4

The infrastructure PPP project development process

Summarising the section

- A PPP framework comprising policy, legal, regulatory and institutional aspects is a key building block for PPP projects in a country. A supportive and flexible PPP framework facilitates deal flow and helps ensure the smooth development and operation of PPP projects.
- The infrastructure project development process is a complex and resource intensive (in both time and costs) process, typically lasting three to four years. It comprises six broad phases: (i) development of the supportive enabling environment; (ii) definition of the project; (iii) feasibility assessment; (iv) project structuring; (v) transactions; and (vi) post- implementation support in terms of contract management/monitoring.
- Contract management and monitoring is a process that takes place throughout the life of the contract. Appropriate monitoring frameworks and tools need to be developed to ensure that a credible performance evaluation process exists, public policy objectives are being met and the PPP project is value for money for the government.
- The public sector should have a transparent mechanism for the allocation, valuation and management of contingent liabilities that may arise from PPP arrangements.
- Contract renegotiations are costly and involve considerable time and effort. Hence, renegotiations should only be carried out if they enhance value for money and/or prevent the collapse of the contract. It is important to understand that a renegotiation does not imply failure of the contract.

This section covers the following topics:

- The framework for infrastructure PPPs, in terms of the enabling environment, comprising policy, legal, regulatory and institutional structures as well as a discussion on contingent liability management;
- The infrastructure project development process, including a detailed discussion of the various elements involved in the different stages of project development; and
- Post-project implementation issues such as contract management and monitoring, as well as renegotiations.

4.1. The PPP framework

This section describes the key elements of the PPP framework, including policy, legal and regulatory aspects, which are important for facilitating PPPs. A description of the key issues to be covered under each aspect is provided, followed by a summary discussion of the main conclusions from the experience of developing countries. The issue of contingent liability management is also discussed.

4.1.1. Overall policy framework

A clear policy framework is the foundation for a PPP programme for a country. The policy framework needs to set out at least the following:

- The objectives and rationale for the use of PPPs;
- How the government plans to take forward its PPP programme;
- Overall guidelines in terms of how the government will assess PPPs;
- The institutional structures and processes involved, including the role of different government departments for project selection, preparation, procurement and approvals.

The policy framework needs to be clear and transparent and is extremely important, as it reflects the government's commitment to implementing a PPP programme in the country.

Building on the policy framework, the government needs to develop a well-structured investment framework that delineates the planned infrastructure projects and the level of investment required, covering both public and private sector projects (i.e. beyond simply a list of PPP projects). This will help the private sector to gauge the links between various infrastructure projects which might impact upon their feasibility, among other considerations. The investment framework needs to be developed for the different infrastructure sectors of the economy.

Box 4.1 discusses the different elements of the PPP policy framework in India and the supporting institutional structures.

Box 4.1. The Indian policy and institutional framework for PPPs

The Government of India (GoI) has launched several institutional initiatives for PPPs in India including:

- A Committee on Infrastructure, chaired by the Prime Minister, that initiates policies, develops structures for PPPs and oversees the progress of key infrastructure projects.
- A Viability Gap Fund (VGF) and the India Infrastructure Finance Company Limited (IIFCL) that provides long-term capital to help finance PPPs, as well as capacity building and other forms of assistance. An initial Rs2 billion (US$40 million)[1] was set aside by the GoI for VGF. IIFCL has been incorporated as a wholly government-owned company, with authorised capital of Rs20 billion (US$400 million), of which paid-up capital is currently Rs10 billion (US$200 million).[2]
- An India Infrastructure Project Development Fund (IIPDF) within the Department of Economic Affairs (Ministry of Finance) that promotes the development of credible and bankable projects. IIPDF has been established with an initial GoI contribution of Rs1 billion (US$20 million).[3]
- Institutional structures such as the PPP cell within the Finance Ministry for organising activities to promote PPPs and administer proposals; PPP cells at state level to promote state-level PPPs; an interministerial Public Private Partnership Appraisal Committee (PPPAC) charged with determining the requalification of bidders under PPP and preparing toolkits and model concession agreements, among others.

4.1.2. Legal framework

The legal framework for PPPs is at three different levels:

- The general legal framework for the country, covering issues such as property rights and land acquisition;
- The legal framework for infrastructure PPPs that looks at specific issues relating to PPPs, such as procurement;
- Finally, the legal framework at the contract level, which includes specific issues relevant to the contract, drawing on the legal framework for PPPs as a whole (if available).

A well-developed legal framework is crucial to the success of a PPP programme. It saves time and effort and allows for some flexibility in contract issues, as they can be referred back to the overall legal framework.

The various elements of a legal framework essentially need to ensure contract enforcement and effectiveness, and provide both the public and private sectors with the assurance that their interests will be protected. Some of the issues to be covered under the legal framework include:

- The rights of the private sector, including those of the investors (in terms of how their investment will be protected) and the lenders (including how their debt/loan provided for the infrastructure project will be protected).

- Appropriate rules and procedures for the resolution of contract disputes, including the rights and obligations of the parties involved. A country may develop internal procedures for contract dispute resolution or this may be facilitated through international courts or agencies.
- Rules for repatriation of profits for overseas investors and the use of expatriate personnel.
- Laws for licences and permits for the different issues, such as land use and environmental impact.
- Rules and procedures for handling renegotiation of contracts and appropriate compensation mechanisms, as may be required.
- Whether unsolicited proposals are acceptable and, if so, the process and system for managing them.

Most of the above legal issues are dealt with in a 'PPP Act' or a 'Concession law' (see Box 4.2 for core principles for modern concession law), but can also be included in separate laws to deal with individual issues such as procurement law, dispute resolution law, expropriation law, foreign ownership legislation, labour law, foreign exchange law, tax laws and laws on public disclosure. While some countries may have specific procurement legislation, an overarching PPP Act is also important as it covers a wider set of issues as highlighted above. Needless to say, all these laws need to be compatible with each other. Some countries have also developed model concession agreements (MCAs), structured legal documents that facilitate PPPs (see Box 4.3).

However, it should be noted that an overly onerous legal system can imply considerable transaction costs and may work to the detriment of both the public and private sectors. The legal framework, therefore, needs to be carefully balanced and rationalised to effectively promote the PPP programme. It is important that the legal framework is clear, consistent and non-conflicting, and especially important that it is stable and fair.

Box 4.2. Core principles for a modern concession law

The European Bank for Reconstruction and Development (EBRD) has prepared a list of core principles for a modern concession law.[4] According to the EBRD, a modern concession law should:

- Be based on a clear policy for private sector participation;
- Create a sound legislative foundation for concession;
- Provide clarity of rules (including a clear definition of the scope and boundaries of application of the concession legal framework);
- Provide a stable and predictable concession legal framework;
- Promote fairness, transparency and accessibility of concession rules and procedures, including providing for transparent and competitive selection of the concessionaire (with limited exceptions allowing direct negotiations), rights of foreign and domestic investors and regulatory instruments relevant to the concession;
- Be consistent with the country's legal system and particular laws;
- Allow for negotiability of concession agreements;
- Allow for enforceable court or arbitral determinations;
- Allow for state undertakings and guarantees;
- Accommodate security interests (i.e. provide for the availability of reliable security instruments on the assets and cash flow of the concessionaire in favour of lenders, including 'step-in' rights).

Box 4.3. Model concession agreements

MCAs are structured legal documents employed by some governments, including India, South Africa and the UK, to facilitate concession PPPs. Standardisation can help streamline the procurement process and enhance the stability of the regulatory and policy framework. Each contract initiated under standard conditions involves limited tailoring and minimal scope for negotiation, thereby also supporting governments with weak capacity and experience in PPPs.

MCAs have been viewed as particularly successful when used for a number of similar projects in a country (for example, toll roads in India), but have also been criticised for rigidity and not being suitably adapted to changing circumstances in different types of projects. MCAs are useful where there are a number of planned projects that can benefit from the standardised document – in the case of only one or a few projects the transactions costs may be too high.

Examples of MCAs in practice

- MCAs for roads and ports in India: http://infrastructure.gov.in/mca.htm
- PPP provisions in South Africa: http://www.ppp.gov.za/StandPPPProv.htm
- UK PFI contracts: http://www.hm-treasury.gov.uk/ppp_standardised_contracts.htm

4.1.3. Regulatory framework

Along with the overall policy and legal framework, a regulatory framework forms an integral part of the overall PPP framework for a country. In most countries, regulatory offices have been set up to support the introduction of private sector participation. A regulatory framework aims to promote infrastructure investments by protecting investors from political opportunism/arbitrary actions, provide improved or maintained quality of infrastructure services for the consumers and protect them from abuse of market power, promote economic efficiency and help ensure stability. Some of the issues addressed by a regulatory framework include:

- The market structure and the impact on the infrastructure service delivery, particularly in terms of the price of the service;
- Ensuring acceptable service quality – operators with market power may be incentivised to reduce costs at the expense of decreasing the quality of the service and the regulatory framework can include several schemes such as quality standards, monitoring schemes and penalties for non-compliance to ensure quality;
- Environmental protection – in the same way that it should ensure the quality of the service, the regulatory framework can also cover schemes and incentives to ensure protection of the environment.

The degree to which the regulatory system in a country can meet its objectives is based to a large extent on its credibility and commitment. An approach to strengthening the commitment of the regulatory system is to establish rules that limit the regulator's discretion, i.e. constrain the regulator's decision-making powers by setting out rules that must be followed. There are various forms that these rules can take, which reflect increasing levels of commitment, but concomitantly lower levels of flexibility, as illustrated in Figure 4.1 below.

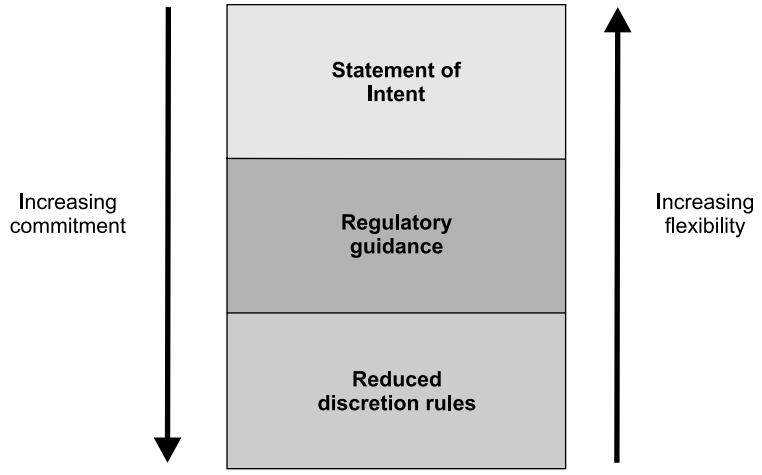

Figure 4.1. Options for creating regulatory commitment[5]

As presented in the figure, a 'Statement of Intent', which sets out only the broad principles as to how the regulator will approach a decision, may provide some level of comfort to investors, as it provides some insight into the regulatory approach to be undertaken. However, this is limited, in that a Statement of Intent is not binding on the regulator (except inasmuch as it may be enshrined in primary legislation). 'Regulatory guidance', on the other hand, represents a higher level of commitment, as the regulator goes beyond broad principles/mission and sets out the regulator's expected behaviour, although the regulator is still not legally bound to follow this. 'Reduced discretion rules' provide the highest level of commitment, as the regulator is legally bound to follow the rules. As a result, however, this approach reduces the degree of flexibility and discretion of the regulator.

These approaches are particularly suited to different contexts, given their trade-offs between commitment and flexibility. Thus, for example, where the legal and institutional environment is strong, a more flexible approach to regulation (through a Statement of Intent or Regulatory Guidance) may be employed, as against an environment where a high degree of commitment is required to encourage investments (as is the case in a number of developing countries at present). As Alexander (2008) recommends, 'it is good regulatory practice to provide some form of statement of intent and also regulatory guidance. The real question is whether it is necessary to go beyond this and provide reduced discretion rules.' The use of different approaches will also vary according to the issue being addressed. For example, for appeals and dispute resolution under PPP contracts, investors would prefer reduced discretion rules outlining the process for dispute resolution and how disputes will be resolved where they do arise (alternative dispute resolution (ADR) systems).

A mechanism for incorporating reduced discretion rules is through the PPP contract ('regulation by contract') – an approach that is often employed by a number of developing countries due to the lack of a suitable overall regulatory framework (see Box 4.4 for a description of the type of regulatory models in practice). While this may be useful, it is only a second-best solution, especially for long-term projects where there is much uncertainty with regards to the investments and operations. Contracts may, however, work for short-term projects (where uncertainty is low) or for one-off projects (there will be lower transactions costs for regulation by contract as against creating an entire framework for a one-off project) or even for large capital expenditure (CAPEX) projects such as IPPs, where there is a single large investment. Establishment of an overall framework also prevents duplication of efforts or any contradictory procedures between projects.

Box 4.4. Type of institutional arrangements for infrastructure regulation

Utility regulation in developing countries has been shaped by two broad legal traditions – former British colonies have established independent regulatory agencies, whereas former European, for example French, colonies have tended to rely on regulation by contract. However, hybrids of these systems are increasingly being implemented, for example Mali, a Francophone African country, has entered into water and electricity concessions and also subsequently established an independent regulatory agency.

International experience indicates that there are four broad types of institutional arrangements for infrastructure regulation:

- **Regulation by government or self-regulation:** This refers to a regulatory system in which the utility is supervised by its own board of directors. This model is generally encountered where the infrastructure service is provided by the public sector, for example a municipality, ministerial department or state-owned body. There are water sector examples in France, India and South Africa, among others. The key challenge of this approach relates to potential conflicts of interest when government regulators seek to regulate state-owned utilities.
- **Independent regulation:** Independent regulation refers to regulation by an independent body, in terms of decision-making, institutional and management structure, and source of funding. For example, Zambia and Kenya have independent regulators in the water sector. The effectiveness of independent regulatory agencies depends on the degree of independence enjoyed by the agency and the strength of professional regulatory competence. Weak political commitment may compromise the effectiveness of the independent regulator.
- **Regulation by contract:** Under this system, regulatory provisions are enshrined in the contract between the asset owner and the service provider. Highly specified contracts may provide comfort to investors, but may then have to be renegotiated at a later date. This approach is often used in developing countries where a regulator/regulatory framework does not exist, but is not suited to long-term projects where there is much uncertainty as regards investments and operations.
- **Outsourcing of regulatory functions:** Outsourcing or contracting out of regulatory functions involves the use of external experts to perform certain functions, such as tariff reviews, monitoring and benchmarking. This may be a useful approach when the legitimacy or independence of the regulator is in question or when regulatory contracts require additional support. For example, under the water concession in Bucharest, tariff setting was contracted out to an expert panel. Under this system, strategic decisions need to be made with regards to the appropriate functions that should be outsourced; these may change over time, with, for example, an improvement in the capacity of the regulator.

  The list of institutional arrangements described above is by no means exhaustive. In practice, many countries have adopted hybrid models with varying elements of the different regulatory models. The key lesson (as also described in Section 4.1.4) is that there are no hard and fast rules for the adoption of regulatory models – instead a country needs to tailor the regulatory model to suit its own particular circumstances and local context.

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4.1.4. Experience of countries with the PPP framework and lessons learned

As discussed in Section 5.1 below, one of the most important constraints in putting together successful PPPs in developing countries is the lack of a suitable PPP framework. Many countries lack an overall PPP policy, as well as the related legislative and regulatory frameworks. The importance of the PPP framework cannot be overemphasised. However, it must also be recognised that in many countries PPPs have progressed in spite of the absence of some, or all, aspects of this framework. For example, a number of countries have followed the 'regulation by contract' route, as against establishing separate national sectoral regulators (for example the Manila water concessions discussed in more detail in Annex 5). However, as discussed in Section 4.1.3 above, the growing consensus is that a suitable regulatory framework should be put in place, instead of re-inventing the wheel for each contract. Thus experience shows that while PPPs can be developed and implemented in the absence of a well-developed PPP framework, this is more difficult and time-consuming than in situations where a PPP framework is in place. This is also discussed in the next section on the project development process.

Second, the concept of 'best practice', with regards in particular to the PPP framework, needs to be viewed with caution, as there is no 'one size fits all' solution to developing a supportive PPP framework. What works in one country may not work in another, let alone be transferred to or replicated in another sector or region within the same country. For example, as discussed in Box 4.3 above, there are many different types of regulatory models. In practice, however, the exact scope, remit and institutional arrangements need to be assessed in the light of a particular county's needs and the local context – often resulting in hybrid regulatory models being implemented.

These lessons are also elaborated on in Section 8.

4.1.5. Contingent liability management

Contingent liabilities refer to liabilities that may arise due to the occurrence of specific events in the future. Government contingent liabilities under a PPP programme include:

- **Explicit contingent liabilities**: These include a wide range of *formal* government guarantees provided to both private sector entities involved with PPPs, such as banks and project vehicles (for example exchange rate and interest rate guarantees) and arms-length public sector bodies such as parastatals. A key feature of these liabilities is that they involve a legal obligation on the part of government in the event that a specified event occurs.
- **Implicit contingent liabilities:** These potential liabilities arise where the PPP relates to infrastructure or infrastructure-related services that are strategically important – and where it is unlikely that the government will let the PPP counterparty fail. These include obligations conditional upon certain events, such as

ensuring systematic solvency of the banking system and bailing out strategically important private firms that get into financial difficulties.

Both explicit and implicit liabilities need to be appropriately managed to prevent an over-commitment on the part of the government that it may not be suited to honour. The nature of the costs of guarantees are uncertain and could have major fiscal consequences – particularly if a large number of the risks that are guaranteed are correlated. Thus contingent liability management forms an integral part of the PPP policy of a country – although many Commonwealth countries have not yet instituted a formal policy to this effect.

Irwin (2006) recommends that governments should have an integrated policy towards guarantees, comprising allocation, valuation and management.[6]

- As discussed in Section 3.3 above, risks under a PPP project should be *allocated* to those best placed to manage them. This is based on the ability of the party to influence the particular risk factor, influence the sensitivity of the total project value to the particular risk factor and absorb the risk.
- In addition, guarantees need to be *valued* so as to provide a quantitative estimate of the guarantee and its impact on the total project value. If the guarantee does not substantially increase the total value of the project, its use may be questionable.
- Finally, guarantees need to be appropriately *managed* through suitable budgeting rules, suitable disclosure of guarantees or the creation of special funds for payment of the guarantee (if called upon).

The topic of accounting principles for contingent liabilities has received much attention. Some countries do not include their contingent liabilities from PPPs on their balance sheets and hence run the risk of overcommitment and shortage of funds in the event that the guarantee is called upon. Efficient management of contingent liabilities requires their appropriate disclosure in the government's financial accounts. Incorporation of the potential future costs into medium-term budgetary projections and into an assessment of medium-term debt sustainability is important.

Box 4.5 provides some information on international experiences with contingent liabilities and their management.

Box 4.5. International experience with contingent liabilities and their management

Provisioning for contingent liabilities

Brazil[7] established the FGP (Fundo Garantidor de Parcerias Público-Privadas), a Guarantee Fund which provides cover for financial obligations of federal government entities under PPP contracts. The Fund's assets, which include shares in state-owned enterprises, have an upper limit of R$6 billion (approximately US$3.1 billion),[8] which are held as the guarantee of repayment for obligations under PPP contracts.

In **Colombia**,[9] each government entity providing a guarantee must include the estimated cost in its budget using valuation methodologies established by the Contingent Liabilities Division in the Ministry of Finance. Contributions to the centralised Contingency Fund for State Entities (FCCEE) are made at a level to cover costs arising with 95 per cent probability. Potential risks are reviewed annually to ensure that all reasonable eventualities are appropriately covered. Each entity has a separate account in the Fund for each project and each risk. If the contingent liability becomes an actual liability and the guarantee is called, the Fund will pay out up to the value of the specific account. The state entity bears any remaining costs directly. Once a risk account is no longer relevant, funds are transferred into other risk accounts for the same project. When the project concludes, funds are transferred to the entities' other projects. Full funds are only reimbursed to the entity when is has no further projects.

In **Canada**,[10] the present value of expected fiscal cost is transferred from the sectoral budget allocation to a central reserve fund.

Management of guarantees

Canada has developed a management framework for loan guarantees that requires, among other things, that:[11]

- Lenders must bear a minimum of 15 per cent of the net loss arising from a default;
- Where the government bears substantial downside risks, consideration is also given to allow parallel sharing of upside potential; and
- Parliament sets a maximum limit on new loans and guarantees.

Similarly, in **Chile** minimum revenue guarantees (and exchange rate guarantees) to operators of highways and other concessions are partially offset by revenue sharing with the government when toll revenue is above a certain level.[12]

Reporting and disclosure of guarantees

Chile reports estimates of the probability-weighted present value of guarantees for toll roads and airports in its annual budget documentation.[13]

In **Colombia**, an estimate of contingent liabilities has begun to be reported annually to the Congress as part of the medium-term fiscal framework.[14]

In **South Africa**, official medium-term fiscal projections reflect expected outlays on contingent liabilities.[15]

4.2. The infrastructure project development process

The infrastructure project development process refers to the development and structuring of a PPP project, right from the initial stages of establishing the feasibility of the project through to detailed structuring and securing private sector finance, as well as the subsequent management and monitoring of the project.

The key activities in the project development process can be classified into six broad phases as depicted in Figure 4.2.[16] Each phase is also described in detail below. The description is also supplemented by Box 4.6, which summarises the key activities undertaken by InfraCo, an infrastructure project development company, in the development of a wind power project in Cape Verde in West Africa. The box provides useful information of the various phases of the project development process in practice. In particular, the information highlights the work done by InfraCo in supporting the government to develop an enabling environment for the project.

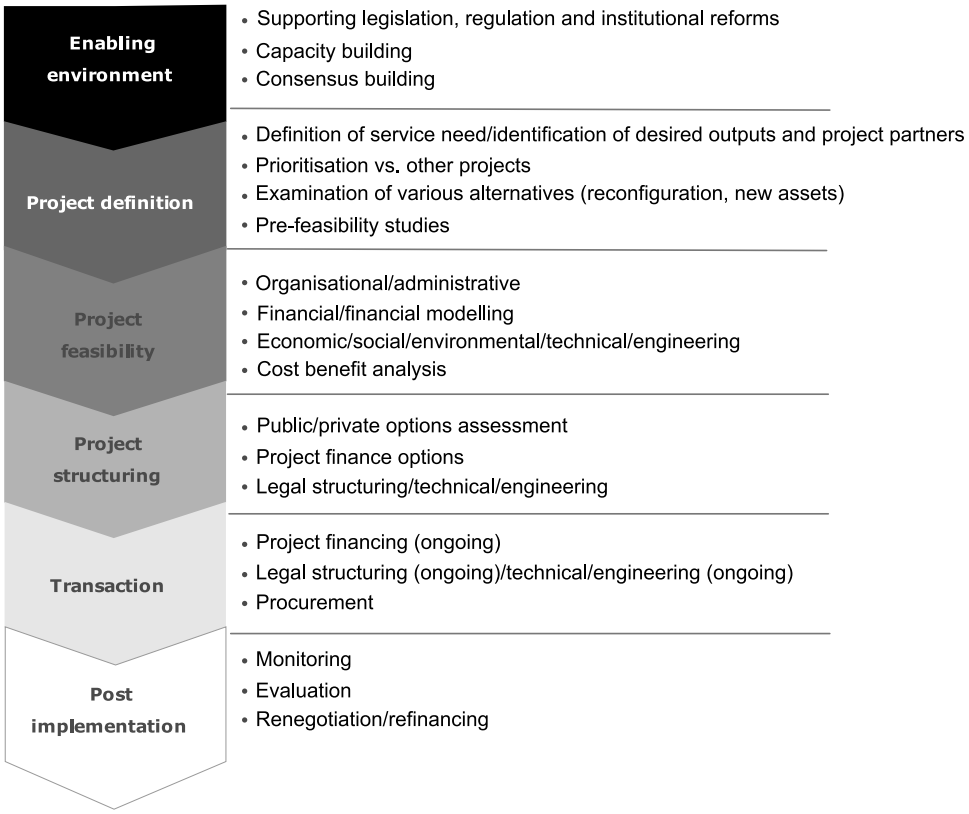

Figure 4.2. The infrastructure project development process

Phase 1: Enabling environment

The enabling environment refers to the relevant policies, laws, regulations and institutions which allow and support the development of infrastructure projects, as well as overall government support, capacity and commitment for PPPs in the country. Examples of activities in this phase include:

- Designing enabling legislation (e.g. laws governing BOT or concession agreements and legislation enabling the restructuring of state-owned utilities in infrastructure sectors);
- Designing, reviewing or changing regulatory approaches if they appear to be insufficient to support sustainable infrastructure development;
- Resolving project-related institutional reform, e.g. solving inconsistencies in the mandate of regional and national authorities;
- Capacity building of the different stakeholders involved in the project; and
- Consensus building within government and the wider stakeholder community for project acceptance.

Development of a supportive enabling environment may be a time-consuming and expensive exercise, but it needs to be in place to ensure more effective PPPs. However, if the enabling environment is already in place, the project development process can commence from phase 2 (project definition) directly. As highlighted in the example of the Cape Verde project development process (Box 4.6), some aspects of the supporting legislation, regulation and institutional reforms were not in place and hence had to be facilitated by the developer at the start of the project development process. Capacity and consensus building also formed a core activity during the early stages of the project development process.

Phase 2: Project definition

This phase includes early stage concept design work and is needed before the full feasibility phase, as it defines the project's parameters. Activities in this phase include:

- Definition of the need for the infrastructure service;
- Identification and scoping of desired outputs and their wider economic benefit;
- Prioritisation of the project in relation to other national/regional demands on resources;
- Examination of the various alternatives in hand such as reconfiguration of existing infrastructure;
- Identification of project partners (e.g. completely public or a PPP);

- Planning and prioritising the complex tasks associated with project development; and
- Commissioning of early stage pre-feasibility studies.

Phase 3: Project feasibility

If the pre-feasibility study reaches a positive conclusion, then more detailed feasibility studies need to be undertaken covering organisational, financial, technical, social, environmental and other aspects of the project. A detailed cost-benefit analysis is also crucial to establishing the feasibility of the project.[17]

Phase 4: Project structuring

This phase involves creating the appropriate commercial and technical structure for the project and is crucial not only for attracting finance, but also for attracting the right mix of finance. This involves:

- Assessing the options for public and/or private participation and the development of a preferred option;
- Development of project finance options;
- Development of an overall commercial structure and preliminary legal structuring; and
- Ongoing support to assess the technical and engineering aspects of the project structure which might impinge on project financing.

Phase 5: Transactions

This phase entails moving the project on from the planning to the implementation stage. Detailed work is undertaken to translate plans into tangible agreements and to procure goods and services. Activities in this phase involve the further development of activities in the project-structuring phase, including developing project financing, legal structuring, and documentation for all major commercial and finance agreements, technical and engineering support and, finally, procurement. At the end of this phase, the project reaches financial close.

Figure 4.3 presents the structure of a PPP and an example of the various agreements and contracts that need to be in place at the end of the transactions phase and achievement of financial close.

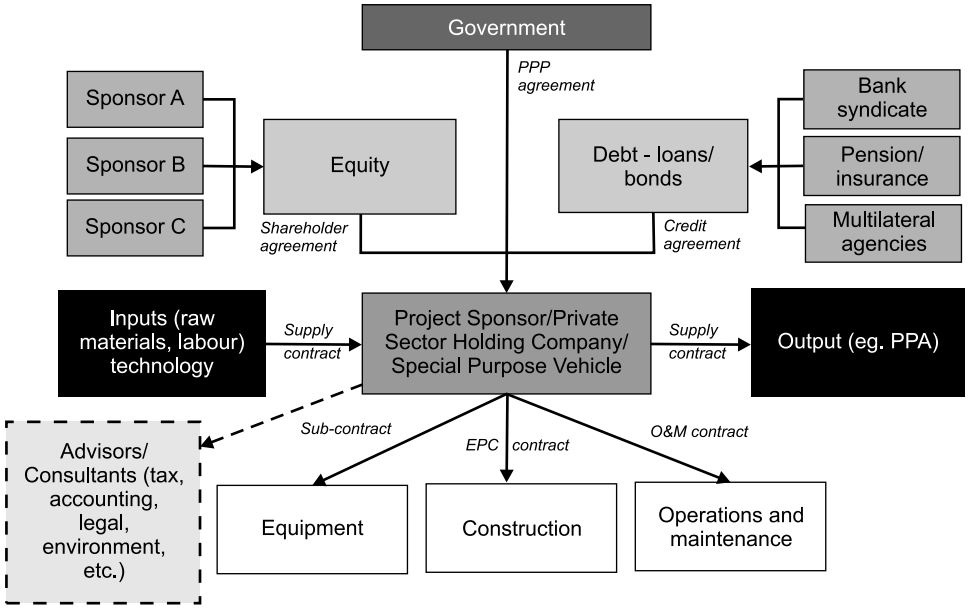

Figure 4.3. PPP structure and agreements/contracts at financial close

Phase 6: Post-implementation

Once the project is in the implementation stage, monitoring of outcomes and progress is crucial – for both the private and public sectors. Typically, monitoring and evaluation plans are produced during the project structuring and transacting phases. Contract management and monitoring by the public sector are discussed further in Section 4.3. In addition, as elaborated in Box 4.6, the private project developer InfraCo has an ongoing interest in providing advisory support and training as appropriate.

Post-implementation support will be necessary to deal with any unexpected circumstances which may lead to renegotiation of procurement agreements, or financing terms and conditions. Renegotiations are also discussed in Section 4.4.

Box 4.6. The project development process for the Cape Verde wind power project[18]

InfraCo, a project development company active in Africa, is currently supporting the government in developing a wind power project on four sites in the islands of Santiago, Sal and Boa Vista in Cape Verde, aimed at increasing power supply to meet the rapidly increasing demand in the country in an environmentally friendly and cost-efficient manner. The project will displace a minimum of 20,000 tons of diesel power per year, thereby reducing greenhouse gas emissions and avoiding expensive fuel imports.[19]

The project development process entailed the following activities:

Enabling environment

Supporting legislation, regulation and institutional reforms

1. Passing legislation approving the Joint Development Agreement (JDA) for the wind project and the establishment of a PPP joint venture company to execute the project.
2. The establishment of a Designated National Authority (DNA) for the registration and approval of certified emission reductions (CERs).

Capacity building

1. Training of staff in the Ministry of Environment in DNA procedures.
2. Training of students at the University of Cape Verde Renewables Department in: (i) wind analysis from the met towers installed by the project; (ii) analysis of lizards' habits and how to mitigate the impact of the construction (the construction area formed the local habitat for a local species of lizards); (iii) general support for the Renewables Department within the university.

Consensus building

1. Familiarisation and training of local utility and government staff in the role and capacities of a PPP structure to deliver a successfully financed project.
2. Training of staff in the Ministry of Environment in DNA procedures.
3. Building consensus on the necessity for project finance structures with Ministry of Finance.
4. Building consensus within the local utility on the size and design of the project.

Project definition

1. Defining the optimal size of a project that would reduce, to the maximum extent possible, expenditures on imported fossil fuels.
2. Defining the optimal size of the project, given wind resources in Cape Verde.
3. Expanding the project concept to include strengthening the national grid to enable higher absorption of wind energy.

Project feasibility

1. Commission full market study for each island to assess the overall demand for power.
2. Engage technical experts to update wind studies prepared over the past ten years
3. Engage environmental experts to conduct a full environmental assessment of the project.
4. Discuss and agree with local officials the outcome of the market and technical studies.
5. Develop a financial model of potential project viability.
6. Develop full technical specifications for the conducting of a full international procurement exercise for plant and equipment.

Project structuring

1. Conceptual development of all the major project contractual structures, including power purchase agreements (PPAs), support agreements and site acquisitions.
2. Develop a proposed shareholding structure attractive to incoming investors.
3. Develop a debt and security structure acceptable to potential equity and debt investors.

Transactions

1. Engage legal, technical and financial advisory support to undertake simultaneous negotiations with bidding parties for the engineering, procurement and construction (EPC) contracts.
2. Engage and manage a competitive process for equity sale that includes development and negotiation of a shareholders agreement, support agreement and associated project agreements.
3. Conduct a full competitive tender for provision of an EPC contract.
4. Conduct a full competitive tender for incoming equity investors.

Post-implementation

Post-implementation support for the project is yet to be determined, but is likely to include:

1. An ongoing advisory role and shareholding role for InfraCo and its affiliates.
2. Ongoing training of Electra as the system operator.

As has been illustrated through the range of activities discussed above, the development of a PPP project is a complex and time-consuming process (Box 4.7 also provides an indication of the timing and costs involved during a typical project development cycle). The experience of different countries has shown that the role of the public sector in project development varies considerably between countries. Where there is considerable government capacity (both in terms of specialist knowledge and expertise for project development and resources), governments have been involved in project development, right from the initial stages of managing the feasibility of the project and structuring it appropriately for private participation, through to tendering the opportunity and selecting the preferred bidder (see Box 4.8 for a description of the stages involved in the competitive selection of the preferred bidder). However, in countries where government capacity is weak, most of these activities have been carried out by the private sector itself, leading to 'unsolicited proposals'; correspondingly, this may involve direct negotiation with the developer or competitive negotiation with a smaller group of private players. (Box 5.1 in Section 5 discusses unsolicited proposals and their management.)

Box 4.7. Indicative costs and timelines for the project development process

Figure 4.4 presents indicative project development costs and timeframes for a medium-sized project (US$50–250 million). It is important to note that this is an indicative presentation only and in practice may vary substantially between projects. In reality, project development costs may range from US$3 million to US$5 million, especially contributed by the transactions phase, which is particularly complex. For example, it may take considerable additional resources to achieve financial close when there are few bidders. The key message, however, is that the project development process is time-consuming and can involve substantial costs for the developer.

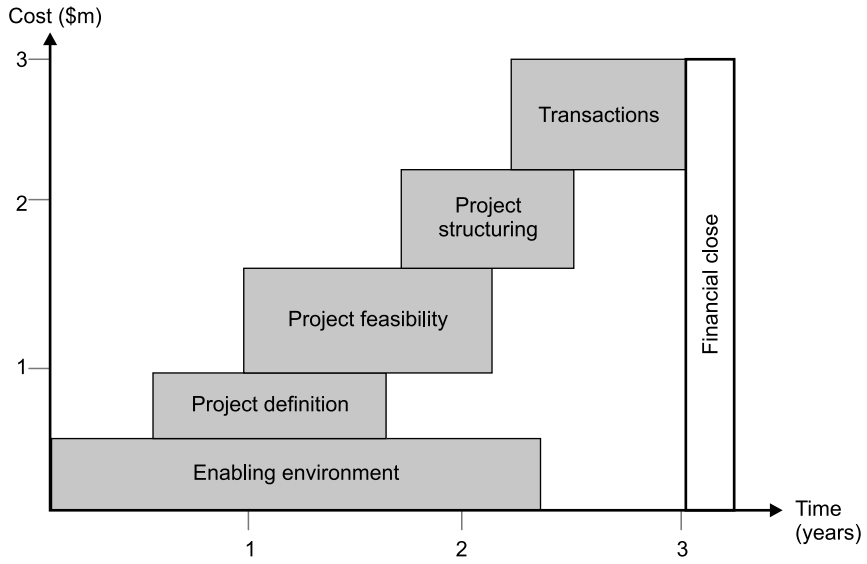

Figure 4.4. Typical time and cost of project development process for a project developer for a medium-sized infrastructure project

Box 4.8. The competitive procurement process

A competitive procurement process is important for achieving VfM for the government, because it incentivises private bidders to find innovative ways of delivering the infrastructure service at the lowest possible cost.

In order to solicit a reasonable number of bids from the private sector, it is important that the government markets the project opportunity well. Thereafter, most procurement processes follow at least a two-stage process of an initial pre-qualification of a shortlist of bidders, followed by a subsequent evaluation for the selection of the preferred bidder. Governments must undertake a comprehensive due diligence of the bidders in order to arrive at a decision on which is the most suitable bidder. Negotiation with the preferred bidder is also a key step before contract is signed.

The different stages in the competitive procurement process are described in Figure 4.5.

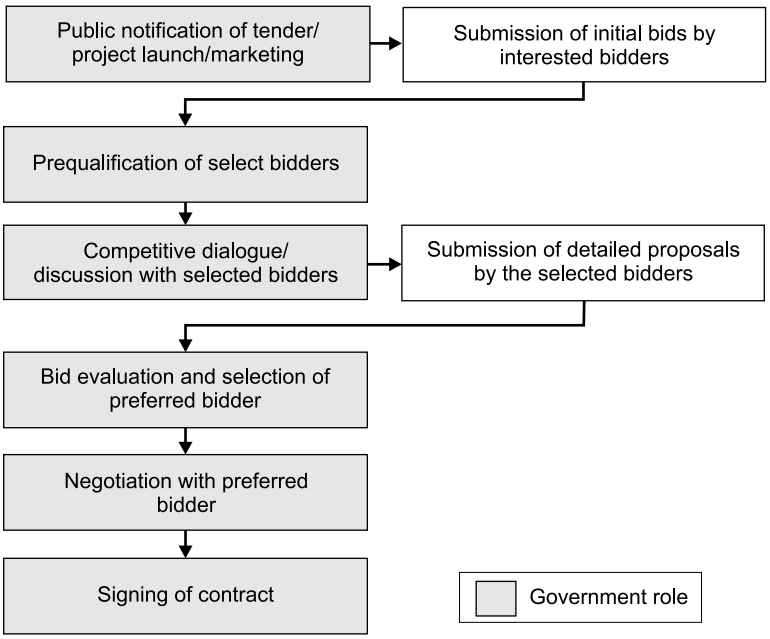

Figure 4.5. The competitive procurement process

In practice, each of these phases may take about one to two months to complete, implying that the entire competitive procurement process typically lasts for six months to a year. However, there have been many examples where the procurement process has been delayed or stalled for a number of reasons (see Section 5 for constraints on infrastructure PPPs), resulting in a longer timescale for the selection of the preferred bidder and signing of the contract. The negotiation stage is particularly difficult and time-consuming and may be delayed, sometimes even resulting in a restart of the procurement process if agreement cannot be reached. Competitive procurement has, however, been observed to be a faster process than sole sourced/direct negotiation transactions.[20]

A number of countries have developed detailed guidelines for competitive procurement, including indicative timelines. For example, the South African PPP Manual notes an

indicative timeline ranging from 41 to 103 weeks for the process, based on the particular project circumstances. The World Bank procurement guidelines also note that 'not less than six weeks from the date of the invitation to bid or the date of availability of bidding documents, whichever is later, shall be allowed for International Competitive Bidding. Where large works or complex items of equipment are involved, this period shall generally be not less than twelve weeks to enable prospective bidders to conduct investigations before submitting their bids.'

Useful references include:

South Africa PPP Unit, 'National Treasury PPP Manual – Module 5 PPP procurement'. http://www.ppp.gov.za/Documents/Manual/Module%2005.pdf

Ministry of Finance, Singapore, *Public Private Partnership Handbook* (2004). http://app.mof.gov.sg/data/cmsresource/PPP/Public%20Private%20Partnership%20Handbook%20.pdf

Infrastructure Australia, *National PPP Guidelines: Policy Framework* (2008). http://www.infrastructureaustralia.gov.au/public_private_partnership_policy_guidelines_pdf.aspx

HM Treasury, UK, 'Operational Taskforce Note 1: Benchmarking and Market Testing Guidance' (2006). http://www.hm-treasury.gov.uk/d/operational_taskforce_note_1.pdf

World Bank, *Guidelines Procurement Under IBRD Loans And IDA Credits* (2004, updated 2006). http://siteresources.worldbank.org/INTPROCUREMENT/Resources/ProcGuid-10-06-ev1.doc

4.3. Contract management and monitoring

After the award of the PPP contract and financial close of the project, the construction of the infrastructure commences. It can take a number of years before the infrastructure is operational and can deliver services. In the interim, governments need to manage the PPP contract and monitor the progress made on the development of the infrastructure. Even after the infrastructure service is operational, the PPP contract needs to be monitored for performance, especially if the asset will ultimately be handed back to the government (i.e. the government is the ultimate owner of the asset). Thus contract management and monitoring is a process that takes place throughout the life of the PPP contract.

Contract management/monitoring can be of two different types:

1. Ensuring that the private operator is in line with the regulatory and legal provisions of the sector and country;
2. Technical monitoring of the project – including in terms of the key performance indicators (KPIs) identified in the contract.

Several institutional mechanisms for contract management and monitoring are available. Box 4.9 provides some examples of institutional structures for contract management and monitoring.

Box 4.9. Institutional arrangements for contract management and monitoring

While the management of a PPP contract usually lies with the relevant line ministry/public office, the monitoring function can be supported by the regulatory office. For example, in the **Philippines**, in the case of the Manila water concession (see Annex 5), a regulatory office was established under the contract to monitor and enforce the PPP agreement. In **Jamaica**,[21] the licence for the telecoms industry was negotiated and awarded by the Government of Jamaica, and monitored and enforced by the Jamaican Office of Utility Regulation (OUR), a multi-sector regulatory authority also responsible for electricity, water and some transport industries.

The City of Johannesburg in **South Africa**[22] has established a specialised Contract Management Unit (CMU) to provide ongoing support and advice to Johannesburg's 12 utilities, agencies and corporatised entities (collectively referred to by the City as UACs) and to monitor and evaluate their performance. The CMU manages the contractual arrangements and obligations with the UACs and is also responsible for ensuring that services are rendered to the City and its residents.

In the **UK**,[23] the Office of the PPP Arbiter (OPPPA) was established under the Greater London Authority Act 1999, principally to deal with disputes about the financial terms of the PPP agreements for the London Underground. OPPPA documents directions and guidance, instructs external advisers, monitors performance of the PPP agreements and commissions research on relevant and emerging issues.

In establishing suitable contract management and monitoring frameworks for PPPs in developing countries, the institutional location and independence, capacity and expertise and exact remit of a monitoring body need to be carefully examined. For example, it may not make sense to set up a separate unit or organisation for this function when the number of PPP transactions is small. Ultimately, an important monitoring and enforcement role is also played by the customers of the infrastructure service being delivered through the PPP.

Appropriate monitoring frameworks and tools need to be developed and implemented to ensure that a credible performance evaluation process exists, public policy objectives are being met and the PPP project is delivering VfM. Efficient contract monitoring requires that the contract contains explicit targets, an acceptable procedure for measuring and evaluating performance against those targets, clear penalties for failing to meet targets and a well laid-out reporting regime.

The PPP contract should require that the private partner provides regular information on the performance of the project. In addition, an 'independent' engineer or other specialists may also be employed to inspect and monitor the development of the project. Detailed contract performance data need to be fed back to the public sector authority to enable determination of performance-based payments (or deductions as the case may be). However, the contract also needs to be flexible enough to handle change (i.e. renegotiations as discussed in the next sub-section) or failure in the case of adverse events.

Ensuring a smooth transition of assets and operations at contract maturity is an important part of contract management and a procedure for this should be clearly laid out at the start. Options or alternatives may be specified that the public authority may have to choose between. For example, some PPP arrangements include an option for the public authority to purchase the asset at the end of the contract. Other contracts may specify that the ongoing operation should be retendered to competitive bids, a process which must be carefully managed. The contract managers must aid a smooth transition between parties or even prepare to return operations to the public sector.

4.4. Renegotiations

Renegotiation of a contract may arise from lack of compliance with agreed terms and/or departures from expected promises of sector improvements. It can arise for various reasons: the political environment (for example, when the political costs of failure are too high or the government does not honour contract clauses); the design of the PPP contract (for example, if the criterion for selecting a bidder is low tariffs, this may encourage aggressive bidding); the nature, type, existence and autonomy of the regulatory framework; or other issues, such as asymmetry on cost information between the operator and the government. Renegotiation only takes place when there are substantial departures from the original contract (as against, for example, tariff adjustments arising from inflation or period reviews).

Renegotiation of concessions and other PPP contracts is commonplace across infrastructure sectors. For example, excluding telecoms, more than 41 per cent of concessions in the LAC region have been renegotiated. A large number of renegotiations in a country can suggest opportunistic behaviour on the part of the private players or the government in an attempt to secure additional benefits, rather than a lack of completeness in the contract. For example, if private operators believe that renegotiation is feasible, this may undermine the competitive bidding process and they may either underbid or overbid in view of renegotiation at a later date. Renegotiation is costly and involves considerable time and effort. It should therefore be carried out only if it enhances welfare by addressing a failure in the PPP contract.

More generally, renegotiation can be avoided to the extent that the PPP contract is well designed and properly implemented. Elements of good contract design and implementation that can reduce the likelihood of renegotiation are set out in Box 4.10.

Box 4.10. Good contract design and implementation that can limit renegotiation

Good contract design

- As far as possible, contracts should be designed to avoid ambiguities.
- Contracts should include clauses committing government to no renegotiation except in the case of well-defined triggers.
- There should be some system of compensation to operators for unilateral changes to a contract by the government.

Good implementation

- Avoid hurried, quickly organised PPP programmes.
- Use a competitive bidding process to award contracts.
- Put in place an appropriate regulatory framework and agency prior to awarding contracts.
- Make appropriate choice of the type of regulation, and understand the allocation of risk in each type and the implications of this for renegotiation.
- Proper regulatory accounting should be put in place to avoid ambiguity.

Notes

1. Current exchange rate of US$1:Rs50 has been used in all calculations in this section.
2. http://www.iifcl.org/
3. http://finmin.nic.in/the_ministry/dept_eco_affairs/ppp/guideline_scheme_IIPDF.pdf
4. http://www.ebrd.com/country/sector/law/concess/core/coreprin.pdf
5. Alexander, I (2008), 'Regulatory Certainty Through Committing To Explicit Rules – What, Why and How?', Fifth Annual African Forum of Utility Regulators (AFUR) conference.
6. Irwin, T (2006), 'Public risk in private infrastructure', Paper presented at the high-level seminar on 'Realising the Potential for Profitable Investment in Africa', organised by the IMF Institute and the Joint Africa Institute, Tunis, Tunisia, 28 February–1 March 2006.
7. Castalia (2007), 'Advice on Fiscal Management of Infrastructure PPPs in Pakistan', Draft Final Report to World Bank. http://www.ipdf.gov.pk/tmpnew/PDF/Pakistan%20FM%20Final%20Report%20(Final)%20-%20December%2015%202007.pdf
8. Article 16 of Federal Act 11.079/04.
9. International Monetary Fund (2005), 'Government Guarantees and Fiscal Risk', prepared by the Fiscal Affairs Department. http://www.imf.org/external/np/pp/eng/2005/040105c.pdf
10. Brixi, HP (2000), 'The Challenge of Dealing with Contingent Liabilities'. http://www1.worldbank.org/publicsector/pe/PEM%20Course%2004%202000.PPT
11. International Monetary Fund (2005), op. cit.
12. Ibid.
13. Ibid.
14. Ibid.

15. Brixi, HP (2000), 'The Challenge of Dealing with Contingent Liabilities'. http://www1.worldbank.org/publicsector/pe/PEM%20Course%2004%202000.PPT
16. Different organisations and resource books classify the project development process in a number of different stages. The objectives and key activities are the same as presented here, but the classification adopted may differ from other sources. Some countries, for example the UK and Australia, employ specific quality assurance mechanisms such as the 'Gateway Review Process' to ensure that necessary actions have been taken at important decision-making points (such as establishing the case for the project, readiness for the market and procurement) in the project development process. The 'Gateway' process essentially involves a review at key decision-making points to provide assurances that the project can progress successfully to the next stage. More information is available at http://www.ogc.gov.uk/what_is_ogc_gateway_review.asp and http://www.gatewayreview.dtf.vic.gov.au/
17. Although, of course, the standard problem that arises with cost-benefit analysis means that attributing a single definitive value will be problematic. But it should be possible to determine the likely direction of impact.
18. InfraCo, http://www.infraco.com/
19. Private Infrastructure Development Group (PIDG), *Annual Report 2007*.
20. http://www.ppiaf.org/documents/working_papers/Unsolicited_Proposals_Experience_Review_Report_FINAL_2006.pdf
21. Brown, AC *et al.* (2006), *Handbook for Evaluating Infrastructure Regulatory Systems*, World Bank. http://siteresources.worldbank.org/EXTENERGY/Resources/336805-1156971270190/HandbookForEvaluatingInfrastructureRegulation062706.pdf
22. http://www.dwaf.gov.za/dir_ws/WSDP/docs/WSDP/GT/JHBwsdpDraft_12May05_64.pdf
23. http://www.ppparbiter.org.uk

Key references

PPP framework

Alexander, I, 'Regulatory Certainty Through Committing to Explicit Rules – What, Why and How?' (2008). http://www.cepa.co.uk/documents/RegulatoryCertaintypaperdraftforcomment.pdf

Focuses on the establishment of predetermined rules committing regulators to future actions.

Alexander, I, 'Appeals and Dispute Resolution – Using Detailed Rules and Processes to Prevent and/or Resolve Disputes' (2008). http://www.cepa.co.uk/documents/RDR AppealsandDisputeResolutionpaperdraftforcomment.pdf

Examines methods of reducing the uncertainty surrounding dispute resolution, with a particular focus on setting rules that pre-empt disputes by removing the discretion of the regulator.

Alexander, I, 'Improving the Balance Between Regulatory Independence, Accountability, Decision-making and Performance', Paper prepared for Fourth Annual Meeting and Conference, African Forum for Utility Regulation (AFUR) (2007). http://www.cepa.co.uk/documents/FinalPaperIanAlexanderAFUR19June2007clean.pdf

Covers the causes and context of regulatory distrust, potential remedies and its relevance to state-owned companies.

Eberhard, A, 'Infrastructure Regulation in Developing Countries: An Exploration of Hybrid and Transitional Models', PPIAF Working Paper No. 4 (2007). http://www.ppiaf.org/documents/working_papers/AFURhybridmodels4.pdf

Examines regulatory frameworks based on common or civil law legacies of colonial administrations.

World Bank, ICA and PPIAF, 'Attracting Investors to African Public–private Partnerships: A Project Preparation Guide' (2008). http://www.ppiaf.org/documents/trends_and_policy/Attracting_Investors_to_African_PPP.pdf

Chapter 3 provides a good overview of the rationale behind establishing a framework and of key aspects of its structure.

Contingent liability management

Irwin, T, 'Public Risk in Private Infrastructure' (2006). http://imf.org/external/np/seminars/eng/2006/rppia/pdf/irwin.pdf

Discusses guarantees and the risks they pose for governments.

Irwin, T, 'Government Guarantees: Allocating and Valuing Risk in Privately Financed Infrastructure Projects' (2007). http://siteresources.worldbank.org/INTSDNETWORK/Resources/Government_Guarantees.pdf

Comprehensive review of issues related to the use of government guarantees, including their history, risk allocation principles and techniques for valuation.

IMF, 'Government Guarantees and Fiscal Risk', Prepared by the IMF Fiscal Affairs Department (2005). http://www.imf.org/external/np/pp/eng/2005/040105c.pdf

Covers issues surrounding the fiscal risks resulting from the use of government guarantees.

Brixi, HP, 'Addressing Contingent Liabilities and Fiscal Risk', in *Fiscal Management*, World Bank (2005). http://siteresources.worldbank.org/PSGLP/Resources/FiscalManagement.pdf

Includes a useful section on 'Public Risk in Private Infrastructure'.

Project preparation

ICA and PPIAF, 'Infrastructure Project Preparation Facilities: Africa User's Guide' (2006). http://www.ppiaf.org/documents/recent_publications/InfrastructureProjectPreparationFacilitiesUserGuideEnglish.pdf

An introduction to the phases of project preparation and examination of individual facilities.

World Bank, ICA and PPIAF, 'Attracting Investors to African Public–private Partnerships: A Project Preparation Guide' (2008). http://www.ppiaf.org/documents/trends_and_policy/Attracting_Investors_to_African_PPP.pdf

Assesses the relevant issues for selecting a project for PPP, actions for preparing projects for the market and the management process. The Guide is intended for hiring and managing expert advisers and explains how the public sector should interact with the private sector during the project selection and preparation phases to ensure that decisions made during these phases are realistic. It also provides an analysis of the issues involved in engaging with the private sector during the tender and after a contract has been signed.

PPP Unit, 'PPP Manual' (2004). http://www.ppp.gov.za/PPPManual.htm

Systematic guide to PPP project cycle phases for national and provincial governments, produced by South Africa's PPP Unit.

Guidance on contract management and monitoring

Partnerships Victoria, 'Contract Management Guide' (2003). http://www.partnerships.vic.gov.au/CA25708500035EB6/WebObj/ContractManagementGuide2-PartOne/$File/Contract%20ManagementGuide2%20-%20Part%20One.pdf

Covers the principles and tools used in contract management in Canada.

Public Private Partnerships Programme, 'A Guide to Contract Management for PFI and PPP Projects' (2007). http://www.partnershipsuk.org.uk/uploads/documents/OTF4ps_ContractManagers_guide.pdf

PFI/PPP contract management guide for local authorities and other stakeholders.

Renegotiation

Guasch JL, 'Granting and Renegotiating Infrastructure Concessions – Doing It Right' (2004). http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2004/05/06/000090 341_20040506150118/Rendered/PDF/288160PAPER0Granting010 renegotiating.pdf

Focuses on the impact of concession design and implementation on contract renegotiation in Latin American countries.