Developing Toolkits for Improving Public Private Partnership Decision Making Processes

User Guide
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Disclaimer

This Toolkit has been prepared as a part of a PPP capacity building programme that is being developed by the Department of Economic Affairs, Ministry of Finance, Government of India (DEA) with funding support from the World Bank, AusAID South Asia Region Infrastructure for Growth Initiative and the Public Private Infrastructure Advisory Facility (PPIAF). A consulting consortium, consisting of ECA and CRIS, commissioned by the World Bank, has prepared this Toolkit based on extensive external consultations.

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With the rapid growth in the PPP programme, policy-makers are increasingly focused on a new set of issues relevant to a programme of this size and maturity. Key amongst these are: assessing performance of PPPs in India to inform future approaches and programmes; the regulation and management of PPPs under operation; and ensuring that the fiscal risks associated with PPPs are properly understood, reported and managed. Government of India (GOI) is also well aware that the expansion of the PPP programme will most urgently require strengthening capacities at all level - Center, States and local level governments - to properly develop and oversee the programme.

To further its support for scaling up PPPs, Department of Economic Affairs requested the World Bank for assistance in developing tools, methodologies and processes to assist the governments/agencies to strengthen decision-making at all key stages of the PPP project cycle. These will serve a very urgent and critical purpose of capacity building and guidance for government at various levels.

The objective of this assignment is to develop a web-based on-line “PPP Toolkit” to facilitate identification, assessment, development, procurement and monitoring of PPP projects. The Toolkit is structured to cover the full life cycle of PPP projects. While the general structure has incorporated international best practices the Toolkit has built on specific approaches for project procurement, approval etc. currently in place in India to ensure that it forms a relevant resource for practitioners in India. The on-line nature of the Toolkit means it will be possible to update the resource quickly over time as the approaches in place develop and change. The toolkit is proposed to be made available to practitioners through DEA PPP Cell’s website (www.pppinindia.com) as well as in the form of CDs and manuals.

The primary audience for the Toolkit are officials at the National, State and city/local governments, State-owned enterprises and other agencies responsible for developing and monitoring PPPs. The Toolkit will be useful in expanding the lessons learned in the transport and power sectors to other infrastructure sectors considering the use of PPPs. More specifically, the Toolkit will benefit the lagging States and regions that currently have huge infrastructure deficits and low capacity to conceptualise and develop PPP projects. The Toolkit will also be of use to the private sector and financial institutions involved in infrastructure PPPs, consultants advising the private sector and governments, as well as civil society.
Credits

The Toolkit was developed for Department of Economic Affairs Infrastructure, Ministry of Finance, Government of India.

The Toolkit was developed under a non-lending technical assistance co-financed by AusAID through the South Asia Region Infrastructure for Growth Initiative, Public-Private Infrastructure Advisory Facility (PPIAF) and the World Bank.

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Toolkit development credits

A consortium of consultants, led by Economic Consulting Associates (ECA), was engaged by the World Bank to develop and produce the Toolkit.

The Toolkit concept, structure and content were conceived, developed and prepared by Economic Consulting Associates (ECA) of London, UK.

ECA also conceived and developed the Toolkit’s PPP analysis, decision making and learning tools:


Indian contextualisation and project assistance was provided by CRISIL Risk and Infrastructure Solutions Limited (CRIS), a subsidiary of CRISIL Limited, a Standard & Poor’s company.

Case studies of PPP experience in India were researched and prepared by CRIS.

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The PPP Toolkit is a web-based resource that has been designed to help improve decision-making for infrastructure PPPs in India and to improve the quality of the infrastructure PPPs that are implemented in India.

The Toolkit covers five infrastructure sectors:

- Highways
- Water and sanitation (W&S)
- Ports
- Municipal Solid waste management (SWM)
- Urban transport (Bus Rapid Transport Systems - BRTS)

The Toolkit is for use by PPP practitioners across India in both the public and private sectors. It has been designed with a focus on helping decision-making by project officers at the Central, State and Municipal levels. However, other users, including PPP practitioners in the private sectors, are also likely to find the material useful. It should be used as a learning tool and as a resource for best practice in PPPs.

This Guide provides a quick introduction to the online Public-Private Partnerships (PPP) Toolkit. It begins with a short introduction to PPP in infrastructure. It then gives an overview of what is in the Toolkit, explains how to use the Toolkit and briefly introduces the Toolkit tools.
What is PPP in infrastructure?

Physical infrastructure, such as roads, water and sanitation networks, and transportation systems, involve large investments that can put a strain on the public purse. This strain is especially great for countries, such as India, whose economies are undergoing rapid development and urbanisation and have a great need for expanded infrastructure.

Public-private partnerships (PPPs) are increasingly being used by governments and public sector authorities throughout the world as a way of increasing access to infrastructure services for their citizens and economies at a reduced cost.

The objectives of a PPP in infrastructure are to:

- increase the availability of infrastructure services
- to do so with greater efficiency (lower cost for the level of services provided) than could be achieved using the traditional public sector approach

PPPs make this possible because:

- PPPs allow access to the substantial financial resources of the private sector
- PPPs enable the public sector to benefit from private sector technical expertise, experience and efficiency
- PPPs enable the public sector to transfer project-related risks to the private sector

A PPP brings the public and private sectors together as partners in a contractual agreement, for a pre-defined period (e.g. 30 years) matched to the life of the infrastructure assets used to provide the services. The private partners (investors, contractors and operators) provide specified infrastructure services and, in return, the public sector either pays for those services or grants the private partner the right to generate revenue from the project. For example, the private partner may be allowed to charge user fees or receive revenue from other aspects of the project.

The best PPPs will have the public and private partners working together to build and sustain a long-term relationship that is of benefit to all.

Definition of PPPs in India

The Department of Economic Affairs (DEA) defines PPPs as:

- **PPP** means an arrangement between a government or statutory entity or government owned entity on one side and a private sector entity on the other, for the provision of public assets and/or related services for public benefit, through investments being made by and/or management undertaken by the private sector entity for a specified time period, where there is a substantial risk sharing with the private sector and the private sector receives performance linked payments that conform (or are benchmarked) to specified, pre-determined and measurable performance standards.

The level of private sector participation in infrastructure can cover a spectrum from short-term service contracts at one end all the way through to full privatisation (disinvestment) at the other.
Service contracts and disinvestments are generally not considered as PPPs in India. An infrastructure PPP in India is therefore more than just a short-term contract for services with the private sector but does not go so far as to include complete private sector ownership and control.

**Characteristics of PPPs**

A PPP typically has the following characteristics:

- The private sector is responsible for carrying out or operating the project and takes on a substantial portion of the associated project risks.
- During the operational life of the project, the public sector’s role is to monitor the performance of the private partner and enforce the terms of the contract.
- The private sector’s costs may be recovered in whole or in part from charges related to the use of the services provided by the project, and may be recovered through payments from the public sector.
- Public sector payments are based on performance standards set out in the contract.
- Often the private sector will contribute the majority of the project’s capital costs, although this is not always the case.

It will often be necessary to build or add to existing assets in order to meet the infrastructure needs of the economy and users. However, an important part of the infrastructure PPP concept is that:

- PPP is focused on outputs, and
- The outputs of the PPP are infrastructure services, not infrastructure assets.

The reason for the focus on outputs and services rather than assets is to encourage efficient use of public resources and improved infrastructure quality.

**Risk – a key focus of PPP design**

Allocating risk to achieve added efficiency is what makes PPP a potentially powerful way of reducing project-related costs and achieving improved value for money for the public sector. The level of risk can be changed by allocating responsibility for individual risks to those who are best able to manage them.

The parties involved in a project can affect the amount of risk by:

- The level of influence they have over events, and
- The level of information they have about the present and the future.

The public and private sectors are different in the types of influence and information that they have. This means they can control risks in different ways from each other and they are better at controlling some risks and not as good at controlling others.

On their own both the public and private sectors are weaker in their ability to control certain risks. One of the goals of a well-designed PPP is to pick out the strengths and combine them together. The result should be that a partnership of public and private parties is stronger and more efficient than either party by itself.

**When should PPP be used?**

The use of PPP for infrastructure projects should only be considered when:

- The public sector environment is suited to supporting PPPs – a PPP is a complex arrangement that requires support from the Public sector during development and
operation. The likelihood of PPP success will be increased when the public sector supporting environment is strong.

- **The project is suitable to being carried out as a PPP** – certain characteristics make a project well suited to being a PPP, while others imply that the PPP approach will be difficult or inappropriate.

- **The potential barriers to successful project implementation have been identified and can be overcome** – many of the common obstacles to successful PPP implementation can be identified in advance. If these are insurmountable then the project should not proceed as a PPP. If they can be overcome, as will often be the case, then this needs to be factored into the PPP development and thoroughly planned for.

- **Given that these conditions are satisfied, the project must be commercially viable for the private sector and offer value for money (VFM) for the public sector** — the choice of PPP should allow the project to be undertaken at lower cost on a lifetime basis, while delivering the same or better quality services than could be achieved through implementation by the public sector or private sector on their own. It must also be commercially viable in order to be attractive to private investors.

These important conditions should be checked early for every project. This will improve the quality and likely success of projects entering the PPP development pipeline.

Where these tests are not met, it may be better to carry out the project through the traditional public sector route. In this case private sector involvement might be introduced in management or operations, but primary responsibility for financing and control of the project would remain with the appropriate public sector authority.

In general, in a well-designed and supported PPP the advantages will outweigh the challenges. The purpose of the Toolkit is to help Sponsoring Authorities achieve this.

**The PPP Process**

Identifying, developing and implementing a project as a PPP involves a series of steps and should be undertaken following a clear process. The PPP Toolkit organises the PPP process into a sequence of four phases:

- **Phase 1: PPP identification** – A set of potential projects is identified through a strategic planning process, which includes a needs analysis for the infrastructure services and an options analysis for providing the services (including whether assets are required). Potential PPPs are then evaluated for their suitability for development as PPPs and a pre-feasibility report is prepared. An Internal Clearance is required before proceeding to the next Phase.

- **Phase 2: Full feasibility study, PPP preparation, and clearance** – A potential PPP that was considered suitable in the Phase 1 analysis is studied in detail and an application is made for In-principle Clearance to continue to the procurement Phase.

- **Phase 3: PPP procurement** – the procurement process takes place, an application is made for Final Approval, the preferred bidder is selected and the project is taken to technical close.

- **Phase 4: Contract management and monitoring** – the Sponsoring Authority manages the PPP throughout its life, including monitoring the private partner’s performance against the requirements of the Concession Agreement. Phase 4 begins at the pre-operative stage, and spans the construction stage (where relevant), the operations stage, and contract closure and asset transfer.

The Toolkit is designed to assist the Sponsoring Authority as it goes through this process.
The Toolkit is made up of three modules:

1. **PPP Background module** – this provides explanatory and reference material about PPPs. It will be of most interest to people who are fairly new to PPPs and to those who want a refresher on some of the main PPP concepts, such as risk and the common types of PPPs.

2. **PPP Process module** – this describes the process of developing a PPP through four Phases, from identification of potential PPP projects, to preparation and clearance, to procurement, and on to management of the PPP contract during the operational life of the PPP.

3. **Tools and resources module** – contains a set of decision-making tools to help PPP practitioners at important stages of the PPP Process. This module also contains downloads and links to other PPP resources, and a set of 15 case studies of PPP project experience in India.

### Tools in the PPP Toolkit

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<th>Description</th>
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<td>Readiness Filter</td>
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**Figure 1** The PPP process Figure 1

Phase 1: Strategic planning, Project pre-feasibility, PPP suitability testing, Internal clearance

Phase 2: Full feasibility study, PPP preparation, Clearance

Phase 3: Procurement, Final approval, Award

Phase 4: Implementation and monitoring
4.1 Entering the Toolkit

The Toolkit is available online at www.toolkit.pppinindia.com

On the homepage choose a sector using the Sector Selector drop-down menu. Specific parts of the Toolkit will then be customised to that particular sector. For example, if you are working in the water sector, choose Water and Sanitation from the menu. The tools and other Toolkit material will then be customised to this sector. The Sector Selector also appears at the top right of each page and can be changed at any time.

After choosing a sector click Go to enter the Toolkit. The first page after entering the Toolkit is the start page. Here you can choose which part of the Toolkit you want to start using.

To use the tools you must Login. The first time you will need to register and choose a username and password. Registration is quick and easy. On the Tools login page click Register Here and follow the instructions. Once you have registered, you can view your profile and change your password by clicking on the links at the top of the page.

Click Signout to end the current session and leave the Toolkit. The next time you go to the Tools page you will be asked to Login again.

4.2 Navigation

Use the menu on the left of each page to navigate around the Toolkit. The Sitemap, available from the bottom of the menu on the left, also provides a convenient way of seeing all content in the Toolkit and navigating around.

The navigation banner at the top of the page tells you which sector you are viewing and which part of the Toolkit you are in.

You can change sector at any time by using the Sector Selector at the top of the page.

In the PPP Process module, you can also navigate by clicking on the Process Maps. These show the PPP process in a flow-diagram, making it easy to see where you are in relation to other parts of the process.
To quickly access the tools including your saved versions click on Go To My Tools.

The sitemap for the Toolkit is at Figure 4.

PPP Toolkit site map

Module 1: PPP Background
- Overview of PPP in Infrastructure
- Overview of PPP in India
- Risk - a critical focus of PPP design
- Overview of main PPP modes
- PPP supporting environment
- Overview of the PPP process

Module 2: PPP Process Guide
- Phase 1: PPP Identification
  - Strategic planning
  - Strategic planning activities
  - PPP process management
  - Pre-feasibility analysis
  - PPP suitability checks
  - Pre-feasibility report
  - Readiness Check 1
- Phase 2: Full feasibility, PPP preparation and project clearance
  - Planning for PPP management
  - Full feasibility analysis and PPP due diligence
  - Choosing best-suited procurement method
  - First drafts of key project documents
  - Readiness Check 2 and application for in-principle clearance
- Phase 3: PPP Procurement
  - Preparing for procurement
  - Market sounding - EOI
  - Qualifying - RFQ and shortlisting
  - Final drafts of key bidding documents
  - Readiness Check 3 & Final approval
  - Bidding - RFP and bid evaluation
  - Contract finalisation & award
- Phase 4: PPP contract management and monitoring
  - Goals, principles and stages of contract management
  - Preparation for contract management
  - Readiness Check 4
  - Monitoring performance
  - Managing asset transfer
  - Other contract management issues

Module 3: Tools and Resources
- Tools
  - PPP Suitability Filter
  - PPP Family Indicator Tool
  - PPP Mode Validation Tool
  - Financial Viability Indicator Model
  - VFM Indicator Tool
- Process guides and checks
  - Process Map
  - PPP readiness filter
- Document guides
  - TOR contents for needs and options assessment, full feasibility study
  - Checklists for environmental and social assessments, pre-feasibility checklist
  - Document examples
- Links and resources
  - Links to websites and other online PPP resources
  - Set of 15 PPP in India case studies
  - PPP glossary
  - PPP modal definitions

Further guidance on specific topics
- Case study lessons

Screen shot of Process Maps page

Figure 3

Figure 4
4.3 Suggested ways of using the Toolkit

Follow the process to develop a PPP — A PPP practitioner who is developing a project as a PPP can follow the Process module in a step-by-step way. This will help ensure that all the important preparations and actions that are needed for a PPP are carried out, which will in turn help strengthen the PPP and help to avoid problems later on in the PPP’s development and in its operational life.

The Process module presents a clear process for the identification, development and implementation of a PPP. This indicates best practice, and shows where clearances and approvals are needed.

The Process module also ties in with the tools, which support the key activities that are required during the Process. When you reach a stage in the process that is supported by a tool you can go and use the tool and then return to the Process module and continue.

During the development of a PPP the practitioner is likely to use other resources also, including External Advisors. The practitioner can return to the Toolkit as they progress to the next step in the process.

Use it as a reference resource — A user might dip in and out of the Toolkit to use the specific parts that they are interested in at any particular time. The Toolkit contains useful background material about PPPs in general and about PPPs in India, as well as links to other resources and an instructional set of case studies of previous experience with PPPs in India.

Use the tools to help with particular parts of PPP preparation — PPP practitioners might use particular tools, such as the Financial Viability Indicator models, the Suitability Filter, or the Readiness Filter, to test or check a project that they are developing.
The Toolkit contains the following 6 tools to help decision-making for PPPs:

- **PPP Family Indicator** gives a starting indication of which PPP mode ‘family’ the particular project might be suited to.

- **PPP Mode Validation Tool** uses a risk allocation analysis to help decide further whether the selected PPP mode is best for the project.

- **The PPP Suitability Filter** tests how well suited the project is to being a PPP and checks for barriers that might make it difficult to do the project as a PPP.

- **Financial Viability Indicator Model** allows an analysis of the key questions of financial viability of the project and to test these using ‘what-if?’ scenarios.

- **Value-for-money Indicator Tool** provides an indication of the expected range of value-for-money for the public sector from the PPP.

- **Readiness Filters** checks that all the important steps have been followed and that the important preparations have been made, so that the project is ready to move on to the next step in development as a PPP.

The tools are available from the Tools & Resources Module, or by clicking on Go To My Tools. You need to login before you can use the tools.

Each of the tools is briefly introduced below.

### 5.1 PPP Family Indicator

The PPP family indicator tool uses a decision tree to help the practitioner see quickly the main PPP mode options available in the selected sector and for the particular project type. This provides the earliest indication of the mode that might be best for the project.

PPP modes can be loosely grouped into several ‘families’ which share certain important characteristics. The simplest family groups are Opex PPPs and Capex PPPs.

The Family Indicator asks some questions about the type of project that you have in mind. It then uses the answers to make a preliminary suggestion of which PPP family would best fit the project.

It may be helpful to use the Family Indicator before using the Suitability Filter.
5.2 Mode Validation Tool

The Mode Validation Tool uses a risk allocation approach to further test the preliminary choice of the best PPP ‘family’ for the project.

The aim at this stage is to prompt the practitioner to go to the next level of detail in thinking about the particular project risks and how these might best be allocated between the public and private sectors in a PPP. This risk allocation is key to choosing the PPP mode.

The Mode Validation Tool allows you to specify your own preferred risk allocation, and then to compare this against the typical risk allocations under the main families of PPPs. Where there are differences between the preferred allocation and the typical allocations, you should ask yourself why this is and consider whether a different allocation would be more appropriate. In this way, you should get a better sense of the best suited PPP mode.

The actual mode for the project will be further refined during the full feasibility and procurement stages and finally specified in detail in the Concession Agreement. The exact details of the specific PPP mode will be determined by the Project Team or by External Advisors.
5.3 PPP Suitability Filter

The Suitability Filter is effectively a preliminary qualitative value-for-money (VFM) test. It tests for qualitative factors that have an impact on the ease or difficulty of doing the project as a PPP. The Filter’s purpose is to weed out dead-end PPP projects early, so resources aren’t wasted and can instead be used on the most promising projects.

The results of the Filter can also be used to highlight where there are weaknesses in the project or in the supporting environment that would make the project less suited to being a PPP. By highlighting any such weaknesses, the Filter can help the Project Officer identify areas that need to be improved, or to decide that the project is not well suited to being a PPP. In this way, the Suitability Filter can help to strengthen the quality of PPPs entering the development pipeline.

The Suitability Filter is made up of a series of questions about the important factors that impact on the suitability of the project for being a PPP. The answers to each question are scored, and the final result from all questions is presented on a scale of ease or difficulty of developing the project further as a PPP. The Suitability Filter results would be summarised in the Pre-Feasibility Report.
5.4 Financial Viability Indicator Model

A simplified Financial Viability Indicator Model is provided to help the practitioner make their own financial assessment of the PPP project. The model is a spreadsheet that runs in Microsoft Excel (2003 or later). The Model has been customised for each of the five sectors.

The Financial Viability Indicator can be used to make a preliminary assessment of the likely financial viability of the project for the private sector. The model looks at financial returns from the PPP compared to the after-tax return on equity a commercial developer would expect. The idea is to get an indication of whether the proposed PPP would be likely to attract private partners and to show what the financial implications would be for the public sector.

You can enter a range of financial options into the model, including:

- an assessment of the level of user charges, annuity or other payment needed to make the project attractive to the private sector
- an initial test of whether and how much government support is likely to be needed (for example, through VGF funding)
- ‘what-if?’ tests of different financial designs and alternative project outcomes

The complexity of the Financial Viability Indicator Model has been deliberately reduced to make it applicable across sectors and flexible enough to analyse many different projects, while still retaining all of the key financial inputs and variables that affect a project. In this way it is a valuable tool to highlight the key project details to practitioners in a way that is most accessible.

Important: Excel’s Macros must be enabled in order to use the Model.
5.5 VFM Indicator Tool

The results from the Financial Viability Indicator Model are an input to the VFM Indicator Tool.

A quantitative value-for-money (VFM) test compares the estimated cost of procuring the project in the public sector with the estimated cost of procuring it as a PPP.

Typical VFM tests use just one monetary value for the risk that would be transferred to the private sector in the PPP. The test is very dependant on the level of uncertainty in the estimate of transferred risk.

The VFM Indicator highlights the uncertainty by using a range of values for the estimate of transferred risk. This range is based on probability distributions. This means the VFM Indicator can incorporate the uncertainty into the result and give a better indication of how likely the PPP is to deliver VFM or not.

The result of the VFM Indicator is a range of expected VFM results that may occur from the project:

- If the range is all positive then this indicates that the project can be expected to provide VFM.
- If it is all negative, then VFM may be unlikely.
- If the range covers both negative and positive VFM outcomes then the focus should shift to a careful qualitative assessment to check where the risks to VFM are and to mitigate these risks where possible.

Note, it is good practice to carry out a qualitative assessment of likely VFM in any case, for example by using the Suitability Filter.
5.6 Readiness Filters

The Readiness Filters are used during the four Readiness Checks that are included in the PPP development process outlined in Process module. The Readiness Checks happen at key milestones in project development. Their purpose is to help make sure that the PPP project is ready for the next stage and to highlight areas where the quality of preparation can be improved. By doing the Checks the overall quality of the PPP can be improved.

The Readiness Filters are structured in the form of checklists containing a series of questions relating to the PPP project design. Each Readiness Filter also contains an overall assessment of the project proposal and a recommendation as to whether it should proceed to the next stage of the process.

The Project Officer or the person in charge of developing the PPP for the public sector sponsor should fill out the Readiness Filter. This should then be reviewed by an internal team of two or three more senior reviewers. The job of the reviewers is to check that the quality of preparation is high enough to allow the PPP to proceed further. Any weaknesses that are identified should be addressed.
5.7 Other resources

Tools and Resources Module also includes a set of other resources to help PPP practitioners. These include:

- links to other online PPP related resources
- downloads of examples of tables of contents for important documents
- A set of 15 case studies of PPP experience in India

Case studies included in the Toolkit

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