वित्त मंत्रालय

MINISTRY OF FINANCE

Government of India





Workshop

on

Awareness Building and Guidance on using PPP Toolkits

Date of workshop: 24th – 25th May 2022

India Habitat Centre, New Delhi



Organised by:

INFRASTRUCTURE FINANCE SECRETARIAT आर्थिक कार्य विभाग DEPARTMENT OF ECONOMIC AFFAIRS Supported by:



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1. Background and Objective of the workshop

1.1. Background of the Workshop

India is currently celebrating 'Azadi Ka Amrit Mahotsav' to commemorate 75 years of independence and the glorious history of its people, culture and achievements. Fuelled by the spirit of Aatmanirbhar Bharat and a vision of activating India 2.0, this effort by the nation is a step towards achieving good governance, global peace and development. It is believed that the upgradation of existing and building of modern infrastructure will serve as a strong foundation for a new and 'Atmanirbhar Bharat'.

Based on a strong past track record, the Government of India (GoI) has set an ambitious target to achieve the Infrastructure Vision of 2025. Building high quality infrastructure and overcoming the infrastructure challenges is considered critical to realize this vision. The initiatives taken by the Department of Economic Affairs (DEA), Ministry of Finance have been instrumental in enabling a viable environment for infrastructure development and investments. This included the launch of National Infrastructure Pipeline in December 2019, a Development Finance Institution (DFI) and other initiatives, such as the National Monetization Pipeline, launch of PM GatiShakti National Master Plan (PMGS-NMP), and debt financing of Infrastructure Investment Trust (InvITs), among others, which will further contribute to increasing efficiency and generating revenues for Indian Infrastructure sector. In India, PPPs have been an important mode of development, upgradation, and maintenance of infrastructure sector and DEA has undertaken various strategic initiatives in realising this potential.

PPS have been able to deliver some of the most successful infrastructure projects in various sectors However, PPPs may not be suitable for all types of projects and many sectors have encountered problems with implementing PPP projects effectively. Thus, it is essential to identify that which project can be implemented on PPP mode particularly at an early stage so as to have the right approach from the beginning. To identify the suitable mode for implementation, DEA has developed the Toolkits, including the guidelines and MCAs, etc which helps in proper decision making and further implementation.

The PPP Toolkits are web-based resources that have 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 Toolkits are for use by PPP practitioners across India in both the public and private sectors. It covers five infrastructure sectors- State highways, Water and sanitation, Ports, Solid Waste Management, Urban Transport. Other toolkits such as PPP Post-Award Contract Management Toolkit, Value for Money (VfM) toolkit, and Framework for recognition, Valuation and Reporting of Contingent Liabilities have also been developed to assist in the PPP decision-making process.

The Workshop was intended towards awareness building and guidance on using these toolkits by government sector agencies and officials.

1.2. About toolkits

The section below briefly discusses various toolkits discussed during the workshop

- PPP structuring toolkit: The Toolkit assists the PPP practitioners at all key stages of the PPP project cycle and improve the quality of the PPPs that are being developed. It facilitates identification, assessment, development, procurement and monitoring of PPP projects. The toolkit is structured to cover the full life cycle of PPP projects. The Toolkit contains the following 6 tools to strengthen 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.
- 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.
- Value for Money Concept toolkit: This toolkit assists decision makers in evaluating, quantifying and comparing the total cost of delivering a project on traditional EPC mode visà-vis PPP mode.
- Contingent Liability Management System (CLMS) Toolkit: The toolkit guides Public Authorities in recognising and measuring the contingent liabilities arising from a PPP project.
- Post Award Contract Management (PACM) toolkit: The toolkit provides relevant guidance material and tools, such as checklists and project progress plans to authority officials to better manage the PPP project during the post award stages of the PPP project lifecycle.

1.3. Workshop Objectives

To support scaling up of PPPs, the Department of Economic Affairs partnered with the World Bank for developing tools, methodologies and processes to assist the governments/agencies to strengthen decision-making at all key stages of the PPP project cycle. As a result, various PPP toolkits, guidelines and MCAs were prepared as a part of a PPP capacity building programme, developed by the Department of Economic Affairs, Ministry of Finance, Government of India (DEA). However, the last few years have witnessed limited use of these toolkits for infrastructure development projects.

The workshop was strategically planned to serve as a platform for sharing an overview of various Public Private Partnership toolkits and guidance materials developed by the Department of Economic Affairs (DEA), Ministry of Finance, Government of India. The Toolkits have been developed for PPP practitioners across India in both the public and private sectors. This workshop was designed for such practitioners and focused on building awareness and providing direction to the government sector agencies and officials for maximizing the use of these toolkits in developing PPP Projects.

At the same time, the workshop provided an excellent opportunity to seek suggestions for improvements in the toolkits and their updating to reflect the changes in the PPP ecosystem in India since they were developed.

2. Summary of the workshop

2.1. Workshop Proceedings

The hybrid Workshop was organised at the India Habitat Centre, New Delhi, and incorporated sessions designed for a 2-day engagement. The detailed agenda of the workshop is provided below:

	Programme Schedule for DAY 01 – 24 th May 2022				
Session No	Timing	Session details			
	10:00 AM – 10:30 AM	Registration and Tea			
Session – 1	10.30 AM – 10.45 AM	Context Setting - Mr. Baldeo Purushartha, Joint Secretary, (ISD), DEA			
Session – 2	10.45 AM- 11.00 AM	UK-India Cooperation on Infrastructure Sector – <i>Mr.</i> Shantanu Mitra, Head- Infrastructure and Urban Development, British High Commission, New Delhi			
	11.00 AM – 11.15 AM	Tea Break			
Session – 3	11.15 AM – 12.15 PM	Introduction of PPP structuring toolkit (Objectives, sectoral coverage, modules, extent of coverage in each of those, etc.) – Ms. Mehali Patel, Director, CRISIL Ltd.			
Session – 4	12.15 PM – 01:00 PM	Walkthrough of the PPP structuring toolkit (Modules 1-3) - Ms. Mehali Patel, Director, CRISIL Ltd.			
	01:00 PM – 02:00 PM	Lunch Break			
Session – 5	02:00 PM – 03:30 PM	Overview of Value for Money Concept – Ms. Mehali Patel, Director, CRISIL Ltd.			
	03:30 PM – 03:45 PM	Tea Break			
Session – 6	03:45 PM – 04:45 PM	Walkthrough of the Value for Money Concept Toolkit - Ms. Mehali Patel, Director, CRISIL Ltd.			
Session – 7	04:45 PM – 05:00 PM	Q & A session			

	Programme Schedule for DAY 02 – 25 th May 2022				
Session No	Timing	Session details			
	10:00 AM – 10:30 AM	Registration and Tea			
Session – 1	10.30 AM – 11.00 AM	Overview of 'Framework for recognition, valuation and reporting of contingent liabilities' - Mr. RNK Prasad, PricewaterhouseCoopers Private Limited			
11.00 AM – 11.15 AM Tea		Tea Break			
Session – 2	11.15 AM – 12:15 PM	Walkthrough of the tool along with handbook on toolkit - Mr. RNK Prasad, PricewaterhouseCoopers Private Limited			

	Programme Schedule for DAY 02 – 25 th May 2022			
	12:15 PM – 12:30 PM	Q/A on Contingent liability Management System (CLMS) Toolkit		
Session - 3	12:30 PM – 01:15 PM	Walkthrough of the Value for Money Concept Toolkit - Ms. Mehali Patel, Director, CRISIL Ltd.		
	01.15 PM – 02:00PM	Lunch		
Session – 4	02:00 PM- 03:30 PM	Introduction to Post Award Contract Management (PACM) toolkit (Introduction, sectoral coverage, extent of coverage, etc.) - Mr. Kushal Kumar Singh, Partner, Deloitte Touche Tohmatsu India LLP		
	03:30 PM- 03:45 PM	Tea Break		
Session – 5	Session – 5 03:45 PM – 04:30 PM Walkthrough of the PACM tool - Mr. Kushal Kumar Singh, Partner Deloitte Touche India LLP			
	04:30 PM – 04:45 PM	Q&A		
	04:45 PM – 05:00 PM	Concluding remarks - Dr. Molishree, Deputy Secretary, DEA		

The Workshop was inaugurated with a context setting note delivered by the Shri Baldeo Purushartha, Joint Secretary, Infrastructure Support and Development (ISD) Division, DEA in which he highlighted the potential in PPPs and the importance of structuring of the projects before it is sent for appraisal and approval. His talk was followed by Mr. Shantanu Mitra, Head-Infrastructure and Urban Development, FCDO India, who talked about the UK-India Cooperation in the Infrastructure Sector and the interventions that are in the pipeline. The sessions of the workshop incorporated presentations focusing on the overview and walkthrough of four PPP toolkits by the following consultancy firms and their representatives:

- PPP structuring toolkit by Ms. Mehali Patel, Director, CRISIL Limited. (Presentation at Annexure 03).
- Value for Money Concept and Walkthrough by Ms. Mehali Patel, Director, CRISIL Limited. (Presentation at Annexure 03).
- Contingent liability Management System (CLMS) Toolkit and walkthrough by Mr. RNK
 Prasad, Senior Infrastructure Expert, PricewaterhouseCoopers Private Limited.
 (Presentation at Annexure 04).
- Post Award Contract Management (PACM) toolkit and walkthrough by Mr. Kushal Singh and Ms. Neha Agarwal, Deloitte Touche Tohmatsu India LLP. (Presentation at Annexure 05).

2.2. Workshop Participation

The hybrid mode of the Workshop enabled participants from various States and Union Territories and across various levels of the Government to join the Workshop and participate actively. The Workshop witnessed active participation of more than **155 participants** (35

participants from 16 Central Infrastructure Line Ministries and Departments including NITI Aayog, M/o Housing Affairs, Civil Aviation, Steel, Road Transport and Highways, New and Renewable energy, Power, Railways, Shipping, Food Processing Industries and D/o Telecom, Rural Development, Expenditure, Food and Public Distribution, Water Resources, Promotion of Industry and Internal Trade; and close to 120 participants from 15 states and 2 UTs including Gujarat, Kerala, Rajasthan, Nagaland, Manipur, Chandigarh, Uttarakhand, Tamil Nadu, Haryana, Madhya Pradesh, Chhattisgarh, Karnataka, Odisha, Andhra Pradesh, Punjab, Jammu and Kashmir and Pondicherry).

The detailed list of participants, both online and offline is given in **Annexure 1**.

2.3. Suggestions & feedback from participants

Each session was followed by a Q&A session, where both online and physical participants shared their experiences with PPP projects, toolkits and extended suggestions to enhance the utility and awareness about the toolkits.

At the end of workshop on May 25, 2022, an online feedback form was circulated to all participants to seek their feedback related to all sessions of the workshop. Feedback was sought with respect to the content, quality of delivery, satisfaction level, etc. aspects of the workshop. As on 23rd June 2022, a total of 44 responses have been received.

Subsequent section highlights the feedback received from the participants. The feedback was sought on the scale of 1 to 5 where 1 indicate low score and 5 indicate high score. Summary of the feedback is presented below.

2.3.1. Overall feedback on the workshop

Figure 1 and **Figure 2** below highlights the 'Level of satisfaction of participants' and 'Interest for participating in similar workshops in future'.

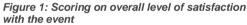
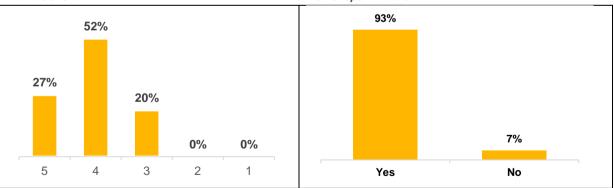


Figure 2: Participants interest in attending similar workshops in future



~80% of the participants scored the workshop between 4 and 5 indicating high level of satisfaction and more than 95% participants indicated that they would be keen to participate in similar kind of workshops providing more in-depth insights on the toolkits in future.

2.3.2. Feedback on individual sessions

The participants were requested to share the feedback on four critical aspects of each of the session i.e. (i) content of the session, (ii) quality of delivering the session, (iii) relevance to their job, and (iv) time dedicated for each session. The section below highlights the feedback

received from the participants on each of these key aspects on four key session of the workshop.

2.3.2.1. Session 01 - PPP structuring toolkit

The section below highlights feedback received on the session.

- **Content of the session** 86% of the participants scored the session either '4' or '5' indicating that participants found the content relevant and useful.
- **Delivery Quality** 79% of the participants scored the session either '4' or '5' indicating that they liked the delivery quality of the session.
- **Relevance to the job** 70% of the participants scored the session either '4' or '5' indicating that they found the session relevant to their job.
- **Time dedicated for the session** 73% of the participants scored the session either '4' or '5' indicating that they found the session timed well.

The graph below shows the feedback received from the participants

2% 2% 2% 5% 12% 19% 28% 23% 30% 26% 26% 21% Content of the session Delivery quality Relevance to the job Time dedicated for the session **■**5 **■**4 **■**3 **■**2 **■**1

Figure 3: Participants response on Session 01 - PPP structuring toolkit

2.3.2.2. Session 02 - Value for money toolkit

The section below highlights feedback received on the session.

- **Content of the session -** 77% of the participants scored the session either '4' or '5' indicating that participants found the content relevant and useful.
- **Delivery Quality –** 80% of the participants scored the session either '4' or '5' indicating that they liked the delivery quality of the session.
- **Relevance to the job –** 67% of the participants scored the session either '4' or '5' indicating that they found the session relevant to their job.
- **Time dedicated for the session –** 79% of the participants scored the session either '4' or '5' indicating that they found the session timed well.

The graph below shows the feedback received from the participants

Figure 4: Participants response on Session 02 - Value for Money (VfM) toolkit



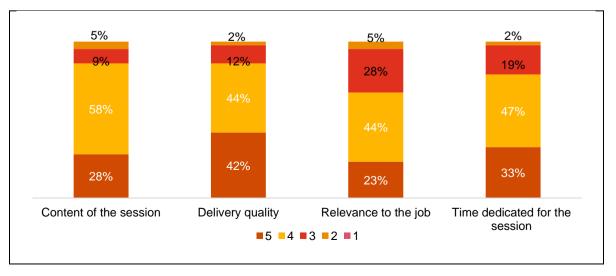
2.3.2.3. Session 03 - Contingent Liabilities Management Systems (CLMS) Toolkit

The section below highlights feedback received on the session.

- **Content of the session -** 86% of the participants scored the session either '4' or '5' indicating that participants found the content relevant and useful.
- **Delivery Quality –** 86% of the participants scored the session either '4' or '5' indicating that they liked the delivery quality of the session.
- **Relevance to the job –** 67% of the participants scored the session either '4' or '5' indicating that they found the session relevant to their job.
- **Time dedicated for the session –** 80% of the participants scored the session either '4' or '5' indicating that they found the session timed well.

The graph below shows the feedback received from the participants

Figure 5: Participants response on Session 03 - Contingent Liabilities Management Systems



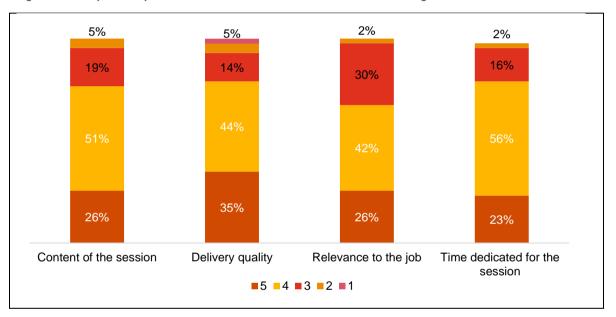
2.3.2.4. Session 04 - Post Award Contract Management (PACM) Toolkit

The section below highlights feedback received on the session.

- **Content of the session -** 77% of the participants scored the session either '4' or '5' indicating that participants found the content relevant and useful.
- **Delivery Quality –** 79% of the participants scored the session either '4' or '5' indicating that they liked the delivery quality of the session.
- **Relevance to the job –** 68% of the participants scored the session either '4' or '5' indicating that they found the session relevant to their job.
- **Time dedicated for the session –** 79% of the participants scored the session either '4' or '5' indicating that they found the session timed well.

The graph below shows the feedback received from the participants

Figure 6: Participants response on Session 04 - PPP Post-Award Contract Management



Some of the testimonials and feedback received are as below

Testimonials and feedback received

'Great initiative. Looking forward to more such sessions.'

'The focus shall be on continuous engagements like PPP initiative under Kelkar Report and also CP3 certification by World Bank which can be promoted and reimbursed by the Gol for govt. officials.'

'I believe the conference was need of the hour as PPP in India in terms of infrastructure is very important as it can definitely help to meet the need of the government in order to meet the funding gap. Private sector is efficient in creation of economic and social

Testimonials and feedback received

infrastructure assets and for delivery of quality public services. The PPP toolkit in a very critical and helpful step in the direction.'

'The entire session has been a great learning experience. The Toolkit is very helpful in understanding and identifying the Project needs and insights to the difficulties generally faced with the Legal and financial issues.'

'Again, very helpful from Government's resources perspective and execution of the projects and setting priorities.'

'Overall, the intention of organising the workshop was quite good. But it could have been designed according to the available time. A better time allocation and more elaborate workshop is needed. Examples may be given for better understanding of how to use the toolkits.'

2.3.3. Overall suggestions and feedback from participants

Some of the key suggestions received from participants during the workshop and through feedback form are as follows

- Extend the coverage of PPP toolkits for other sectors: Many participants requested that
 these tools should be customised and extended for other sectors and sub-sectors also such
 as healthcare, education and other social sector projects.
- Holding these workshops more often and in more detailed manner: Many participants found
 the workshop useful and agreed that the workshop was the need of the hour. Therefore,
 there was a request to organise similar workshops in future also. Some of the participants
 felt that more elaborated and in-depth workshops would be highly beneficial which should
 also include recent case studies or examples, would help in better understanding of these
 concepts
- Access to training Video and materials: Many of the participants indicated that they would like to have access to training workshop video and presentation slides for future reference.
- Helpline number: The participants requested for a helpline number that users can access to clarify doubts while using each of the PPP toolkits.
- Additional Comments: The participants also suggested few additional topics that can be taken up for discussions through such workshops in future. Some of these include sessions on –
 - Sector specific PPPs with strategies for project structuring and financial feasibility assessments,
 - Fiscal Risk Management, Contract Management and Financial Viability Analysis for PPP projects, etc.

The comments from the participants were welcomed by the DEA and DEA suggested evaluation of the same for future strategies. Also, workshop sessions were well appreciated by

both – physical and online participants and the suggestions received paved for a way forward for DEA in organising similar sessions in future, with diverse themes & topics.

2.4. Vote of Thanks & Suggested Way Forward

The workshop was concluded with Vote of Thanks from Dr. Molishree, Deputy Secretary, Department of Economic Affairs, Ministry of Finance, Government of India. Dr. Molishree acknowledged the active participation and suggestions received during the workshop further highlighting that DEA will continue to organise a pipeline of workshops which could support government institutions in improving their decision making for PPP projects and expect better usage of these toolkits.

DEA is in process of **Revamping of PPP Toolkits and expanding its scope for new sectors** as per the suggestions received during the workshop. The existing toolkits i.e., PPP structuring Toolkit, Contingent liability Toolkit and Post award Contract management Toolkit have some limitations in terms of the sectors and the mode of implementation. To cater these limitations, the toolkits are being revamped as per the latest norms, policy, Acts, Model Concession documents and good industrial practices.

3. Snapshots of the workshop

Following are few glimpses of the workshop:

Figure 7: Welcoming Mr. Baldeo Purushartha, Joint Secretary, (ISD), DEA to the workshop



Figure 8: Welcoming Mr. Shantanu Mitra, Head, Infrastructure and Urban Development, FCDO India



Figure 9: Welcoming participants on the first day of the workshop

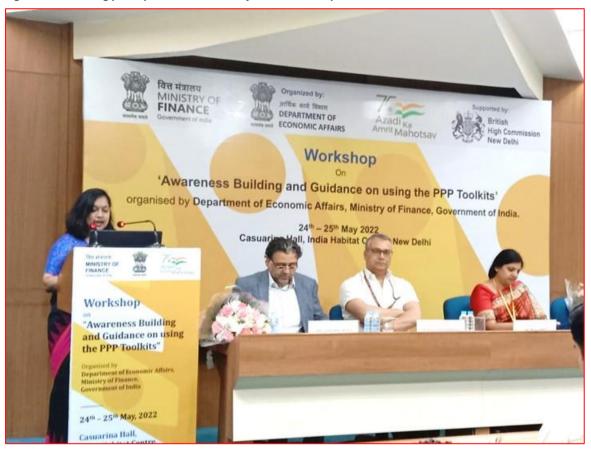


Figure 10: A teams window snapshot of the participants



Figure 11: Presentation on PPP structuring toolkit and walkthrough by CRISIL Ltd



Figure 12: Presentation on Contingent liability Management System (CLMS) Toolkit and a walkthrough by PricewaterhouseCoopers Private Limited



Figure 13: Presentation on Post Award Contract Management (PACM) toolkit and walkthrough by Deloitte Touche Tohmatsu India LLP



Figure 14: Stakeholder participation during Q/A session



Appendix A – Participants List

. No.	Full Name of Participant	Designation	Name of the Organization/Firm	
Participants from Department of Economic Affairs				
1.	Mr. Baldeo Purushartha	Joint Secretary	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance	
2.	Sh. A K Pal	Adviser	IPP Division, Department of Economic Affairs (DEA), Ministry of Finance	
3.	Dr. Molishree	Deputy Secretary	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance	
4.	Sh. Manoj Kumar Madholia	Joint Director	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance	
5.	Sh. Sujeet Kumar	Under Secretary	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance	
6.	Dr. Kartik Agrawal	Deputy Director	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance	
7.	Ms. Arya Balan Kumari	Deputy Director	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance	
8.	Ms. Kanika Wadhawan	Deputy Director	IPP Division, Department of Economic Affair (DEA), Ministry of Finance	
9.	Ms. Manshi Gupta	Deputy Director	IPP Division, Department of Economic Affair (DEA), Ministry of Finance	
10.	Sh. Rohan Nair	OSD, PIU, ISD	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance	
11.	Sh. Gaurav Jumrani	Consultant	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance	
12.	Sh Rajender Singh	Assistant Section Officer	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance	
13.	Sh. Madhav Kumar Jha	Assistant Section Officer	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance	
14.	Ms. Abhilasha Manda	Young Professional	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance	
15.	Sh. Suman Saurabh	Assistant Section Officer	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance	
16.	Sh. Khurshid Ahmad Rather	Young Professional	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance	
17.	Sh Shubham Varun	Stenographer	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance	

List of Physical participants			
S. No.	Full Name of Participant	Designation	Name of the Organization/Firm
18.	Mr. Shantanu Mitra	Head- Infrastructure and Urban Development	British High Commission, New Delhi
19.	Ms. Sangeeta Mehta	Sr. Programme Manager	British High Commission, New Delhi
20.	Mr. Shoubhik Ganguly	Sr. Infrastructure Manager	British High Commission, New Delhi
21.	Debaleena Saha Ghatak	Program Officer, Infrastructure and Urban Team	British High Commission, New Delhi
Participa	nts from Ministries/ Departm	ents /Authorities	
22.	Sh. Ravi Prakash	Director (UT-I), UT wing, MoHUA	M/o Housing and Urban Affairs
23.	Sh. Rajat Kumar Gupta	Senior Waste Management Specialist	D/o Water Resources River Development & Ganga Rejuvenation
24.	Sh. Puneet Kumar Mittal,	Senior Joint Commissioner	D/o Water Resources River Development & Ganga Rejuvenation
25.	Sh. Joyanta Chakraborty	Director	M/o Civil Aviation
26.	Sh. Amit Kumar Jha	Under Secretary	M/o Civil Aviation
27.	Sh. Pradeep Kumar	CGM	D/o Telecommunications
28.	Sh. Rupendra Kumar	PGM	D/o Telecommunications
29.	Sh. Amit Pankaj	Under Secretary	M/o Steel
30.	Sh. Sushant Sudan	Deputy Secretary, Highways	M/o Road Transport & Highways
31.	Sh. Subhash Khurana	(GM Fin), NHAI	M/o Road Transport & Highways
32.	Sh. N.P. Shukla	Under Secretary	MNRE
33.	Sh. Anubhav Uppal	Scientist 'C',	MNRE
34.	Sh. L K Trivedi	Deputy Secretary	D/o Expenditure
35.	Mr. Harish Bhakuni	Chief Manager, PFCCL	Ministry of Power
36.	Mr. Sujit Jena,	Sr. Associate	NITI Aayog
37.	Ms. Manpreet Kaur	Young Professional	NITI Aayog
38.	Mr. Mateshwari Prasad Mishra	Director (Storage & Warehouse Expert)	D/o Food & Public Distribution
39.	Mr. Tajinder Singh Bal	Under Secretary (Storage- III)	D/o Food & Public Distribution
40.	Shri Rajiv Ranjan Kumar	Director Infra -II	M/o Railways

List of Physical participants			
S. No.	Full Name of Participant	Designation	Name of the Organization/Firm
41.	Shri D.K Mishra	Director/MTP	M/o Railways
42.	Puja Sharma	PPP Expert	Department of Economic Affairs, Ministry of Finance
43.	Imokaba Jamir	Comissioner & Secretary	Planning & Co-ordination Department., Gov. of Nagaland
44.	Nidish Nair	MD-Advisory	PricewaterhouseCoopers Private Limited
45.	Raja V	Independent Consultant	NA
46.	Ankit Verma	Dy. Admin	DoT
47.	Sanjay Kumar	DC	KVS, Ministry of Education
48.	Saurabh Chandra	ASO	DPIIT
49.	Lisapila Aier	Sr.PRO	Tourism Department, Nagaland
50.	Sachin Arora	Manager	Power Finance Corporation Ltd., Ministry of Power
51.	Baldev Rinwa	Asst. Manager	Power Finance Corporation Ltd., Ministry of Power
52.	Dinesh Yadav	ASO	Power Finance Corporation Ltd., Ministry of Power
53.	Sakshi	DM	Power Finance Corporation Ltd., Ministry of Power
54.	Archana	Executive	Power Finance Corporation Ltd., Ministry of Power
55.	Arpit Agarwal	Senior Manager	PricewaterhouseCoopers Private Limited
56.	Aditi Rai	Associate	PricewaterhouseCoopers Private Limited
57.	Amasikha Dey	Manager	PricewaterhouseCoopers Private Limited
58.	Abhishek Singh	Sr. Associate	PricewaterhouseCoopers Private Limited

	List of On-line participants				
S. No	Full Name	Designation	Department	State/ UT.	
1.	Manu Thomas	Assistant Engg.	Public Works Department (PWD)	Andaman & Nicobar	
2.	Gopinathan J	Officer In-Charge (Planning)	Shipping	Andaman & Nicobar	
3.	Shelam Raju	PPP Expert	Finance Department	Andhra Pradesh	
4.	Jay Kumar Das	Executive Engineer	Tech Branch IV	Assam	

	List of On-line participants				
S. No	Full Name	Designation	Department	State/ UT.	
5.	Dr Alok Kumar	Joint Secretary (MC)	Road Construction Department	Bihar	
6.	Himshikha Sahu	Research Officer	Finance Department	Chhattisgarh	
7.	Jaspreet Singh	Manager	PFC Ltd.	Delhi	
8.	Mandar Shirodkar	DGM (Law)	Goa Industrial Development Corporation	Goa	
9.	Tushar Dessai	Consultant	Dept. of PPP	Goa	
10.	Aayushi Shah	Assistant Manager	Gujarat Infrastructure Development Board. (GIDB)	Gujarat	
11.	Amit Chavda	Deputy General Manager	Gujarat Infrastructure Development Board. (GIDB)	Gujarat	
12.	Kavina Mehta	Assistant Manager	Gujarat Infrastructure Development Board. (GIDB)	Gujarat	
13.	Pranab Nanda	Sr. Manager	Gujarat Infrastructure Development Board. (GIDB)	Gujarat	
14.	Vaishalli G. Sirohi	Assistant Manager	Gujarat Infrastructure Development Board. (GIDB)	Gujarat	
15.	Dr. YPS Berwal	Director Principal	CH.Devi Lal State Instittute of Engg. & Tech., (CDLSIET)	Haryana	
16.	Sh. Arjun Kadiyan	AD	Higher Education	Haryana	
17.	Romit Chugh	Executive Engineer (Roads- I)	Public Works Department (PWD)	Haryana	
18.	Dhirendra Khadgata, IAS	Director	Panchayats,	Haryana	
19.	Arunika Sharma	Architect	Dharamshala Municipal Corporation	Himachal Pradesh	
20.	Pradeep Thakur	Commissioner	Municipal Corporation Dharmashala	Himachal Pradesh	
21.	Tarsaim Kumar	Joint Director, Planning	Jal Shakti	Jammu and Kashmir	
22.	M. Ishfaq Pakchiwal	Director planning	Housing and Urban Development Department (HUDD)	Jammu and Kashmir	
23.	Nissar Mandloo	Deputy Director	Planning Development & Monitoring Department (PD&MD)	Jammu and Kashmir	
24.	Subash Chander	I/C Joint Director	Planning Development & Monitoring Department (PD&MD)	Jammu and Kashmir	

	List of On-line participants				
S. No	Full Name	Designation	Department	State/ UT.	
25.	Suneel Pandita	I/C Joint Director	Planning Development & Monitoring Department (PD&MD)	Jammu and Kashmir	
26.	Sheikh Shavaiz	I/C Joint Director	Public Works Department (PWD)	Jammu and Kashmir	
27.	Rajeev Bushan	Joint Director (P)	Health	Jammu and Kashmir	
28.	K R Devika	Executive Engineer	PPP Cell, IDD	Karnataka	
29.	Devika K.R.	Executive Engineer	PPP Cell, IDD	Karnataka	
30.	Mahantesh Hokarani	DGM, Procurement	KUIDFC	Karnataka	
31.	Abhishek Singh Thakur	Planning Tourism	MP Tourism Board	Madhya Pradesh	
32.	Bishwachandra Singh	Superintendent Engineer	Public Works Department (PWD)	Manipur	
33.	Joseph Jenuo	CFO, Edn(S)	School Education	Manipur	
34.	Keisham Biju Singh	Assistant Registrar	Manipur Technical University	Manipur	
35.	Khumukcham Davidkumar Singh	Deputy General Manager	MSPCL	Manipur	
36.	Md Arif Mujahid Khan	Finance Controller, Samagra Siksha,	School Education	Manipur	
37.	N. Sarat Singh	MD	MSPCL	Manipur	
38.	Peterson Thounaojam	OSD,	School Education	Manipur	
39.	S Ginmuan Ngaihte	Sr. Administrative Officer		Manipur	
40.	Wahengbam Meghachandra Singh	DEO	School Education	Manipur	
41.	Dabalue Yumlembam	DM (Finance & Accounts)	MSPDCL	Manipur	
42.	Anne Laishram	DM (Finance & Accounts)	MSPDCL	Manipur	
43.	Mhonlumo Kikon	Exec. Engg.		Nagaland	
44.	Shahkup Phom	Exec. Engg.		Nagaland	
45.	Bendangtola Walling	Exec. Engg.		Nagaland	
46.	T. Nungsangtemjen	Exec. Engg.		Nagaland	
47.	Lutho K	Exec. Engg.		Nagaland	
48.	Rovinuo Kehie	Assistant Urban Development Officer		Nagaland	
49.	Krishna Chandra Padhy	Consultant, PPP	Finance Department	Odisha	

	List of On-line participants				
S. No	Full Name	Designation	Department	State/ UT.	
50.	Krushna Chandra Satapathy	Director, PPP	Finance Department	Odisha	
51.	Satyananda Sarangi	Under Secretary	Finance Department	Odisha	
52.	Pooja Makkar	AGM (Finance)	PIDB	Punjab	
53.	Varsha Rana	AGM (Legal)	PIDB	Punjab	
54.	R S BAL	General Manager (P&F)	PIDB	Punjab	
55.	Baluram jat	Assistant Engineer	Public Works Department (PWD)	Rajasthan	
56.	Deva Ram	Executive Engineer	Public Works Department (PWD)	Rajasthan	
57.	DHARMENDAR KUMAR	Assistant Engineer	Public Works Department (PWD)	Rajasthan	
58.	Dinesh Jangid	Joint Secretary	Tourism	Rajasthan	
59.	Dk Meena	Assistant Engg.	Public Works Department (PWD)	Rajasthan	
60.	Ekta Jain	Assistant Engineer	Public Works Department (PWD)	Rajasthan	
61.	K. B. Khandelwal	Assistant Director	Planning (PPP)	Rajasthan	
62.	Rajan Kapoor	Finance Expert	Planning (PPP)	Rajasthan	
63.	Rajat Dhankhar	Assistant Engineer	Public Works Department (PWD)	Rajasthan	
64.	Suman Achera	Assistant Engineer	Public Works Department (PWD)	Rajasthan	
65.	Priya Kavaria	Assistant Engineer	Public Works Department (PWD)	Rajasthan	
66.	Dr.T K SREEDEVI, IAS	Finance Secretary	Finance Deptt.	Telangana	
67.	K S S V Anjaneyulu	Project Monitoring Officer		Telangana	
68.	Arvind Kumar (Jain)	Member(T)	UPSHA, Lucknow	Uttar Pradesh	
69.	Mukesh Kumar	General Manager	GPCU, KANPUR	Uttar Pradesh	
70.	Akshay Oli	PPP Associate	PPP Cell	Uttarakhand	
71.		Superintendent	Rural Development Haryana	Haryana	
72.	Amit Negi	JS Exp			
73.	DK Rawat	Add Director			
74.	H Homendro Singh	RO/Plg			
75.	Agha Khan				

List of On-line participants								
S. No	Full Name	Designation	Department	State/ UT.				
76.	Akash Tyagi							
77.	Apurva Verma							
78.	Babita Thangjam							
79.	Bajinder Sharma							
80.	Dinesh kumar							
81.	Dr. Sunil Luthra							
82.	Dr. Yashpaul Singh							
83.	Eenhkiphire							
84.	Jeevan prakash Pandey							
85.	Kalapataru Samantaray							
86.	Kumaraswamy.H							
87.	kynsai kharlukhi							
88.	N KUMAR							
89.	Nivashkar							
90.	Rajat Kumar Gupta							
91.	Rajesh Kumar Jindal							
92.	Ramakrishnan							
93.	Sangeeta Mehta							
94.	Sanjay Johri							
95.	Sanjay kujur							
96.	Shan Mitra							
97.	Sheela premji							
98.	Snehaprava Das							
99.	Sukhvir Yadav							
100.	Vivek Jain							

Appendix B – Presentation on PPP structuring and Value for Money (VFM) toolkit

Presented by-

Ms. Mehali Patel
Director
CRISIL Risk and Infrastructure Solutions Limited

Overview of various PPP toolkits and guidance materials developed for PPP practitioners

Agenda - PPP structuring and Value for Money (VfM) toolkit

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Ms. Mehali Patel

Directo

CRISIL Risk and Infrastructure Solutions Limited

Magnolia Hall, India Habitat Centre, New Delhi

24 May 2022

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Today's Sessions

TIMING	SESSION DETAILS		
11:00 AM - Noon	Introduction of PPP structuring toolkit		
12:15 PM - 01:00 PM	Walkthrough of the PPP structuring toolkit		
02:00 PM - 03:30 PM	Overview of Financial Viability Indicator and Value for Money Concept		
03:45 PM - 04:45 PM	Walkthrough of the Value for Money Concept Toolkit		

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Introduction of PPP structuring toolkit

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Web-based PPP toolkit for infrastructure

https://www.pppinindia.gov.in/toolkit



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Online PPP Toolkit overview

- · Customised for 5 sectors in India:
 - State Highways
 - Water & Sanitation (W&S)
 - Ports
 - Solid Waste Management (SWM)
 - Urban Transport (Bus Rapid Transport Systems)
- · For users at Central, State and municipal levels, as well as other PPP practitioners
- User may select the sector using the sector selection option which will customise parts of the toolkit to that particular sector

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Aims of the PPP Toolkit

- · Improve PPP decision making processes in India
- · Provide a guide to the whole PPP process, from start to finish
- · Lift quality of projects entering the PPP pipeline
- Increase the number of PPPs in the pipeline

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Toolkit structure and content

3 main parts to the toolkit:

- · Module 1: PPP Background
 - General information and explanation about PPPs
- Module 2: PPP Process

 - Describes the process of developing a PPP through four Phases
- · Module 3: Tools and resources
 - 6 decision-making tools
 - Other resources, including case studies

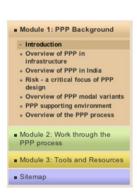
■ Module 1: PPP Background ■ Module 2: Work through the PPP process ■ Module 3: Tools and Resources

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Module 1: PPP Background

General information and guidance about PPPs



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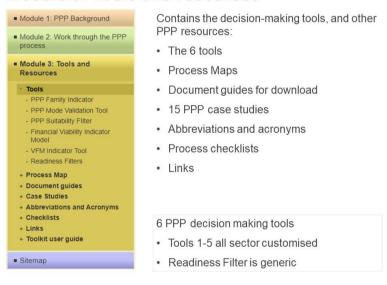




Module 2: PPP Process



Module 3: Tools and resources





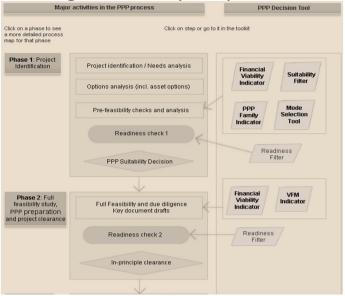
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PPP Process and linkage with tools (1 of 2)

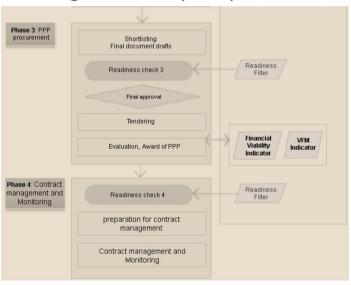
Major activities in the PPP process



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PPP Process and linkage with tools (2 of 2)



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Summary of the Tools

Tool	What's it for?	For use in which phase of the PPP Process?			
		Pre-feasibility	Feasibility	Procurement	Operation
PPP Family Indicator	Which type of PPP?	•			
PPP Mode validation	Risk-based check of type	•			
PPP Suitability Filter	How likely is success? Identify challenges	•	•		
Financial Viability Model	Viable for private partners?				
VFM Indicator	Likely VFM public sponsor?				
Readiness filters	Is preparation complete?				

No / little experience of PPPs • • Experienced with PPPs

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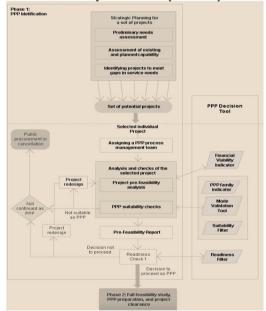
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Flow charts showing the 4 phases in the PPP process (1 of 4)

Process Maps: Information, Navigation

Phase 1: Identification



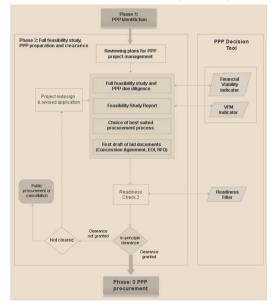
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Flow charts showing the 4 phases in the PPP process (2 of 4)

Process Maps: Information, Navigation

Phase 2: Feasibility and clearance



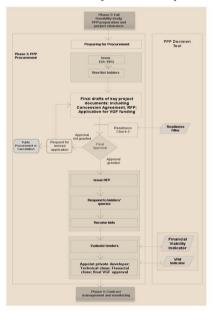
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Flow charts showing the 4 phases in the PPP process (3 of 4)

Process Maps: Information, Navigation

Phase 3: Procurement



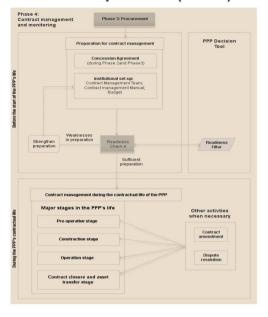
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Flow charts showing the 4 phases in the PPP process (4 of 4)

Process Maps: Information, Navigation

Phase 4: Implementation and monitoring



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Case Studies



- 15 PPP Case Studies
- · India experience with PPPs
- · Multiple sectors

All available online in the Toolkit

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Walkthrough of the PPP structuring toolkit

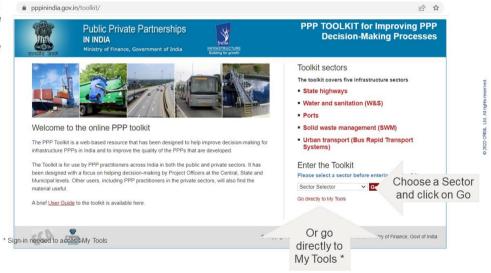
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Entering the Toolkit

- Choose a sector and click 'Go' to enter the toolkit
- Or, click 'Go directly to My Tools' to see your saved tools



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Navigation Options



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Register for sign-in

- · You must register to use the tools
- This allows you to save your work on the online toolkit



Click 'Register Here' and follow the instructions



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My Tools

- The 'My Tools' page is the control panel for your tools
- · Shows all saved tools
- Allows access / add / upload / delete



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Add new project

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Creation of New Project

- · Select the Sector
- · Define the Project Name
- · Click on 'START'





Project listed in My Tools



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Summary of the Tools

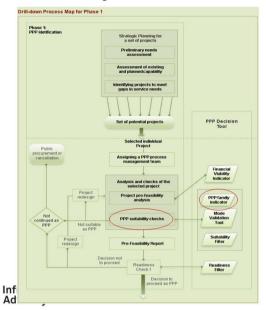
Tool	What's it for?	For use in which phase of the PPP Process?			
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Readiness filters	Is preparation complete?				

No / little experience of PPPs • • Experienced with PPPs

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PPP Family Indicator tool



Purpose: To help quickly show the main PPP options available, and help with preliminary mode selection

- · Customised for each sector
- · When to use this tool?
 - Project Identification Phase of the PPP process
 - During PPP suitability checks
- · Not a substitute for detailed PPP mode design

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PPP 'Families'



- · Many different PPP contract types, or 'modes'
- · Similar PPP modes can be grouped into PPP families
- · Four main 'families' of PPPs:
 - Management contracts
 - Lease contracts
 - Concessions
 - Build-operate-transfer (BOTs), and variants
- · Which family depends on PPP project design

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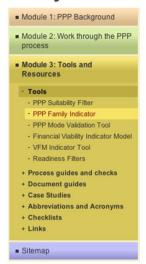
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Family Indicator - Results

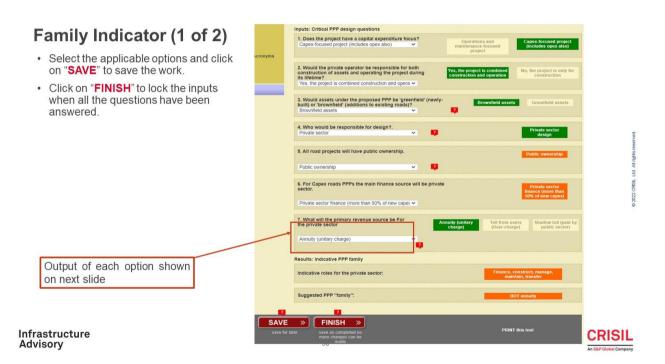


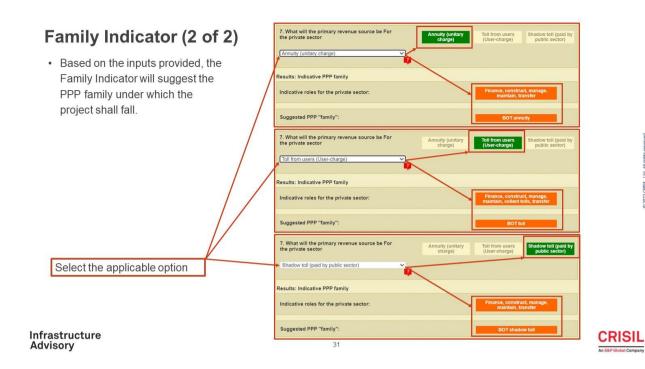
- · Structured as an interactive 'decision tree'
- User answers key questions about the planned PPP project
- · Answers are used to indicate typical PPP family

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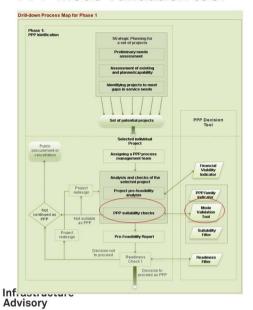
Summary of the Tools

Tool	What's it for?	For use in which phase of the PPP Process?					
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VFM Indicator	Likely VFM public sponsor?	•		•			
Readiness filters	Is preparation complete?						

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PPP Mode Validation tool



- Purpose: Risk-based assessment to help check the proposed PPP mode against typical modes for similar types of projects
- · Customised for each sector
- · When to use this tool?
 - Project Identification Phase of the PPP process
 - During PPP suitability checks
- · Not a substitute for detailed PPP mode design

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Risk based assessment



- · 5 major risk categories for PPPs:
 - Pre-operative phase risks
 - Construction phase risks
 - Operations phase risk
 - Handover risk events
 - Other risks
- · Risk can be allocated to:
 - Public sector
 - Private Sector
 - or Shared
- Mode types particularly sensitive to Volume risk and Payment risk (in operation phase)

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PPP Mode Validation Tool

- Step 1: Select preferred PPP mode
- **Step 2:** Select preferred allocation for each major risk
- Step 3: Identify best mode by comparing with typical allocation

Select the applicable option from the dropdown and thereafter, the subsequent options.

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PPP Mode Validation tool



- · Outcomes and take-aways:
- · Deepened thinking about major risks

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- Deepened thinking about risk allocations between public and private sector
- · Review of typical risk allocations in PPP modes
- · Check (validation) of proposed PPP mode against common modes



Summary of the Tools

Tool	What's it for?	Foru	ess?		
		Pre-feasibility	Feasibility	Procurement	Operation
PPP Family Indicator	Which type of PPP?	•			
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Readiness filters	Is preparation complete?				

No / little experience of PPPs

Experienced with PPPs

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PPP Suitability Filter - Qualitative VFM check



- · Suitability Filter is a Qualitative check of:
 - Likelihood of achieving Value For Money (VFM)
 - Likelihood of project succeeding as a PPP
- Value for money (VFM) means the public sector is financially better off
 if the project is done as a PPP rather than if it is done as a traditional
 public sector project.

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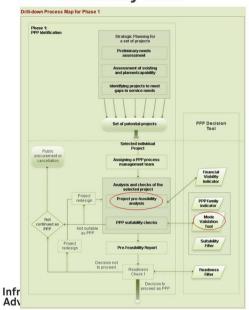
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PPP Suitability Filter



- · Purpose:
 - Determine suitability for PPP in terms of ability to deliver VFM
 - Help prioritise projects that are most likely to be successful PPPs
 - Identify weaknesses that can and should be improved
 - Identify projects that should not be PPPs, reduce wasted resources: Only suitable projects enter PPP pipeline
- Customised for each sector
- · When to use this tool?
 - Project Identification Phase of the PPP process



Using the Suitability Filter

- Module 1: PPP Background ■ Module 2: Work through the PPP Module 3: Tools and Resources - Tools PPP Suitability Filter PPP Family Indicator PPP Mode Validation Tool Financial Viability Indicator Model VFM Indicator Tool Readiness Filters + Process guides and checks + Document guides + Case Studies + Abbreviations and Acronyms + Checklists + Links ■ Sitemap
- 5 major issues related to suitability:

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- How supportive is public sector environment?
- How supportive is private sector environment?
- What are potential barriers to PPP?

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- Are characteristics of the project itself suited to PPP?
- How do other factors impact PPP suitability?
- Filter contains a series of questions about each issue

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Suitability Filter

- · Answers to questions are scored
- · Result shown on Suitability Indicator
- · 'Very Attractive' or 'Very Difficult'
 - Give clear result for or against
- · 'Difficult'
 - Probably not suitable as a PPP
- · 'Possible'
 - Could be suitable, need to address problems first
- · 'Attractive'
 - Probably suitable



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Other Features



- · Pop-ups give information for each question:
 - Explanatory notes
 - Risks and example consequences
 - Mitigation options
- Weights on questions can be rebalanced must have good reasons for changes
- Questions can be skipped but best not to skip them, result will be weakened

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Suitability filter



- · Outcomes from using this tool:
 - Qualitative assessment of ability of project to deliver VFM
 - Project has been tested for likelihood of success as a PPP
 - Identified weaknesses that can and should be improved
 - Identified if project should not be a PPP = reduce wasted resources
- If the project is not suitable it should not enter PPP pipeline

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Summary of the Tools

Tool	What's it for?	For use in which phase of the PPP Process?				
		Pre-feasibility	Feasibility	Procurement	Operation	
PPP Family Indicator	Which type of PPP?	•				
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PPP Suitability Filter	How likely is success? Identify challenges	•	•			
Financial Viability Model	Viable for private partners?					
VFM Indicator	Likely VFM public sponsor?	•		•		
Readiness filters	Is preparation complete?					

No / little experience of PPPs

Experienced with PPPs

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Readiness Filters



- Purpose: Monitor and uphold quality of PPP project preparation
- · Used to test preparedness at major steps in the PPP process
- · Online checklists and questionnaires
- · Focus on major requirements for PPP preparation

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Readiness Filters



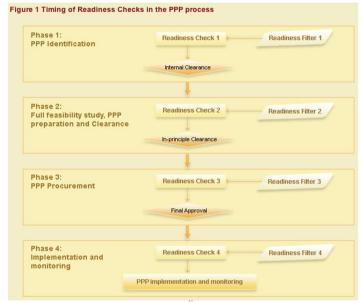
- · Readiness Filters check for readiness of project preparation
- · Use during 4 Readiness Checks
- · Note: Suitability Filter checks for suitability of project as a PPP

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Timing of the readiness checks



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Four Readiness Checks

- 1: To get internal clearance
 - · Project suitability for PPP
- 2: Before In-principle Clearance
 - · Project feasibility
- 3: Before Final Approval

Procurement readiness

- 4: At start of contractual period (After contract signing)
 - · Implementation and Monitoring Readiness



How to use the Filters

- · An Expert Group should be formed by the Sponsor
 - Small group of senior people
 - Must have authority to review
- · Project Officer answers questions
- · Supporting evidence is required
 - Eg, Suitability Filter results
 - Eg, Financial analysis results
 - Eg, Feasibility study
 - Examples are given in the Filters

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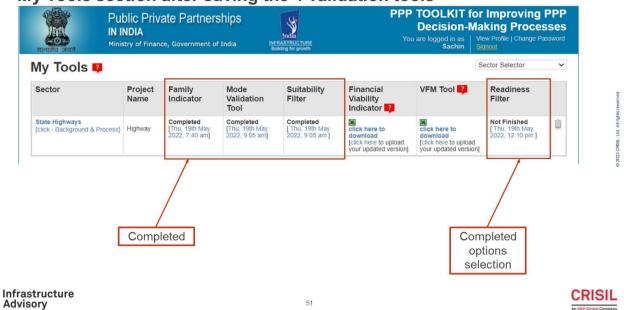
How to use the Filters ...

- · Expert Group assesses answers
 - Identify and highlight things to be improved
 - May request improvements if not project not yet ready
- · Expert Group and Project Officer meet
- · Project allowed to proceed if ready









Financial Viability Indicator



Summary of the Tools

Tool	What's it for?	For use in which phase of the PPP Process?				
		Pre-feasibility	Feasibility	Procurement	Operation	
PPP Family Indicator	Which type of PPP?	•				
PPP Mode validation	Risk-based check of type	•				
PPP Suitability Filter	How likely is success? Identify challenges	•	•			
Financial Viability Model	Viable for private partners?	•	•	•		
VFM Indicator	Likely VFM public sponsor?	•	•	•		
Readiness filters	Is preparation complete?	•			•	

No / little experience of PPPs • • • Experienced with PPPs

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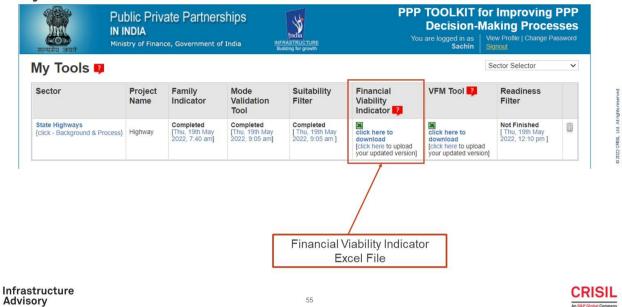
Financial Viability Model

- Module 1: PPP Background Module 2: Work through the PPP process Module 3: Tools and Resources - PPP Suitability Filter - PPP Family Indicator - PPP Mode Validation Tool - Financial Viability Indicator Model - VFM Indicator Tool - Readiness Filters + Process guides and checks + Document guides + Case Studies + Abbreviations and Acronyms + Checklists + Links ■ Sitemap
- · A Quantitative viability check
- · Customised for each sector
- · Downloadable Excel file
- · Purpose:
 - Test if proposed PPP is viable for private partner
 - Test user charge levels
 - Estimate level of public financial support needed
 - Test 'what-if?' scenarios of financial design

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My Tools section



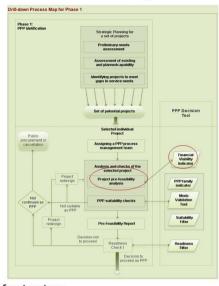
Financial Viability Model



- · Models are designed to be flexible
 - Can handle different PPP modes
- · Intended as simplified analysis
- · More detailed financial model should be developed at Feasibility stage



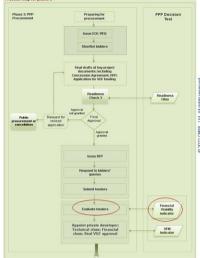
Financial Viability Model





When to use this tool?

Project Identification, PPP Feasibility, and PPP Procurement Phases

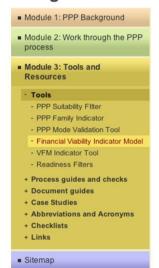


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Using the Model



- · Getting started
 - Must 'Enable Macros'
 - Help is provided in pop-up boxes
 - User guide also provided
 - Rupee symbol Download Rupee symbol font
- Results are exported to the VFM Indicator tool

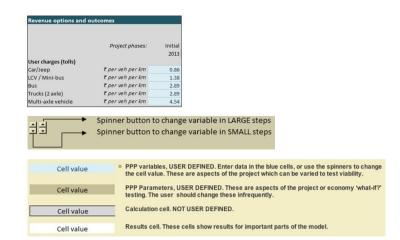


Using the Model

- · Data entry options
 - Enter numbers directly:

- Use spinners:

Colour coded cells:



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Structure of the Model

- · All models based on same structure
- · Main sheets are:
 - User-guide
 - Set-upDemand
 - Capex Input sheets
 - Opex
 - Revenue
 - Viability Analysis main output sheet
 - Other summary info and output sheets

Set-up Demand CapEx OpEx Revenue Viability Analysis

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Process of analysis

- 1. Set-up the analysis
 - Move through the input sheets 1-by-1
 - · Enter the data that describe the project
- 2. Review the results
 - · Essential outputs are on Viability Analysis sheet
 - · These outputs indicate viability
- 3. Conduct 'what-if' analysis
 - · Change crucial inputs
 - Eg, revenues, grant funding
 - · Check impact on viability results

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Setting up the analysis



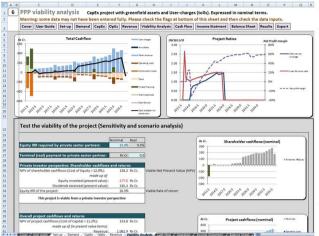
- · Enter data into the cells as indicated
 - Blue cells, brown cells
- · Key project information is grouped in each input sheet:

Set-up Demand CapEx OpEx Revenue Viability Analysis
 Set-up: general details (eg, inflation)

- Demand: expected usage (eg, traffic, volume etc)
- · Capex: planned capital investment and structure
- Opex: expected operating expenses
- Revenue: usage fees, annuity payments, etc



Results



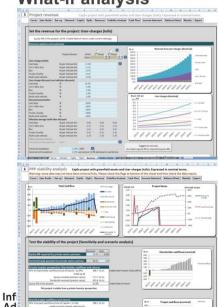
- · Summarised on Viability Analysis sheet
- Viability measured by:
- NPV
 - o (should be positive)
- IRR
 - o (should be > investor's requirement)
- And other financial measures
 - Debt service coverage
 - o Loan life cover
 - Net profit margin
- · Other outputs also provided
 - Summary financial statements

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What-if analysis



Use model to test different project designs

- 1. Change key inputs
 - Eg, revenue levels, grant funding, concession length, etc
- 2. Go back to Viability Analysis sheet and see what the impact is
- 3. Try different combinations until:
 - · Viable option is found that meets project objectives
 - Or, it becomes clear that project is not viable needs redesign or be dropped



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What is Value for Money (VFM)?

- VFM is used as procurement decision i.e. What is the best mode for project implementation? (Public procurement or PPP)
- Typically involves (a) qualitative analysis and (b) comparison of life cycle costs for the public sector if the project is implemented on PPP vis-à-vis Traditional procurement (quantitative analysis). VFM is achieved if:
 - Project structure includes value drivers to bring in private sector efficiency; and
 - Lifecycle cost of project delivery by private party is lower than that of the public sector







VFM and Affordability – Not the same!!

- VFM and affordability are sometimes confused as concepts. This can arise because the approach to making a
 quantitative VFM assessment has strong similarities to that for an affordability assessment.
- · However, each approach has a different output:
 - VFM assessment seeks to determine whether a project should proceed as a PPP; while
 - An affordability assessment seeks to determine whether the project is affordable for the public authority or end-users and can
 eventually be paid for. If it is a PPP project, it determines whether the project could be procured as a PPP.
- In a nutshell, the VFM supports the procurement decision while affordability validates the investment decision

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What is VFM used for?

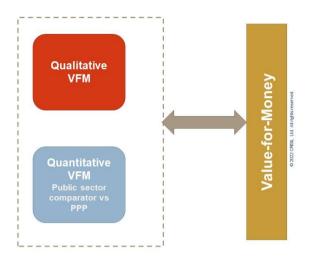
- As an 'awareness-raiser' VFM assessment may be used as a means by which PPPs may be justified on an objective basis and introduced as a competing approach to the conventional procurement option.
- As a 'gate-keeper' VFM assessment to serve as a decision making criteria for identifying the procurement option.
- As a 'negotiation tool'/ 'bid sanity check' VFM assessment serves as a guidance for negotiating the bid/ evaluating the bid to ensure that the procurement option delivers value for money. This may be applied during the tendering process or after receipt of the bids, as the case may be.
- The requirement to use VFM assessment differs between countries. In some countries, a VFM assessment is mandatory by law in order for a PPP scheme to be undertaken (for example the évaluation préalable Preliminary Assessment in France). In others, a VFM assessment is carried out on a more voluntary basis (e.g. in the Netherlands where no formal obligation for VFM assessment exists).





Stages in VFM analysis

- · VFM analysis compares the relative merits of PPP procurement as against traditional public finance. This can be done using quantitative analysis, qualitative analysis, or both.
- Qualitative assessment Checking the rationale for using PPP by asking whether a project is likely to be suitable for private financing. Qualitative VFM subjectively tests if objectives, service need, & proposed project structure are likely to allow private party to access value drivers to deliver better efficiency to the government agency.
- Quantitative VFM is undertaken through Public Sector Comparator. Comparison of the cost for public sector in case of PPP against the cost of traditional delivery through public procurement.



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Qualitative VFM

- · Purpose to subjectively test whether objectives, service requirement and proposed project structure are likely to provide the *private* party with sufficient scope to access the value drivers.
- · Value drivers are opportunities available for the private sector to deliver better efficiency to the government agency. The key elements include:



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Qualitative VFM – Key enquiries

- Have risks been allocated to party best able to manage them?
- Is there a genuine risk transfer to private sector?
- · Does market have sufficient management quality to control transferred risks?
- · Does market have risk appetite?
- · Extent of risk sharing between parties?
- Is there sufficient credit quality in market?
- Can contract be developed to enforce risk allocation?

Risk Allocation



- Is private party free to determine O&M needs to meet output specifications?
- Is private party responsible for all refurbishment needs?
- Is private party responsible for performance of asset throughout the contract period?
- Whole of Life

Costing



- Is private party free to determine how to deliver services?
- Is design & construction of the asset private party's decision?
- Is there scope for innovation in design or service delivery?
- Does scope of service delivery provide sufficient incentive for innovation?
- Is private party responsible for all / part of services required?
- To what extent is Govt. / IA responsible for utilizing asset?

Innovation



- Can private party generate additional third party income from asset?
- Can private party provide additional services to third parties?
- Is third party revenue generation likely to reduce overall cost of service to
- Is market for asset / facility / service large enough to access significant economies of scale?

Asset Utilization & Economies of Scale



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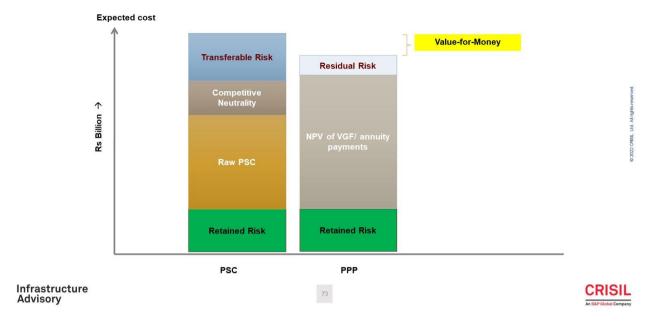


Quantitative VFM

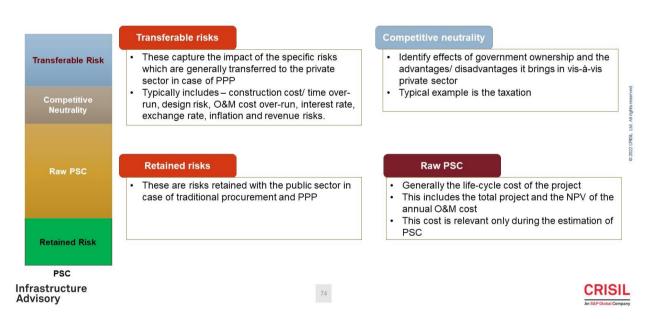
- Typically undertaken using a process to compute the cost of public procurement known as 'Public Sector Comparator' or
- · The PSC assessment computes the actual cost of public procurement i.e. actual costs including cost overruns, delays etc. for the entire life of the project.
- · Thereafter, the net present value (NPV) of the traditional public sector comparator (PSC) is compared with the cost of procuring the same service through PPP.
- The delivery option having lower NPV is deemed to offer better value for money when compared to the alternative.
- VFM for PPP exists if PSC is greater than the cost of PPP
- · Used commonly in the UK, the Netherlands, Australia and Canada, where systems are in place to track cost of public procurement in detail.



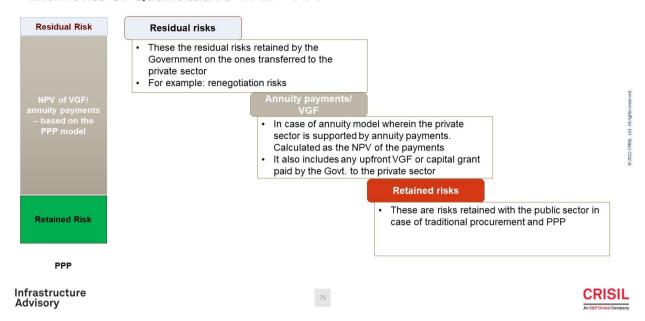
Quantitative VFM



Elements of Quantitative VFM - PSC



Elements of Quantitative VFM - PPP



Walkthrough of the Value for Money Toolkit



Summary of the Tools

Tool	What's it for?	For use in which phase of the PPP Process?				
		Pre-feasibility	Feasibility	Procurement	Operation	
PPP Family Indicator	Which type of PPP?	•				
PPP Mode validation	Risk-based check of type	•				
PPP Suitability Filter	How likely is success? Identify challenges	•	•			
Financial Viability Model	Viable for private partners?	•	•	•		
VFM Indicator	Likely VFM public sponsor?	•	•	•		
Readiness filters	Is preparation complete?	•	•	•		

No / little experience of PPPs

Experienced with PPPs

Experienced with PPPs

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VFM Indicator Tool

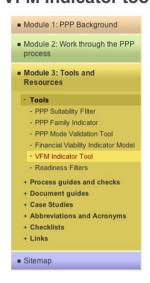


- · A Quantitative VFM indicator
- · Downloadable Excel file
- · Uses results from Financial model
- · Based on probabilities (eg, of time or cost overruns)
- Should be used with qualitative assessment (eg, Suitability Filter)
- · User Guide available in the Toolkit

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VFM Indicator tool



- · Purpose of the tool:
 - Help indicate expected range of VFM
 - Highlight how much uncertainty there is to improve decision making
 - Allow for better data when it becomes available

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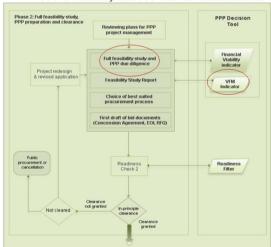
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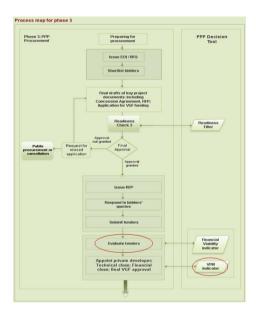


VFM Indicator Tool

- · When to use this tool?
 - PPP Feasibility and PPP Procurement Phases

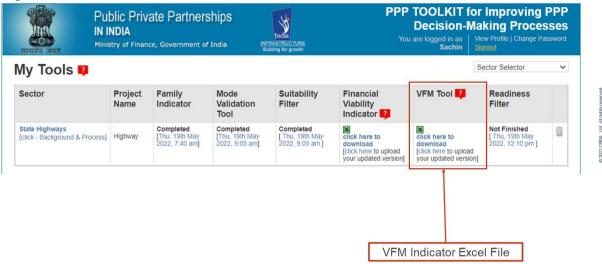


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My Tools section



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Important concepts

Outcomes

- · Actual cost, actual construction time, etc.
 - i.e., What actually happens
- · Likely to vary from what was expected
 - i.e., Cost and time overruns, revenue under-collections, etc
- This variation = risk

Probability

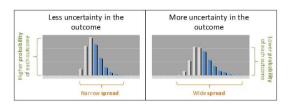
- · Chance or likelihood of an outcome happening
- · A probability distribution shows likelihood of all possible outcomes

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Range of project outcomes

Probability distributions

- · illustrate range of outcomes
- · illustrate level of uncertainty



- · Blue are positive outcomes
- · White are negative outcomes

Wider spread means more uncertainty over the outcome Indicates level of project risk

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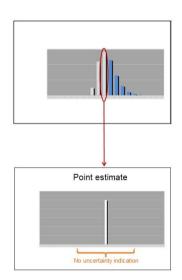
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Point estimate

- · A point estimate fails to account for uncertainty
- · Only one among many possible outcomes
- · But appears to be higher probability



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VFM Indicator tool

- · Focus is on transferable risks, for example:
 - Construction cost risk
 - Construction time risk
 - Revenue risk (due to traffic)
 - Payment risk (from collections)
 - Opex Risk
- · Uncertainty about
 - How big each risk is, and
 - How much transferred to private party
- · Focus is on range of outcomes:
 - Captures uncertainty (risk)
 - Supports better decision making

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Using the VFM Indicator

- · Getting started
 - Must 'Enable Macros'
 - Download Rupee symbol font
 - Select sector from the drop-down menu

Sector Selector:

Bus Rapid Transport System (BRTS)

- Financial data is imported from the Financial Viability Indicator Model
 - Click

Import data from .csv file

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Structure of the tool

- · Main sheets are:
 - User-guide
 - Setup
 - Financial inputsInput sheets
 - Probability parameters
 - VFM Indication main output sheet
 - VFM calculationRisk values
 Calculation sheets



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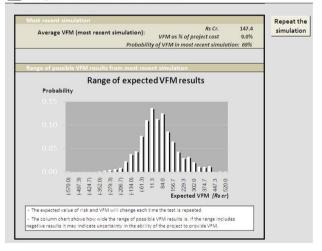
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VFM indication

Highlights uncertainty in what VFM outcome will be

2 Range of simulated VFM outcomes



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VFM Indicator tool

Purpose of the tool:

- Help indicate expected range of VFM
- Highlight how much uncertainty there is to improve decision making
- · Allow for better data when it becomes available

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Summary of the Tools

Tool	What's it for?	For use in which phase of the PPP Process?				
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PPP Family Indicator	Which type of PPP?	•				
PPP Mode validation	Risk-based check of type	•				
PPP Suitability Filter	How likely is success? Identify challenges	•				
Financial Viability Model	Viable for private partners?	•	•	•		
VFM Indicator	Likely VFM public sponsor?	•		•		
Readiness filters	Is preparation complete?		•	•		

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Experienced with PPPs

No / little experience of PPPs • • •



Thank you

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CRISIL Risk and Infrastructure Solutions Limited

Email: mehali.patel@crisil.com

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About CRISIL Limited

CRISIL is a leading, agile and innovative global analytics company driven by its mission of making markets function better.

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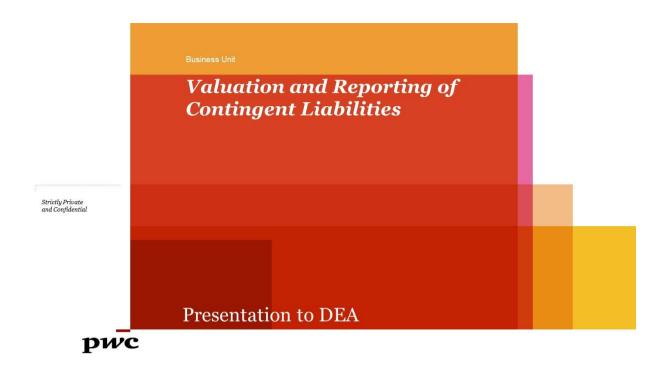


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Appendix C - Presentation on Valuation and Reporting of Contingent Liabilities

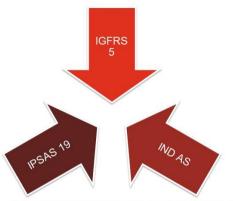
Presented by -

Mr. RNK Prasad Senior Infrastructure Expert PricewaterhouseCoopers Private Limited.



Conceptual Framework — Quick Recap Framework for Recognition, Valuation and Reporting of Contingent, Liabilities • Presentation to DEA

Contingent liability is...



A possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity;

- A present obligation that arises from past events but is not
 - it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation; or
 - the amount of the obligation cannot be measured with sufficient reliability.

National & International Accounting Standards converge on the same principle – that contingent liabilities are unknown uncertain obligations that get converted into direct liabilities on occurrence or non-occurrence of future event/s not within the

15.02.2017

Governments absorb some risks in all PPPs - while all risks do not create contingent liabilities, some risks do and if these are not managed well, they can accentuate contingent liabilities

Element	Direct Liability	Contingent Liability
Obligation	Present & Certain	Present & Possible
Amount	Known upfront and certain	Unknown and uncertain
Timing	Certain	Uncertain
Outflow of resources	Certain	Depends on occurrence or non occurrence of certain events in future
Recognition	Recognised in an Accrual based accounting. In cash based accounting, recognised when actually paid	Not recognised
Disclosures	NA	Encouraged/Practiced

DIRECT LIABILITIES -PPP

- Viability gap payments
- Costs relating to change of scope, additional works etc.
- Annuity payments
- Project specific subsidies (if any)
- Revenue shortfall loans (if any)

CONTINGENT LIABILITIES - PPP

- $\label{thm:continuous} \mbox{Termination risks and payments for Force Majeure events}.$
- Termination risks and payments for concessionaire/ authority event of default events, if such defaults lead to termination.

- Traffic/Revenue Guarantees (if any)
 Project loans/borrowings of the sub-national or government

Currently the level of contingent liabilities from PPPs not known

Section 1 – Conceptual Framework Draft

Why do we need to manage contingent liabilities

Contingent liabilities increase fiscal costs and are a potential threat for the fiscal responsibility

Contingent payments can exasperate fiscal risks from PPPs, hence need to be estimated and monitored

Fiscal commitments from direct and contingent liabilities need to be assessed for an aggregate exposure to PPPs which will determine the affordability under the fiscal constraints faced by the governments

Setting aggregate exposure limits for PPPs is helpful in ensuing government's total exposure remain within manageable limits

Risks are dynamic, hence contingent liabilities need ongoing monitoring throughout PPP lifecycle

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Draft

Institutional framework for management of contingent liabilities



Policy





Capacity & Training

- Articulate government's intent and direction on valuation, risk assessment and management of contingent liabilities
- Identifies the authority for management of contingent liabilities (for e.g. an Act or a Guideline or an Accounting Standard)
- Set out the institutions responsible for managing contingent liabilities
- Lay down exposure limits in line with the FRBM
- Lay down disclosure norms and process for disclosure of contingent liabilities in the budget and financial statements of the government
- Set up Processes and Methodology for estimation and management
- Embed the CL estimation process in the PPP Project Appraisal and Approval Process
- Build robust databases for centralised monitoring and management of contingent liabilities
- · Develop IT tools for estimation and management
- Develop and Issue Guidelines
- · Provide training
- · Monitor the usage

Section 1 – Conceptual Framework Draft

An accounting view of Contingent Liabilities

Contingent liabilities are never recorded in the books of accounts and financial statements, and they remain off balance sheet in the accounting domain. These are only disclosed in the financial statements irrespective of the basis of accounting i.e. cash or accrual. The national and international practices suggest the following treatment.

Method of Accounting	Relevant Standard	Accounting Treatment	Disclosure
Cash Accounting	-	Only when contingency is materialized and cash payments need to be made.	Encouraged
Accrual Accounting	IGFRS / IPSAS 19	Liability should be recognized as a provision if: • More likely than not (50%) that the event will occur; • The amount of obligation can be measured with sufficient reliability Liabilities that do not satisfy the above requirements do not get recognized	contingent liabilities unless the payment is remote under the International and Accounting Practices

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Draft

Estimating the probabilities of occurrence of risk and its impact is not easy and hence contingent liability estimation is difficult and tricky.

Methodologies for estimation of contingent liabilities can range from highly mathematical and statistical modelling to simple excel based scenario analysis.

Statistical Models:

- Complex probability analysis, parametric modelling and option pricing techniques
- Extremely data intensive
- Difficult to implement
- Requires substantial institutional capacities including a lot of training and upskilling

Simple Scenario based judgemental models

- A combination of scenario analysis and assignment of probabilities based on past experience and stakeholder consultations could be more appropriate and simplistic
- Building risk registers and arriving at risk values based on past experience, available data, past trends and judgements of the authorities.
- Estimating contingent liabilities for different risk categories, for different project phases and using expected values

Maximum exposure under the assumption of 100% likelihood of all risks and therefore estimating the liability at 90% of debt due may be very conservative and hence a risk based estimation is needed

Valuation of Contingent Liabilities using the toolkit- Methodology

PwC

Framework for Recognition, Valuation, and Reporting of Contingent Liabilities • Presentation to DE

Section 2 - Valuation of Contingent Liabilities - Proposed Methodolog

Draft

Valuation of Contingent Liabilities – Methodology

1. Assign Probabilities for each risk event based on the following guidance

S No	Range of Probability	Assign Probability score as	Explanation for Assigned Probability
1	0.00 - 0.25	1	The likelihood of occurrence of an event is to be classified as "REMOTE"
2	0.26 - 0.50	2	The likelihood of occurrence of an event is to be classified as "UNLIKELY"
3	0.51 - 0.75	3	The likelihood of occurrence of an event is to be classified as "POSSIBLE"
4	0.76 - 1.00	4	The likelihood of occurrence of an event is to be classified as "LIKELY'

$Valuation\ of\ Contingent\ Liabilities-Methodology$

2. Assign Impact score for risk events as per the following guidance

S No	Likely Impact of a Risk Event	Guidance for defining financial impact	Impact Score to be assigned
1	If the risk event is expected to cause High Financial Impact	> 20% project cost	4
2	If the risk event is expected to cause Moderate Financial Impact	>10% and less than 20% of project cost	3
3	If the risk event is expected to cause Minor Financial Impact	>5% and less than 10% of project cost	2
4	If the risk event is expected to cause Insignificant Financial Impact	<5% of project cost	1

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Valuation of Contingent Liabilities – Methodology

3. Construct a Risk Register as per the following guidance



		Probabili	ty * Risk Impact	
High	4	8	12	16
Moderate	3	6	9	12
Minor	2	4	6	8
Insignificant	1	2	3	4
	Remote	Unlikely	Possible	Likely
		Pı	obability	
	Moderate Minor	Moderate 3 Minor 2 Insignificant 1	High 4 8 Moderate 3 6 Minor 2 4 Insignificant 1 2 Remote Unlikely	Moderate 3 6 9 Minor 2 4 6 Insignificant 1 2 3

Valuation of Contingent Liabilities - Methodology

Determine the threshold level of risk scores that can trigger a contingent liability. Methodology considers the following thresholds.

Risk Score	Explanation	Effect on Contingent Liabilities	Disclosure and Budgeting
9 to 16	Likely risks with high impact.	Will trigger contingent liabilities.	To be budgeted
			 To be disclosed
6 to 8	Possible risks with minor moderate impact.	to Do not trigger contingent liabilities	May be disclosed
			• Need not be budgeted
1 to 4	Remote to unlikely risks wi insignificant impact	th No impact on contingent liabilities	No disclosure and No budgeting required

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Valuation of Contingent Liabilities - Methodology

- 5. Match the Termination Payments as per CA with the default list provided in the Application Tool. The Tool is configured with the following:
 - **Toll Projects** based on the updated version of MCA of May 2016. A sample analysis of the concession agreements signed prior to 2006 and after 2006, indicate that the basis and quantum of termination payments in the event of occurrence of force majeure and default risks are almost similar in all concession agreements and hence the Application Tool can be used for all types of BOT projects with necessary user inputs as required by the Tool.
 - **Annuity Projects** based on an Annuity Concession Agreements signed during the period 2012. It may be relevant to note here that there are only 47 Annuity Projects (from NHAI) till date with a total project cost of Rs. 30,286 crores and an annuity commitment of Rs 3,096 crores
 - Hybrid Annuity Projects based on the MCA of 2016 (version 2 of 2016).

Valuation of Contingent Liabilities - Methodology

6. Determine the Debt and Equity - The Tool is configured to take the following as Debt and Equity:

Project Debt Outstanding = (Least of {(i) Total Project Cost as per CA,(ii) Total Project Cost at Finance Close, (iii) Total Actual Project cost} – Construction Grant – Equity as per CA.)

Debt Due = Lower of (i) Project Debt Outstanding and (ii) Actual loan outstanding with interest as per user inputs

Adjusted Equity (in case of termination on or before COD) = (Equity*(1+((0.5*Change in WPI Value w.r.t Appointed Date)/100))

Adjusted Equity (in case of termination between COD and 4^{th} anniversary thereof) = Adjusted Equity= (Base Equity on COD *(1+ ((% change in WPI w.r.t. given reference date and COD date)/100)))

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Valuation of Contingent Liabilities – Methodology

7. Estimate contingent Liabilities on a Reference Date. The Tool estimates the contingent liabilities for given project data using the default risk registers and based on the Debt and Equity formulae for any given category of risk.

Risk Category	Risk Score and Probability Applied	Formula Applied	Amount in Rs. Cr
Concessionaire Event of Default	6 – 0.50	(90%*Debt Due)*0.50	Xxx
Authority Event of Default	4- <0.50		0
Non Political Force Majeure Event	6 – 0.50	(90%*Debt Due)*0.50	Xxx
Indirect Political Force Majeure	6 - 0.50	(Debt Due+(110%*adjusted equity))*0.50	Xxx
Political Force Majeure Event	6 - 0.50	(Debt Due +(150%*adjusted equity))*0.50	Xxx
Contingent Liability for the project is the	maximum of above va	lues	Xxx

Tool-kit overview

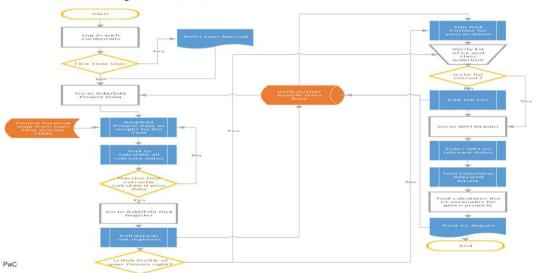
- 1. Web based application can be hosted centrally and states can use the system through internet link.
- 2. Users to use the web application through secure access, no one will have the ability to overwrite the default data.
- 3. Adequate security features for restricting data sharing among agencies/ stakeholders.
- 4. Reports can be downloaded into excel format for necessary analysis and use.



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Draft

User Flow Chart for Tool Kit



Appendix D - PPP Project Delivery Post Award Contract Management

Overview of Sector Agnostic Guidelines and Sector Specific Manuals for Highways, Ports and Schools

Presented by-

Mr. Kushal Singh

Partner

Deloitte Touche Tohmatsu India LLP.

Ms. Neha Agarwal

Director

Deloitte Touche Tohmatsu India LLP.



DEA's Initiative on Post Award Contract Management Toolkit

- Government of India has been placing strong emphasis on the use of Public Private Partnerships (PPP) as a strategy for expanding the provision of infrastructure.
- To facilitate such large-scale expansion of PPPs on a sustainable basis, it is was critical for the Government to ensure that these PPP projects deliver the intended benefits for the public at large.
- It was thus important to place emphasis on Post-Award Contract Management.
- This ensured that the projects delivered the outcomes as laid down in the contractual obligations to be fulfilled by the Concessionaire.
- As part of DEA's capacity building initiative and mainstreaming PPP programs, Post Award Contract Management Guidelines, Manuals and Toolkits have been prepared which are enabled in the form of web based Online Toolkits.

Indicative Issues during Post Award Stages

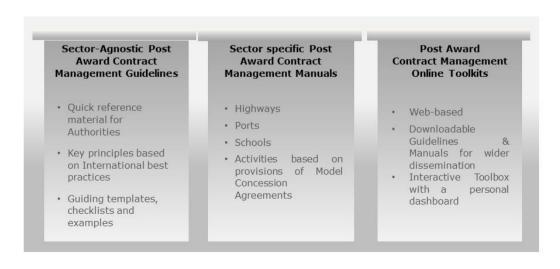
 PPP projects are generally long tenure in nature and undergo a full lifecycle. Multiple risks might possibly materialize during various stages of the PPP contract

Indicative Major Issues in PPP Projects during Post Award Stages Pre-Award Stage Procurement & Award Land Financial Closure SPV formation Managing change & transition Land Acquisition Change of Scope & law Construction Regular Monitoring & Performance Reporting Managing contingencies & disputes Technology obsolescence Operations & Maintenance Revenue Sharing Handover(Expiry/ Termination) Inspections & Checks Clearance Issue Handover

 One of the key objectives of the post award contract management framework is to identify such issues and develop detailed managed plans for the same.

Components of Guidance Material

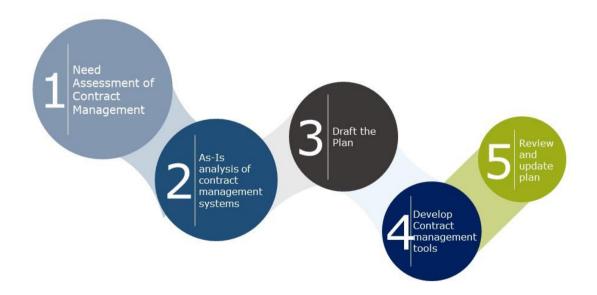
Guidance Material includes Guidelines, Manuals for Highways, Ports and School sector and Online toolkits



Coverage of Contract Management Toolkits



Development of Contract Management Plan



Guidance for Creating Contract Management Team

Identifying



Planning



Appointing



Identifying major stakeholders in a PPP project

- ✓ Authority
- ✓ Private Party/Concessionaire
- ✓ Other Stakeholders like Independent Engineer, Safety Consultant, lenders etc.
- - ✓ Resource Estimation
 - required etc.

Team Structure and Composition

Structure

Decision Making Level

Composition

- Government Representatives/ Members
- Chairman
- Board comprising of Ministry level executives as well



- HQ Officer: Senior Managers/ Chief General Managers representing Technical, Financial, Legal wings Field Officer: Regional Office/ State
- Office Managers
- Senior members from other dept.



- Field Officer: Project Director (PD)/ Divisional General Manager (DGM) as Contract Manager
- HQ Officer: General Manager (GM)-Technical

Team's Role and Responsibility

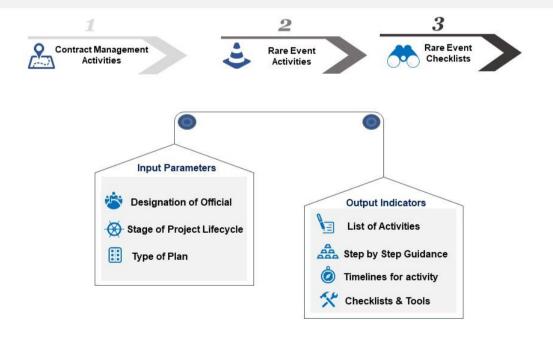
Structure Decision Making Level Supervisory Level Operation Level

Responsibilities

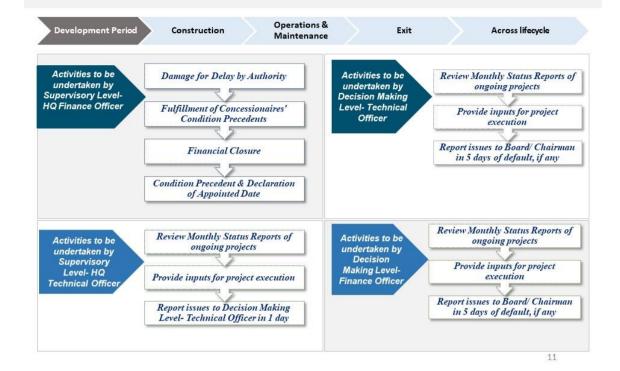
- Approve rare events & financial decisions
- Conduct bi-annual review meetings, and
- · Provide approvals
- Review all issues escalated by Operations Level
- Escalate issues to Decision Making Level
- Conduct quarterly review meetings with stakeholders
- Conduct post award contract management activities.
- Escalate issues to Supervisory Level.
- Communicate with stakeholders and conduct review meetings.

4

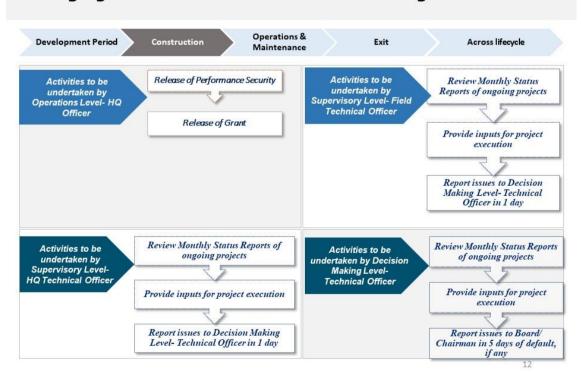
Managing the Concession



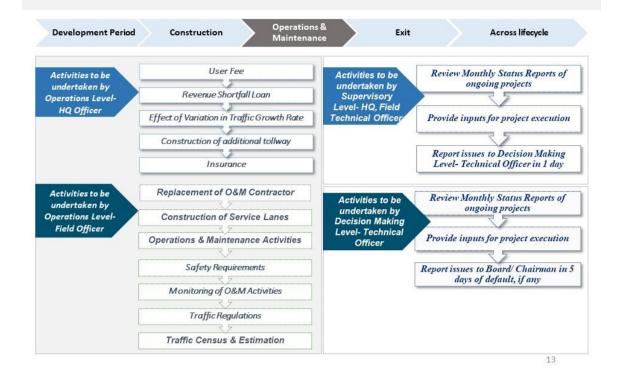
Managing the Concession - Development Stage



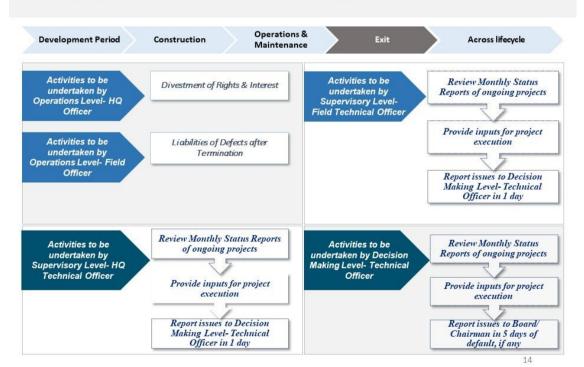
Managing the Concession - Construction Stage



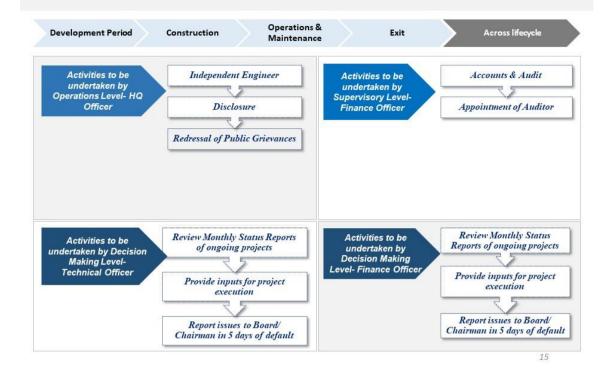
Managing the Concession - O&M Stage



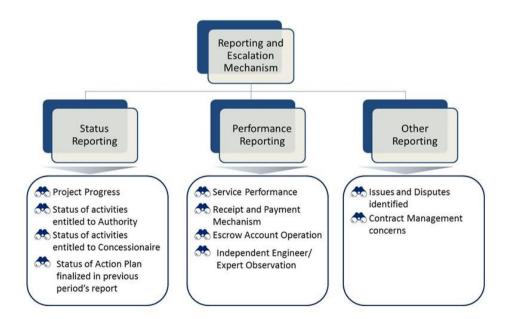
Managing the Concession - Exit Stage



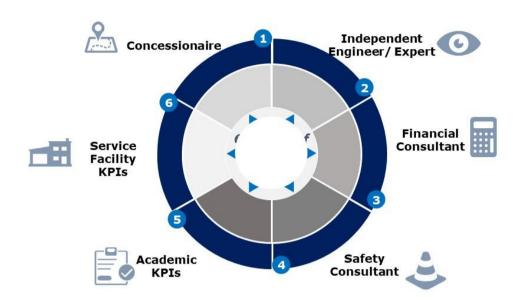
Managing the Concession - Across Lifecycle



Reporting and Escalation Mechanism



Stakeholder Performance Monitoring



17

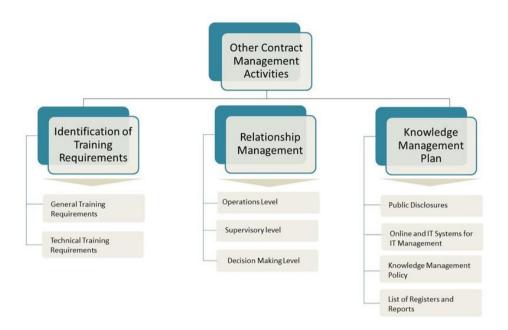
Risk Management

Risk register elaborating the following:

- 1. Category of risks
- 2. Threshold value
- 3. Likelihood
- 4. Impact
- 5. Responsibility of management
- 6. Frequency of Monitoring
- 7. Mitigation Strategy
- 8. Action Plan



Knowledge Management



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Key Features of Online Toolkit



Visit http://www.pppinindia.com



Objectives of Contract Management Framework

The below mentioned objectives will be served jointly by the Post Award Contract Management Guidelines and the manuals which will provide valuable insights for both the Authority and other stakeholders to effectively & efficiently manage the contract.

Objective	Key Aspects
Effective Planning and	Identification of constraints and addressing same
Project Management	Advance planning / Risk Management through early alarm bells
Regular Monitoring	Ensuring performance of obligations by Private Party
	 Management of Incentives & Penalties
	 Monitoring of critical tasks / timelines
	Tariff / Payment Adjustment
	Dispute Resolution
Compliance	Ensuring adherence to laws, policy & regulation
Accountability	Ensuring intended use of public resources
Managing Eventualities	Management of contingencies like Force Majeure, Termination etc.
	Change Management
Effective Coordination	 Relationship Management with Concessionaires
	 Coordination amongst departments and with third parties
Institutional Perspective	 Ensuring uniformity in contract management approach
	Streamlining Communication
	Maintaining Institutional Memory
	Capturing and monitoring performance indicators
User Perspective	User grievance / feedback management
	• Knowledge Management & Information Sharing with Stakeholders

Appendix E - Workshop Feedback Questionnaire









Stakeholders Workshop on Awareness Building and Guidance on using the PPP Toolkits

Event feedback

Thank you for participating in our Workshop for 'Awareness Building and Guidance on using the PPP Toolkits' organized by the Department of Economic Affairs (DEA), Ministry of Finance and supported by the Foreign Commonwealth and Development Office (FCDO), UK. We hope you had as much fun attending as we did organizing it.

We want to hear your feedback so we can keep improving our logistics and content. Please fill this quick survey and let us know your thoughts (your answers will be anonymous).

Also, requesting you to enter all the required (*) details for the digital certificate that will be awarded to the attendees of the 2-day workshop.

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arpit.agarwal@pwc.com (not shared) Switch account



* Required

Please enter your full name *	
Your answer	
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Your answer	

Please enter your Department.*
Your answer
Please enter your state. *
Your answer
Enter your Phone Number
Your answer
Enter your E-Mail Id *
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	01 (lowest)	02	03	04	05 (Highest)
Content	0	0	0	0	0
Delivery Quality	0	0	0	0	0
Relevance to your job	0	0	0	0	0
Time dedicated to the session to cover all relevant details	0	0	0	0	0
	comment/sugg				

	01 (lowest)	02	03	04	05 (Highest)
Content	0	0	0	0	0
Delivery Quality	0	0	0	0	0
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Content	0	0	0	0	0
Delivery Quality	0	0	0	0	0
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	01 (lowest)	02	03	04	05 (Highest)
Content	0	0	0	0	0
Delivery Quality	0	0	0	0	0
Relevance to your job	0	0	0	0	0
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Any additional comments regarding the overall agenda? * Your answer							
How satisfied a	re you wit	h the eve		4	5	Very much	
What were your	r key take	aways fro	om this eve	ent?			
Any overall feedback for the event? Your answer							
Would you be intin-depth insight: Yes, I am inte	s on the to		ating in sir	milar work	shops pro	oviding more *	
Please suggest the additional topics that can be included in such workshop sessions. Your answer							
Submit						Clear form	