lenders and their technical advisers may consider that they are taking a greater risk in this regard and will therefore be reviewing the works with greater scrutiny. If so, the government may be able rely on the scrutiny of this certification process rather than add a second layer of review and certification at its own cost.

4.2.3 Defects

Similarly, a typical construction contract will contain extensive design and construction warranties which can be enforced by the employer. In a PPP context, the government's guarantee of quality of the construction is usually covered by the mechanics of the payment regime during operations (namely, that deductions may be made to the extent that the quality of the project falls below specified standards at any time). Accordingly, detailed defect liability provisions may only be needed where part of the construction works are being handed over to parties outside the concession (such as traffic improvement works on neighbouring land).

4.2.4 Delay / Performance damages

The same rationale may apply to delay and performance damages. If the project is late or under-performing, the concessionaire's revenue stream will be severely delayed and, on an availability-based project, the government will not be obliged to make availability payments. This can be seen as already providing suitable motivation for the concessionaire to achieve a timely delivery.

That said, on some projects it may be merited to have delay damages in favour of the government. This might be necessary for example, on an airport project where operations are already handed over on day one and the government needs to have a suitable incentive for timely completion, or on a revenue generating project where the government had budgeted for a percentage of the expected tolls or fares to be paid back to the government as a royalty.

4.2.5 Design review process

As PPP contracts typically work on the basis of an output specification to be achieved rather than an input specification provided by the government, the final design may not be available at contract signature and will need to be developed in detail during the construction period as works

progress. The government will therefore have a keen interest in seeing how the concessionaire's final design is developed to ensure that it meets the government's understanding of what the output specification is intended to deliver. This is particularly the case with projects where functionality of the asset is key for the government users; medical professionals will have a keen interest in seeing how their operating theatres are laid out for example. In a technically complex project, the government party may want to scrutinise the technical aspects of the project carefully before the concessionaire goes too far with the design process.

4.2.6 Certification process

Given the risks undertaken by the concessionaire and its lenders, and the significance of the completion date for the commencement of the revenue stream, it would be very unusual to see a PPP project that did not provide for certification to be undertaken by a neutral third party. The "independent engineer" or "independent certifier" would normally be appointed jointly by the government and concessionaire, and would owe a duty of care to all parties. The rationale for this is that, in the absence of a third-party certifier, a dispute could arise between the government and concessionaire as to whether completion had occurred, the concessionaire would likely be insolvent before the tribunal reaches a decision, and even a positive decision would be too late at that point.

Summary of key points

Construction period obligations

- The concessionaire is responsible for designing and constructing the asset at its own costs, it must ensure that it meets the output specification set out in the concession agreement. If the concessionaire needs to raise private finance during this construction period, valuation and certification of payments for completed works must be agreed between the concessionaire, the EPC contractor and the lenders. Any capital contributions from the government usually occur at the end of the construction period to reduce the risk that the project will terminate early before the asset reaches its full value and operation and the government will suffer a loss.

- In terms of defects, the government's guarantee of quality of the construction is usually covered in the mechanics of the payment regime during the operation of the project – deductions will be made if the quality of the project falls below a specified standard.

- Similarly, if a project is delayed or under-performing, this will impact on the concessionaire's revenue stream which will be delayed or reduced in the case of an availability project.

- The final design of a project is not usually available when the contracts are signed, so the government will continuously review the ongoing development of the design by the concessionaire to ensure that it will meet the output specification as agreed in the concession agreement.

- After the project has been constructed and the revenue stream is due to commence, an independent third party usually carries out a certification process that is neutral and owes a duty of care to both parties to determine whether completion has occurred.

4.3 Operation period obligations

The operational period will usually only begin after certification has taken place and there has been confirmation that the project meets the construction requirements set out in the contract. As noted previously, the operational scope of services may be different to the scope of the works.

4.3.1 Nature of service

In many PPP contracts the services are measured against an output specification, rather than an input specification. An output specification describes the outputs (end goals) that the government wishes to achieve (e.g. a facility with a certain number of available rooms with agreed environmental characteristics, and with equipment suitable to meet certain operational functions), whereas an input specification would specify in detail what services the concessionaire should provide (e.g. to provide a daily cleaning service or security service for a certain number of hours).

An output specification allows more flexibility to the private sector to propose different solutions to meet the desired end-goals of the government.

The consequences of non-performance are discussed in section 4.4 "Payment Regimes" below.

4.3.2 Interface with users

If the government's staff are the principal users of the facility (e.g. medical staff in a hospital, government employees in a government accommodation contract etc.) then the service specification will need to include provisions that deal with responsiveness to service requests. Many such projects operate a "help desk" system that logs calls and requires the concessionaire to attend to these within a certain timescale to avoid performance penalties.

Where the users include members of the public outside the direct control of the government, such as patients in a hospital, pupils in a school, or passengers on a metro system, the position may be more finely balanced. If damage is caused, for example, it may be reasonable for the concessionaire to manage this through insurance. If persistent damage is a risk (e.g. vandalism or graffiti where the facilities are by their nature open to trespassers), then this may need to be a shared risk if the risk cannot be financially predicated or managed out through innovative design solutions (such as vandalism-proof trains).

4.3.3 Transfer of employees

Some projects will involve a transfer of existing employees. In some countries there are mandatory laws about protection of employment when an "undertaking" is transferred from one entity to another. Even if such rules do not exist, the government may also wish to ensure – for public accountability purposes – that the transferring staff are treated appropriately when transferring to the private sector and do not find their public sector benefits eroded (public sector pension benefits being a common example). Conversely, the government may wish to ensure that a "two tier" workforce is not created, such that any benefits agreed with the remaining public sector staff for the same service are also honoured by the concessionaire after they are transferred to private sector employment.

It may be inevitable on a termination or expiry of the project that the same body of staff will re-transfer to the public sector. If so the government would seek to ensure that appropriate indemnities are put in place regarding outstanding claims or pension deficits that may transfer with the employees.

In a privatisation context, it may be that retrenchment (redundancy) of staff is an unfortunate necessity in order for the business to be economically viable. If so, this risk will need to be addressed explicitly in the contract to avoid disputes and reputational problems. On the Rift Valley Railway project in Kenya and Uganda, part of the cost of retrenchment of excess staff was covered through World Bank grant funding; presumably without this assistance the project would not have been affordable for the private sector.

4.3.4 Benchmarking and market testing

If labour costs make up a high proportion of the operational cost of the project, and the project is structured on an availability-fee basis (such that costs cannot be recovered through increased user prices), it may not be cost effective to ask the concessionaire to price the risk of labour cost increases over the full concession period because labour costs can often be more volatile than general inflation.

The concept of benchmarking is a mechanism whereby labour prices are compared to the market periodically (e.g. every 5 years) so that the government can be assured that the price being paid for that service is in line with the market. If the parties cannot agree on the benchmarked price for the next period then the government may call for individual services to be market tested – i.e. put out to tender (but still engaged by the concessionaire or its operating sub-contractor). The mechanism acts as a convenient hedge for both private and public sector risks as the risks are reset every five years.

4.3.5 Handback requirements

At the end of the operational term, the concessionaire's principal asset – the concession agreement – will cease to exist and the concessionaire will no longer have an income, and the shareholders will no doubt wish to wind it up as soon as they can and recover any residual money left in its accounts. As such, if the government wishes to specify any requirements for the condition of the assets on their handback at the end of the concession, such as a minimum residual value or life for certain assets, it cannot rely on the covenant of the concessionaire after the expiry date to meet these requirements.

Accordingly, the government must inspect the assets at some point before expiry (24 months is common, but periods up to 60 months or more are also seen) to assess whether any rectification work is necessary before the handback date. If so, then the government has the option of reserving funds otherwise due from the concessionaire and/or requiring it to put up some performance security against these liabilities. When the rectification works are complete, the funds or security are released back to the concessionaire.

Summary of key points

Operation period obligations

• The nature and quality of the service provided is measured against an output specification which describes the end goal that the government wishes to achieve. There is usually a distinction between the users of the facility: if they are the government's staff, then the service specification must include provisions that measure the responsiveness of the concessionaire to service requests; if the public are users of the project, then damage or issues caused in the services provided are sometimes outside of the control of the government, so it is a shared risk.

• If existing employees are transferred for the project, the government will want to ensure that: EU laws relating to such a transfer are complied with; the staff transferring from the public to the private sector are treated appropriately and retain their public sector benefits; and a "two-tier" work force is not created.

• Benchmarking is often used to compare labour prices to the market on a periodic basis (usually every 5 years) to reassure the government that the price paid for the services is in line with the market. If the parties cannot agree on the benchmarked price for the next period then the government may call for the service to be market tested.

• When the concession agreement terminates, the asset will be transferred back to the government. It may wish to specify "handback" requirements relating to the condition of the assets (e.g. that there is a minimum residual value or life left in the asset). The government will also inspect the assets prior to the expiry of the concession agreement to discuss whether any rectification work is necessary before the handback date, the financing of these rectification works can then be discussed between the parties.

4.4 Payment regimes

4.4.1 Demand / Revenue risk projects (Concession / user-pays PPPs)

In revenue-generating projects where the concessionaire takes demand risk, such as toll roads, ports or airports, the concessionaire takes advantage of the licence given to it to raise revenue from project users directly. Such PPP projects may be referred to as concessions or "user-pays PPPs".

In some cases, prices are likely to be governed by simple market forces, such as electricity offtake on a waste-to-energy project or car parking charges in an airport.

In many cases, however, the government may want to retain a level of tariff control. It is often the case that government-run projects are being run at a subsidy rather than with realistic levies and, when the private sector is introduced into the project, then unless the subsidy continues, they will need to raise prices to the real cost of delivering and maintaining the assets. Therefore, the government may want to introduce a slow increase in prices. Even if an immediate sharp rise is not expected, governments would still want to maintain control over tariffs over time to avoid profiteering from a monopoly or strong market position.

Constraints can therefore be introduced through regulation (and ideally the regulator setting the price will be independent from the procuring government) or through the PPP contract itself. The concessionaire, for its part, may be concerned that the regulator may have the power to impose price caps that prevent it from recovering all of its operating and financing costs or from recovering its anticipated return. If so, the contract may need to provide a safety net for the concessionaire by way of a financial adjustment in the concessionaire's favour. In West African port projects, for example, there have been arrangements whereby the PPP contract sets out an expectation of a minimum level of inflationary increase that the concessionaire is entitled to charge, based on what it anticipates it will need to match its outgoings over time.

Where the project is a net revenue-generator (after allowing for all project costs and funding costs) then the government may expect to receive a share of the profits. Some projects are structured on a share-of-gross-revenue basis so that the government still receives a payment even if the project is unprofitable. The structure of the project will be a function of the economics of the project and the state of the market at the time. Port and airport projects can be expected to sit in this category.

It is also possible for projects to have an issue with **excessive** demand. For example, one healthcare PPP project was structured on the basis of the concessionaire owning the demand risk (i.e. payment per patient procedure). However, payments were not made directly by the patients, but rather by the government. The new healthcare facilities proved much more popular than the existing, outdated facilities and the government found itself having to pay much higher treatment costs to the concessionaire than expected, creating a budgetary problem. Similar problems have happened where the government has agreed to provide a subsidy if demand falls below a certain level, and then found that actual demand fell far below the baseline, creating a major budgetary issue.

4.4.2 Availability-based projects

On an availability-based scheme (e.g. government accommodation, public hospital, public schools, public highways with no tolling, etc.) - the concessionaire will be paid a fee (here referred to as an **availability fee**, although many different terms are used) for the successful delivery and management of serviced accommodation. In other words, does the accommodation itself meet the availability requirements, and do the services provided within it also meet the service requirements? The concessionaire will often be penalised for poor performance of services on a "no service, no fee" basis, the principle being that a complete lack of service should result in zero fees.

Since poor service may affect the concessionaire's ability to service its debt, the lenders will be strongly motivated – usually through due diligence over the construction process and also over the methods of delivery of services – to ensure that 100% service delivery can be obtained. This is the essence of project finance risk in an availability-based PPP project.

Some projects are structured in a way that is more protective where only a maximum amount of the availability fee is put at risk. This includes some African road projects structured in this way. Whilst this can assist with a value for money pricing of the risk component of the deal, the government and its advisers would need to look closely at some disaster scenarios to ensure that the lenders and sponsors still remained sufficiently motivated to deliver performance.

The concessionaire and lenders will usually be keen to ensure that the "no service, no fee" mecha-

nism operates as a sole remedy mechanism, such that the government cannot use the same breach of contract to make financial deductions and also sue for general damages for breach of contract. This is often accepted on projects; however, the government should ensure that in doing so it does not create a mechanism whereby it is cheaper for the private sector to accept the stated deductions rather than actually provide the service. The simplest way of dealing with this kind of "deliberate breach" is to apply a "ratchet mechanism" which increases the financial deductions for repeated or persistent breaches under a carefully calculated formula. Alternatively, the project could provide that breaches with no financial penalties can lead toward termination if they are sufficiently repeated or persistent.

In some projects, particularly those with complex technological solutions, it may be appropriate to allow the concessionaire some latitude in the early months of service delivery as services are "bedded in". This can be achieved by including a "ramp up" provision in the payment mechanism, with lower deduction levels applying in the early months of operations.

Summary of key points

Payment regimes

For <u>demand / revenue risk projects</u>

- The concessionaire takes demand risk and raises its revenue from project users directly; it can determine the prices to charge service users however the government will often want to retain some control over the tariff because it is likely that the government-run project was previously subsidised and so prices will be increased when the project is transferred to the private sector to account for the real cost of delivering the service and maintaining the asset.

- Constraints on prices are often introduced via regulation by an independent body or through the PPP contract itself.

- If the project generates net revenue (after deducting project and funding costs), depending on the structure of the project, the government may receive a share of the profits.

For <u>availability-based projects</u>

- The concessionaire receives a payment based on the availability of the facility and successful delivery of services. It can face penalties and deductions for poor performance of services, which limits the concessionaire's ability to repay its debt. Therefore, lenders often want to ensure that 100% service delivery can be obtained. Although sometimes there is a limit placed on the amount of the availability fee that can be put at risk.

- Lenders will aim to ensure that the "no service, no fee" mechanism operates as a sole remedy mechanism (i.e. to prevent the government from using the same breach of

contract to make financial deductions and also sue for general damages for breach of contract).

• If projects are highly technical and dependent on technology, there is sometimes a "bedding in" period which allows the concessionaire some flexibility at the start of the project when deductions will not be made to the availability fee.

4.5 Rights of the Contracting Parties

In most PPP projects, the intention is that the PPP contract (concession agreement) sets out the key rights, obligations and liabilities of the contracting parties, however it should be noted that in some jurisdictions – particularly civil law jurisdictions – both the public authority and the concessionaire may enjoy certain rights which sit outside of the contract, and this needs to be considered carefully when structuring the PPP contract terms.

For example, at law, the public authority may benefit from the following rights:

• right to terminate the contract;

• right to modify the contract to adapt the service in a way that is in the best interests of the public;

• right to impose other enforcement methods in case of a breach of fundamental obligations by the concessionaire (for example: right to automatic use of assets and human resources of the private party in case substantial default in the performance of the public service).

Contrastingly, at law, the concessionaire might benefit from the following rights:

• right to fair compensation when the public authority exercises sovereign rights for general interest;

• right to adequate compensation in the case of an unforeseen event *("sujétions imprévues")*;

• right to restore the contract equilibrium in case of an unexpected event ("hardship"), for example when, after contract signature, the economic circumstances change substantially and have a detrimental impact on the economic and financial equilibrium of the partnership; and

• right to indemnity when a sovereign act increases the concessionaire's obligations above a certain threshold and that such action is not reasonably foreseeable (if the private sector entity is not in default).

Where such rights exist and do override (or augment) the contractual rights and obligations under the contract, it will be important for these to be well understood by both parties so that the right balance of risk is achieved for the project as a whole. Solutions taken from common law jurisdic-

tion contracts may not be fully appropriate in civil law jurisdiction contracts, and vice versa.

4.6 Supervening events

There are certain events which are beyond the contractor's control. PPP contracts often divide these into the following categories:

- Compensation events / political force majeure;
- Relief event / non-political force majeure;
- Excusing causes;
- Changes; and
- Changes in law / stabilisation provisions.

This section addresses each category in turn.

4.6.1 Compensation events / political force majeure

These events give the contractor full relief (in time and money) which will put it in a "no better, no worse" position. These events will usually consist of government breaches (or other events solely within the government's control) and any other events that the private sector is unable or unwilling to "price for" when bidding for the project.

These events might include the existence of latent defects in existing assets which the concessionaire is obliged to take over, or the provision of government warranties as to ground risks (such as contamination and the discovery of archaeological remains) that may be very difficult to identify or verify from surveys before contract signature. This might also include risks which the government is better placed to manage, such as the obtaining of certain approvals (e.g. planning) or "political" events for which the government is entirely responsible, such as expropriation of assets or imposition of capital controls.

Overall, such events may sometimes be termed "Political Force Majeure" or "Material Adverse Government Action", but ultimately it is the stated contractual remedy that defines the relief, rather than the title.

While the government may be motivated to transfer as much risk to the private sector as possible (after all, privatised businesses have to manage a broad range of risks), it may not be within the government's best interest to overload the concessionaire with risks which it cannot manage – and which could ultimately cause it to go insolvent. For example, some rail projects (Kenya, South Africa) have been badly affected by damage to the lines, either through political violence (Kenya) or theft (South Africa). Since government ultimately has responsibility for public order, and may be better placed to enforce this directly (through the use of security services) or divert funds when required to ensure that additional security services can be hired in. A similar approach has been taken on one road project in an African jurisdiction bordering a country with persistent terrorist threats.

4.6.2 Relief event / non-political force majeure events

This refers to events which provide the contractor with relief from breach or termination, and typically they do not allow for any financial compensation to be received and, on availability-based projects, the contractor will usually not receive any relief from availability deductions that may be levied as a result of non-provision of the service. A relief event or force majeure list may be open-ended and non-exclusive, or it may be a prescribed list of no-fault events. These usually include events such as natural disasters, fire, accidental damage and strikes.

Where physical damage is caused, these events are likely to be insured by the concessionaire and therefore business interruption insurance should be available to cover the subsequent loss of revenue. It is for this reason that these events typically do not attract compensation from the government. Alternatively, the risk may be able to be passed to suppliers, although it would be included in the price of the contract and this may not present value for money.

However, even if insurance is available it is usually limited in time. Where insurance is not available (such as for non-damage events like labour strikes), the government may expect the concessionaire to bear this risk to some degree and lenders may therefore require the concessionaire to put in place a debt service reserve account to manage the risk. Six months debt service coverage would be common. If the force majeure continues beyond this and the project remains uneconomic, then lenders can no longer manage the risk and, for this reason, most PPP contracts will provide for a no-fault termination to occur.

4.6.3 Excusing causes

In an availability-based project, the concessionaire may not require positive compensation, but it may simply wish to have its availability fee protected from the occurrence of certain events. These events may be very similar to those discussed above but in this context they are often termed "excusing causes". The list may include additional events which sit below the insurance claim threshold, but which should not be treated as penalising the contractor, e.g. extreme weather.

An alternative approach to creating a long list of protections is to ensure that the performance mechanism acknowledges that a certain element of disruption within the project is inevitable. For example, a light rail project may seek a reliability threshold of 98% rather than an unrealistic 100%; this would allow a 2% buffer for day-to-day problems that are unlikely to be endemic or long-lasting, such as passenger emergencies, electrical faults or adverse weather conditions.

4.6.4 Changes

Given the long duration of a typical PPP contract, it is inevitable that there may be a need for the government to change its requirements and the PPP contract should facilitate that, as long as the concessionaire is kept in a "no better, no worse" position.

That said, it is fair to have some limits on the nature of such changes and lenders will often insist on this as a bankability issue. For example, they may wish to veto any change that would require the concessionaire to materially change its risk profile, which may include a variation to increase the size of the project by a material amount. Similarly, the concessionaire should not be required

to carry out a change that may be impossible to implement or which would cause it to breach legislation.

The outcome of the change procedure is that the concessionaire should be compensated for the change, either through direct payment or by adjusting the revenue-sharing mechanism under the contract. It may also be fair to require the concessionaire to use reasonable endeavours to find additional external funding, as long as the revenue stream from the project can bear this.

The concessionaire may have the right to propose changes itself, but typically the government will be under no obligation to consent to these changes unless the change is necessary in order to comply with a change in law and there is no cost increase to the government. The government may consider requiring a share in savings made as a condition of giving consent.

4.6.5 Changes in law / stabilisation provisions

PPP contracts often make distinctions between the following categories of "changes in law":

- Discriminatory changes in law (discriminatory against the concessionaire or similar concessionaires);
- Specific changes in law (specific to the respective project's sector as opposed to other sectors); and
- General changes in law (all other changes in law).

Discriminatory and specific changes in law are invariably treated like "change orders", so as to leave the concessionaire in a "no better, no worse" position. This is fair as it is difficult to see how the concessionaire could meaningfully predict and price against such changes.

For general changes in law, practice differs. If the change in law affects the market as a whole then inflationary increases to tariffs or availability fees may cover the risk, or the concessionaire may have flexibility within the tariff structure to make non-inflationary adjustments. In these cases, the concessionaire may be able to manage its risk. In some jurisdictions, the governments give protection against general changes in law which require new capital expenditure on the grounds that such changes are difficult to predict and could create significant costs.

Predictability of changes in law may also affect the risk allocation. In a country with a transparent law-making process, it may be fair to require the concessionaire to take the risk of change in law during the construction phase on the basis that it is well-placed to see what changes in law are likely to come into force during that period. In an emerging market context however, this is probably not a realistic risk allocation and the concessionaire may expect to be protected against changes in law that occur after the bid date.

If the law is changed in such a way that the performance of the project has become impossible, it would be reasonable to require the government to issue a "change order" to adjust the scope and make it feasible again. If it does not, it would be reasonable for the concessionaire to have the right to terminate the project and seek compensation.

Summary of key points

Supervening events

Certain events are beyond the contractor's control and so the PPP contracts divide them into the following categories:

- **Compensation events / political force majeure** – the contractor obtains full relief (in time and money) and it will be put in a "no better, no worse" position. Such events tend to consist of government breaches, events which are the responsibility of the government (e.g. imposition of capital controls) and could also include situations where there are latent defects in existing assets or warranties as to ground risks that cannot be verified from surveys.

- **Relief event / non-political force majeure** – the contractor obtains relief from termination but cannot receive financial compensation. A force-majeure list may be open-ended, or it may constitute a prescribed list of no-fault events (including natural disasters, fires, strikes etc.) If physical damage is caused, these events are likely to be insured by the concessionaire and business interruption insurance is usually available to cover revenue loss. If insurance is not available, the concessionaire might have to bear the risk and the lenders might require a debt service reserve account to be set up to manage this risk (six months debt service coverage is common).

- **Excusing causes** – these may be events that are similar to those discussed above, but they are given a different name. The concessionaire may not desire compensation but may wish to have its availability fee protected from such events.

- **Changes** – due to the long duration of a PPP contract, the government's requirements may change over time. The PPP contract should permit this provided the concessionaire is kept in a "no better, no worse" position. Some limits might be placed on the changes permitted, for example if it affects the bankability of the project. The concessionaire should be compensated for the change, usually (through direct payment or adjusting the revenue-sharing mechanism under the contract. The oncessionaire may have the right to propose changes itself, but the government is not obliged to consent to the changes unless it is necessary to comply with a change in law and there is no cost increase to the government.

- **Changes in law / stabilisation** – if the changes in law are discriminatory against the concessionaire, then the concessionaire must be kept in a "no better, no worse" position. If the changes in law are general then practice differs, if it affects the whole market then the concessionaire may have the flexibility within the tariff or availability fee structure to manage its risk. If the law is changed in such a way that the performance of the project has become impossible, the government might be required to issue a "change order" to adjust the scope and make it feasible again. If it does not, the concessionaire can terminate the project and seek compensation.

4.7 Termination and compensation

4.7.1 Routes to termination

In a PPP project, the fundamental asset of the concessionaire is the concession agreement itself because without this the concessionaire has no inherent right to receive a revenue stream from the project. Normally , the underlying assets are the property of the government, and even where a lease is granted it is common for the lease to be co-terminous with the concession agreement.

Therefore, on a termination of the concession agreement, for whatever reason, the concessionaire's and the lenders' investment will be at risk, except to the extent that the concession agreement provides for compensation. Even when compensation is payable, enforcement and recovery of these sums (which may be substantial) will be unlikely to be a straightforward process so it is important that the routes to termination are clear, fair and manageable. As a consequence, PPP contracts typically provide that termination may only occur on express grounds, such as specific events of default of each party, or extended no-fault events beyond the control of either party, such as force majeure events.

There will typically be more concessionaire default events than government default events as the concessionaire holds the majority of the obligations under the agreement. Typical default events would include:

- failing to complete construction within the agreed construction period plus a suitable longstop date (6-12 months being common);
- abandoning the works or services for a specific period of time;
- failing to comply with critical obligations, such as the provision of project insurance or performance security;
- persistently substandard operational performance beyond certain thresholds; and
- committing acts of bribery or corruption (and if carried out at sub-contract level, failing to remove the tainted sub-contractor from the transaction).

Some projects have many more default events and sometimes these are cast more loosely such as "material breach" by the concessionaire. The greater the number of events, and the more loosely they are drafted, the more difficult it is for the concessionaire to assess and manage its risk profile.

This could affect the bankability assessment of the project during bid stage and delay financial close or even impact on the quality of bids received.

Government default events may be very few:

- failure to pay a specified amount beyond a specified period;
- interference that renders the project impossible (such as expropriation of assets); and

- a reorganisation or transfer of responsibilities that affects the procuring government's ability to meet its obligations.

As previously mentioned, force majeure events may lead to a right of termination if the event substantially prevents performance for a material amount of time such that the project has become uneconomic and the parties cannot agree an alternative way around it.

Other routes to termination may include passing an adverse change in law that renders the project impossible (typically treated as government default) or where the government retains the risk to terminate the project for public convenience (which is also treated as a government default for compensation purposes). Lack of available insurance (commonly referred to as "uninsurability") can sometimes lead to the project being seen as impossible to run and may lead to a no-fault / force majeure termination.

4.7.2 Compensation on termination

On the termination of a PPP project, the concessionaire's revenue stream comes to an end and the concessionaire, its shareholders, its lenders and its sub-contractors and suppliers will incur various losses ***unless otherwise compensated:***

- the lenders will lose their unamortised debt and may also incur breakage costs as financial instruments such as interest rates and currency swaps are unwound;

- the equity investors will lose their unamortised equity, as well as the future return they expected to make if the project had gone to term;

- the concessionaire and its sub-contractors may have redundancy costs in respect of staff who can no longer be employed on the project; and

- the sub-contractors may have costs of demobilisation and of early termination of supply contracts, as well as the loss of profit they expected to make on their contracts.

What losses are compensated will depend on the respective fault of the parties.

In a government default termination (or a circumstance treated like a government default, such as termination for public convenience), the concessionaire would expect full compensation for all such losses. It is very common for the heads of loss to be set out in the manner just described. Another approach that is seen is to compensate the concessionaire for the "fair value" of the project, i.e. what would an ideal purchaser pay to take over the concessionaire's position in an open-market tender based on the state of the project prior to termination. This approach may be more appropriate where the concessionaire had accepted market risk because it will reflect the market's expectation of the true profitability of the project going forward rather than the forecast profitability at the date of contract signature.

In a force majeure termination (or any other no-fault termination), the shareholders and lenders will typically expect to get back their basic investment, i.e. outstanding debt and equity. In the case of equity, credit will usually be given for equity distributions already received. In some jurisdic-

tions, unavoidable redundancy costs and sub-contractor breakage costs may also be payable, but the general principle is that no loss of future profit is payable. Another approach that is sometimes seen, alongside the "fair value" assessment described above, is for compensation to be based on "book value" of the assets, i.e. their depreciated cost over time in the books of the concessionaire.

This may achieve a similar result but will need careful accountancy advice in the context of each project.

In a concessionaire default termination, the position is more complex. In a standard commercial contract, it is normally the case that the defaulting party pays compensation. However, in a PPP contract this approach would leave the government with a windfall gain as it would be handed back the underlying asset for free without any debt attached. Typically, therefore, compensation is paid to the outgoing concessionaire to reflect the value transferred, but with a suitable adjustment to act as a disincentive.

In certain developed markets with a high project pipeline (such as the U.K. and Canada), where it is presumed that there is a liquid market for willing bidders to take over failed projects, the government may adopt a re-tender approach. The remainder of the concession contract is put out to tender (ignoring the default that led to termination) and the price paid by the highest bidder is then paid over by the government to the outgoing concessionaire. The theory is that the price paid should be a reflection of the net present value of the future income stream available under the project up to expiry, less a suitable allowance for rectification and uncertainty risk.

In other markets this approach has not been followed and would likely not be bankable. A very common approach is for the government to be obliged to pay out just the senior debt (or a percentage of senior debt), or for the government to assume the debt obligations directly. Unamortised equity would be lost and the concessionaire would be liable for any other breakage costs suffered by employees or the supply chain. The lenders will typically have first-ranking security over any such senior debt payment.

It is, perhaps surprisingly, common for infrastructure projects in emerging markets to be structured around a pay-out of 100% of senior debt in a concessionaire default scenario. With this being the case, it raises the question of whether the lenders are actually taking any project risk? In fact, lenders do not see the 100% underwrite by the government as a panacea. They know that it can be difficult and time-consuming to recover such debts from the government and there is a strong preference for the project not to reach such a point.

That said, there is a trend for infrastructure projects to be structured with a lower underwrite of senior debt, and many projects have closed with a floor value of 80%-95% of senior debt, and sometimes less. Within Africa, there have not been many of such projects. However, Kenya has been attempting to seek such a position in recent projects, which may represent the start of a trend. In these situations, the lenders will be more at risk and can be expected to impose stricter terms on the concessionaire, the shareholders and the sub-contractors to ensure the success of the project.

4.7.3 Lenders' direct agreement

Since a concessionaire default termination presents a risk for lenders, they will want to minimise the risk of this occurring. Lenders will typically insist on a direct agreement with the government

to help in this regard.

The lenders' key rights in a direct agreement will be as follows:

- an acknowledgement of the lenders' security over the concessionaire's contracts (ensuring no other party has competing rights);

- a right to be notified of any potential default and a "breathing space" before the government can exercise a right of termination (allowing the lenders to have some time to understand the issue and potentially take action before the termination arises);

- a right to appoint a representative to step in and manage the concessionaire's affairs (to put the termination on hold while the lenders consider their long-term options); and

- a right to substitute the concessionaire with a new project vehicle (if the lenders are able to find a suitable replacement contractor willing to take over the debt at the expense of the original equity).

Summary of key points

Routes to termination

- The underlying asset in a PPP project is the property of the government, and so the concessionaire's and the lenders' investment will be at risk if the concession agreement is terminated.

- PPP contracts typically restrict termination to specific events of default of either party (e.g. the *concessionaires* failure to complete construction within the agreed period, persistent substandard operational performance, committing acts of bribery or corruption, or the *government's* failure to pay specified amounts beyond a specific period, interference that renders the project impossible to achieve, etc.) or extended no-fault events beyond the control of either party (e.g. force majeure events)

- Other routes to termination include: the passing of an adverse change in law which makes the project unviable, termination of the project by the government for public convenience, lack of available insurance, etc.

Compensation on termination

- When a PPP project is terminated, the incoming revenue from the project stops meaning the concessionaire, its shareholders, its lenders, its sub-contractors and its suppliers incur various losses. The level of compensation for these losses and the way that the total amount owed will be calculated will depend on the respective fault of the parties.

Lenders' direct agreement

- This is a contractual agreement between the lenders and the government to minimise the risk of a concessionaire-default termination.

- The direct agreement acknowledges the lenders' security rights over the concessionaire's contracts; grants the lenders a right to be notified of any potential default or "breathing space" before the government exercises its right of termination; grants the lenders a right to appoint a representative to step in on behalf of the concessionaire and a right to substitute the concessionaire.

4.8 Liability and insurance

4.8.1 Liabilities and indemnities

The concessionaire is expected to assume broad responsibility for the majority of contract risks relating to its project activities. To achieve this, broad indemnities are usually given to keep the government protected from harm from the impact of death, personal injury, property damage and third-party claims arising from the carrying out of the project. These are not normally contingent on proof of breach or negligence, but merely that they were caused by the project activities themselves. This may seem harsh, but it reflects the intent that the concessionaire should take all risks similar to private ownership when in full control of the facility.

These indemnities are often structured on an uncapped basis and, in practice, the majority of such risks will be covered by standard insurance policies, but there can be a strong push for uninsured risks to be the subject of a financial cap to avoid the concessionaire being put at risk of insolvency.

"Injurious affection" is the term used to describe land being made less valuable as a result of construction activities, and it is sometimes termed more broadly to describe the risk of third parties bringing claims for interference with business as a result of the carrying out of the project. If the development of the project is likely to have such an unavoidable impact for which compensation can be claimed, it may not be fair to pass the risk of such third party claims on to the concessionaire, in which case any broadly-drafted indemnity provisions may need to be limited in this regard.

4.8.2 Insurance

The PPP concessionaire is typically obliged to maintain:

- "construction all risks" or "material damage" insurance for the full reinstatement value of the project assets during construction and operation; and

- third party liability insurance for a specified level of cover.

The concessionaire is usually also obliged (and would wish) to maintain "advance loss of profits" or "business interruption" cover to protect it against loss of revenue due to any insured events arising under the material damage insurance.

The contract is likely to make assumptions about the existence of such insurance. If the concessio-

naire has business interruption cover then it does not need contractual revenue protection from the government. The lenders will likely be indifferent as to who bears the risk (which could also be covered through a reserve account held by the concessionaire in a controlled account), but the lenders will expect the issue to be properly considered in order for the project to be bankable.

As the underlying or reversionary owner of the project assets, the government has an interest in making sure that the insurances are used properly to retain the assets and it may sensibly call for all material damage proceeds to be paid into a jointly controlled account. Proceeds will only be paid out of the account to fund a reinstatement programme agreed with the government. This prevents the lenders from taking the money and "heading for the hills" (i.e. paying off their debt and leaving the concessionaire in default).

The concessionaire takes the principal risk in relation to the cost of insurance premiums throughout the contract period, but in many developed countries PPP contracts contain a risk sharing mechanism which protects the concessionaire against excessive market fluctuations. This is a basic risk trade-off, if the government pushes more risk onto the private sector then they will simply price the risk and the cost of this will be taken into account when calculating the cost of the project.

If insurance terms become unavailable (either generally in the market, or because they are generally seen as unaffordable by the market) then this presents a problem for the concessionaire. Faced with the lack of a key insurance term, a prudent board of directors may conclude that the project can no longer be operated legally or safely, which would be problematic for the concessionaire as it would be put in breach of the concession agreement. In some jurisdictions this is addressed by passing the risk of uninsurability back to the government who has the option to take on the risk itself (self-insure) or terminate (as if an extended force majeure has occurred).

Summary of key points

Liabilities and insurance

- The concessionaire assumes broad responsibility for risks relating to its project activities; therefore, it gives broad indemnities to protect the government from claims relating to death, personal injury, property damage, third party claims etc. Such indemnities are often uncapped but these are usually covered by standard insurance policies.

- The concessionaire is usually obliged to maintain two types of insurance: "material damage" insurance for the full reinstatement value of the project assets during construction and operation, and third-party liability insurance. It is also common to see "business interruption" insurance taken out which will cover any loss of revenue suffered if an insured event arises.

- As the reversionary owner of the project assets, the government will want the insurances to be used properly to maintain the assets, it may also require all material damage proceeds to be paid into a jointly controlled account, out of which payments can be made to reinstate the assets as agreed by the government.

- The concessionaire is responsible for the cost of insurance premiums throughout the contract period, but sometimes a risk-sharing mechanism is included in the PPP contract to protect the concessionaire against market fluctuations. If insurance terms become unavailable, it may be decided that the project cannot be operated legally or safely and so the concessionaire would be in breach of the concession agreement.

4.9 Dispute resolution

The hallmark of a PPP contract compared to most other contracts is the long project duration. If the project is to be a success, the parties need to have a means of resolving disputes that will not destroy the working relationship them. Unfortunately, dispute resolution procedures such as arbitration and litigation tend to create very formal, adverse relationships between the parties, and they are also time-consuming and expensive to conduct. This can also take up a lot of management time on both sides.

For this reason, PPP contracts tend to adopt a tiered dispute resolution approach, to maximise the opportunity for speedy, cost effective resolution of disputes.

4.9.1 Escalation to management

Many PPP contracts mandate that disputes should first be escalated to a more senior management level for discussion for a minimum period of time before it can be escalated contractually. Bringing new personalities into the discussion, who may be able to take an overview of the wider project, can often be a way of unlocking a disagreement.

4.9.2 Mediation

Mediation is a consensual process by which the parties agree to appoint a neutral third party to mediate and act as a "go-between" in order to help the parties find a solution. Each party puts their position forward and the mediator speaks to each party in turn in confidence. By doing so, the mediator may be able to unlock sticking points and help the parties find a consensual solution, which may involve commercial trade-offs that a formal dispute resolution tribunal would not be permitted to do. By contrast to arbitration and/or litigation, the costs of conducting a mediation hearing are relatively low.

4.9.3 Adjudication / Expert determination/ Fast track DRP

These are different terms which relate to similar concepts. The idea is that some disputes (particularly technical disputes or single-issue disputes) may be well-suited to an abbreviated form of dispute resolution in front of a suitable independent expert. A typical "fast track" procedure may allow for disputes to be determined within a matter of a few weeks. The procedures normally provide that such decisions can be fully re-opened in litigation or arbitration if so required, but evidence shows that in many cases parties are content to live with the decisions reached having had their "day in court".

4.9.4 Litigation / Arbitration

This is the default dispute resolution forum. Hopefully, if the parties have followed the preceding dispute resolution options discussed above then they may not need to escalate the dispute this far.

In PPP contracts in emerging markets, international arbitration procedures in a neutral judicial seat tend to be the norm because investors and lenders will take more comfort where the process is being run by an established institution (or by arbitrators appointed by an established body) and where the rules governing the arbitration process are well understood and capable of being upheld by national courts with a suitable reputation.

4.9.5 Enforcement issues

The issue of an award does not guarantee immediate payment. Where compensation is sought, each party needs to consider where the assets of the other party are located and how enforcement might be sought.

In the case of an award against a government entity, enforcement may essentially become a political issue because the courts will generally not permit enforcement against government assets. In this case the investors and lenders may need to consider what other protections are available to them, which is discussed later.

A good example of an enforcement problem is the MM2 Domestic Terminal concession at Lagos Airport in Nigeria. The concession agreement contained a guarantee that the federal government would ensure that all domestic traffic in Lagos would go through the newly built domestic terminal, and that it would not build any competing terminals. The federal government however allowed the upgrade of a competing domestic terminal at the airport causing loss to the concessionaire. The concessionaire raised a breach of contract claim in the courts and was upheld, the court awarding not only payment of lost income but also transfer of the competing terminal. Despite receiving such an award, the concessionaire was unable to enforce it, because (among other reasons) the defendant was the federal government and it is not possible to enforce judgment against federally-owned assets. This situation may have been different if the project had also had an international investor with political risk insurance, or a multilateral lender with some political leverage over the federal government.

Summary of key points

Dispute resolution

- PPP projects often have a very long duration and so the PPP contract must provide for effective dispute resolution (DR) mechanisms to retain the parties' working relationships.

- Disputes are initially escalated to a more senior management level for discussion because they can take a wider view on matters before contractual DR mechanisms are triggered.

• A mediator can be instructed to act as a neutral third party to help the parties resolve any issues and come to a consensual solution, preserving the parties' working relationship. The costs of a mediation hearing are relatively low.

• Disputes that are technical in nature or relate to a single issue could be addressed by an independent expert by way of an adjudication or expert determination. The final decision is open to appeal by way of litigation or arbitration, but most parties accept the decision on the basis that they have had their "day in court".

• Litigation or arbitration should be the last resort, but the process usually takes place in a neutral judicial seat by an established institution (or an arbitrator appointed by a professional body) following accepted international arbitration procedures.

• Even if an award of compensation is granted, it can be difficult to enforce the award because it depends on the locations of the other party's assets. If the award is against a government entity it can be even more controversial given that the courts will not generally permit enforcement against government assets.

4.10 Government controls

4.10.1 Control over shareholdings

The government has been assured at bid stage of the quality of the entities proposing to provide services, however the actual PPP contract is likely to be entered into with a special purpose vehicle. The entities which make up the bidding consortium (construction company, operation company, equity investors, etc.) are the commercial glue holding it together and the government would wish to keep them locked into the project for a reasonable period of time.

It would be common to see the initial equity investors locked into the equity of the project for at least 18 months, and in some cases substantially longer. For their part, the equity investors will usually want to retain the right to sell their equity stake freely after this period. Once the project is self-sustaining the government should not be too concerned provided that reasonable controls over the nature of any replacement equity investor are maintained. The government will always want to have the right to prevent "undesirable" investors from taking an interest in the project (e.g. for national security reasons).

Even during the lock-in period, it may be justifiable for the equity investors to be able to transfer their stake within their own corporate group or within their own managed funds. The government should be comfortable with this in principle.

4.10.2 Control over financing documents

As previously discussed, the government is likely to have contingent liability for the senior debt in the project, which may be realised on an early termination.

For this reason, the government has an interest in ensuring that the finance documents are not

amended in a way which unfairly increases the government's contingent risk. This could be achieved by requiring all changes to finance documents to be approved by the government prior to being implemented. However, in practice government consents can be time-consuming to obtain and so this is likely to be too restrictive for the concessionaire and lenders. A usual compromise is to provide that changes can be freely made to the financing documents, but no such changes will affect the government's contingent liability for the debt unless express approval has been obtained.

Some changes to the financing documents may be beneficial to the shareholders. If market conditions have changed or the project is perceived to have become less risky, a lower margin may be achievable on the debt. If the government had to bear the original cost of financing at the point the project started (e.g. through the calculation of the availability fee), it may be fair for the government to benefit from any subsequent reduction in finance costs. A starting position in many jurisdictions is that the benefit of such refinancing (called a refinancing gain) should be shared 50:50 between the parties.

4.10.3 Control over project documents

The government will expect to see and approve the final copies of the contracts entered into with the principal supply chain partners (EPC and O&M contractors) and any subsequent replacements. Not only does this give comfort that the concessionaire has put adequate arrangements in place to manage its obligations, but the government has an interest in potentially stepping in to these contracts on an early termination of the concession agreement.

This right of approval should however be subject to a test of reasonableness. The concessionaire will wish to retain the ability to terminate and replace the sub-contractors where this is justified in the best interests of the project in order for the concessionaire to manage its ongoing obligations under the concession agreement.

4.10.4 Step-in rights

The project assets are likely to comprise an essential piece of public infrastructure and, as such, the government should always expect to have the right to step in and take control of the asset at any time when this is reasonably necessary (e.g. if there is an emergency or a need to satisfy statutory obligations).

The concessionaire will usually be accepting of this, provided that the government keeps the concessionaire in a "no better, no worse" position during the step-in period. If the reason for the step-in was brought about by a concessionaire breach then the concessionaire can expect to bear the additional costs incurred by the government to take the step-in action.

However, the penalty should be moderate: once the project is taken out of the concessionaire's control it is no longer able to rectify the original breach itself and so it would not be justified to continue to penalise the concessionaire indefinitely for this. Similarly, if the project is revenue-generating, one would expect the government to be under an ongoing obligation to continue to operate the project prudently and maximise revenues, which would need to be turned over to allow the debt to continue to be serviced.

Summary of key points

Government controls

• The government will usually require the initial equity investors (and shareholders of the concessionaire as a special purpose vehicle) to be locked in for a period of time because of their importance in holding the project together. Equity investors usually have the right to sell their equity stake freely after this period, but the government also often wants to be able to prevent "undesirable" investors from taking a share in the project (usually for national security reasons).

• The government has contingent liability for the senior debt in the project and so it will want to restrict amendments to the finance documents. The usual position is that the government's prior approval will be required if an amendment will affect its contingent liability.

• The EPC and O&M contracts provide the government with comfort that the concessionaire has adequate measures in place to manage its obligations under the concession agreement; these (and contracts with any subsequent replacement contractors) will therefore be reviewed and approved by the government. This right of approval is subject to a test of reasonableness, the concessionaire should be able to terminate and replace contractors freely when it is in the best interests of the project.

• The government will always want the right to step in and take control of a public infrastructure asset where it is reasonably necessary to do so. The concessionaire will accept this provided it is kept in a "no better, no worse" position during the step-in period, particularly in terms of financial penalties and potential loss of revenues.

4.11 Government support obligations

In order for the project to be bankable, it needs to be economically sustainable; not every revenue-generating project will make enough revenue to be able to pay for itself. If the government party still wants to participate in the PPP project, it will need to consider how to fill the viability gap.

(a) Some governments have **viability gap funding** programmes set up for this purpose, discussed previously.

(b) Many projects use **capital contributions** as a means of reducing the financing cost of the project. It is essentially a government grant to the project. This has been addressed earlier under the construction period payment terms.

(c) A **subsidy** would be a similar form of support during the operational period, e.g. payment of an availability fee alongside the right to recover tolls.

(d) The government may also consider treating its contribution to the project as **equity.** This

would allow the government to benefit from any upsides in the project.

(e) The government's contribution could also be structured as a **loan,** perhaps on concessional terms. Some countries have national infrastructure banks set up to play such a role, although the government needs to ensure that by doing so it does not unduly crowd commercial funders out of the market.

Instead of direct contributions, the government's support could be contingent, and this may be sufficient for commercial banks to rely on to lend the additional funding required.

For example:

- A project with uncertain demand risk (such as a new toll road) could be supported by a **traffic guarantee.** If traffic falls below a certain level, the government party would be obliged to provide a subsidy to ensure the concessionaire can meet its financing obligations. The subsidy could be conditional (i.e. there could be an obligation on the concessionaire to repay it when profits are available in the future) or alternatively there could be a reciprocal obligation on the concessionaire to share super-profits with the government if they arise. This reciprocal arrangement is termed a "cap and collar".

- If the procuring government does not have a clear financial covenant, a **central government guarantee** may be requested. In some projects, the government may provide a weaker letter of comfort, which is a promise that it will ensure that the procuring government is properly funded to meet its obligations. The enforceability of these letters however is not always without challenge.

- **Bilateral investment treaties** may provide a level of protection outside the contract where the government interferes with the investment, but they are not straightforward in practice to enforce.

- The government may need to provide **additional works and services** that fall beyond the scope of the project but nevertheless support its aims and objectives. This may include constructing connecting roads or railways, or carrying out upgrades to power networks or other utilities. In some cases, there are reserved services within the project that can only be provided by the government, such as air traffic control services in an airport project.

Summary of key points

Government support obligations

- Projects will often require government support to make it bankable and economically sustainable because it cannot generate enough revenue to pay for itself initially.

- Such support can be provided by way of a loan; viability gap funding (which was discussed earlier); capital contributions by way of a grant to reduce the financing cost of the project; a subsidy during the operational period of the project; or an equitable contribution to enable the government to benefit from the upsides in the project.

4.12 Additional terms and conditions

4.12.1 Transfers and assignment

The concessionaire will want the ability to freely assign the contract to its lenders by way of security as this will be a condition of the funding security package.

The government may also want the flexibility to transfer the PPP contract to a successor agency (government reorganisation is not an unrealistic or unthinkable scenario) but it should not be permitted to do so where the new agency does not have the same financial strength to manage the obligations under the contract.

4.12.2 Local content requirements

Local law may provide for minimum percentage levels of employment or sub-contracting to local firms, however, if it does not, this can be detailed in the concession agreement itself. That said, such obligations are often relatively weak and may have reasonable exceptions and derogations that are difficult to police. For example, a common exception would be that the minimum levels of employment do not apply where the requisite skills do not exist in the local workforce.

4.12.3 Waiver of sovereign immunity

Investors and lenders will wish to have any rights of sovereign immunity waived to the fullest degree possible. If the government has assets in other countries, local advice may be required to understand whether the waiver offered will be sufficient to allow enforcement over those assets under local law.

4.12.4 Intellectual property

The contract should ensure that the government receives an adequate transfer of all intellectual property in the project so that it may use and modify the intellectual property when operating the facility following termination. The government should be protected by an indemnity in case any infringement claims arise against the government at any time after the concession agreement has been terminated.

4.12.5 Confidentiality / Freedom of information

Confidentiality provisions are fairly standard, but consideration should be given to any freedom of information laws that are currently in place or other transparency initiatives. In some cases, there have been very clear statements that the concession agreement is to be treated as a public document and therefore must be available for public inspection and scrutiny. For example, this is a mandatory provision with the Liberian procurement commission's template PPP contract.

Summary of key points

Additional terms and conditions

• There are various other terms and conditions that will be included in the project documents which cover the concessionaire's ability to assign the contract to its lenders by way of security and the government's ability to transfer the PPP contract to a successor agency where there is a governmental reorganisation. This is in addition to terms governing the employment of sub-contractors, the adequate transfer of intellectual property rights and the usual provisions relating to confidentiality and freedom of information provisions. However, it is important to note that sometimes concession agreements are treated as a public document and so they will be available for public inspection.

Conclusion

To summarise, the documentation of a PPP transaction by way of a single concession agreement is often quite challenging due to the complexities of a typical PPP project and the fundamental (and often contentious) issues that need to be accounted for in the agreement. The negotiation of the various provisions relating to: construction and operation period obligations, payment regimes, the level of liability and risk borne by each party, the issue of termination of the agreement and compensation as well as handback requirements when the PPP contract ends etc. are often driven by commercial factors and the power play between the authority and the private sector entity.

CHAPTER 5

DOCUMENTING THE TRANSACTION: FINANCE DOCUMENTS

5. DOCUMENTING THE TRANSACTION: FINANCE DOCUMENTS

Project finance transactions include a vast number of "finance documents", typically defined as all the documents to which one of the lenders (or their agent) is party to.

This section will focus on the documents involved in a loan transaction (rather than a capital markets issuance). The following will be considered:

(a) the core finance documents;

(b) equity arrangements;

(c) the impact of the finance documents on the concession agreement;

(d) direct agreements;

(e) taking security and enforcement; and

(f) the involvement of multilateral development banks, development finance institutions and export credit agencies.

The key learning objectives of this module are:

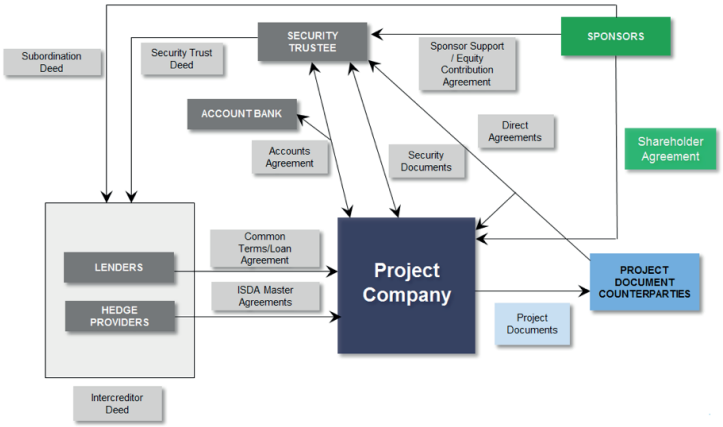
(g) to identify what finance documents are entered into in a traditional project finance transaction and to understand what those finance documents are used for;

(h) to understand the interplay between the debt and equity finance arrangements on a typical project finance transaction; and

(i) to understand what security documents funders will require on a project and the reasons for taking this security.

5.1 Core finance documents

The diagram below illustrates how the key finance documents interplay with the typical structure of a PPP transaction. Each core finance document is explored in more detail within this section.



5.1.1 Loan agreement or common terms agreement

The loan agreement sets out the terms on which the lenders will advance funds to the project company, such as the mechanics for the funds to be disbursed, rates of interest, repayment, representations and warranties, conditions precedent to be met before any funds will be advanced, events of default and the consequences of default.

The loan agreement provides for repayment of the loan once the construction stage is complete. In practice, the date on which any repayment is to be made will not correspond with the receipt of revenues from the project. Therefore, in order to avoid monies being spent by the project company before a repayment date, payments by the government (or revenue payments such as tolls) will be made to an account over which the lenders have control (the "proceeds account"). The monies standing to the credit of the proceeds account on the repayment date will then be used for repayments. If there are insufficient funds in the proceeds account to pay the total amount due on the same date, the loan agreement will provide for an order of application, known as the payment cascade or cashflow waterfall. Typically, payments will be made in the order of operating costs, fees and expenses, interest and then principal. Shareholder distributions will rank at the bottom of the payment cascade and will only be permitted upon satisfaction of certain distribution conditions.

In a complex transaction where there are a number of different categories of lender (e.g. commercial banks lending senior debt, multilateral development banks, equity bridge lenders) each category of lender may have its own loan agreement. If this is the case, the parties will usually also enter into a "common terms agreement" which includes the common terms applicable to the project company and all of the lenders, for example, representations, undertakings and events of default.

5.1.2 Hedging documents

If, for example, the project company receives revenues from the government (or through revenue payments such as tolls) in the local currency, but is obliged to make payments under the loan agreement in another e.g. U.S. dollars, the project company will be exposed to shifts in the exchange rate between those two currencies. The effect of such currency fluctuations can be offset by hedging. This means that the project company enters into an arrangement with a counterparty

(often one of the lending banks) to fix the rate of exchange between the local currency and loan repayment currency in advance for a specified period in return for a fee to the counterparty. The lenders will be keen for the project company to reduce its exchange rate exposure by entering into hedging arrangements because if the project company does suffer a loss due to exchange rate movements, the lenders may bear some of that loss.

The project company is also likely to have an obligation to pay a floating rate of interest to the lenders under the loan agreement. In order to ensure certainty of future payment flows, the project company will be required to fix the interest rate under hedging arrangements.

5.1.3 Intercreditor agreement (sometimes including a security trust)

A typical intercreditor agreement will:

(i) subordinate the creditors who need to be subordinated. Who gets subordinated will depend on the transaction in question. Usually, you would expect to see shareholder debt subordinated to the bank debt. Also, there will be restrictions placed on any mezzanine debt. It will include a pre and post enforcement waterfall for the application of payments (if this isn't covered elsewhere in the documents e.g. accounts provisions, loan agreement or common terms agreement);

(ii) rank the security and deal with any dedicated security (security provided for the benefit primarily of one creditor or group of creditors);

(iii) include provisions for appointing the security trustee/agent. Note that these might be included in a separate security trust deed if the security trustee is an independent third-party trustee such as Law Debenture;

(iv) regulate decision-making by the lenders. Any significant decision will need to be made in a co-ordinated fashion. The intercreditor agreement will set out the decisions that require the input of all lenders and the voting rights or input of each lender into that decision-making process; and

(v) deal with the position of hedging banks.

Typically, the project company is party to the intercreditor agreement along with all the creditors of the project company (including the senior lenders, agent, security trustee/agent, any mezzanine debt providers and any shareholder of the project company). The project company will have an interest in making sure that the decision-making process of the lenders doesn't result in unnecessary delays to the project company's ability to make variations to the concession agreement and other project documents and otherwise adversely impact on its day to day management of the project.

5.1.4 Security documents

The project company will grant security over the project assets and its immediate shareholder(s) will grant security over the shares in the project company and the right to receive the repayment

of any shareholder debt. The security is granted in favour of the security trustee/agent. See further, section 5.6 below.

5.1.5 Accounts agreement

The lenders will want to exercise control over the cashflows of the project. They do this by imposing strict restrictions on what the project company can and can't do with money flowing into and out of the project. All money will need to flow through one of the project accounts. The accounts agreement sets out the terms relating to the project accounts. The account bank (usually one of the lenders) holds the project accounts and it will be party to the accounts agreement, along with the project company, the agent and the security trustee/agent.

In African projects, the borrower is likely to have accounts both "onshore" in the local jurisdiction and "offshore", for example, in England or the U.S. An offshore accounts agreement and an onshore accounts agreement will be required if that is the case.

The key accounts you will see in a project finance transaction are as follows:

(i) proceeds account – all revenues received by the project company are paid into this account (including payments in the nature of revenue replacement such as delay liquidated damages or delay in start-up or business interruption insurance proceeds). As mentioned above, a "payment cascade" or "cashflow waterfall" operates on this account – this is an order of priority of payments which seeks to prioritise the payment of project costs ahead of debt service and then shareholder returns.

(ii) debt service reserve account (or "DSRA") - a feature of project financing is that there is often a requirement for the project company to set aside money in a debt service reserve account to ensure that the project has funds to meet loan repayments and payment of interest over the following six to twelve-month period. In the event that the project company is unable to meet its payment obligations at the required time, money can be taken from this reserve account for that purpose. There is usually a requirement to top up the account to the required level at the next available opportunity;

(iii) maintenance reserve account (or " MRA") – this is another type of reserve account. During its due diligence at the outset of the project, the lenders' technical adviser may identify particular years where heavy maintenance is required and which will involve significant capital expenditure. To avoid this having an adverse impact on the project's cashflow and increasing the likelihood of project company payment default, the lenders will require the project company to set aside money in advance in the maintenance reserve account to pay for this scheduled maintenance;

(iv) compensation proceeds account – this account will hold the proceeds of performance liquidated damages, compensation for expropriation or contract termination payments, until it is ready to be applied towards repayment of the debt;

(v) insurance proceeds account – this account will hold the proceeds of physical damage insurance to the extent these are not required to be placed into a joint insurance proceeds

account held by the project company for the benefit of both the lenders and the government. The money in this account will ultimately be used for reinstatement of the project or pre-payment of the outstanding debt.

Quite often, the project company will hold money that it does not need to spend in the immediate future, for example, in the reserve accounts. In the meantime, it makes sense to allow the project company to invest this money until such time as it is needed. The accounts agreement will set out rules relating to the types of investments that are permitted and the terms upon which the project company is allowed to make those investments

5.1.6 Direct Agreements

Direct agreements create a direct contractual relationship between the lenders and the key contractual counterparties to the project e.g. the construction contractor, operator and government. See further, section 5.5 below.

5.1.7 Equity contribution agreement / shareholder support agreement

This is the agreement between the project investors, any holding company of the project company, the project company and the lenders (or their agent) which governs the relationship between them and provides for the equity arrangements in respect of the project financing.

The agreement will also include restrictions on the ability of the project investors to transfer their equity interests to third parties, at least, until an agreed period after project completion. This is to ensure that the project investors, who have been selected for their experience in similar projects, will remain in place until the project is performing successfully.

Summary of key points

Core finance documents

- **Loan agreements** set out the terms on which the lenders will advance funds to the project company and covers the mechanics of future disbursements, rates of interest, repayment schedule after construction is complete, conditions precedent to be satisfied before funds are advanced, events of default and the consequences of default.

- If the PPP project is complex and there are different categories of lenders, each category might have its own loan agreement and so all parties enter into a "common terms agreement" which includes the common terms applicable to the project company and all of the lenders, for example, representations, undertakings and events of default.

- **Hedging agreements** will be entered into between the project company and a counterparty to protect the project company from shifts in the exchange or interest rates.

- **Intercreditor agreements** manage the order of payments and security ranking of the

various creditors; includes provisions for appointing the security trustee/agent; regulates decision-making by the lenders; and addresses the position of hedging banks. The project company is party to the agreement as it will want to ensure decision-making by the lenders does not unduly interfere with the daily management of the project or variation of the key project documentation.

• **Security documents** detail the security granted by the project company (over its own assets) and its shareholder(s) (over the shares in the project company and the right to receive repayment of any shareholder debt) in favour of the lenders.

• **Accounts agreements** set out the terms relating to the project accounts and the level of control (and mechanisms of restriction) that the lenders have over the cashflows of the project. The key accounts in a project finance transaction are: the proceeds account, debt service reserve account, maintenance reserve account, compensation proceeds account and insurance proceeds account.

• **Direct agreements** create a direct contractual relationship between the lenders and the key contractual parties to the project.

• **Equity contribution agreements / shareholder support agreements** govern the relationship between the project investors, any holding company of the project company and the lenders. It deals with how
equity is contributed to the project and restricts the ability of project investors to transfer their equity interests for a set period of time.

5.2 Equity arrangements

5.2.1 How much equity must the project investors contribute to the project?

All projects require a portion of the total project costs to be borne by the project investors. The project investors contribute by way of true equity (i.e. share capital) and subordinated debt (provision of loans or subscription for loan notes). The "gearing ratio" (or debt to equity ratio as it is also called) tests the proportion of debt in the project against the amount of equity contributed by the project investors. The required proportion of equity varies by jurisdiction and project. The riskier the project, the higher the requirement for equity. For example, a U.K. PPP is often 90:10 and an African infrastructure project is more likely to be 70:30.

5.2.2 Forms of equity

(i) Equity can be contributed to a project company in one of two forms: either true equity (paid up share capital) or equity subordinated debt.

(ii) Paid up share capital is your typical "true equity". In this form, project investors will receive their return on investment in the form of dividends. This is very common, however, an issue for project investors is that dividends can only be made from realised profits, which means their cash is "trapped" in the project company and cannot be returned to investors or

applied toward other investments until a later date.

(iii) Equity subordinated loans are often preferred by project investors as a way around this issue – as project investors will receive their return on investment in the form of interest on these loans.

(iv) Subordinated loans will be subordinated to the repayment of senior debt (i.e. the project finance debt from the lenders). Some jurisdictions may have rules on thin capitalisation, which restrict a company from being highly leveraged (having more debt than true equity). The rationale behind these rules is that where a company is financed by its shareholders through a mixture of debt and equity and the shareholders have introduced only a nominal amount of paid-up share capital, then the company has lower financial reserves with which to meet its obligations.

(v) Similarly, certain lenders, such as export credit agencies, may require that at least 50% of equity is "true equity".

(vi) The lenders will want security over the project company's and the project investors' rights in respect of the equity subordinated loans. This is because in an enforcement scenario, lenders will want to enforce the project investors' obligations to make payments to the project company which have not yet been made, and will also want to ensure that any amounts to be repaid to the project investors are not distributed until the senior debt has been repaid.

5.2.3 When is the equity contributed to the project?

This is a question of risk allocation and will be dependent on the project: the technology, the market, the jurisdiction, the project investors.

Project investors generally don't want to put in their equity upfront, as it affects the return on their investment on the basis of the time value of money. On the other hand, lenders will want to ensure the project investors' commitment to the project by seeing their equity going in before the lenders lend.

In many transactions, the negotiated position is that equity goes in pro-rata – this will mean that equity and debt will go in at the same time in accordance with the agreed debt to equity ratio. So, for example, if a project is going to cost $100, lenders and project investors may agree a debt to equity ratio of 80:20. That will mean that for every $8 of debt that goes in, project investors must ensure there is $2 of equity also injected at all times.

Back ended equity is where equity goes in after debt i.e. at the end of the construction period. This is very unusual.

An equity bridge loan can be used where the project investors want to delay their contribution, but the lenders want the contribution to be made *pro rata* or upfront. The structure of an equity bridge loan allows project investors to delay their cash being injected into the project company, but lenders will treat the equity as already having been contributed.

5.2.4 What are equity bridge loan facilities?

Equity bridge loan facilities are a common way for project investors to inject equity into a project company, but at the same time defer the actual cash outlay required.

The structure works as follows:

(i) Timing for equity contributions

Project investors agree with the lenders when to inject their equity, either in full prior to first drawdown of the project finance loans or pro-rata with the project finance loans.

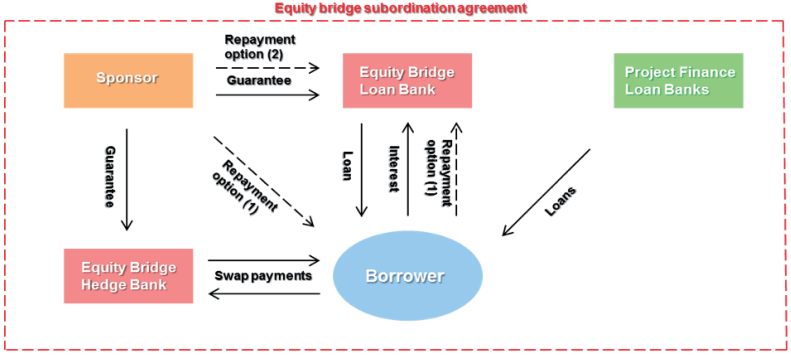
(ii) Equity bridge loan facilities

Separately, the project investors arrange for this equity to be provided by commercial banks under equity bridge loan facilities. These may be third party banks or banks which are also lenders of the senior loan. The borrower is the project company, but the equity bridge lender will benefit from corporate guarantees issued by the project investors (or letters of credit procured by them from a suitably rated bank).

Interest under the equity bridge loan facilities is paid periodically during construction or capitalised (i.e. rolled up to form part of the principal amount), but principal is repaid in a single instalment towards the end of construction using the contribution from the project investors. There may be separate equity bridge hedging arrangements (see below).

(iii) The funds contributed by the equity bridge lenders are treated as equity for the purposes of the debt-to-equity ratio agreed with the project finance lenders.

Typical equity bridge loan facilities structure



(iv) Repayment and hedging

If the interest isn't capitalised, the funds for paying the interest under the equity bridge loans are typically provided by the project finance lenders (as it is interest paid during construction) and therefore these amounts are included within the overall funding requirements for the project. The project finance lenders may require these amounts to be capped, in which

case, the floating rate interest exposure under the equity bridge loan facilities is hedged. Any equity bridge loan hedging is typically provided by the equity bridge lender itself and the counterparty would be the project company, but the equity bridge hedging bank would also benefit from corporate guarantees from the project investors (or letters of credit).

Where there are multiple project investors, there may be more than one equity bridge loan facility and hedging. For example, if there are two project investors, there may be two equity bridge loan agreements, two equity bridge hedging agreements and four equity bridge guarantees/letters of credit. The guarantees/letters of credit would typically be on a several (and not joint and several) basis. Alternatively, one equity bridge loan will be arranged with several liability of the project investors, proportionate to their shareholding percentage.

(v) Full subordination

The equity bridge lenders and equity bridge hedging banks will be fully subordinated to the project finance lenders. In practice, this means that, after an event of default under the project financing documents, their claims against the project company can usually be extinguished automatically and their sole recourse is against the project investors under the guarantees (or letters of credit). Prior to an event of default, the project company would typically be entitled to pay the equity bridge lenders' interest (as noted above, if not capitalised, it would be funded from drawdowns under the project finance loans). The project company should also be entitled to pay principal, although the exact flow of funds in order to discharge the equity bridge loans themselves is usually subject to negotiation – the funds would either be paid directly by project investors to the equity bridge lenders (repayment option 2 in the above diagram) or by project investors to the project company who in turn pays the equity bridge lenders (repayment option 1 in the above diagram) (the former being the better option if permitted under local accounting rules).

(vi) Once the project investors have discharged the equity bridge loans, an equivalent amount is then converted into share capital and/or subordinated loans.

5.2.5 Are equity bridge loan facilities common?

Yes, they are standard in some markets.

The structures are popular with bidders since they effectively allow them to defer the obligations to contribute equity. On day one, the equity is contributed by a third-party bank and therefore the bidder is not required to make a cash outlay.

5.2.6 When are dividends paid?

Project investors will be very eager to receive their return on investment. However, lenders will need the project to satisfy certain conditions before they allow distributions to be made. In the context of project financing "distributions" will include both dividends paid on true equity and interest and repayments of principal on the equity subordinated loans. There are typically two layers of restrictions:

(i) project revenues need to be paid into the proceeds account (an account held in the project company's name with the account bank) and then make their way through the payment cascade. The payment cascade is a mechanism where revenues must be applied toward project costs, financing costs, repayment of principal, debt service reserve requirements and other fees and expenses first, in an agreed order of priority. If there is cash left over once all these costs have been paid, then project investors will want this leftover cash to be transferred to them (either directly or by payment into a "distributions account"); and

(ii) the project company will not be permitted to pay any distributions from money in the proceeds or distributions account until certain conditions are satisfied. These would typically include construction completion has occurred; there is no continuing default under the finance documents; all amounts payable under the finance documents have been paid and the project is performing as intended by reference to financial covenants given by the project company.

Summary of key points

Equity arrangements

- Project investors contribute money towards the project costs by way of equity or shareholder subordinated debt. This is the "gearing ratio" (the amount of debt in the project measured against the amount of equity contributed). Some jurisdictions restrict companies from being highly leveraged (having more debt than equity).

- Equity can be contributed by way of "true equity" (paid up share capital) where project investors receive a return on their investment through dividend payments or subordinated debt (provision of loans) where project investors receive their return in the form of interest on the loans. Subordinated debt is subordinate to the repayment of senior lender debt. The finance documents will include restrictions on the payment of dividends / distributions to the project investors.

- Depending on the project, equity may be contributed before, pro-rata with, or after the senior debt, but before or pro-rata with is most common. An equity bridge loan can be used where project investors want to delay equity contributions. The equity bridge loan disbursements will be treated as equity contributions for the purpose of the gearing ratio.

5.3 Impact on the concession agreement

As seen above, a project finance transaction involves a whole matrix of contracts that all need to work together to ensure that the project is built and operates as intended in order to achieve cashflows to repay the senior debt and provide a return to project investors.

The government will want to ensure that nothing in the finance documents impacts the project company's ability to perform its obligations under the concession agreement, or will impose greater liabilities on the government than it has agreed to bear at the time of signing the concession agreement.

There are a number of areas which a government, finance parties and the project company should consider when negotiating the finance documents:

(a) the parties will want to ensure that the regular payments under the concession agreement are sized to cover the senior debt – this will be the case at financial close, but deductions for performance issues will impact on the amount the government pays the project company by way of availability payments, or lower than modelled traffic numbers will impact on project revenues. This will all need to be dealt with in the pre-financial close financial model (by testing the outcomes of poor performance) and in the finance documents (the lenders will typically prohibit distributions to project investors where the project isn't performing to encourage them to take active steps to remedy the performance issues);

(b) how the completion date is defined under the concession agreement – the lenders will want the completion date definition in the finance documents to match the concession agreement definition to ensure that post completion obligations in both documents apply at the right time;

(c) when can the government terminate the concession agreement for delays in the completion date? The lenders will want to ensure that this is later than the point in time they are permitted to exercise step-in rights under the direct agreement with the government (see section 5.5). The lenders will want the opportunity to remedy any issues before termination of the concession agreement;

(d) should the government be liable for increased obligations of the project company to the lenders as a result of changes to the finance documents after financial close? The government will want to restrict its liability only to those obligations it has contractually agreed to take on at financial close. It is common for concession agreements to include wording restricting the government's obligations (e.g. to pay compensation on termination) only to obligations in the finance documents originally entered into;

(e) is there a mismatch between the currency of project revenues (i.e. payments under the concession agreement or tolls) and the currency of the senior debt ? If the obligations don't match the project company may have to execute currency hedging in order to pay the lenders;

(f) is any government support required? For example, is the government required to give a guarantee (e.g. if there is a government offtaker), are any tax concessions required, is subsidy required for lower than forecast users of the project?

(g) are there any restrictions on enforcement of security by the senior lenders, for example, they want to transfer shares in the project company to a third-party, but the law requires some local ownership of the project?

(h) how should any insurance proceeds in respect of the project be applied e.g. in reinstatement or in prepayment of the senior debt? The government will want the project to be reinstated and the concession agreement will provide for reinstatement in most circumstances, but the lenders may want proceeds to be applied to prepay debt, particularly in a total loss scenario. There may need to be a joint insurance account for the benefit of both the

lenders and the government into which proceeds of insurance are paid pending agreement on reinstatement or prepayment;

(i) what should the government pay on termination and will this cover all amounts owing to the senior lenders? The lenders will require the compensation on termination payments to cover the senior debt. See further, section 4.7(b);

(j) the lenders will usually expect the project company to grant security over its rights under the concession agreement. This is not usually controversial for the government and the documents will need to provide for consent to that security;

(k) the interaction between the events of default under the concession agreement and the loan agreement – the lenders will want to ensure that the concession agreement provides for termination if there is a continuing event of default under the loan agreement in order to obtain compensation on termination from the government. This is usually included as a contractor default in the concession agreement;

(l) the lenders will want a direct contractual relationship with the government in respect of certain matters – it is common for the government to enter into a "funders direct agreement" with the lenders.

Summary of key points

Impact on the concession agreement

- When negotiating the finance documents, the government, finance parties and the project company will have to consider how certain issues interact with, and have an impact on, the concession agreement.

- For example: whether the regular payments under the concession agreement will be of a sufficient size to cover the project company's senior debt repayments under the finance documents; the importance of the definition of "completion date" across both suites of documents, the lenders will want to ensure that they can exercise their step-in rights under the direct agreement with the government before the government can terminate the concession agreement for delays in the completion date; how events of default under the concession agreement interact with those under the finance documents.

5.4 Direct Agreements

(a) Where the project company has failed to comply with its obligations under one of the project documents, the counterparty to that project document will be entitled to terminate. This is likely to occur at the same time as the lenders are entitled to enforce their security. As will be seen below, when security is being considered, the ability of the lenders to enforce their security in respect of the project is very important, but in real terms, is piecemeal and may not yield the desired amount of money to repay the loan. The lenders may take the view that they, or a third party appointed by the lenders, could do a better job of running the

project than the project company and that, rather than enforcing the security, the lenders would prefer to take on the project as a going concern to remedy the defaults which have led to the right of the counterparty to terminate. The problem is that the lenders have no contractual relationship with the project counterparties under the relevant project document so how can they stop the counterparty terminating?

(b) This is achieved by «direct agreements» which create direct legal relations between the lenders and each party to the project documents. A direct agreement stipulates that the relevant party to the project document will not exercise its rights of termination or wind-up the project company before the lenders have been given the option of running the project themselves. This option is known as a "step-in" right.

(c) In simple terms, a direct agreement:

(i) is a three-way agreement between lenders and the parties to the key project documents;

(ii) provides step-in rights to lenders and a covenant from the project document counterparty not to terminate or take other adverse action without first notifying the lenders and allowing them time to decide whether they want to step-in. During this period (the "standstill period") and any step-in period, the project document counterparty will also agree to perform its obligations under the project document; and

(iii) usually permits the granting of security by the project company of its rights under the relevant project document to the lenders.

(d) Direct agreements can have benefits for the counterparty. For instance, most direct agreements will contain a promise from the lenders that if they step in, outstanding amounts due from the project company to the counterparty will be repaid by the lenders.

(e) The direct agreement will often also include restrictions on who the lenders can appoint as the nominee, in the case of step-in, or the identity of the transferee if they decide to enforce security and sell the shares in the project company to a third party. These can take the form of pre-emption rights on a sale of the project company shares or a requirement that the nominee or transferee is not a competitor, and has adequate financial and technical capability to undertake the relevant obligations.

Funders direct agreement

(f) A government will be expected to enter into a direct agreement with the lenders – typically called a **funders' direct agreement.**

(g) The government will be particularly concerned with the following:

(i) the identity of any transferee to ensure that the infrastructure development they originally contracted for (usually due to an urgent public need) is indeed delivered by a reputable and capable contractor with the relevant technical expertise and financial backing;

(ii) the length of any step-in period – the government will want to ensure that the lenders are diligently pursuing steps to remedy the default under the concession agreement in as short a period as possible before they will have the right to terminate the concession agreement and take back the project into public ownership; and

(iii) agreeing what happens after payment of compensation on termination if the lenders have not recovered the full amount of the senior debt. In this scenario, the lenders will want the ability to enforce their security in respect of the remaining amount of senior debt, but the government will also be looking to the project assets to recoup its investment, or to take back the project into public ownership in order to continue construction or remedy defects to get the project back to full performance. The direct agreement can govern the rights of the lenders and government relating to the priority over the project assets in this situation.

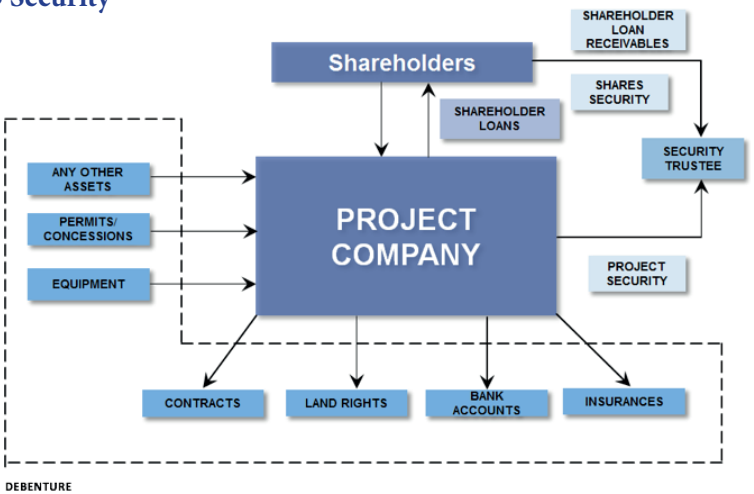
Summary of key points

Direct Agreements

• These agreements create a contractual relationship between the lenders and the counterparties to the project documents. If the project company commits a breach of a project document, the contract counterparty may wish to exercise its right to terminate the contract. However, the direct agreement will prohibit the counterparty from exercising its termination rights before the lenders have been given the opportunity to remedy the issue themselves. These are called "step-in" rights.

• It is common to see restrictions on who the lenders appoint as the nominee (in the case of step-in) or who the lenders transfer ownership of the project company to if they decide to enforce security and sell their shares in the project company.

5.5 Security



At the outset of a transaction, the lenders will want to design a security package which will ensure to the greatest extent possible that all monies advanced will be recovered (together with interest and any other costs incurred).

5.5.1 Why do lenders take security?

(i) «Aggressive» nature of security

Where a borrower defaults, the lenders can take possession of the secured assets and sell them to repay the debt. This is the traditional view of security and the main reason for taking security in many types of transactions. However, in a project finance context it is not the main reason for taking security. Take, for example, a road project – the project assets will include the road (once built) but there is not much value in a half-built road, or a ready market to purchase it (especially given any potential restrictions on the identity of the project company e.g. the requirement for it to be a local entity). The project company may have other assets e.g. land moving equipment, but these may be leased or not worth very much compared to the amount of senior debt outstanding.

(ii) «Defensive» nature of security

If the lenders take security over an asset, this reduces the risk of other creditors obtaining an interest in project assets or bringing disruptive action, such as insolvency proceedings, as they would rank behind the secured lender in any such action. This is a principal motive for security in a project finance transaction as, often, and especially during the construction phase, the value of the assets will be less than the outstanding debt.

(iii) Management and control

Security may (depending on the jurisdiction) entitle the lenders to:

(a) take ownership of the project company and manage the project;

(b) give the lenders the opportunity to negotiate with contractual counterparties in the event of a default in order to restructure the project or seek support, for example, from the government; and/or

(c) appoint an insolvency practitioner to the project company which gives the lenders greater control over the insolvency proceedings.

5.5.2 Types of security

The security package on a project finance transaction will depend on a number of factors: the nature of the project assets (e.g. whether the asset is tangible or intangible; moveable or immoveable) and location of the project assets – is the asset located "onshore" (i.e. situated in, or governed by, the law of the jurisdiction where the project is located) or "offshore" (all other assets)?

Security granted by the project company will typically cover:

Onshore assets	Offshore assets
Land interests in relation to the project site	Rights under construction and supply contracts
Equipment	Rights under contractor guarantees and performance bonds
Bank accounts	Bank accounts
Rights under concession agreement	Completion support
Rights under offtake agreement	Construction and supply contracts
Insurance (if locally placed)	Insurances/reinsurance
	Shareholder loans

In addition, the lenders will expect to receive security over:

(i) the shares in the project company in order to exercise the management purpose of the security mentioned above; and

(ii) any shareholder loans - in order to discharge the shareholder debt on enforcement to more easily effect a sale of the project company on enforcement.

This security will be granted either by a holding company or the project investors depending on the structure of the project. As mentioned above, it is not uncommon to include a holding company between the project company and the project investors for tax structuring purposes or because the project investors are restricted by the terms of their own corporate borrowing from granting security.

5.5.3 Project investors' support

In some limited circumstances the project investors might give some form of support in addition to the required equity contribution (see section 5.3(a) and (b) above). This may be some form of completion or cost overrun guarantee and it will depend on the nature of the project, the jurisdiction and the amount of risk of completion being delayed. They are typically used on projects which utilise untested technology.

The support may be backed by a bank letter of credit, a guarantee of the project investors or it may be an increased equity contribution if standby or cost overrun facilities are required.

5.6 Enforcement and insolvency

As seen above, the traditional purpose of taking security in a financing transaction is problematic in a project financing. Enforcing the lenders' security package may be difficult for a number of reasons:

(a) government consents are likely to be required for a change in ownership of the project company or a sale of project assets – a project concession can't simply be transferred to another party;

(b) will the local courts enforce agreements governed by foreign law (e.g. the loan agreement) or the judgments of foreign courts or arbitral awards?

(c) in some jurisdictions there might be a moratorium on insolvency, effectively preventing the lenders from enforcing their security;

(d) in many jurisdictions, enforcement remedies may only be capable of being exercised through the courts;

(e) judicial sale may be the main (or only) enforcement remedy and the concept of a receiver (or a similar concept) may not exist;

(f) substantial preferential creditors may rank ahead of all types of security.

At the outset of the transaction the lenders will need to understand the enforcement position in the relevant jurisdiction so they can be prepared if things go wrong during the project term.

Summary of key points

Security, enforcement and insolvency

- Lenders will always want to take a comprehensive security package to ensure that they have the highest possible chance of recovering the monies advanced to the project company. The main reason for taking security over an asset in project finance transactions is to reduce the risk of competition (other creditors taking an interest in project assets) or the risk of disruption to the project progress (such as a creditor commencing insolvency proceedings). Security provides the lenders with the reassurance that they can control all aspects of the project, from taking ownership and managing it, to dealing with contractual counterparties and appointing an insolvency practitioner if insolvency proceedings are instigated.

- The type of security taken will depend on the project finance transaction and the nature of the assets involved e.g. whether there are onshore assets (land, equipment, bank accounts, etc.) or offshore assets (rights under construction and supply contracts or contractor guarantees, insurances, shareholder loans, etc.).

- Lenders will also want to take security over the shares in the project company (so that it can exercise full control) and the shareholder loans (so that it can discharge shareholder debt more easily on enforcement, facilitating a quick sale of the project company if necessary).

- It is not uncommon for the lenders to face significant difficulties when trying to enforce their security package for various reasons: often government consents are required for changes in ownership of the project company or its assets; the foreign nature of the security documents, the foreign concepts of a receiver or security trustee and the foreign location of the assets, can also be problematic.

5.7 Involvement of multilateral development banks (MDBs), development finance institutions (DFIs) and export credit agencies (ECAs)

5.7.1 Introduction

MDBs are institutions such as the World Bank, African Development Bank and the European Bank for Reconstruction and Development or other of the international agencies established to assist in the development of economies. MDBs will support governments in the development of projects through risk mitigation products such as political risk cover, or in other ways (e.g. direct lending, providing funds for government support).

DFIs are bilateral, regional or multilateral institutions that are supported by developed countries with a mandate to provide finance to private sector participants to promote economic growth and support social development. These are institutions such as the International Finance Corporation and European Investment Bank.

ECAs are institutions (often public or quasi-public) that provide government backed support (loans, guarantees and insurance) to encourage the export of goods from their home country. For example, JBIC (the Japanese ECA) may lend to a PPP project for the supply of Japanese built trains.

These institutions play a vital role in securing the required funding for infrastructure projects in emerging markets. They are catalytic, attracting further private investment from commercial banks.

The involvement of these types of entities is advantageous in project finance transactions for a number of reasons:

(i) their interest rates are generally lower than those of commercial banks and the tenor of the loan may be longer;

(ii) they may be able to lend to projects which commercial banks cannot;

(iii) the presence of one of these institutions may attract further private finance from commercial banks because of:

(a) the nature of the support e.g. guarantees given to commercial banks covering all or part of their loan; and/or

(b) indirectly, because their involvement engenders confidence in other potential lenders due to the expertise of these institutions in the project finance market; the political pressure that can be brought to bear on the government if any issues arise; or, in some cases, because of the preferential status that may be afforded to certain lenders by virtue of the involvement of these institutions (e.g. mitigating transfer and convertibility risk in the event of a foreign exchange crisis).

A full examination of these institutions and the support they provide is outside the scope of this guide. However, political risk mitigation products will be discussed briefly below, which feature in African infrastructure PPP projects.

5.7.2 Political risk

Commercial risk is the inability of a borrower to meet its payment obligations due to performance issues with the project or if an offtaker has become insolvent.

Political risk is the failure of a borrower to meet its payment obligations because of the actions of the government or because of war or civil unrest in the jurisdiction of the project. Political risks typically include:

(i) damage or destruction of assets, business interruption or forced abandonment of a project resulting from events such as war, revolution, insurrection, civil unrest, terrorism and sabotage;

(ii) confiscation, expropriation, nationalisation **(CEN)** and other acts by a government that deprive the project company of its fundamental rights to the concession, equipment or other assets. "Creeping expropriation" - a series of acts that ultimately have an expropriatory effect. Selective discrimination, forced divestiture, and losses arising from breach of contract by the government or the non-honouring of a government payment obligation under an off-take agreement or other commercial arrangement;

(iii) the non-honouring of a government payment obligation under an off-take agreement or other commercial arrangement;

(iv) currency inconvertibility and non-transferability - the inability to convert local proceeds to hard currency and repatriate the currency.

There is an element of political risk in any project financing, even projects in the U.K., but the risk is likely to be greater in emerging market jurisdictions. Political risk is an issue in project finance transactions because:

(i) the project may be the first project of its kind in the country in a sector which was previously government controlled;

(ii) the project is likely to require some form of governmental concession whether to transfer hard currency outside the host country or merely just to operate and, if this is revoked, the project will fail; and

(iii) the project will be very important to a country's infrastructure (roads, hospitals) or for security reasons (airport, port).

5.7.3 Mitigation

The lenders to the project will seek to mitigate the political risk inherent in a project. They can do this in a number of ways:

(i) by including "stabilisation" provisions in the concession agreement (promises not to adversely change legislation or to indemnify the project company if adverse legislation is implemented);

(ii) an undertaking from the central bank to ensure the availability of foreign exchange;

(iii) political risk insurance provided by commercial insurers or from ECAs or MDBs (see further below), although this can be very expensive or not available to cover the relevant risk;

(iv) rely on the involvement of MDBs, DFIs and ECAs as part of the lending group to exert political pressure if political risks materialise; and

(v) include the government as a shareholder in the project company.

5.7.4 Political risk insurance

Political risk insurance **(PRI)** policies are insurance contracts that offer coverage for the "political risks" excluded under typical commercial insurance contracts. PRI provides coverage for investors making direct equity investments in projects and to those lending to emerging market borrowers.

As with other insurance contracts the coverage trigger hinges on a loss occurrence connected with a specified insurance peril. Particularly in relation to political violence and CEN cover, it can be difficult to determine the trigger for a claim. How can the insured prove that a loss was directly caused by political violence?

PRI policies are bespoke, and the definition of each peril will be different for each insurer. Likewise, the exclusions, deductions, etc. will all depend on the nature of the project, the country, and other factors to be considered at the time of policy inception.

Summary of key points

Involvement of multilateral development banks (MDBs), development finance institutions (DFIs) and export credit agencies (ECAs)

- MDBs, DFIs and ECAs play a vital role in securing funding for infrastructure projects in emerging markets. MDBs and DFIs have a common aim of promoting economic growth and development. These entities provide support by way of direct finance, equity investment, specific products or governmental support.

- The involvement of these entities is beneficial for the project company as interest rates on the loan may be lower, or tenors might be longer. It also often attracts further investment from commercial banks due to the nature of the support these institutions and their perceived political influence.

Political risk

- This relates to the project company's failure to meet its repayment obligations due to the actions of the government (such as confiscation, expropriation, nationalisation), the inability to convert local proceeds to hard currency and repatriate the currency, or because of war, civil unrest, terrorism, insurrection in the jurisdiction of the project which damages assets or causes interruption to the project.

- Such risks are greater in emerging markets jurisdictions than developed markets, but the risks can be mitigated through the use of stabilisation clauses, the involvement of MDBs, DFIs and ECAs that can exert political pressure if necessary, and political risk insurance policies that can cover such events.

5.8 Government shareholder arrangements

(a) In certain projects, the government may take an ownership stake in the project company. There may be different reasons for this, for example, a requirement of the government to maintain some management control over the project company; as a means of injecting funding into the project (possibly to make the project more bankable); public perception (to show that the project is still, at least partially, publicly held) or to extract value in the future from the project. Government ownership interests are common in many mining transactions, and the government's rights in respect of such ownership interests are typically enshrined in law.

(b) The percentage of ownership interest will depend on whether the government wants to have management rights in respect of the project company or wants the interest to be "off balance sheet". Even where the government does not have management control, the shareholders agreement may enable the government to have a veto right in respect of certain matters. The shareholders agreement will be the key document which governs the rights and obligations of a government shareholder, along with the constitutional documents of the project company or any holding company vehicle. Issues which will need to be dealt with include:

(i) What voting rights will the government shareholder have? Will these be the same as the private investors?

(ii) Should the government pay for the equity interest in cash or will it be a "free carry interest" (i.e. free of charge)? Rather than pay cash for the interest it is more likely that the payment will be "in kind", for example, through some other form of support or contribution or through issue of the concession itself.

(iii) Will the government shareholder be required to participate in any equity call e.g. for further development costs? If not, will their interest be diluted by any new issue or remain in the same proportion? The term "free carry interest" refers to the other shareholders "carrying" the government shareholder through the period when calls may be made, potentially for the duration of the concession.

(iv) Will the government shareholder have a right to have a nominee appointed to the board

of directors? This may give rise to conflict of interest issues – is the appointee acting in the interests of all the project company shareholders or as a representative of the government?

(v) Will the government shareholder be entitled to a fixed return?

(vi) What provisions are there relating to transfers? For example, will pre-emption rights be included?

Summary of key points

Government shareholder arrangements

- The government may sometimes take an equitable stake in the project company so that it can retain some management control over the project, it addresses any perceived "privatisation" of the project or asset or scepticism by the public, it enables the project to receive additional funding and enables the government to take advantage of the upsides in the project.

- The shareholders agreement documents the rights and obligations of the government as a shareholder of the project company; it outlines the extent of its involvement in the project, the interaction of its position as shareholder with other project investors and the levels of return it can expect to receive.

Conclusion

The suite of finance documents to which the lenders are a party on a project finance transaction include various provisions relating to the mechanics of the funding and the control of the project company and its cashflows. The core finance documents usually consist of the loan agreement, hedging documents and an intercreditor agreement if multiple lenders are involved. The project company and its shareholder(s) will provide security over the project assets and he shares in the project company. It is not always easy to enforce security on a project finance transaction, particularly share security, where government consents may be required for enforcement. The lenders will also expect key contractual counterparties to enter into direct agreements with them, which, among other things will prevent the counterparty from terminating the key project contracts if the project company defaults.

The project investors will be required to inject money into the project by way of shareholder debt or investment in share capital. The lenders will restrict the ability of the project company to make payments to the project investors by way of a return on their equity investment.

The parties will need to consider the interaction between the finance documents and the concession agreement.

Multilateral development banks, development finance institutions and export credit agencies are often involved in African project finance transactions, providing direct funding or risk mitigation products such as political risk insurance. Their involvement plays a vital role in attracting private sector funding for infrastructure projects in Africa.

In some transactions, it may be appropriate for the host government to become a shareholder of the project e.g. to exert some management control or to take advantage of any profit in the project.

CHAPTER 6

DOCUMENTING THE TRANSACTION: OTHER PROJECT DOCUMENTS

6.1 Construction contract, O&M contract and interface issues

6.2 Sub-contract risk pass-down

6. DOCUMENTING THE TRANSACTION: OTHER PROJECT DOCUMENTS

In addition to the finance documents discussed in the previous module which are fundamental in documenting a PPP transaction, it is also necessary to consider other key project documents that also need to be put in place to make the project a reality.

This section will consider the following:

(a) the construction contract, the O&M contract and interface issues; and

(b) sub-contracts and the approach to drafting such documents.

The key learning objectives of this module are as follows:

(a) to understand how a PPP project is structured in terms of the suite of key project documents,
contracts and sub-contracts;

(b) to appreciate the interplay between such project documents and contracts; and

(c) to understand the way in which risk, obligations and rights of recourse are "passed down" in the sub-contracts.

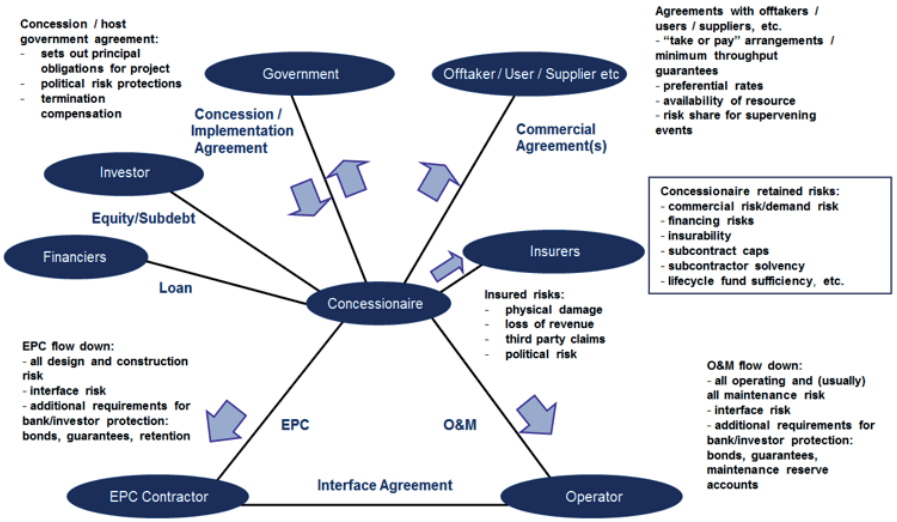
6.1 Construction contract, O&M contract and interface issues

This guide has previously focused on the relationships between the concessionaire and the government, and between the concessionaire and the lenders. The guide will now address how the concessionaire upholds its obligations and delivers the services that have been agreed.

The concessionaire itself usually has a minimal number of staff. It does not have construction personnel to build the facility and it does not usually have any facility management staff to operate and maintain the facility. Therefore, the concessionaire acts as the "middle man", the interface between the public sector (as recipient of the facilities and/or services) and an EPC contractor and an O&M contractor (as suppliers of the facilities and/or /services). This can be seen in the diagram below.

The split between EPC contractor and O&M contractor arises because construction works and maintenance activities are traditionally the domain of different types of businesses. However, due to diversification or consolidation within the market, the EPC contractor and the O&M contractor may sometimes be part of the same corporate group, or they may even be the same corporate entity.

Given its limited financial resources, the concessionaire must ensure that its inputs and outputs on the one hand upstream to the government under the concession agreement and on the other hand downstream to the sub-contractors under the sub-contracts are as closely matched as possible – ideally the concessionaire needs to be in a neutral position.



Summary of key points

Construction contract, O&M contract, interface issues

- The PPP company / concessionaire often has minimal staff, it is the "middle man" between the public sector (as recipient of the facilities / services) and an EPC contractor or an O&M contractor (as suppliers of the facilities / services). This distinction between the two contractors is due to the fact that the construction works and maintenance services are two different types of businesses. However, sometimes both contractors are part of the same corporate group or can be the same entity due to diversification or consolidation within the market.

- In terms of financial resources, the concessionaire must ensure its financial inputs and outputs upstream to the government, and downstream to the sub-contractors, are closely matched to ensure it maintains a neutral position.

6.2 Sub-contract risk pass-down

6.2.1 Aims

The general aim of the concessionaire when entering into sub-contract arrangements with third parties is to cleanly pass all of the rights and obligations to its principal sub-contractors. Clearly this is only possible when the rights and obligations fall within the area of competence of the sub-contractor.

When this is implemented effectively, the residual risks that are left with the concessionaire should be limited, clear and well-understood by all parties.

However, there are two principal risks to be aware of:

(i) Construction delay

Revenue payments will not be available to the concessionaire until the facility is built in accordance with the contract specification. Therefore, if the handover from the sub-contractor to the concessionaire is delayed, the revenue stream due throughout the project period will be shortened. This in turn will threaten the ability of the concessionaire to meet its debt repayment obligations and/or the level of return the concessionaire's shareholders will make on the capital invested. If the EPC contractor never completes the facility then this may lead to termination of the concession agreement and the consequences for the lenders may be even more severe.

(ii) Poor performance of operation and maintenance

The performance of the services to be provided during the operational phase of the project will be measured against certain performance indicators. Failure by the O&M contractor to meet these standards may permit the government to reduce the availability fee through pre-determined deductions, or lead to a loss of user revenues if potential users select alternative options as a result of quality concerns.

If the level of deductions / revenue loss is too high, this will also threaten the ability of the concessionaire to meet its debt repayment obligations and/or impact on the level of return the concessionaire's shareholders will make on the capital invested.

The sensitivities of the lender in this regard are reflected in their requirement for pass-down or back-to-back sub-contracts. As the names suggest, these sub-contracts work by "passing down" or "passing through" all of the obligations and entitlements of the concessionaire under the concession agreement to the relevant sub-contractors so that the provisions of the agreements either side of the concessionaire are "back-to-back" with each other.

There are two main ways to prepare such contracts:

(i) Amended standard forms

A drop-down contract could be drafted by starting with a standard form contract (e.g. FIDIC Yellow for EPC works) and amending it so that it includes all necessary obligations and other provisions from the concession agreement.

(ii) Bespoke forms

Alternatively, the drop-down contract could be drafted by starting with the form of concession agreement and then removing the sections which do not relate to the works or services (as appropriate), changing the names of the parties and the remainder of the drafting as appropriate.

The bespoke form of contract is most commonly seen in practice because it ensures that the relevant clauses of the concession agreement and sub-contract match each other word-for-word to the closest extent possible.

However, this drafting approach cannot by itself guarantee that the concessionaire will have a neutral position between the government and the sub-contractor, this is due to the effect of the doctrine of privity of contract.

For example:

The government restricts the building contractor's access to the site for a month. Both the concession agreement and the EPC contract allow for a "reasonable extension of time" to be awarded in the event of denial of access. The EPC contractor goes before Adjudicator X under the EPC contract dispute resolution procedure, who awards 45 days extension of time (EOT) and compensation. The concessionaire then goes before Adjudicator Y under the concession agreement dispute resolution procedure.

Adjudicator Y is not bound by the decision of Adjudicator X, whose decision was given on a different contract, and awards only 30 days EOT and compensation. If the project is then delivered 60 days late, the concessionaire will suffer financial loss for the delay between the 30th day and the 45th day. This loss will be a considerable sum as a delay in handover of the facility will translate into an irrevocable loss of the revenue payment for that period, and the concessionaire's obligations to start repaying the debt will usually commence from a fixed date. Such a result would clearly be unsatisfactory for the lender.

6.2.2 Equivalent project relief

To deal with the above issues, it is common for PPP sub-contracts to contain what are commonly referred to as "equivalent project relief" or "EPR" clauses. The substance of an EPR clause in plain English is as follows:

> *You, the sub-contractor, shall only become entitled to relief (by way of payment, extension of time or otherwise) under this sub-contract to the extent that we, the concessionaire, have become entitled to such relief under the equivalent provisions of the concession agreement.*

In return for accepting such a limitation on its right to relief, the sub-contractor will typically be given the right to force the concessionaire to put forward equivalent claims against the government and to have control as to how these claims are run. However, the sub-contractor, being the beneficiary of any proceeds, will often be liable for the costs of the process.

In theory, a clause of this nature will remove the concern that the concessionaire will face inconsistent decisions at project agreement and/or sub-contract level, either in terms of the outcome of the decisions or their timing.

6.2.3 Key commercial issues

Even where the contract drafting is aligned and equivalent project relief clauses are introduced, this does not mean that the concessionaire will be able to completely isolate itself from project risk. There are some key areas of negotiation between concessionaires and sub-contractors which are explored in this section; these commonly define the extent of retained risk left with the concessionaire (and which the lenders therefore need to take into account as part of their lending decision).

(i) Caps on liability and carve-outs

Concession agreements tend not to have express limitations of liability because one could take a view that the concessionaire's exposure is limited to its invested equity and debt. If liabilities exceed this value it can choose to become insolvent rather than secure more money from third parties; the concessionaire itself has no other business it needs to protect.

Contractors, however, are fully trading entities with multiple contracts. An uncapped exposure on one contract could bring down other contracts that it currently has in place or even the whole company. From a corporate risk perspective, therefore, contractors will not enter into contracts with uncapped liability, in dropping down the concession agreement terms, a new limitation of liability clause needs to be added.

Wherever the cap is set, it means that the concessionaire now takes the risk that the contractor's exposure will exceed the cap and thus the liability will revert to the concessionaire. Typical EPC contract caps are between 30-50% of the contract price; sometimes caps are even higher in infrastructure projects. A cap of this size would appear to leave the concessionaire and lenders significantly exposed, but the lenders will rely on technical advice to confirm that the capped amount will be sufficient to cover all reasonable downside scenarios. If the project is linear or consists of multiple separate units, the risk of the entire project failing must be relatively low.

Typical O&M contract caps are a function of the operating fee: it often comprises 100% of the operating fee as an annual cap and 200% of the operating fee as a termination cap. Again, technical advice will satisfy the lenders that the concessionaire's residual risks can be managed in all reasonable downside scenarios.

Nevertheless, some liabilities will be carved out from the caps. This would typically include liability arising out of fraud or deliberate breach, insured liability and certain indemnity liabilities like personal injury or IP claims. Other carve outs may be negotiated on a case by case basis, but this will usually be a contentious issue.

(ii) Performance security

Even if the government does not request performance security from the concessionaire (and it may not need to because the concessionaire has already invested debt and equity into the project), the concessionaire has to manage the solvency risk of the sub-contractors. Performance security may include:

(i) parent company guarantees from the sub-contractor's group companies;
(ii) performance bonds to cover the cost of finding a replacement contractor on termination, or just to cover a failure to pay damages when they fall due (10% of the contract price would be typical, typically returned on certification of completion or the end of the defect liability period);
(iii) a retention from payments (or a bond in lieu of retention) (3-5% of contract price would be typical, most often halved on certification of completion and returned at the end of defect liability period);

(iv) an advance payment bond, should any advance payments be made.

(iii) Delay and insurance

If the construction works are delayed the concessionaire will expect to suffer a revenue loss, and the sub-contract should therefore ensure that the EPC contractor is liable to pay suitable liquidated damages to the concessionaire over the period of delay.

The EPC contractor will often expect its liability for liquidated damages to be capped, either by amount or by time, 10% of the capital cost by value is commonly seen. From the concessionaire's perspective, the liquidated damages cap should at least be sufficient to cover lost revenue until the longstop termination date in the concession agreement.

Some delays may be caused by insured events. In this case, who takes the deductible, the concessionaire or the EPC contractor? Who takes the cashflow risk of meeting the project debt while an insurance claim is made? These are all negotiable points.

What happens in the case of force majeure? Normally the contract will provide that force majeure relieves a party from liability, but it does not provide the party with compensation. If this risk is passed down to the EPC contract, the concessionaire will find itself left with a shortfall as there will be no revenue due under the concession agreement but also no damages due from the EPC contractor.

(iv) Termination events and other buffers

When passing down the termination events (events of default) from the concession agreement to a sub-contract, the concessionaire and lenders will want to ensure that adequate buffers are included so that the concessionaire has the ability to terminate the under-performing sub-contractor in good time before the termination event arises under the concession agreement.

In addition, the sub-contract may need to contain a number of additional termination events that are not present in the concession agreement, such as failure to procure performance security when due, or reaching a cap on under the sub-contract (on the basis that it would not be reasonable to continue a contract under which the contractor can incur no further liability, so the contractor must accept that if it does not increase its cap it may be terminated).

(v) Interface issues

A perennial risk for a concessionaire is that when a physical problem occurs with the works it may find itself stuck between competing defensive arguments from its sub-contractors. If a problem arises in the facility, the EPC contractor may say that it arose through a failure of maintenance, and the maintainer may say that it arose due to poor design or workmanship. In the meantime, the concessionaire may be suffering from the consequences of the event under the concession agreement, for example by way of financial deductions for non-compliance.

An interface agreement is one way to address this. In this arrangement, the EPC contractor and O&M contractor both sign an agreement (together with the concessionaire) in which they agree that they are collectively responsible for the condition of the facility. In the event of a dispute like the one mentioned above, the concessionaire would have the right to allocate the responsibility for the non-compliance to either the EPC contractor or the O&M contractor on a good faith basis.

Typically, these agreements would apply throughout the EPC contractor warranty period. After expiry of the warranty period, the risk of latent defects left by the EPC contractor may remain with the O&M contractor, or it may revert to the concessionaire. However, this is usually a negotiable point.

(vi) Lifecycle maintenance

The O&M contractor may be given responsibility to manage the condition of the facility for the operating term. Over time, the maintenance expenditure is unlikely to be constant but rather spiky in profile with peaks occurring when major equipment needs to be replaced (life cycled) and with greater expenditure occurring toward the back end of the operating period.

The question then comes as to how the O&M contractor should be paid. Despite the fact that the concessionaire's income is typically flat over the concession period (subject to demand growth and inflation), the lenders may be nervous to pay the O&M contractor on a similar basis in case the O&M contract is terminated early. If this does occur, the O&M contractor may have effectively been paid in advance for lifecycle works that it has not carried out. For that reason, it is common for lifecycle expenditure paid to the O&M contractor to be subject to tighter controls.

In some projects the concessionaire maintains the lifecycle fund and spends money as and when it is required, this is usually based on the O&M contractor's recommendations as to when assets have reached the end of their serviceable life. If there is an excess of funds against the modelled or predicted expenditure, this benefit stays with the concessionaire.

In other projects the O&M contractor takes the risk in terms of the sufficiency of the lifecycle fund, this is because it may have prepared the relevant lifecycle maintenance estimates for the project's financial model in the bidding process. The concessionaire will agree to release monies to the O&M contractor for replacement work when required, but never in excess of the modelled amounts. If the O&M contractor needs to spend more than this to meet its obligations to have a functioning asset then it has to meet these expenses from its own resources.

Summary of key points

Sub-contract risk pass-down

• When a concessionaire enters into sub-contract arrangements with third parties, it aims to cleanly pass all of the rights and obligations owed to the principal contractors where applicable. Any residual risks outside of the sub-contractor's competence remain with the concessionaire.

• However, two key risks are (1) construction delay, the concessionaire will not receive revenue payments until the facility is built in accordance with the contract specification, any delays shorten the project period during which a revenue stream *would* have been expected which consequently threatens the concessionaire's ability to meet its debt repayments and (2) poor performance of operation and maintenance of the project, which can lead to penalties and deductions to the availability fee.

• To avoid these risks materialising, lenders require 'back-to-back' sub-contracts to be drafted, this can be done by way of a market-accepted standard form contract being amended to include all necessary obligations from the main concession agreement, or a bespoke contract being created using the concession agreement as the base of the contract.

• It is common to see "equivalent project relief" or "EPR" clauses in sub-contracts which only entitle the sub-contractor to relief if the concessionaire has become entitled to the same relief under the concession agreement. However, the sub-contractor often demands the right to force the concessionaire to put forward equivalent claims against the government and to have control as to how these claims are run, which it can then benefit from.

• Certain key commercial issues will be negotiated between concessionaires and sub-contractors to establish the extent of the risk that remains with the concessionaire, this includes delays and insurance, events of default which need to be triggered in the sub-contract *before* such events are triggered in the concession agreement, caps on liability for the sub-contractors and performance securities in the form of guarantees so that the concessionaire can manage the solvency risk of the sub-contractors.

Conclusion

To summarise, in addition to the concession agreement and suite of finance documents that are involved in a typical PPP transaction, there will always be a range of project documents that provide for the realisation of the project i.e. the construction and/or ongoing maintenance of the project. It is common to see sub-contracts put in place with additional private sector entities in order to achieve the implementation of the project, however this often raises some key commercial issues that need to be addressed in the sub-contracts, e.g. the way in which the risk of non-completion, the risk of delay to completion and any rights of recourse are passed down from the main contractors to the sub-contractors

CHAPTER 7

PROCUREMENT ARRANGEMENTS

7. PROCUREMENT ARRANGEMENTS

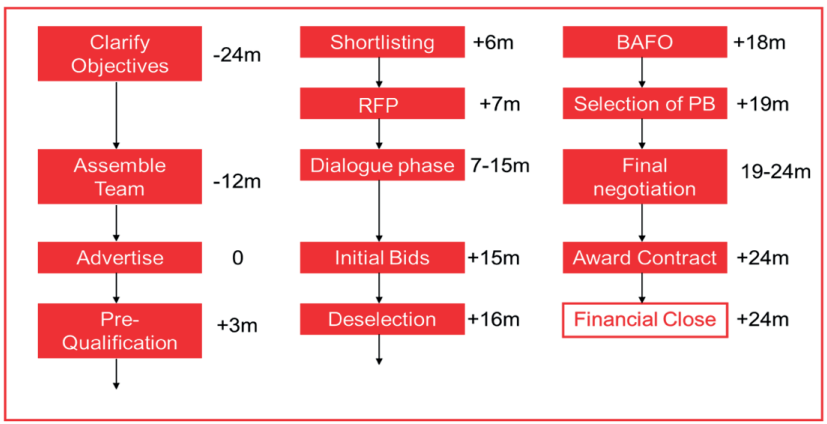
This section will look at:

(a) a typical PPP procurement process; and

(b) proposals that arise outside of a formal procurement process, called unsolicited proposals.

7.1 A typical PPP timetable

The diagram below provides an overview of a typical PPP procurement timetable. A project may take 4 years from conception to signature (and in practice longer periods are seen). It can be seen that it is quite possible for the whole procurement process to overlap political terms; for this reason, it is common to see politicians pushing for timelines to be shortened, but this may not be compatible with the goal of achieving a well-structured project that stands the tests of time.



7.1.1 Preparatory stage

At the preparatory stage the government parties should clarify the objectives of the proposed scheme. This would include defining the scope and reviewing the feasibility of the project. This may also include carrying out market soundings – inviting the industry to comment on the proposed procurement on a basic level – i.e. "Do you agree with PPP as a method for procuring this new project? What problems do you envisage from an investor or lender perspective?".

At a suitable point in advance of the contract being notified, the government will probably want to generate some interest for the project amongst the private sector contractors and advisers by issuing information in the form of a Preliminary Information Notice or Project Information Memorandum. This is in addition to hosting bidder days through which the government will make presentations on the proposed scheme.

During this period the government will also be assembling its team and making internal preparations such as:

- clarifying the funding structure;
- assessing affordability;
- working out how to communicate with stakeholders (e.g. users, unions, local authorities, utilities);
- assembling data to be provided to the bidders, e.g. data on employees who may transfer, site condition surveys, etc.;
- preparing for land acquisition, if it is not already owned; and
- preparing the tender documentation.

7.1.2 Pre-qualification

The project will then be advertised and the advertisement will usually clarify what type of scheme is involved and may invite expressions of interest. It may provide that a further, more detailed information memorandum is available to interested participants.

For a major scheme there will typically be a **pre-qualification process.** This is aimed at reducing the number of unsatisfactory bidders proceeding too far in the process and wasting valuable government time.

Based on the expressions of interest received, a smaller number of parties (usually around six to eight) may be invited to pre-qualify by completing a pre-qualification questionnaire (PQQ). This will largely be a "look–backwards" exercise to assess the financial and technical capacity of the party and the experience of the proposed bidders or bidding groups. The PCQ will also address some basic legal questions and requirements, answers to which may otherwise exclude the bidders, e.g. corruption or other criminal activity.

It is often the case – particularly in PPPs where a number of different entities need to come together to deliver a solution - that consortia are made up of a number of different entities. The bid procedure should clearly provide flexibility for the government to accept or decline any variations in the bidding groups throughout the process, provided that the government is satisfied that the bidding group would have been pre-qualified in the current makeup. This will also reduce the risk of challenge by other bidders for technical reasons.

Some pre-qualification questionnaires are more involved and also require an element of forward-looking input from the bidders. The bidders may be asked to submit some form of initial solution based on what is known about the government's requirements from the Project Information Memorandum. This may contain indicative pricing and there may be initial interviews.
The government will then use the PQQ responses to shortlist a number of bidders to receive the Request for Proposal or RFP documents.

7.1.3 Request for proposals

There are a number of different names for this stage of a PPP timetable (Invitation to Negotiate - ITN, Invitation to Tender - ITT, Request for Proposals - RFP, etc.), but there is no formal distinction between them.

The number of shortlisted bidders is usually between two and four. Here there is a trade-off between simplicity of procedure and the risk of being left with a single bidder if one pulls out. For this reason, the RFP procedure should be very clear as to what the government's rights are in the event that the procedure leaves it with just one bidder remaining (i.e. an ability to continue with the process or the right to walk away).

The RFP documents will usually contain a draft of the PPP contract and other ancillary agreements required such as forms of bid security that are to be submitted with the bid, and which may be forfeited if a bidder pulls out of the bid process before selection of a preferred bidder.
Bidders will normally be evaluated on a technical, financial and legal basis, although other possibilities are also seen. For example, for a long-term joint venture project where partnering is seen as a major issue, a significant proportion of the evaluation mark may relate to the bidders' ability to demonstrate how it will work with the government as a partner on schemes going forward. This may of course be quite a subjective question.

Bidders have been known to be put off by PPP projects where the selection process is seen as being too subjective – if the process is too random (too political) then there is not enough certainty to merit the bidder incurring considerable costs to prepare its bid. Similar concerns may arise if there is not enough certainty in the bidding documents, as experienced bidders may properly price the risk and lose, but inexperienced bidders may underprice the risk and win – but with a high risk of the project subsequently failing when the price discrepancies are discovered.

The objective is to encourage the delivery of bids of the highest quality and the weighting process between the technical, financial and legal components of the tender needs careful consideration. A minimum pass-mark may be set in each category to ensure that bidders' proposals are acceptable across the board.

On the financial side, a PPP bid will be geared not to the capital cost of the project directly but rather its whole life cost including cost of funding. In other words, what is the lowest availability payment required from the bidder, or for a revenue-generating project, what is the highest revenue share or revenue guarantee to be offered by a bidder.

A PPP is a complex form of project and sufficient time needs to be left for the parties to consider the issues in detail. Many current projects now have a "dialogue phase" whereby the government sits down with each of the bidders in turn and explores issues in more detail. In principle the government can take advantage of this dialogue during the competitive stage to encourage the bidders to propose solutions, such solutions could be tested in detail against the other bidders, subject to confidentiality issues. The government can then continue with a single solution on which all remaining bidders bid on, or alternatively it can ask different bidders to bid on different solutions. It can also consider inviting bidders to make variant bids alongside fully compliant bids, which may give the government more options to consider. As a result of the complex nature of PPP pro-

jects, which often have partially undefined solutions at the RFP stage, such dialogue or negotiation phases are extremely beneficial – it would be an unusual PPP project if it could be procured without any dialogue or negotiation (i.e. here is the specification and contract, the best price wins).

7.1.4 Bidding phase

The bidding phase may proceed in a single round or it may consist of multiple rounds. For example, after the receipt of initial bids, the government may decide that one or more of the initial bidders is too far behind the remaining bidders to provide any meaningful competition and/or may continue to be a drain on the government's time and resources (as well as the bidder's own), so there may be a deselection process. This usually drops the number of bidders to two.

The remaining bidders will then be required to submit their final bids, sometimes termed BAFO (Best and Final Offer). If negotiations continue, this may be followed by a LAFO (Last and Final Offer). The culmination of this phase will be the selection of the Preferred Bidder (PB).

It is essential at this stage that the bidders have:

- accepted the key contractual terms of the tender;
- shown that they have access to private finance, through executed term sheets from lenders; and
- demonstrated a solution that meets the government's output specification.

It is also of fundamental importance at this point in the process that the government is satisfied that:

- the price is affordable;
- the whole life solution is value for money;
- the bidding group is a cohesive entity;
- the bidder has sufficient arrangements in place with its supply chain (e.g. signed heads of terms with EPC and O&M contractors); and
- if required, the project would achieve off-balance sheet treatment.

The final terms may sometimes be captured in a detailed "preferred bidder letter" which summarises what has been agreed and committed to date as well as providing a summary of any outstanding issues in the run-up to contract signature. The bidders would be required to sign the preferred bidder letter as a condition of final bid validity, upon which the government will make its final selection. If a preferred bidder letter has not already been signed, the government will seek to capture the same terms through an "award letter" given to the preferred bidder.

7.1.5 Final stages

Following preferred bidder selection, the government may need to negotiate any outstanding issues with the preferred bidder.

It is sometimes the case that some of the bidders' due diligence can only be carried out at this stage. The bidder may have made provisos in its bid as to how these would be dealt with at the final stage. Nevertheless, the preferred bidder – or award letter - should contain the strongest possible language to ensure that the preferred bidder acts in accordance with the commitments previously made. Failure to comply with these commitments can usually result in the government being entitled to cancel the process, and/or open up discussions with a reserve bidder. However, a reserve bidder will only remain interested for a short period of time as, following the award of the project to a preferred bidder, the team will likely have disbanded and moved on.

If a bid bond has been requested this will help secure the preferred bidders' commitments until financial close. Failure to enter into a final contract on the terms previously agreed will entitle the government to call the bond and use the funds to re-procure the project.

During this final period the preferred bidder will also finalise its supply chain and funding arrangements (moving from term sheets / heads of terms to fully negotiated and drafted contracts). These discussions are complex, so the final negotiation period will usually be at least six months and for complex projects can be longer.

Strong project management is required by the successful bidder to bring these projects to a close given the number of parties involved and the complexity of the documentation. A typical project will contain hundreds of documents for signature.

Conditions precedent will be finalised in these final stages, which will include legal opinions as well as financial and technical reports on the viability of the project. Central government approvals will also be satisfied.

Following preferred bidder award and contract signature, the concessionaire (a special purpose vehicle) will be established. There will usually be a period between signature and effectiveness of the contract, during which final conditions precedent are obtained.

Financial close is the point at which the contracts become effective from a financial point of view, this is when all conditions precedent are concluded and satisfied, at which point funding will be drawn down from the lenders to repay all private sector costs to date (bid costs and design costs) and funding starts to pay for construction activities.

On some projects the government will ask the successful bidder to use part of this initial funding to make payments of certain design costs to the unsuccessful bidders. This is to encourage bidders to put in credible design proposals.

The legal framework should be clear as to the treatment of unsuccessful bidders. Some countries' PPP programmes have suffered due to a tendency of unsuccessful bidders to bring (perhaps spurious) claims against the making of the award. The programme is often delayed while these are resolved. Ideally the time to challenge the government's decision to award the project to a specific

entity should be carried out at the stage of selecting the preferred bidder itself and not financial close, this provides a period of time for any dispute to be resolved while negotiations continue to take place.

Summary of key points

Typical PPP timetable

• At the preparatory stage, the government clarifies the objectives of the project, defines its scope and reviews the feasibility of the project. This may also include carrying out market soundings to obtain industry views on the proposed project. The government will publicise the project via a Project Information Memorandum amongst private sector contractors and advisers to generate interest. The government will also begin to assemble its team and prepare for the procurement process by clarifying the funding structure, assessing affordability, establishing communications with stakeholders, collate data to be provided to the bidders, prepare tender documentation, etc.

• At the pre-qualification stage, a small number of bidders will be invited to complete a pre-qualification questionnaire (PQQ) to assess the financial and technical capabilities of the bidder and their experience, the bidders may also be asked to submit their initial thoughts on a solution to the government's requirements for the project – this reduces the number of weak bidders progressing too far in the process and wasting valuable government time.

• At the request for proposals (RFP) stage, the government circulates the RFP documents with the successful bidders who were shortlisted from their PQQ responses (usually between two to four). The RFP documents often contain drafts of the PPP contract and ancillary agreements. The RFP procedure must not be too subjective, political or seemingly random, bidders incur significant costs in preparing for such bids and so they wish to be evaluated on a fair technical, financial and legal basis. Due to the complexity of PPP projects, it is now common to also see a "dialogue phase" where the government discusses key issues in detail with each bidder to explore alternative solutions that could be proposed.

• At the bidding phase, the government may require an initial round of bidding which will enable weaker bidders to be removed from the competitive process and usually drops the number of bidders to two. The bidders then submit their final bids, from which a preferred bidder will be selected. Sometimes the final terms of the agreement are often detailed in a "preferred bidder letter" or an "award letter".

• In the final stages following selection of the preferred bidder, the government may need to negotiate any outstanding issues with the preferred bidder. The bidder may carry out due diligence at this stage, but it will still need to comply with the terms of the "award letter". Failure to do so could lead to deselection and a reserved bidder stepping into its place. At this final stage, the preferred bidder finalises its supply chain and funding arrangements, conditions precedent will be finalised (including legal opinions

and financial / technical reports on the viability of the project) and central government approvals will be satisfied.

• Following signature of the contracts, the concessionaire (special purpose vehicle) is established, the contracts become effective once all conditions precedent are satisfied, funding is then drawn down from the lenders and construction of the project can begin.

7.2 Unsolicited proposals

An unsolicited proposal is one where a private sector entity reaches out to the government directly with a proposal to develop an infrastructure project. Usually, the project identified by the private entity is not one that was included in the project pipeline developed by the government and is generally off of the government's radar. Depending on the policy regulations that guide the implementation of PPPs, unsolicited proposals might be expressed as simple project summaries or a new concept that is developed jointly with the government. Some countries have gone down the route of formalising the process; requiring private entities to submit pre-feasibility studies with technical, financial, economic, social and environmental due diligence studies to support their offer.

The key benefit of an unsolicited proposal is that it allows governments to take advantage of the knowledge and ideas of the private sector without having to invest in project development activities themselves. While this might be classed as a benefit from an administrative resource perspective, paradoxically, a lack of capacity is the most significant obstacle for implementing unsolicited projects successfully. Governments with capacity constraints and no framework to assess unsolicited proposals often struggle to implement projects procured in this way.

Unsolicited proposals can be problematic because of:

- A lack of transparency and corruption
- A lack of competition
- A lack of clarity on procedures
- Constraints in performing thorough due diligence
- Risks not being properly allocated
- Poor structuring
- A lack of perception of future liabilities
- High transaction costs

Evidence shows that many countries have attempted to overcome these challenges. However, it requires additional procedures and rules to strike the difficult balance between incentivising the private sector to develop projects and ensuring sufficient transparency and competition to achieve value for money for the government.

The process of dealing with unsolicited proposals can differ from country to country. The advantage of having a clearly-defined process that is represented in a PPP policy framework is that it creates a sense of predictability and establishes clear steps in the procurement process. This then standardises each submission, helping to create more transparency in the process.

7.2.1 UNCITRAL guidance

Some key pieces of advice – based on UNCITRAL guidance – are set out below:

- Proposals should not relate to a project for which selection procedures have been initiated or announced.

- The government should inform the proponent whether there is any potential public interest within a reasonable amount of time.

- If there is public interest, the government should invite the proponent to submit a formal proposal with sufficient detail.

- The proponent should retain title to submitted materials and these should be returned if the proposal is rejected.

For proposals that do not involve proprietary concepts and/or technology, the UNCITRAL guidance suggests that:

- The government should initiate a competitive selection procedure and invite the proponent to participate.

For proposals that do involve proprietary concepts and/or technology:

- The government should seek to obtain elements of comparison.

- The government should identify the output and invite interested parties to submit alternative proposals.

- The government can initiate negotiations if no alternative exists.

- If alternatives exist, other parties should be invited to participate in negotiations.

7.2.1 Evaluation

The evaluation of unsolicited bids is perhaps the most complicated aspect of the process. Since the private sector has initiated a project proposal in an uncompetitive environment, the government must find a way to ensure that the project is priced in a manner that delivers value for money for

the public. This means introducing competition into the process after the initial submission from the private entity, this is ultimately a key feature of the benefits of PPPs.

The tension in the process arises from trying to introduce competition, for competitive pricing and innovative technical solutions, while at the same time rewarding the initial private entity who submitted the proposal to begin with. Several different approaches have been developed to resolve this issue:

(i) Swiss Challenge: An open tender process is held in which the unsolicited proponent is permitted to match the winning bid.

(ii) Bonus System: An open tender process is held, in which the unsolicited proponent receives bonus points during the evaluation (5%-10%), as a means to reward them for their initiation of the project.

(iii) Automatic Short-listing: This option applies to tender processes that have multiple stages (e.g. pre-qualification and request for proposals). In essence, the unsolicited proponent does not have to pass the preliminary stages of the process and is automatically invited to the last stage where they will submit their best and final offer. The Nigerian Government's policy on unsolicited proposals suggests this approach.

(iv) Regular procurement: An open tender is held in which the unsolicited proponent competes on equal terms with the other interested bidders.

(v) Financial compensation: In some jurisdictions, compensation might be awarded to an unsolicited proponent to reimburse them for the feasibility studies and other such expenses incurred in preparing the proposal.

There is consensus amongst PPP practitioners that the best option for the government to pursue for procuring an unsolicited proponent is a simple Swiss Challenge process. The primary advantage of the Swiss Challenge approach is that it can be clearly defined. The original proponent's "advantage" is based solely on the project bidding criteria and the bar is set by the competitive process. Since no further definition or negotiation is needed, like in the case of bonuses or bidding costs, it does not create additional work for the government, nor provide room for subjective decision making that could be perceived as unfair.

[6] *https://ppp.worldbank.org/public-private-partnership/sites/ppp.worldbank.org/files/documents/Guide%20for%20Implementing%20Unsolicited%20Proposals.pdf*

Summary of key points

Unsolicited proposals

• This is where a private sector entity makes a direct proposal to the government in respect of a project, which is usually something that the government had not considered previously. Some countries have formalised the route of unsolicited proposals so that they are now more heavily regulated.

• The government takes advantage of the knowledge and ideas of the private sector without incurring research and project development costs itself.

• Unsolicited proposals can be problematic due to the lack of transparency, competition and clear procedures to follow; risks are sometimes not allocated properly; due diligence exercises are constrained and the project could lead to higher transaction costs because there is a lack of perception of future liabilities. Various countries have attempted to combat these problems; however, it is a fine balance between increased regulation and procedures which encourage transparency and competition, and incentivising the private sector to develop such projects.

• Evaluation of unsolicited bids is highly complicated due to the fact that the proposal was made in an uncompetitive environment, yet the project prices still need to be fair and good value for money for the public. Therefore, competition needs to be introduced into the procurement process which occurs after the unsolicited project proposal has been accepted, yet the private entity that made the initial proposal needs to still be rewarded. This is achieved through various models providing for automatic short-listing of the unsolicited project proposer, additional bonus points awarded to it during the evaluation stage of the tender process, or even the opportunity for it to match the winning bid in the open tender process etc.

Conclusion

To summarise, the procurement of a PPP project is slightly different to conventional procurement methods in terms of the timetabling and various stages that are involved e.g. the preparatory stages, rounds of discussion, pre-qualification and bidding etc. There is a slight controversy surrounding the concept of unsolicited proposals due to the lack of transparency and reduced competition. Nevertheless, the benefits of private sector innovation and research and development, which are a natural product of unsolicited proposals, cannot be underestimated, therefore new models and adaptations to the PPP procurement process have been implemented to redress these concerns of transparency and to re-introduce competition.

CHAPTER 8

INTRODUCTION TO KEY SECTOR ISSUES

8. INTRODUCTION TO KEY SECTOR ISSUES

Each specific infrastructure sector has its own particular issues. This section will highlight a number of the key questions that typically arise in the following sectors, and consider some of the possible answers to these questions:

(a) Roads

(b) Urban Rail

(c) Freight Rail

(d) Airports

(e) Ports

(f) Accommodation

Ultimately, however, each project will have its own specific characteristics which will need to be considered. Thus, this should only be seen as a general starting point for discussion.

The key learning objectives of this module are as follows:

(a) to develop an awareness of the most common sectors in which PPP projects are developed; and

(b) to understand how the peculiarities of a particular sector and other commercial factors may impact on the provisions of the concession agreement.

8.1 Road projects

8.1.1 Demand or Availability?

How is demand risk allocated in the project? To what extent is the project subject to under-demand risk (in terms of toll revenue) or over-demand risk (which may affect the ability to maintain)?

Some countries launched PPP toll road projects with demand risk allocated to the private sector, only to find that these projects faced difficulties during the global financial crisis as personal income restricted car usage. A number have needed to be restructured and in those countries the trend is for projects to be structured on an availability basis. It is understood that a number of traffic advisers on those projects have faced legal action for over-optimistic traffic estimates.

The success of road tolling is also dependent on public acceptance – willingness to pay. Where alternative travel options exist, the toll chargeable will be a function of users' value of their own time. In some countries, like France, road tolling is well established. The government has a role in ensuring

that the public is made aware of the reason for road tolling and assurance is given that the road tolls are a transparent reflection of the cost of building, financing and operating the road.

8.1.2 Performance mechanism

How is performance measured during construction and operation? Is the regime sufficiently objective and usable in practice, or might it give rise to disputes, or even the risk of abuse by the government?

A typical availability-based project may use lane availability as a measure of performance, with availability being measured by certain aspects of road quality (e.g. road surface deterioration). An alternative approach (termed "demand management") is to measure average road speeds as a proxy for road availability.

8.1.3 Tolling interface / competition

What is the interface between the project and any tolls being levied? If the project is subject to demand risk, is there protection against competing roads or other transport modes being developed by the government? How are tolls regulated? How free is the concessionaire to adjust tolls to meet unexpected costs?

Even if the project is an availability-based project, the government may wish the concessionaire to implement the tolling booths / tolling technology; or if this is being implemented by others, it creates an interface that needs to be managed. Where demand risk applies, it may be natural for the concessionaire to request some measure of protection against the creation or substantial improvement of competing routes to allow it to develop a business case, but some requests may not be reasonable - the government should not feel itself prevented from making legitimate improvements to the transport network that are reasonably predictable to meet growing demand. In emerging markets, the development banks may insist that there should also be a toll-free alternative; if so, this should be made clear at bid stage and not introduced as a response to public complaint.

In terms of toll regulation, a balance needs to be struck between the concessionaire's desire to increase (or decrease) tolls to meet unforeseen changes in costs over time (such as changes in law) or to keep itself afloat as a consequence of reduced demand. But some regulation may be required – either by statute or contract – to ensure that the concessionaire does not abuse a market position, where there is no realistic alternative to using the toll road.

8.1.4 Dealing with demand growth

Will any KPIs or maintenance costs be affected by demand growth? If there is an upside, does this have to be shared with the government and is this commensurate with the downside risks?

Demand growth may affect the concessionaire's ability to meet demand-management KPIs (if they exist) and will increase maintenance costs. The contract may need to allow reasonable adjustment for this so that the concessionaire's position is manageable. On a revenue-risk project, demand growth should increase the level of profit on investment; this could be managed through toll regulation (limi-

ting tolls to a fair level of return, reducing the cost to the user), or the excess profits could be captured through a super-profit mechanism, e.g. a formula that requires a share back to government if the concessionaire's rate of return exceeds a certain threshold. Alternatively, as used in some countries in Latin America, the contract could provide that it terminates early when a certain level of equity return has been reached.

8.1.5 Accidents and emergencies

How are risks allocated when dealing with accidents and emergencies? To what extent is the concessionaire reliant on (or at the mercy of) the government emergency services? How do these events get addressed in the payment and performance mechanism?

If an accident requires the emergency services, the police or fire service may expect to close part of the road until such time as injured parties have been safely removed and it is safe to bring in recovery vehicles to clear the road. The concessionaire may have control over the latter activities but not the former, so it may be reasonable for the concessionaire not to be penalised under any availability KPIs unless it fails to respond in good time when the relevant service has given control back to the concessionaire.

8.1.6 Weather and other events

What level of interference by weather and other events does the concessionaire have to assume? Are there levels of weather or flooding risks that cannot be predicted (e.g. 1 in 50-year events) that should constitute a compensation event?

This is a question of design resilience. The government's output specification may require the concessionaire to design the road surface, bridges and tunnels to be able to withstand a certain level of natural event, and this can be priced. If a much more severe event occurs that was not taken into account in the design, and the consequence of this is not fully insured, it may be reasonable for the risk to be shared.

8.1.7 Maintenance and replacement

Maintenance costs are strongly influenced by vehicle types and loads; the relationship between vehicle weight and road surface damage is not linear. Changes in vehicle mix could be influenced by government policy and the concessionaire should be able to adjust tariffs to reflect any material changes in costs.

Excess vehicle loading (e.g. too much weight per axle) can cause disproportionate damage to the road surface. Government has a role to play in policing this properly and enforcing against offenders, using powers which are likely to be beyond the control of the concessionaire. If so, it may be reasonable for the concessionaire to be protected if there is a material flouting of the rules, or even if there is a material change in traffic mix (for example if the government diverts all heavy traffic from urban routes onto the concessioned road).

8.1.8 Interface with third party rights

New or upgraded roads will have an interface with roadside developments, and may also travel over existing facilities such as railways and pipelines. It is not always possible to predict the level of disruption (or indemnity) that will be necessary to deliver the intended road and it may be difficult to obtain permits to work from unconnected entities.

The risk of obtaining suitable permits from third party agencies and property owners is always difficult to predict, and delayed receipt of permits can have a material impact on a timetable if the float (contingency) in the project programme is used up. Government may have a role in ensuring that any agencies under its control ensure that permit requests are not unduly delayed if applied for properly, and accepting a commensurate risk in the concession contract. For third parties outside government control (such as private railway companies or pipeline owners), the concessionaire will most likely need to give open-ended indemnities in favour of the relevant parties in order to have the right to work over or move the infrastructure. This may create difficult to ensure obligations which also need to be brought into the risk allocation discussion.

8.1.9 Contamination

Oil spills and shed loads are an occupational hazard for roads projects and could lead to significant environmental damage and/or significant revenue loss due to road closures. To what extent is the concessionaire protected against historic contamination on brownfield projects, and to what extent is insurance available to cover this risk during the operational period?

Ideally some level of environmental survey will already have been completed and this can be provided to the concessionaire. In many cases, the government will except the concessionaire to form its own opinions on such surveys and take the risk, but if there is insufficient time or ability to verify this information during the bid stage, this may not be a cost-effective risk approach. In many projects, the government recognises this by accepting the environmental survey as a baseline and providing a level of protection to the concessionaire if environmental issues are discovered which were not described in the report or inferable from it.

8.2 Urban rail projects

8.2.1 Demand or Availability

Passenger fares tend to be low/subsidised and urban infrastructure is expensive. Many passenger rail projects structured on a demand-basis failed and needed to be restructured. High demand elasticity and competition makes it difficult to increase fares and maintain high usage.

A study of 27 rail PPP projects in 2012[7] *described some of these failures, and noted that in every single project the demand forecasts had been overestimated, with most falling between a 20% and an 80% overestimate. Lending institutions are now much more cautious about demand risk within an urban rail context and as a result, in developed markets the vast majority of passenger driven projects*

[7] *https://mpra.ub.uni-muenchen.de/38415/1/Dehornoy_Review_of_rail_PPPs_2012_.pdf*

are structured on an availability basis (or with some measure of guaranteed usage for the infrastructure concessionaire, or with cross subsidy from other lines of business (e.g. Heathrow Airport's rail link, where the infrastructure cost is subsidised by the broader commercial business).

8.2.2 Structure of the project

Does the project include operations of the system (DBFOM) or just the construction and maintenance of the system to be operated by others (DBFM)? How do operations fit within the wider urban transport policies?

This is a key structuring point for the government. The new network may work well as a standalone operation (particular if new and evolving technology that is not currently used by the city authorities), in which case DBFOM (design-build-finance-operate-maintain) may be appropriate, but if the city wishes to have greater day to day control over the system as part of a city-wide transport strategy, it may want to keep the operations out of the project and procure as a DBFM (design-build-finance-maintain). It is an important early question because the performance and payment mechanism will be very different between the two structures. This is discussed further below.

8.2.3 Urban construction risks

Does the project involve tunnelling (an underground scheme) and/or remodelling of roads (a tramway/elevated scheme)? How is the risk of unknown conditions dealt with (e.g. relocation of utilities, removal or containment of contamination)? Are any existing structures being taken over?

Tunnelling projects are expensive and create their own risks, which may be difficult to incorporate into the wider financing of the project. For this reason, a number of metro projects have either been developed outside of a PPP route, or the tunnelling component has been developed outside the PPP route and the finished tunnels then handed to the concessionaire to build out the system within it.

Remodelling of roads on a tramway scheme also involves significant interaction with the built environment as well as existing services and businesses. On some projects the government party may seek to minimise the risk for the financing by doing some of the necessary work and utility removals before the concessionaire's work starts.

The concessionaire's ability to take on utility removal / contamination / existing asset risk will be a function of the existence and quality of surveys, so the government can improve the quality of bids by doing these and making them available in good time in the bidders' data room. The government usually avoids accepting that reliance may be made on the reports, but this may not be a reasonable position if the concessionaire has no way of verifying the data.

8.2.4 Performance and service levels

What are the key KPIs? What level of performance is the concessionaire required to achieve? Is it achievable? Is there a suitable buffer before deductions start? Is there a ramp up period in the early phase? How will service levels be set?

A DBFOM project will focus more on punctuality and reliability of the service; a DBFM project will focus more on functionality and the availability of the rolling stock, track and stations to meet the requirements of the timetable set by the city operations team.

Whichever requirements are set, 100% performance is not realistic – there will always be issues due to breakdowns, maintenance requirements, passenger-related events, vandalism, etc. If the performance levels are set at 100% then the concessionaire will price in the risk of unavoidable deductions at (say) 2% and when it achieves greater than 98% reliability it will keep the risk money as extra profit. It may be more cost effective to set a performance level at 98% and avoid the increased risk pricing. Risk can also be reduced by agreeing to a number of "excusing causes" – external events that will relieve the concessionaire from performance deductions – but these should not be so numerous or subjective that the contract becomes difficult to administer.

In some projects – e.g. a new tramway project where the system will be interacting with new traffic signals for the first time – it may be difficult to predict how well the system will perform; it may take a few months to achieve a steady service. If so, it may be appropriate to allow some latitude in the deduction regime during the first year so that the concessionaire is not overly penalised.

8.2.5 Rolling stock issues

Are vehicles being supplied by the concessionaire or by the government? If the latter, how will the concessionaire manage the handover risk? Vehicles tend to be procured on a long lead-time. What happens to performance levels if vehicles are damaged?

In most DBFOM projects the concessionaire will be asked to provide the rolling stock alongside the civil works so that it can take responsibility for delivering a totally integrated system. If the government has access to vehicles through another source – e.g. a framework contract for supply of vehicles for the wider transport network – then more thought will be required as to how systems integration is managed and as to who takes the risk of problems arising between the components.

8.2.6 Passenger interface issues

If the concessionaire is being managed on performance, what protection does it have against increased passenger numbers? Who takes the risk of needing to supply more vehicles to meet demand?

Vehicles will probably be designed to accommodate a certain number of people; trains can usually be made longer by adding new units (if the platform lengths permit); the timetable will assume a certain amount of dwell time at each stop. If passenger numbers increase significantly, it may affect the ability to meet timetables, and it may even become a safety issue. If new vehicles are required, a suitable lead time will be required in the contract given the manufacturing time. New vehicle options are usually limited in time to the first few years, because after then it will be more difficult for the original vehicle manufacturer to guarantee delivery of additional vehicles to an agreed price and time, as they may have taken on other orders or reconfigured their production lines.

8.2.7 Segregation and traffic interface

Is the project physically isolated from other rail networks? Is it segregated from road traffic? In a tramway project with a traffic interface, how will the signalisation between trams and cars be managed? How will traffic accidents / blockages be dealt with?

Each potential interaction with other rail or road vehicles outside of the concessionaire's control will need to be considered when setting any punctuality/timetable requirements. If the project involves a new tramway, the concessionaire may be responsible for designing the new traffic signals and ensuring these are integrated into the government's wider road signalling system, who will then be responsible for operating it. This may take time to bed down and the concessionaire may need some latitude in terms of its punctuality metrics. Similarly, if the concessionaire is dependent upon local emergency services to remove blockages, it may wish to be protected from a major delay that affects the timetable in a material way.

8.2.7 Safety regulations

Rail transportation tends to be highly regulated from a perspective of safety. Changes in safety law could present a disproportionate impact on those operating rail systems. Can additional costs be recovered under the contract if this occurs?

One may expect that changes to the rail sector will be covered as "Specific Changes in Law", but in some rail projects this approach has been expanded to include general changes in law with a disproportionate effect on the project.

8.2.8 Energy use

Power will be a major component of project operating costs. How will the project allocate energy consumption and tariff risk between the parties?

Energy costs will be a function of a number of issues, including: (i) efficiency of the trains and provision of traction power to the system; (ii) how the trains are operated by the drivers (braking and accelerating profiles); (iii) prevailing weather conditions and the level of exposure of the system components to the weather. It would be reasonable for the concessionaire to take responsibility for those components within its control – in terms of design, construction and selection of components; and in terms of operator efficiency if the concessionaire has that responsibility as well. A compensation mechanism may involve requiring the concessionaire to include the expected energy usage of the system in its bid and to pay compensation if actual energy use exceeds this.

8.2.9 Network expansion

Is it likely that the project will be expanded during the concession lifetime or interact with new network lines? Can this additional work or impact be predictably priced by the existing concessionaire? How will the interface be managed if a new contractor or concessionaire is engaged?

If a network expansion is likely, there will be a lot of sense in asking the existing maintainer/operator to take charge of the expansion, but without competitive tension, the government may find it difficult

to get the same value for money it would have had. Some projects have proceeded by terminating the first concession, and then reletting the project as a further new-build contract with the right to operate both the original and the new lines. This can also be an overly expensive route, as the original concessionaire would expect to be able to claim the lost profit it would have earned on the original concession.

8.3 Freight rail projects

8.3.1 Demand based

Freight rail projects are dependent on having sufficient users. Greenfield freight rail projects may only be financeable if there are anchor customers (e.g. mines or industrial users) who will benefit from cheaper transportation costs. These users may also co-invest in the rail business.

Lenders may expect the anchor customers to provide minimum traffic guarantees, to ensure that the infrastructure funding can be paid off over the life of the loan. In the longer term, the concessionaire may be able to take on more demand risk.

8.3.2 Project structure

Is the project based on a complete logistics service (procurement of rail system, rolling stock and operations, charging a fee to transport goods from point to point) or separation of the infrastructure service and operations (where an infrastructure owner charges a track access fee to an operator)? In the latter case, are there single or multiple operators? How long will the concession(s) be?

The structure will depend on a number of factors, such as the status of the existing network and what parties are already in place to own and operate that network. For a freight rail project that will have a mine as anchor customer, the mining company may want to have suitable control over the operator so that it can guarantee that its mine products can reach the market. If there are to be multiple operators with strong businesses, it may be possible to separate the infrastructure component of the project and finance this on the basis of the expected track access fees. Another structure might involve the government opening up an existing network to new operators by letting out concessions for specific train paths for specific goods, with the concessions being used to finance new rolling stock.

8.3.3 Third Party Use / Connections to wider network

Will third parties have the right to operate their own rolling stock on the railway? Can third parties build a spur line to connect with the railway and then run services on the existing railway? Does the new line interact with an existing network and existing services? How will train paths be allocated? Can infrastructure charges recognise the "first-mover" risk that the investors took?

Although a new greenfield railway may viably be constructed to serve a new mine or industrial development, if the development is supported by the government through the grant of a concession, it raises valid questions as to whether the new railway should form part of a broader public infrastructure network, and therefore be open to third party use. In many cases concessions are therefore let on terms which mandate that third-party usage must be tolerated, and even that third party spur lines may be connected. This is to avoid a situation where a developer can refuse access to the others,

which may lead to the inefficient construction of a parallel or separate railway, or simply leave other developments unaffordable. That said, the initial developer will have been taking significant development risk with the original project and in calculating track access charges for subsequent users it is legitimate for a "first mover" risk component to be included in the price.

8.3.4 Passenger Use / Public Service requirement

Does the project involve a passenger service? Is a minimum service level mandated by the government in the concession agreement? Is this use compatible with the intended freight use?

Similarly, the creation of a new or upgraded railway creates the possibility of a new or increased passenger service. In many cases, a public service requirement is therefore built into the concession terms, however in most cases the obligations are not particularly strict. This reflects the fact that a passenger railway service in developing countries are unlikely to be viable except on a subsidised basis. In addition, there can be a stark difference between passenger services and freight services – for example, mine-product trains can be very long, which may make it difficult to schedule in a frequent stopping service for passengers without additional capital expenditure for passing loops.

8.3.5 Modal competition

How is competition from competing modes of transport for the freight addressed? Do the rail operations have to cover the below-rail infrastructure cost in addition to the cost of rolling stock and operations? How does this compare with road freight's contribution to roads through taxes/fuel levies?

One of the practical difficulties in financing a greenfield freight rail project is that the logistics cost to the end-user has to cover the cost of delivering and financing the new infrastructure, whereas in most countries, road hauliers do not have to meet the full cost of their own "infrastructure" (the road network), even though heavy trucks can cause a significant and costly amount of damage to road surfaces. If this imbalance remains, it may be difficult to predict the demand uptake for the new railway.

8.3.6 Political Support

What steps can government take to encourage modal shift to railways? What other political support may be required for the project to be successful? Is retrenchment required of existing railway staff? How will this be managed politically?

The modal shift from road to rail may be a key driver for government, either due to the high cost of road maintenance or the indirect costs of road congestion (such as delays, pollution and accidents). To address the imbalance discussed above, the government may want to consider whether it needs to intervene in some way to encourage a modal shift. For example, by mandating a minimum use of railway infrastructure or incentivising rail usage through suitable tax breaks. In each scenario, the government's desire to achieve a shift from road to rail is likely to come up against some political resistance from established interests, such as trucking companies.

8.3.7 Tariff regulation

Are prices for use of the infrastructure or haulage regulated by statute or contract? What certainty will an investor have that prices can be raised to cover inflation/project costs over the life of the project?

A balance needs to be struck between the concessionaire's desire to increase (or decrease) track access charges / haulage charges to meet unforeseen changes in costs over time (such as changes in law or external market changes such as forex movements and fuel costs) or to keep itself afloat as a consequence of reduced demand. Some regulation may be required – either by statute or contract – to ensure that the concessionaire does not abuse a market position, particularly where the government has put in place other incentives to encourage rail usage.

8.3.8 Management of supervening events

What supervening events may occur over the network? Are there security issues? Risks of vandalism and/or theft of assets? Risk of disruption of services at crossing places? Does the concessionaire need assistance from government agencies to manage these risks?

In an emerging market context, many such issues may present themselves. There needs to be a realistic discussion as to whether the concessionaire can fully protect itself from these risks or whether the assistance of government security forces (police or army) may be required from time to time to ensure that the concession remains workable.

8.3.9 Contractual fallback

To what extent will the investors and lenders have recourse to the government on a project termination? Will debt be guaranteed? What risks does that leave with government in terms of the quality of the investors' delivery methodology?

In most emerging market infrastructure projects, there is usually a significant underpin of the project debt by the government in order to raise finance. In a default termination scenario, equity will be lost, but the government will still be faced with a liability to pay out the debt. The government may therefore need to do a material amount of technical due diligence of the concessionaire's proposals, and suitable monitoring of its implementation, to ensure that the value of the assets returned in such a situation is at least the value of senior debt.

8.3.10 Rehabilitation issues

Does the system involve any transfer and rehabilitation of existing assets? Are they capable of meaningful due diligence in a competitive bid situation and how should such existing assets be valued? Should there be an obligation to maintain / increase their value?

Some concessions have been structured on the basis of the transfer of an existing railway network, with a view that it will be upgraded by the concessionaire. The government's interest will be to ensure that the concessionaire not only makes any new investments promised but also that the value of the existing assets are maintained at all times throughout the concession. To do this analysis, this may require a detailed due diligence of the existing railway components, and termination compensation

can then be made contingent on a re-assessment of the network value at the date of handback. This is likely to be a significant endeavour on a large network.

8.4 Airport projects

8.4.1 Demand based, typically brownfield assets

Airport projects tend to be based on the transfer of an existing business (single or multiple airports) accompanied by an obligation to upgrade the infrastructure. Greenfield projects are occasionally seen which raise questions as to how demand will be allocated between old and new airports.

There is a healthy market interest in single airports with a reasonable passenger throughput (about 1 million passengers being a typical threshold) or in a group of regional airports with a similar throughput. This is supported by a global trend for increased demand, leading to a good pipeline of airport investment projects across the world. Occasionally it may be necessary for a new airport to be constructed at a city – if the existing sites are constrained and will not permit demand growth. If so, the project structure needs to be very clear as to what services will be transferred to the new airport (particularly if the existing airport remains in operation).

8.4.2 Competing Airports

Is it possible that the government will seek to create new airports during the term of the concession? What exclusivity protection is fair and reasonable to protect against this risk to ensure that the concessionaire can repay the cost of the new infrastructure?

Given the size of the concessionaire's investment, it is reasonable and typical for governments to agree to some level of exclusivity protection. For example, this might be a promise not to develop any new airports (or upgrade any existing airports) within a certain distance of the concessioned airport for a certain period of time (e.g. no new airport within a radius of 300km within the next 10 years).

8.4.3 Aeronautical revenues

How are airport charges regulated? How free is the concessionaire to adjust charges to meet inflation, unexpected costs or future developments ?

In many circumstances, the new airport concession may be the first time that the airport has been run on a fully commercial basis, and so there may need to be new laws or procedures brought in to support this. For example, local laws may provide that certain services always be provided in local currency, but an international investor may need to have the right to recover all airport charges in U.S. dollars (and possibly into an offshore account) to be able to service its U.S. dollar financing.

In some cases, the existing operator may still have a supervisory role over the concessionaire as its regulator, which may include the setting of airport charges. The concessionaire for its part may need some contractual protection from the government to ensure that any requests to increase permitted

charges are handled fairly and recognise any efficiently incurred expenditure.

8.4.4 Non-aeronautical revenues and overall revenue share

What non-aeronautical revenue opportunities exist? Is non-aeronautical revenue subject to any contractual or statutory regulation? What share of gross revenue is allocated to the government? What are the components of gross revenue? Is there a fixed or up-front fee and how is this treated in terms of investment?

Airports create significant opportunity for non-aeronautical revenue growth, through shopping, catering, car parking, hotels and other services. This income is less commonly subject to regulation, but the government may expect to share in the upside of such revenues through a share of gross revenue agreed in the contract. For governments, there is a trade-off between requesting an upfront cost to "buy into" the concession, and requesting a royalty share of longer-term revenue. Either way, the total expected return to government should form part of the bidding criteria.

"Gross revenue" is typically defined as including all revenues received by the concessionaire through the airport business, but care should be taken to ensure this does not inadvertently cover some heads of income that are purely compensatory, e.g. liquidated damages received from contractors or late payment interest.

8.4.5 Rights to fly and Air Services Agreements

What is the regime surrounding air travel in the host country? Which "Freedoms of the Air" do airlines enjoy? Is service growth constrained by any bilateral or multilateral air service agreements? What protection does the concessionaire get if these are varied? What happens if political steps are required to enable new routes?

The greater the freedoms for air travel, the more likely it is that airlines will be able to create new routes to meet increasing demand. In many cases, air travel between countries may be governed by air service agreements (treaties) which describe what level of services may be made between those countries and between which cities. Difficulties can arise if the usage of these rights is not balanced.

For example, if one country's airlines wishes to increase the number of flights but the other country does not want to allow this because its own airlines are not in a position to take up reciprocal rights. These are political decisions, and the concessionaire is largely at the mercy of the government to take action here, although the airlines themselves may also be willing to lobby for such changes.

8.4.6 Expansion rights and obligations

Is expansion of the airport likely within the term of the concession? At what point will this be triggered as an obligation? What happens if the concessionaire cannot finance this new work due to market conditions ?

Given trends in passenger growth, it is likely to be inevitable in many long-term concessions that

capacity expansion is necessary. The government will want to include this as a concrete obligation, which ideally will be triggered at the point at which the concessionaire needs to start building to avoid a reduction in the level of service at the airport arising through overcrowding. For the concessionaire and its existing lenders, the issue is that it is difficult to predict when funding may be required in the future, and lenders will be reluctant for their concessionaire to be treated as being in breach of contract if it is not possible to raise finance at the relevant time in the future (for example, if financing conditions had changed materially by that point).

8.4.7 KPIs and performance regime

What kind of performance regime applies to the concessionaire? Are any financial penalties attached to this? What level of poor performance is required to lead to termination? Is performance measured by reference to IATA Levels of Service (e.g. Optimum)? Are there any subjective methods of monitoring such as customer satisfaction?

Most airport concession agreements contain a performance regime of some kind, but these are usually not onerous in terms of financial penalties and only a severe and persistent failure to perform should have termination consequences. Since the concessionaire takes full demand risk on the project, a shortfall in performance can usually be expected to lead to a direct loss in revenue, and so proper performance should be self-policing in that respect. That said, it can be expected that the government would want to have a close eye on the level of service being provided at the airport, usually based on customer-focused metrics issued by the trade body IATA. Their Level of Service "Optimum" is now the usual standard to be sought for new terminal developments. In addition, some contracts do impose an obligation to take passenger surveys to assess customer satisfaction, but these will not normally be subject to a major financial penalty.

8.4.8 Government services interface

Which services are reserved to government suppliers? Air traffic control, customs, security, policing? What space and equipment needs to be provided to be these bodies, and what service levels are required in return? Is performance of these entities guaranteed by central government? Does revenue mostly come through a national (state-owned) carrier? Will government guarantee these payments?

An airport cannot run without certain services, and in many cases these services are reserved to government providers. Air traffic control, border control/customs and policing will invariably fall within this category. Fire fighting and ambulance services may also be reserved services, but sometimes may be delegated to the concessionaire. Where the concessionaire is dependent on such services, there should ideally be a clear service level agreement which sets out the reciprocal obligation on both parties. These services are typically without payment, so if there is a material failure of service, the concessionaire may want to fall back on the government as concession grantor to guarantee the performance of its state agencies.

If the airport revenues are highly dependent on a state-owned enterprise – the national carrier using the concessioned airport at its hub – then the concessionaire needs to be confident that it will receive payment in a timely manner from the airline for the services it is provided with. In the case of a privatisation, there may not be a solid payment history between two state owned enterprises, and so in

many cases, the government is often asked to provide a guarantee of the national carrier's payments.

(i) Existing infrastructure/ existing staff / existing contracts

What is the state of existing infrastructure? Can it be adequately surveyed? What happens if major defects are discovered that impact on performance? How many staff are employed and on what terms? Are they unionised? Are there any unpaid liabilities (back pay, pensions)? What contracts already exist and do they have to be taken over?

These are essentially due diligence issues, but in the case of employees may also be political issues. If the airport is being privatised in order to increase its efficiency, it may be necessary for the concessionaire to have the right to lay off some staff. Who should bear the redundancy cost in this case?

8.5 Port projects

8.5.1 Demand based

Port projects can be either brownfield (transfer of business and upgrade of existing port infrastructure) or greenfield (creation of new terminal) but are invariably structured on a demand basis. Some port projects may serve anchor customers (e.g. mining companies or industrial users) through take-or-pay arrangements, or may have port users as shareholders to guarantee port usage indirectly, or may have an operating contractor guarantee a minimum throughput based on arrangements with shipping lines.

The global logistics industry is driven by competition for the cheapest cost of transporting goods from point to point. Port projects are to be seen a part of this landscape. The key factors in logistics costs include: (i) the cost of shipping (voyage cost), which in turn is driven by efficiency of the ships (with a trend to increasing size and draught); (ii) the location of the ports and the impact on hinterland delivery costs to the final destination; (iii) stevedoring charges and port dues – the cost of offloading and transferring to other modes; and (iv) transhipment opportunities, allowing transfer to smaller, regional ships.

As with the airport industry, there is a general trend of increasing port demand, particularly containerised traffic, driven by factors such as an increase in middle income households and a corresponding increased desire for consumer goods.

At the same time, the increased competition in the market has led to a reduction in shipping costs, which in turn has led to efficiency drives through larger ships and a consolidation of carriers. The same drive for lower costs has led to a desire for ports with a draught capable of handling the larger ships as well as new and efficient port handling equipment to minimise costly dwell time at the ports.

8.5.2 Competing ports

Is it possible that the government will seek to create new competing ports during the term of the concession or allow others to be expanded? What exclusivity protection is fair and reasonable to protect against this risk to ensure that the concessionaire can repay the cost of the new infrastruc-

ture and any upfront purchase price for the concession?

Similar to airport projects, concessionaires may expect to have a minimum level of exclusivity over a certain distance and time period. The government may expect to have the right to revoke the exclusivity if the port is not able to handle increased demand and the concessionaire does not itself expand the port to meet this demand.

8.5.3 Tariff setting regime

How are port charges regulated? How free is the concessionaire to adjust charges to meet inflation, unexpected costs or future developments? If there is a national tariff regime, does it properly account for the level of investment and increased service levels from the new port? Can the concessionaire offer differential pricing to different users, and different benefits (e.g. priority berthing)?

Some projects are designed with a very free tariff structure – the concessionaire will essentially be governed by market pressures (subject to local legislation on abuse of a dominant position), but equally in many jurisdictions there are existing regulations governing port tariffs. This may create difficulty if there is an expectation of a national set of standard tariffs, as it is usually inevitable that an increased charge may be required to support the additional debt required to construct new port facilities. It is common for ports to be structured on an open-access basis, to avoid a market distortion, but it may still be open for the port operator and shipping lines to agree some mutually beneficial terms between them, such as increased discounts for minimum throughput levels.

8.5.4 Supporting infrastructure

How well connected is the proposed port to the rail and road network? To what extent is the concessionaire dependent on the provision of new or upgraded infrastructure or its maintenance over time? What happens if these activities do not take place and this affects the reputation of the port? Will the government invest in new supporting infrastructure before the new port works are completed?

A key issue for lenders, particularly with greenfield port developments, will be to ensure that the new or upgraded port is adequately connected to the road and rail network. These developments will typically be outside the control of the port operator, and there have been examples of projects which have materially suffered due to the government not making suitable supporting infrastructure connections to support the new inland traffic to and from the port. This can be critical, as chronic port congestion can affect the port's reputation and may drive traffic elsewhere.

8.5.5 Expansion rights and obligations

Is expansion of the port likely within the term of the concession? Will the concessionaire have the right to expand the port unilaterally to meet this demand or will government consent be required? If the concessionaire does not start expanding to meet demand, will it lose exclusivity?

As with the airport projects, there is a delicate balance between the government's desire to impose an obligation to expand and the concessionaire's ability to guarantee it can access finance at the relevant time. Conversely, the concessionaire itself will want to ensure that if it sees a suitable opportunity to

expand the port (and this is contemplated by the concession), it can do so without requiring a fresh approval from the government (otherwise, the government may use its approval right to seek to renegotiate the commercial terms of the project).

8.5.6 KPIs and performance regime

What kind of performance regime applies to the concessionaire? Key criteria for logistics companies will be the efficiency/speed of the port operations and responsiveness to vessel requests. How strict is the contractual regime if these criteria are not met?

A port concession will typically contain a performance regime, but, as with the airport projects, these are not usually very strict in terms of financial or default consequences. This reflects the fact that the concessionaire will already be taking demand risk and is fully incentivised to provide a service that turns ships round quickly and is seen as efficient by port users.

8.5.7 Marine services/ government support

Which services are reserved to government suppliers? E.g. harbour master, pilotage, towage, dredging, customs, security. What contractual protection is available if service levels are not met? Is new investment required to supply the services? Can the concessionaire self-perform if necessary? Does the port benefit from any special economic zone status that would incentivise business growth?

As with airport projects, port projects may be subject to a range of reserved services, although practice differs from country to country as to which services may be reserved or not. Where the services are reserved to government, it will typically be able to recover the cost through port dues and may require the concessionaire to recover these on its behalf. In some case the government agencies may have the right to impound the ship if the dues are unpaid, so it will be in the concessionaire's interest to ensure that its payment arrangements with the shipping lines manage this risk, as an impounded ship could block a profit-making berth.

In some cases, it may be appropriate for the concessionaire to have the express right to self-perform reserved services, particularly if service becomes patchy or insufficient to meet growing demand.

8.5.8 Existing infrastructure/ existing staff / existing contracts

What is the state of existing infrastructure? Can it be adequately surveyed? What happens if major defects are discovered that impact on performance? How many staff are employed and on what terms? Are they unionised? Are there any unpaid liabilities (back pay, pensions)? What contracts already exist and do they have to be taken over?

These are essentially due diligence issues, but in the case of employees may also be political issues. If

the port is being privatised in order to increase its efficiency, it may be necessary for the concessionaire to have the right to lay off some staff. Who should bear the redundancy cost in this case?

8.6 Accommodation projects

8.6.1 Availability or Demand

Accommodation projects often apply to government-provided services that do not generate any income or relate to subsidised services that would not pay for the accommodation cost, e.g. state-run schools and hospitals, buildings for government departments, police, army, etc. A few projects do generate income and take demand risk: e.g. student accommodation projects in developed markets.

In an emerging market context, if the project is to be paid through subsidies/availability payments, the government party needs to be able to assure the concessionaire that it will be able to stand behind the payments due. A central government letter of support or guarantee may be required, or else the project may need to bear the cost of a suitable political risk insurance / non-payment guarantee.

8.6.2 Output Specification and Payment Mechanism

Assuming performance is measured on availability, what is being measured? How much of the specification is based on outputs (e.g. desired functional outcomes such as safety, temperature, availability of systems) as opposed to inputs (e.g. requirements to deliver specific services). How is the availability payment calculated, and how much of it is at risk? How is performance monitored and how are deductions levied? How subjective are the requirements and is there a risk of abuse?

If the project is not subject to demand risk, then the government must take a closer look at the project outputs to ensure that it receives value for money for the availability fee paid. Payment mechanisms can become complex, but the government should always bear in mind that these mechanisms need to be operable by the end users. This may be a new discipline for some public servants (such as school estates managers) and it will be necessary for the contract managers to be given adequate training to explain how a PPP contract is intended to work, and what tools are available within the contract framework to measure performance. Ideally the contract requirements should be as objective as possible, but this is not always achievable and a level of subjectivity may be present. Where the government party has control of monthly payments, it may be very easy in practical terms to withhold payment until such time as the government is satisfied that proper performance is provided. However, because cashflow is critical for thinly-capitalised concessionaires, a unilateral right of withholding may be subject to abuse, for commercially driven reasons.

8.6.3 Interface with users/visitors/vandalism

To what extent can performance be affected by interaction with facility users and visitors? How open to the public is the facility? To what extent should the risk of damage and interference be shared between the concessionaire and government? How does this interface with project insurances?

User damage is a perennial risk in some accommodation contracts. Schools, in particular, have a reputation for being subject to accidental damage risk during the day and vandalism risk out of hours, when out of use. A practical mitigant to vandalism risk is to keep the buildings occupied at more times, for example by encouraging out-of-hours use for social clubs, which can also generate a source of revenue.

8.6.4 Risk of termination / Compensation on termination

What level of poor performance merits a default termination of the project? Can this be measured objectively? How should the concessionaire be compensated on a default termination?

Where there are detailed performance mechanisms with penalties attached, it is typical for the concession agreement to provide that these mechanisms will be the sole remedy of the government for damages for poor performance. This ensures that the parties are rigorous when setting the performance mechanism and avoids a double jeopardy risk, whereby the government may be tempted to ignore the penalty regime and sue for general damages. Where this mechanism applies, it would be appropriate to use a suitable threshold of deductions incurred as a trigger for termination (e.g. 25% of payment lost to deductions over a three-month period), because this type of trigger is objective and easily understood by both parties.

On a default termination, the shareholders can expect to lose their equity; lenders will wish to receive their outstanding senior debt, but on many projects this may not be guaranteed.

8.6.5 Management of services costs

What services are being provided under the project? A distinction is often made between "hard service" costs (maintenance and renewal) vs "soft service" costs (cleaning, catering, grounds maintenance, security); the latter are more exposed to changes in labour rates. How can this risk be managed efficiently over the project term?

Labour rates have often been seen as more volatile, so a simple CPI inflation ratchet in the payment provisions may not be sufficient to cover the risk of increased staff payments. In some projects this risk is shared by requiring the concessionaire to benchmark any proposed cost increases against other projects in the market, or if necessary conduct a full market testing exercise to establish the prevailing cost. This leaves the government party exposed to price increases, but avoids the need for the private sector to price for this risk.

8.6.6 Design review

How much design detail is ready at bid selection phase? How can the government ensure that it has adequate control over the finalisation of the design to meet functional requirements and/or aesthetic requirements? Can the concessionaire proceed at risk if disputes arise on design adequacy?

A design review procedure is commonly adopted – the concessionaire submits its detailed design as it is developed during the project and the government checks it is compatible with the end-user requirements. This is particularly useful for projects with a high level of interaction with the govern-

ment staff, such as hospitals and schools, and where operational efficiency will be key. That said, the concessionaire will likely have a tight construction programme, so any delay in receipt of approval to proceed (whether because of a dispute or otherwise) may create severe difficulties. For this reason, concessionaires commonly request a right to proceed at risk pending resolution of the dispute (and for the dispute itself to be referred to a fast track dispute resolution procedure).

8.6.7 Employee/ Pension issues

Does the service involve the transfer of existing staff? Are the staff unionised and/or do they have expectations of certain conditions as government staff? Is there a concern about creating a "two-tier" workforce for the same services? Are pension contributions properly funded at transfer?

Accommodation projects typically involve transfer of existing staff from government employment. Since they may continue to have the benefit of government terms and conditions (as negotiated by public sector employee unions), there may be a political sensitivity if the workers still feel part of the original public sector provision, and the concessionaire has freedom to diverge from the original terms and conditions. The unions may want to avoid a "two-tier" public sector workforce arising; the risk for the concessionaire with a "single-tier" workforce is that the unions may negotiate a pay increase on the non-concessioned projects and create an expectation that the concessionaire's transferred employees should have an increase as well. This may not be allowed for in the concessionaire's financial model.

8.6.8 Energy use

Power will be a major component of project operating costs. How will the project allocate energy consumption and tariff risk between the parties?

Typically, the concessionaire would take consumption risk – based on the anticipated energy use for the buildings calculated at design stage – whereas the government party would take tariff risk. Some adjustments may be necessary over time if usage changes materially within the buildings, for reasons beyond the concessionaire's control.

8.6.9 Commercial use

To what extent can the facilities also be used for commercial purposes? To what extent is it fair to have this revenue cross-subsidise the service fee and if so how should it be shared?

As mentioned above, out-of-hours usage of facilities – such as in schools – can be a useful way of generating additional revenue while also performing a useful social function. In some projects, the concessionaire is asked to bid a level of minimum income it expects to make and this will be netted off the availability fee for the benefit of the government. Ordinarily, any excess income will then be subject to a sharing mechanism with the government, e.g. 50:50, after any necessary costs of opening/closing/cleaning have been covered.

8.6.10 Refinancing

To what extent has the government shared in interest rate risk through the setting of the availabi-

lity payment? What happens when interest rates can be improved, how will the benefits be shared?

Since the government will wish to have a fixed availability fee, it may be necessary for the concessionaire to ensure that its lenders obtain a suitable interest rate swap to ensure that the financing costs are stable enough to be covered by a fixed fee from the government. Since the swap price will usually not be known until the moment of financial close, it has been common for government parties to share in the risk that the swap price diverges from the rate assumed at bid submission (otherwise the project may be unbankable for the concessionaire). If this is the case, it would be reasonable for the government party to share in some of the upside if the project can be refinanced at a cheaper rate. Many projects therefore contain a provision that requires the concessionaire to notify the government whenever a refinancing occurs, or any material change to the financing documents that generates an equity upside. It is common for 50% of the upside to be required to be shared with the government.

8.7 Further suggested reading

World Bank Public-Private-Partnership Legal Resource Centre:

https://ppp.worldbank.org/public-private-partnership/financing/project-finance-concepts

World Bank PPP Reference Guide, version 3:

https://ppp.worldbank.org/public-private-partnership/library/ppp-reference-guide-3-0

Project Finance, 4th Edition by Graham D. Vinter

8.8. Glossary

Key term	Meaning
Availability based projects	Projects which entitle a Private Partner to receive regular payments from a public sector client to the extent that the project asset is available for use in accordance with contractually agreed service levels.
Awarding government	The public sector body (or department, agency or constitutional institution) that procures a service from the PPP. Also known as a procuring government.
BOO – Build Own Operate	A project delivery mechanism in which a government entity sells to a private sector party the right to construct a project according to agreed design specifications and to operate the project for a specified time but with no obligation to transfer the project at the end of that period.
BOOT – Build Own Operate Transfer	A project delivery mechanism in which a government entity sells to a private sector party the right to finance, design, construct, own and operate a project for a specific number of years. This structure is very similar to the build-operate-transfer (BOT) structure, except that the private sector party owns the asset during the term of the agreement and, at the expiration of the specific period, the facility is returned to the government. The BOOT structure is often used to build power stations, water treatment facilities and sewage facilities.
BOT – Build Operate Transfer	A project delivery mechanism whereby the government sells to a private sector party the right to build and operate a project. After the concession agreement comes to an end (usually after 20 or 30 years) and the private sector entity has operated the project for the duration of this period, the entity then transfers control of the project and its operations back to the government.
Brownfield projects	This term refers to projects which involve land that has been previously developed but is not currently in use, i.e. it usually requires renovation, further development, remodelling, modification, upgrading etc. This can be contrasted with Greenfield projects.

Cap and collar arrangement	An agreement not to go above (cap) or below (collar) certain amounts in relation to a particular requirement (e.g. subsidy levels in the case of a "cap and collar subsidy arrangement").
Changes in law	The amendment or passing of new laws, as well as new interpretations of laws, that conflict with the laws affecting the project and impact upon the project; change in law protection may be subject to a specified level of materiality before any protection is given (e.g. demonstrating the change has a minimum financial impact on the Private Partner).
Commercial lenders	The parties, typically international banks but may also include local banks, who provide financial backing to the project, taking an interest by way of security – often of the asset in question or the project as a whole.
Commercial operate date / commercial operations / COD / Scheduled COD	The date on which the construction phase of the project is successfully completed (typically determined by some form of independent certification and/or testing regime); the scheduled COD represents a target date for such successful completion with failures to achieve that date having commercial consequences (typically delay liquidated damages and/or termination).
Community engagement	Steps taken to ensure that the project in question can adequately function in the local community. This may be by developing the land in a way that is as compliant as possible with local customs, employing a certain number of local citizens or engaging with local businesses.
Compulsory acquisition	The process whereby the Contracting Government does not give the local land owners a choice to sell their land, but rather uses its legislative powers to compel them to sell for a predetermined price.
Concession agreement	An alternative term for a project agreement. The parties may refer to a «concession» where a project provides a paid-for service to the public, such as a «concession» to operate a toll bridge but is also sometimes used more generally to refer to any long-term PPP agreement.

Construction phase	The period from when the Private Partner takes control of the project site (typically by reference to the date of signing or effective date (if conditional) of the concession agreement or the commencement of construction by reference to certain works) until the commercial operations date.
Construction phase	The period from when the Private Partner takes control of the project site (typically by reference to the date of signing or effective date (if conditional) of the concession agreement or the commencement of construction by reference to certain works) until the commercial operations date.
CTA / Common Terms Agreement	This is an agreement between the financing parties and the Project Company which sets out the terms that are common to all the financing instruments and the relationship between them (including definitions, conditions, order of drawdowns, project accounts, voting powers for waivers and amendments).
DBF – Design Build Finance	A project delivery mechanism in which a government entity grants a private sector entity the right to design and construct a public infrastructure project, in addition to sourcing full or partial financing of the project. The government retains the operating and maintenance obligations in respect of the fully-constructed project.
DBFM – Design Build Finance Maintain	A project delivery mechanism like DBFO/DBFOM but where the operation of the asset is retained by the public sector; for example, where a railway system (track and rolling stock) is delivered and maintained but the public sector retains control over the dispatching and operation of the rolling stock.
DBFO – Design Build Finance Operate (or DBFOM - Design Build Finance Operate Maintain)	A project delivery mechanism in which a government entity sells to a private sector party (which has funding capabilities) the right to design and construct the project and thereafter maintain and operate it for an extended period of time.
De minimis	A minimum threshold often used in concession agreements to benchmark when something is of a material nature, thereby triggering a consequence under the agreement.
Deductions	A method set out in the payment mechanism by which payments to the Private Partner are reduced if it fails to meet the key performance indicators. Sometimes called abatements, adjustments or penalties.

Default termination	Where an innocent party exercises its contractual right to terminate the concession agreement in whole or in part due to the other party's actual or anticipatory failure to perform its contractual obligations.
Demand risk projects	Projects where the revenue generated by the project will fluctuate based on the level of usage and which therefore relies on demand forecasting to determine the bankability of the project.
DFI	A Development Finance Institution (DFI) provides credit by way of debt or equity and guarantee instruments to private sector investments based in developing countries.
Direct agreement	An agreement creating a direct contractual relationship between a sub-contractor of the project company and either the awarding government or the project's funders. The parties sometimes call the agreement between a sub-contractor and the awarding government a collateral warranty. Key sub-sub-contractors enter into direct agreements (or collateral warranties) with the project company. Direct agreements include a right to step in to the sub-contract.
DSRA / Debt Service Reserve Account	This type of bank account is usually required by lending banks in the context of project finance transactions. The primary purpose of the Debt Service Reserve Account (DSRA) is to protect a lender against unexpected volatility or interruption in the cash flow available to service the debt. These funds, essentially put aside for a rainy day, are usually established at the end of a construction period once the loan becomes repayable. The DSRA is usually funded to be either six months or even one year of principal and interest payments.
ECAs / Export Credit Agencies	An export credit agency (ECA) is a financial institution (which can be a private or quasi-governmental institution) that offers financing for domestic companies' international export operations and other activities. ECAs offer loans and insurance policies to such companies to help remove the risk of uncertainty of exporting to other countries.
EPC (or Turnkey contract) – Engineering, Procurement, Construction	A contract requiring a contractor to complete the design, engineering, procurement, construction, and start-up of a project or facility by a certain date, for a fixed price and at certain performance specifications.

Equator Principles	A risk management framework, adopted by financial institutions, for determining, assessing and managing environmental and social risk in projects. It is primarily intended to provide a minimum standard for due diligence to support responsible risk decision-making. These can be found at: http://www.equator-principles.com/
Equity	Monies used to finance a deal that is sourced from the existing finances of a company (for example, raised through the issuing of shares in the company), rather than though external debt (for example, from commercial lenders).
Equity return	The amount of a company's net income returned as a percentage of the shareholders' equity.
Event of Default / EoD	This is usually a predefined circumstance, situation, condition or event that is considered to be a breach or violation of the facility agreement / CTA. This allows a lender to exercise its rights and remedies under the agreement and demand full repayment of the outstanding balance before it is due.
Expropriation	Where the government takes privately owned property and declares it for public use.
Facilities management	Management of the asset and services by the supplier. The parties, and the PPP contracts, may refer separately to hard FM and soft FM. Hard FM relates to "hard» facilities management: the maintenance of buildings, engineering, landscaping and similar elements of an asset, rather than «soft» FM, associated with services which support the operation of the facility (for example, catering, cleaning, laundry, parking).
Finance Documents	The suite of key finance documents which relate to the transaction in its entirety.
Financial Model	A financial model is used in project finance transactions to assess the economic feasibility of the project and whether or not it will be capable of producing enough cash to cover all operating costs and debt-servicing expenses for the duration of the concession agreement.

	The financial model is used for multiple reasons: to assist with structuring a project finance deal, to determine the maximum amount of debt the Project Company is able to take on, to calculate the annual debt service coverage ratio which will highlight the riskiness of the project and is often used to determine the level of interest to be paid on the debt
Float period	The amount of time that one stage of the project can be delayed without causing delay to any subsequent stages of the project.
FM contractor	A company contracted to carry out hard FM or soft FM services using the completed asset. Largely synonymous with an O&M Contractor.
Force majeure	An event, outside the control of the contracting parties, that results in one or both of the parties being unable to fulfil their contractual obligations. In common law jurisdictions the definition of force majeure is typically a matter of drafting and negotiation whilst in civil law jurisdictions is normally set out in the relevant civil or commercial code.
Foreseeable / unforeseeable	Circumstances in the reasonable contemplation of the parties given their knowledge at the time of entering into the concession agreement. Unforeseeable having the opposite meaning.
Functional specification	The document outlining the required specification of as-built project and how the project is to operate in practice.
Gearing ratio	The gearing ratio measures the proportion of a company's borrower funds to its equity. The ratio indicates the financial risk to which a business is subjected, since excessive debt can lead to financial difficulties. A high gearing ratio represents a high proportion of debt to equity, this is indicative of a great deal of leverage, where a company is using debt to pay for its continuing operations. In a business downturn, such companies may have trouble meeting their debt repayment schedules, and could risk bankruptcy. The situation is especially dangerous when a company has engaged in debt arrangements with variable interest rates, where a sudden increase in rates could cause serious interest payment problems.

	A low gearing ratio represents a low proportion of debt to equity, this may be indicative of conservative financial management, but may also mean that a company is located in a highly cyclical industry, and so cannot afford to become overextended in the face of an inevitable downturn in sales and profits. The most comprehensive way to calculate the gearing ratio is as follows: **(Long-term debt + Short-term debt + Bank overdrafts) Shareholders' equity**
Government support	Where the government in the jurisdiction in which the project is based actively uses its powers to enable the project to function, or acts in a passive manner whereby it does not prevent the project from commencing. Such support may extend to guarantees if the Contracting Government is perceived by the Private Partner to be a credit risk and/or other fiscal measures designed to stabilise any jurisdictional uncertainties that make the project not bankable (e.g. foreign currency protections and tax breaks)
Grace period	The period after an obligation is due for performance during which such obligation may still be performed without declaring an event of default and/or termination.
Greenfield projects	This term refers to projects which involve unused land that is not subject to the constraints of existing buildings or infrastructure, there is no need to remodel or demolish existing infrastructure as is the case with Brownfield projects.
Hair trigger	Circumstances that easily and disproportionately allow a party to terminate all or part of a contract with no genuine prospect of the offending party remedying the issue.
Hedging arrangements	An instrument used to limit exposure to a price or unit of value that fluctuates. These typically cover interest rate, foreign currency exchange rates or commodity prices and/or inflation.
Hedging termination costs	The costs associated with terminating any hedging arrangements prior to their expiry.

HoldCo / Holding Company	A holding company is a company or entity that exercises control over one or more other companies, this is usually due to it being a majority or sole shareholder of the respective subsidiary companies. In a project finance transaction, a special purpose vehicle (SPV) is usually set up to be a "shell" holding company (HoldCo). This HoldCo is owned by the Project Investors and other investors all of which in turn own the project itself. This structure enables debt to be raised at HoldCo level. The debt-holders and equity-holders then rely on the cash flows of the assets in HoldCo to recover their investment.
IFC Safeguards	All projects undergoing the International Finance Corporation's (IFC) initial credit review process after 1 January 2012 must follow: • The Policy on Environmental and Social Sustainability, which defines IFC's commitments to environmental and social sustainability; • The Performance Standards, which define clients' responsibilities for managing their environmental and social risks; and • The Access to Information Policy, which articulates IFC's commitment to transparency. These can be found at http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+sustainability/our+approach/risk+management/ifcsustainabilityframework_2012.
Indigenous land rights	The legal or beneficial interests in the land on which the project will be built that belongs to local citizens or affects their customs in a material way.
Institutional investors	An institutional investor is an entity which pools money to purchase securities, real property and other investment assets or loans for their respective investment portfolios. Institutional investors include banks, insurance companies, pension funds, hedge funds, investment advisers, endowments, and mutual funds.
Interface agreement	A contract between the construction sub-contractor and the FM contractor / O&M Contractor. The interface agreement regulates who bears the cost of, for example, a defect in the completed asset caused by the construction sub-contractor, which delays the FM contractor's / O&M Contractor's performance

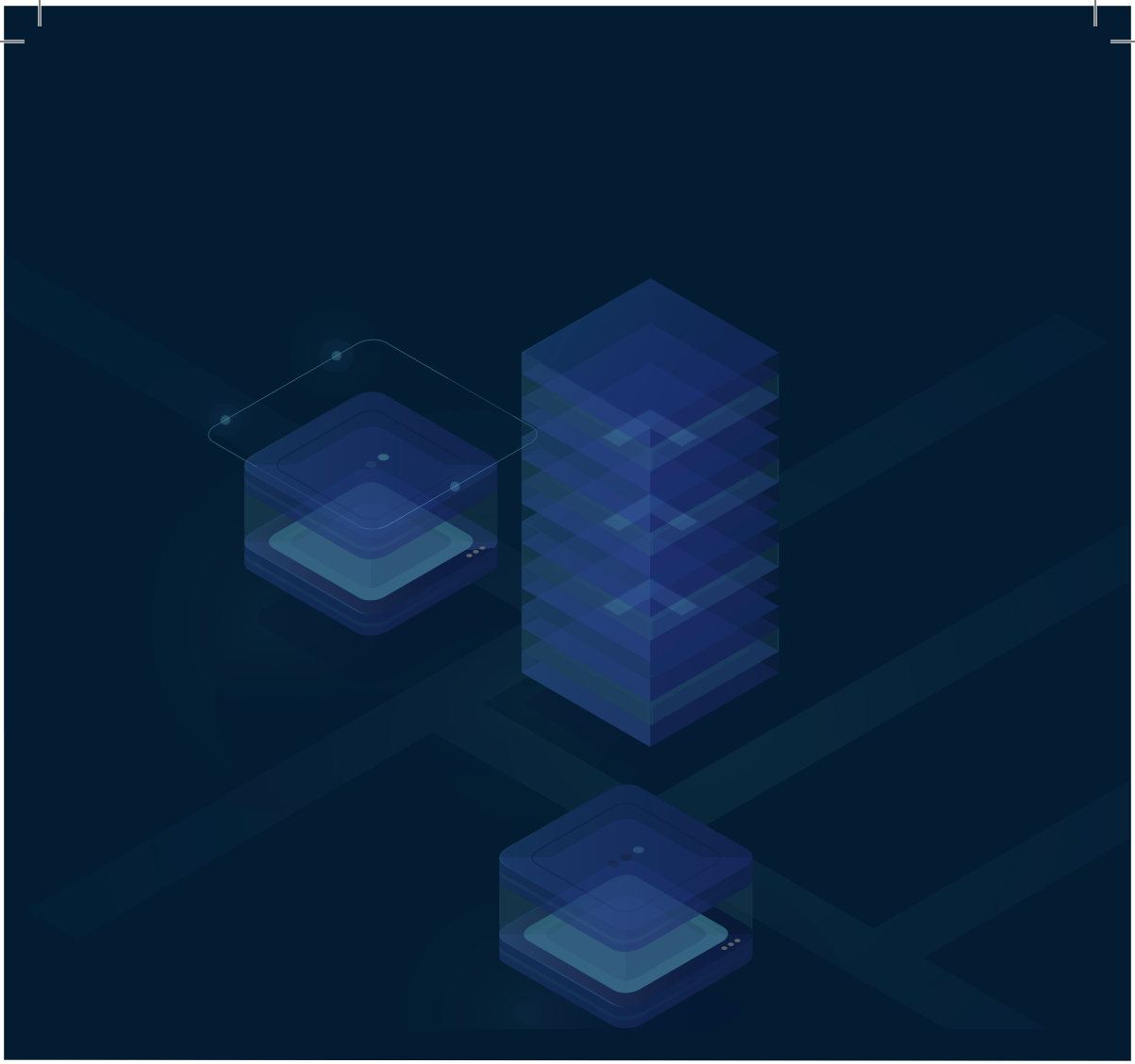
Investors	Parties who provide capital to the project enabling it to commence, seeking to make gains on the monies provided in the form of interest payments or a proportion of profits from the project (i.e. equity return).
IRR	This means internal rate of return, used as the measure of return on the investment made by shareholders in a consortium.
ITT	An invitation to tender (by submitting priced bids) issued to bidders by an awarding government.
Life-cycle cost	This is the total cost of providing the asset and services to the end of the contract term. It includes capital costs, finance, running costs, staff costs and the total cost of maintenance, taking into account the value of any asset at the end of the contract term.
Liquidated damages / LDs	A specified monetary amount paid for a specific contractual breach that aims to compensate the injured party for the loss it suffers for such breach.
Longstop date	A date which is tied to a prescribed time period after a scheduled completion date by when all obligations must have been fulfilled otherwise a right of termination will typically arise.
MDBs / Multilateral Development Banks	A multilateral development bank (MDB) is an international financial institution, usually created by two or more countries for the purpose of encouraging economic development. MDB's often have a large and varied group of members, ranging from developed countries acting as "donors" and developing countries who require such funds.
MMRA / Major Maintenance Reserve Account	During the operational phase of a project, capital investment is required to ensure that the project is able to continue operating as planned. The Major Maintenance Reserve Account (MMRA) is a specific bank account that is designed to accumulate funds over time to ensure that the funds are there when they are needed, if not a little before. An MMRA is typically required by lenders where the maintenance cycle of the project is such that there are large maintenance costs relative to the cash flow which will be incurred during the operational life of the project. The MMRA is usually funded up to a certain target balance. The target balance might be set at 6, 12, 18, or 24 months of future major maintenance capital expen-

	diture. It may even be a fixed amount. The MMRA could be funded (i) in full on the last day of construction; (ii) partially funded on the last day of construction and then subsequently built up from the project's cash flow; (iii) completely built up from the project's cash flow.
MSA – Management Services Agreement	An agreement entered into between a consultant or independent contractor and a company to provide management, consulting or other services for a fee. A management services agreement helps the company to reduce its operational costs and to increase its efficiency.
Natural force majeure	A force majeure event that is brought about by an act of nature, for example, an earthquake.
Non-default termination	The situation in which the contract can be terminated by an event that is not brought about by either party breaching their contractual duties (e.g. termination for extended force majeure or termination by agreement).
Novate / novation	Replacing one of the parties to an agreement with another party who consequently takes on the rights and obligations of the party who is no longer bound by the contract (in contrast to an assignment whereby, typically, only rights can be transferred).
O&M – Operation and Maintenance	An agreement between the project company and an operator to manage, operate and maintain a project.
O&M Contractor	A company contractor that carries out operation and maintenance services on a project.
Offtake agreement	An agreement to purchase all or a substantial part of the output or product produced by a project.
Operations phase	The functional stage of the project after the construction phase when it adequately operates, finishing with the end date of the concession agreement.
Output specification	The specification that sets out the awarding government's requirements in non-prescriptive terms, it usually outlines the levels of capacity from the project from a technical and financial perspective that are required in order to ensure the pro-

	ject is built to the desire standard and is profitable. This leaves the bidders to determine how to deliver those requirements. May be similar to a functional specification.
Payment mechanism	The formulae used to assess performance of the project and to calculate the payments to be made to the Private Partner assessed against their compliance with the performance indicators.
Performance indicators / KPIs	Benchmarks to measure performance and of the project, or the parties' contribution to the project. These are typically referenced to the output specification and are the benchmark against which the Private Partner is incentivised to perform. If the Private Partner falls short of the performance indicators then typically deductions will be made and in persistent or material circumstances a right of termination may arise. It is imperative that the Contracting Government runs a sensitivity analysis in the payment mechanism to calibrate the deductions.
Political force majeure	A force majeure event that is brought about by the direct acts of the government, such as a nationwide strike protesting the government's actions, or by indirect events affecting the government, such as war. Similar terminology used may include "material adverse government action" / events of government action / inaction / buyer risk events (which may also extend to Contracting Government breach).
PPP – Public Private Partnership	A contractual arrangement between a public and private sector entity providing a service or performing a departmental function, in accordance with an output specification, for a specified, significant period of time. PPP involves a substantial transfer of all forms of project life cycle risk to the private sector. The public sector retains a significant role in the project either as the main purchaser of the services provided or as the main enabler of the project.
PRI / Political Risk Insurance	This is a type of insurance that is commonly taken out by private sector entities in the context of project finance transactions to protect against the risk of revenue loss due to a change in the political environment. Political risk may be defined as extra-economic changes arising strictly out of the political process, either through violent means (war, insurrection, politically-motivated terrorism etc.) or through specific government action (new law and/or regulation) that can directly affect a company's operations and interfere with its ability to generate revenue.

Private Partner	The entity from the private sector that undertakes the project typically through the use of a special purpose vehicle incorporated specifically and only for the purposes of undertaking the project.
Project agreement	The principal agreement between the awarding government and the project company governing the project. Sometimes also known as a Concession Agreement.
Project Company	The SPV company, established by the preferred bidder, to enter into the project agreement with the awarding government. Also known as ProjectCo.
Project Documents	These are a suite of documents which are vital to the design, construction, ongoing operation, maintenance and service of the project after it has been built.
Rehabilitate-Operate-Transfer / ROT	The project structure whereby the Private Partner receives from the Contracting Government an existing asset, may then upgrade, improve or rehabilitate that asset and then operate and maintain the asset to the agreed standard and subsequently transfers it back to the Contracting Government after a specified period of time (typically somewhere between 25 and 30 years in the transport sector and 15 and 25 years for energy and waste/water). The Contracting Government should carefully consider the quality of the asset it expects to receive back at the end of the term and how to ensure that the Private Partner ensures that the asset achieves that standard.
Risk matrix	This usually takes the form of a table identifying the risks involved in a project, indicating the provisional risk allocation for each risk and any mitigation of that risk, such as insurance.
Senior debt	Money that is borrowed by the Private Partner to finance a project that takes priority over any 'junior' debt (lower down the order of priority) or equity in the event that the project company becomes insolvent.
Service level specification	The specification (typically scheduled to the project agreement) setting out the standard to which the service must be delivered, often accompanied by an agreed performance monitoring regime that uses key performance indicators, which are a measure of the contractor's performance against the contract specification.

Set-off	If one of the contracting parties is owed monies by another contracting party, the debtor's right of set-off allows it to balance mutual debts with the creditor.
Sponsor(s)	The party that is the ultimate owner of the Private Partner. It invariably includes the major project parties such as construction contractor and commonly includes financial investors or funds. Sponsors will limit their liability to the project through the Private Partner but may need to give limited support or guarantees to the lenders of the senior debt, particularly during the construction phase.
Stabilisation	Contractual clauses that entrench certain legal provisions, enabling foreign investors to protect themselves from changes in the law and a certain degree of political risk.
Substitute concessionaire	The party who fulfils the obligations of the Private Partner in the event that the concession agreement is novated.
Tariff	The rate at which prices for the project output – for example, electricity in the context of a project in the energy sector - are paid between the Contracting Government and Private Partner, in relation to either a predetermined price or agreed formula.
Termination costs	The fee charged to a party to the contract when it wants to break the contract.
Termination trigger	An event that allows for an innocent party to terminate a contract in the event that the other party to the contract breaches its obligations.
Unavailability	This is the test for determining deductions from the unitary payment, by referring to standards for the provision of the facility (not the standard of associated services that are provided by the public sector).
Uninsurable	When a project, or part of a project, cannot be covered by any insurance policy or insurance cover cannot be obtained on the specified terms, or when it is not commercially feasible to obtain an insurance policy for the project or insurance cover on specified terms.



DEVELOPED BY

ALSF ACADEMY

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