आर्थिक कार्य विभाग
DEPARTMENT OF
ECONOMIC AFFAIRS

2023

OUTCOME REPORT: PPP STRUCTURING TOOLKIT

ROAD & HIGHWAY
16 - 17 NOVEMBER, 2023

PREPARED BY:
INFRASTRUCTURE FINANCE SECRETARIAT
MINISTRY OF FINANCE
GOVERNMENT OF INDIA

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1. Background and Objective of the workshop

1.1. Background of the Workshop

India is undergoing a remarkable change and is one of the world's fastest growing economies. India is celebrating 'Azadi Ka Amrit Mahotsav' to mark 75 years of freedom and the rich heritage of its people, culture and achievements. Inspired by the idea of Aatmanirbhar Bharat and a vision of activating India 2.0, this initiative by the nation is a step towards achieving good governance, global peace and development. It is expected that the improvement of existing and the creation of modern infrastructure will lay a solid foundation for a new and 'Atmanirbhar Bharat'. The Honorable Prime Minister of India has set a bold goal of making India a developed nation by 2047.

In line with the views of the Honorable Prime Minister of India, Government of India is looking at the private sector as a partner in progress, to enhance Public Private Partnership (PPP) ecosystem and to ensure faster infrastructure development to improve public service delivery. This philosophy emphasizes the collaborative efforts of the public and private sector in utilizing optimal capacities and building more resilient partnership models. The stakeholder workshop titled – "PPP structuring Toolkit for Road & Highway Sector" was organized by the Infrastructure Finance Secretariat (IFS), Department of Economic Affairs (DEA), Ministry of Finance (MoF), especially focused on developing robust pipeline of the of road projects using the web-based PPP Structuring Toolkit. The objective of the workshop was to connect and collaborate with the stakeholders within the PSAs, over a two-day workshop and to listen to their views/ suggestions and the issues while implementing PPP projects. The event was attended by 70 participants from public and private sector institutions.

The workshop was organised at the India Habitat Centre in New Delhi, on 16th – 17th November 2023. The workshop commenced with an inaugural session by DEA Secretary Shri Ajay Seth, followed by walk through of the PPP structuring toolkit for road and highway sector. The participants completed a case study using the web-based toolkit.

PPPs 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 to help improve decision-making for infrastructure PPPs in India and to improve the quality of structuring of the infrastructure projects implemented on PPPs in India.

The Toolkits are available for use by PPP practitioners across India on www.pppinindia.gov.in. It currently covers four sectors – Road & Highway, Water and sanitation, Port and Solid Waste Management respectively.

The Workshop was intended towards awareness building and guidance to use on these toolkits.

About toolkits

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 5 tools to strengthen decision-making for PPPs:

- **Suitability filter:** This is the key tool to test whether the project is suitable to be developed on PPP basis. It tests for qualitative factors that have an impact on the ease or challenges of developing a project on PPP basis. It provides Go/ No Go decision for the project to be implemented on PPP. This tool also acts a preliminary qualitative value for money tool.
- **Family indicator:** Family indicator tools help to identify the appropriate PPP family that the project may be best fit. The tool uses a decision tree to assist the PSA in identifying the PPP family.
- **Mode validation:** The mode validation is based on the risk profile of the project.
- **Financial viability indicator**: Financial viability indicator examines the viability of the project with returns on various PPP modes.
- **Value for money indicator:** VFM tool helps to examine whether the project provides for value for money if structured as a PPP project.

Contingent liability toolkit was also presented in the workshop. The toolkit has been developed to assist Project Sponsoring Agencies (PSAs) in assessing the amount of financial liability arising from a PPP project. It is also expected to aid PSAs in making informed decisions regarding the financial payout to Concessionaire as a result of occurrence of unforeseen events.

1.2. Workshop Objectives

The workshop was strategically planned to serve as a platform to give walkthrough of the PPP structuring toolkit and Contingent Liability toolkit to the participants. The workshop also provided an opportunity to showcase various guidance material developed by the Department of Economic Affairs (DEA), Ministry of Finance, Government of India. This workshop was first in the series. This workshop was designed for such practitioners and focused on building awareness, usability and providing direction to the Project sponsoring authorities and their officials for maximizing the use of these toolkits in developing PPP Projects.

The workshop also provided an opportunity to the participants to develop a project based on a case study of **Road & Highway sector** using the tools of the toolkit. It gave them hands on experience to learn the usage of the toolkit.

At the same time, the workshop provided an excellent opportunity to seek suggestions for improvements in the toolkits.

A total of **260** user logins have been created for the PPP Structuring toolkit as of 20 November 2023.

2. Summary of the workshop

2.1. Workshop Schedule

The detailed agenda of the workshop is provided below:

Day	Timing	Details	Presenter
Day 1	1000 – 1030	Registration & Tea	
	1030 - 1045	Inauguration by Secretary DEA	Shri Ajay Seth
	1045 – 1100	Context setting	Shri Antony Cyriac, Adviser, (CBU), DEA Ms. Preeti Jain, Director, ISD, DEA
	1100 – 1130	Introduction of the participants, their expectation from the workshop	Participants
	1130 – 1215	Introduction of PPP structuring toolkit (Objectives, sectoral coverage, modules etc.)	Ms. Arya B Kumari, Deputy Director, ISD, DEA
Session I	1215 – 1245	Walkthrough of Tool 1: Suitability filter	Ms. Puja Sharma, PPP Expert, ADB Consultant
	1245 – 1315	Case study	Ms. Puja Sharma PPP Expert, ADB Consultant
	1315 – 1400	Lunch Break	
Session II	1400 – 1500	Walkthrough of the Tool 2: Family mode and Tool 3: Mode selection tool	Ms. Arya B Kumari, Deputy Director, ISD, DEA
	1500 – 1530	Case study	Ms. Puja Sharma, PPP Expert, ADB Consultant
Session III	1530 – 1600	Financial Viability Indicator Tool	Ms. Puja Sharma, PPP Expert, ADB Consultant

Day	Timing	Details	Presenter
	1600 – 1630	Tea Break	
	1630 – 1700	Q & A session	
Day 2	0915 – 0945	Tea	
Session III	1000 – 1130	Financial Viability indicator tool	Ms. Puja Sharma, PPP Expert, ADB Consultant
	1130 – 1230	Case Study	Ms. Puja Sharma, PPP Expert, ADB Consultant
	1230 – 1330	Lunch Break	
Session IV	1330 – 1400	Value for money indicator tool	Ms. Puja Sharma, PPP Expert, ADB Consultant
Session V	1400 – 1545	Contingent liability toolkit	Ms. Nikita Chhabra, KPMG, Consultant
	1545 – 1615	Tea	
	1615 – 1630	Q & A session	
	1630 – 1645	Vote of thanks and next steps	Ms. Preeti Jain, Director, ISD, DEA

The Workshop was inaugurated by Secretary DEA, Shri Ajay Seth with a context setting note delivered by the Shri Anothony Cyriac, Adviser, Capacity Building Unit and Ms. Preeti Jain, Director, 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.

2.2. Coverage of the workshop

The workshop was attended by officers of PSA who are associated with the Road & highway sectors. The Workshop witnessed active participation of more than **70 participants** through hybrid mode from Central Infrastructure Line Ministries and Departments including Department of Expenditure, NITI Aayog, MoRTH and CII. 16

States and UT including Telangana, Mizoram, Gujarat, Andhra Pradesh, Delhi, Arunachal Pradesh, Rajasthan, Kerala, Ladakh, Uttarakhand, Karnataka, Madhya Pradesh, West Bengal, Maharashtra, Tripura and Uttar Pradesh participated in the workshop.

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

2.3. Suggestions & feedback from participants

Each session was followed by a Q&A session, where both online and physical participants

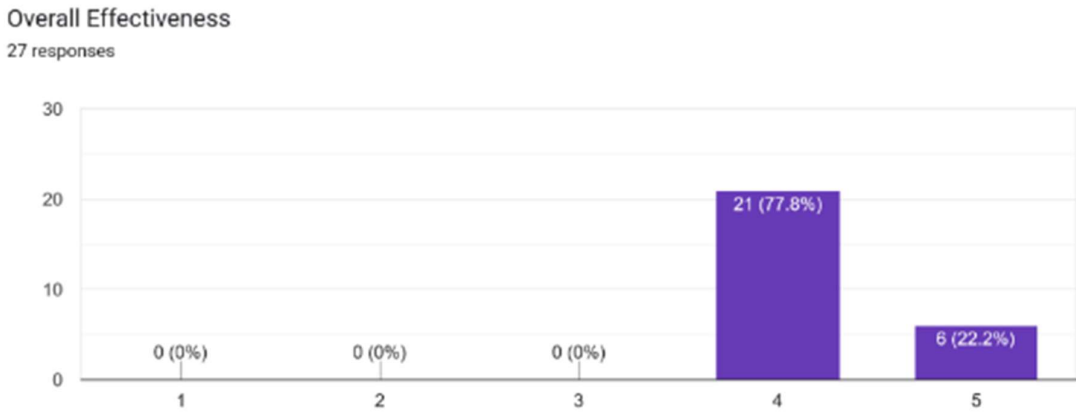
shared their experiences with PPP projects, toolkits and extended suggestions to enhance the utility and awareness about the toolkits. At the end of workshop on November 17, 2023, an online feedback form was circulated to all participants to seek their feedback related to all sessions of the workshop. Feedback was sought with respect to the content, quality of delivery, satisfaction level, etc. aspects of the workshop. As on 01 December, a total of 26 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

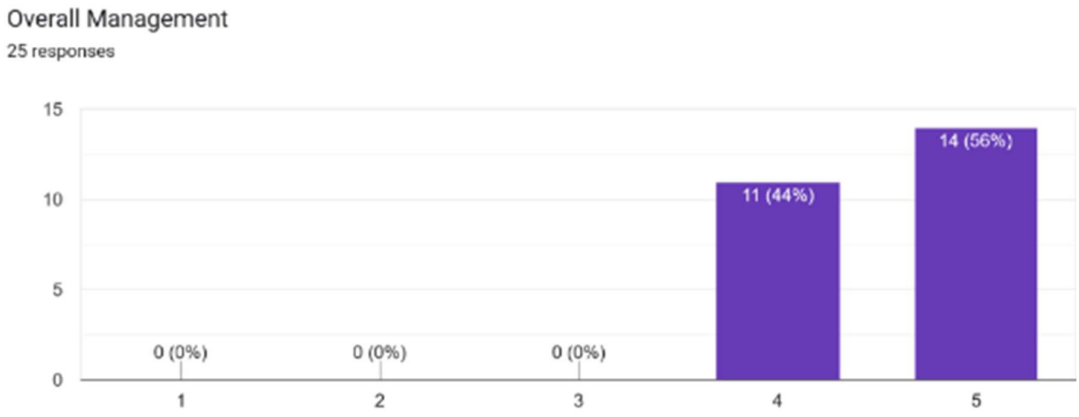
Figure 1 and Figure 2 below highlights the 'Level of satisfaction of participants' and 'Interest for participating in similar workshops in future'.

Figure 1: Scoring on overall effectiveness of the workshop



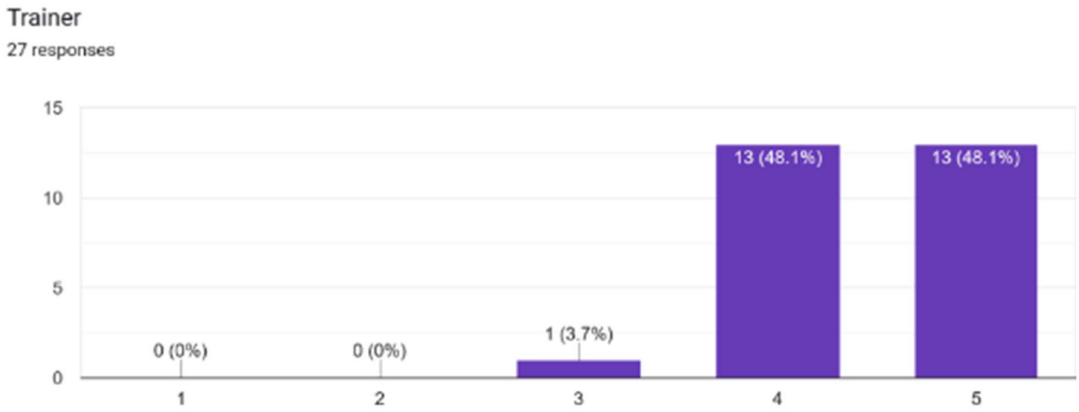
Workshop was rated effective by all the respondents. The participants also provided feedback to have more such workshops in the states and choose the participants from the field.

Figure 2: Overall workshop managment feedback



The participants rated overall management of the workshop on a rating of 4 or 5 indicating that participants found the workshop and related infrastructure conducive and useful.

Figure 3: Feedback on trainier



~96% of the participants rated the trainer's effectiveness and delivery on a scale of 4 and 5. They were happy with the speed, content and delivery aspect of the trainer.

Figure 4: Feeback on contextual relevance

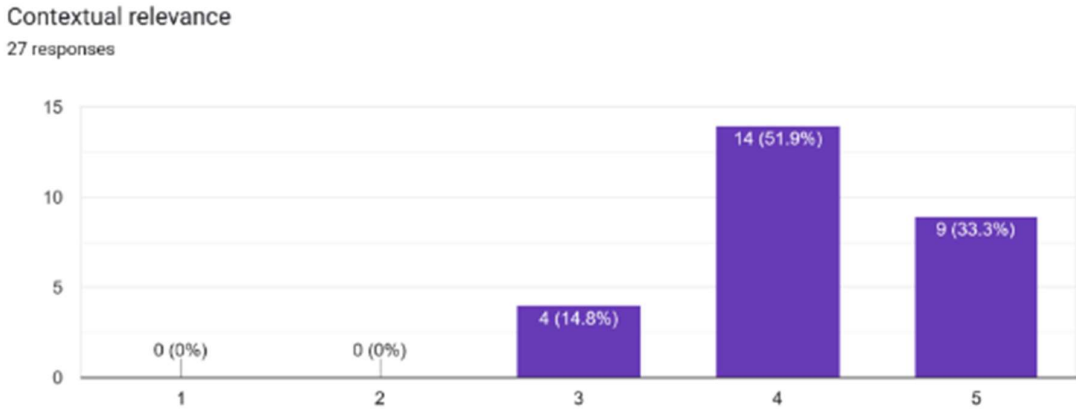
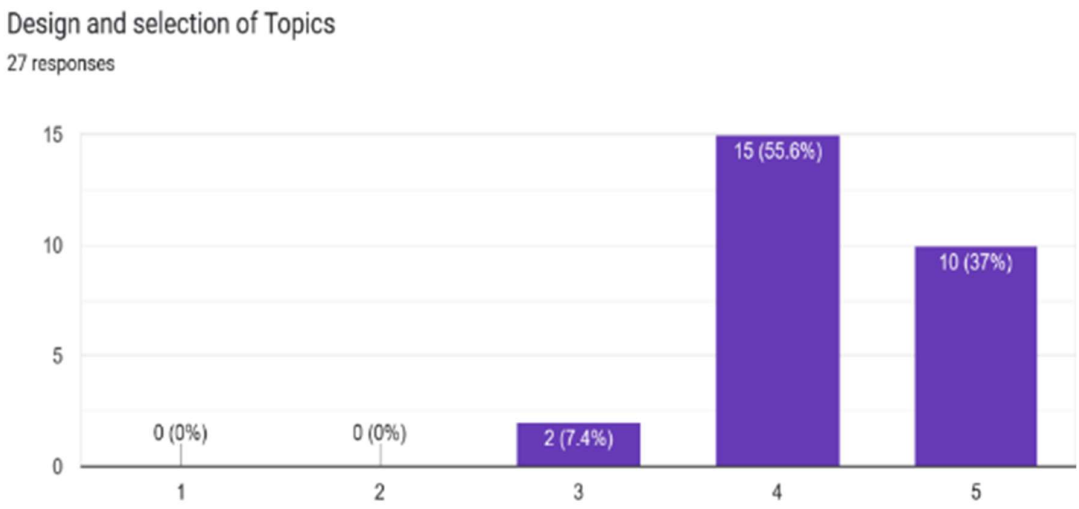
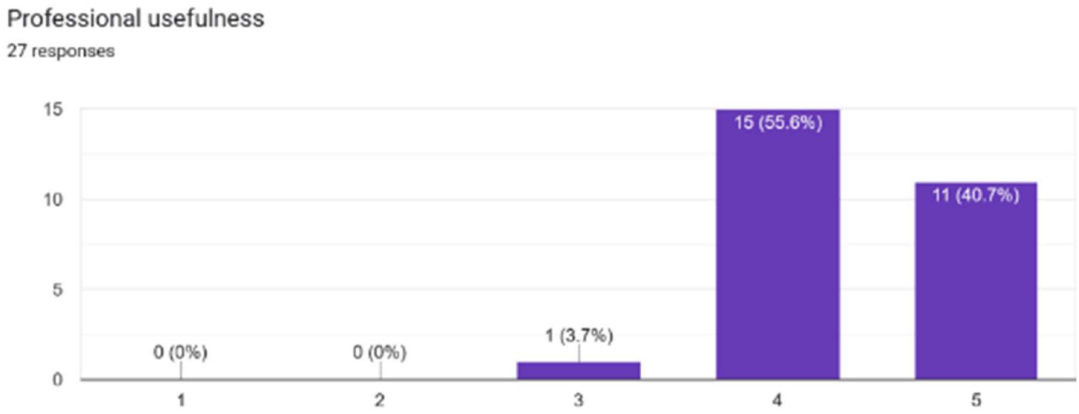


Figure 5: Design and selection of Topics



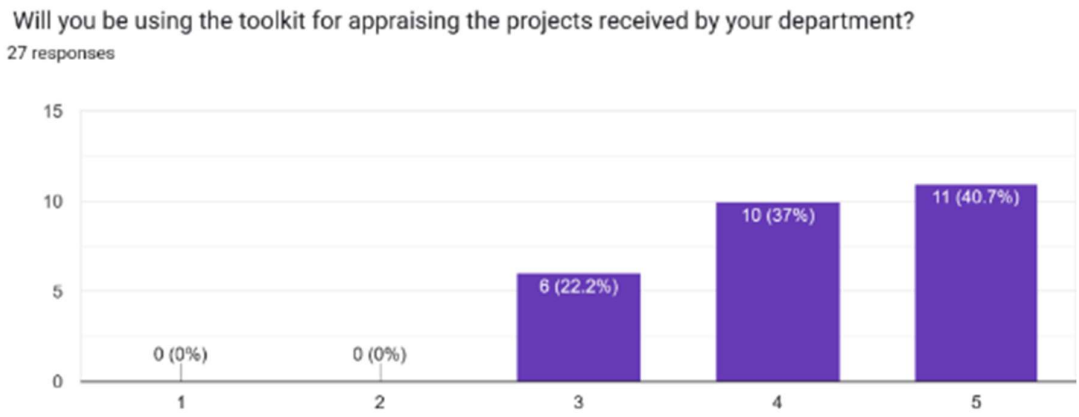
All the respondents to the feedback survey were happy with the contents of the workshop. They found it relevant and in line with their work.

Figure 6: Professional usage of toolkit feedback



All the respondents found the content to be useful in their profession. 96% of respondents rated the workshop content on a scale of 4 and 5 for their professional usage.

Figure 7: Feedback on using toolkit for project appraisal

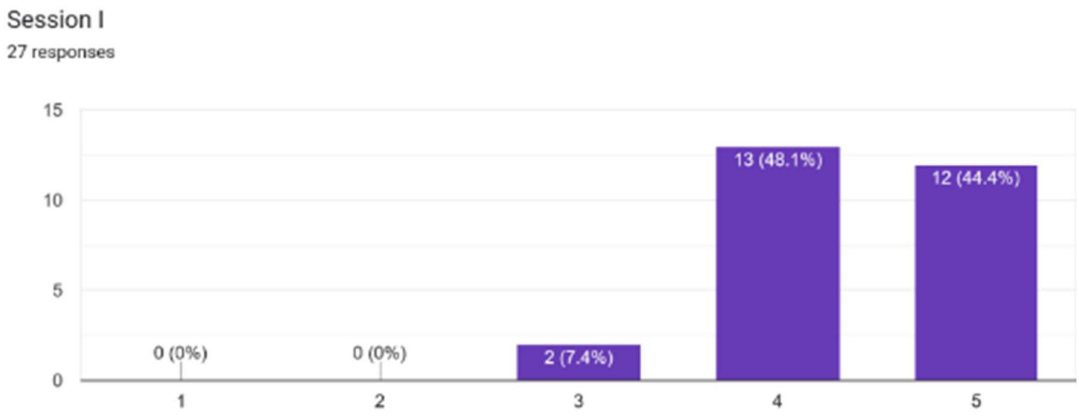


Respondents were keen on using the toolkit to appraise the projects in their departments using the toolkits as a resource available to them.

2.3.2. Feedback on individual sessions

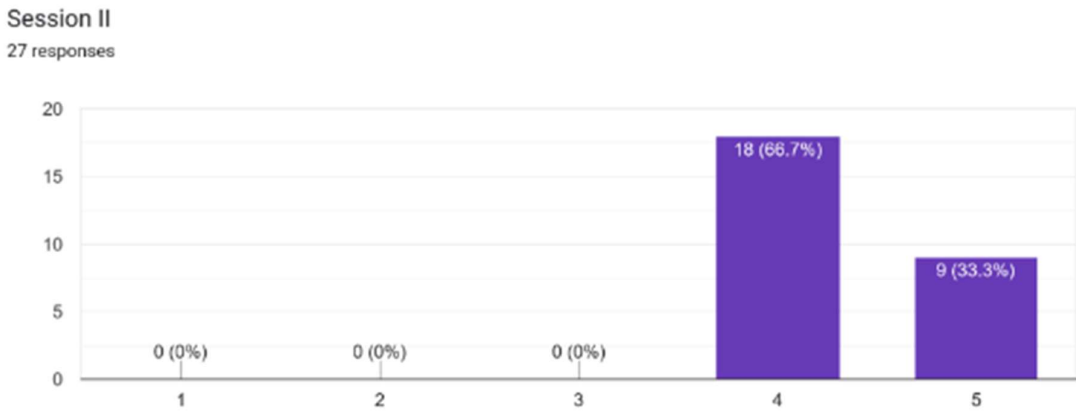
The participants were requested to share the feedback on four critical aspects of each of the session. The section below highlights the feedback.

Figure 8: Suitability Filter tool



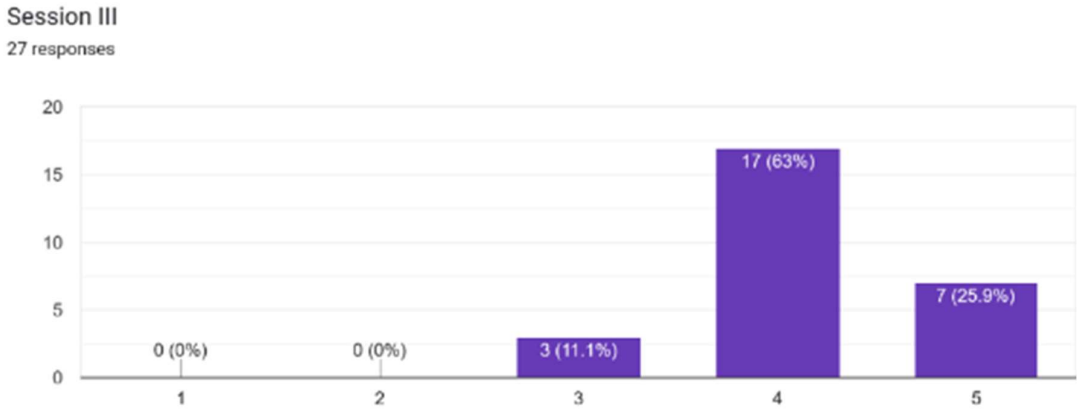
~95% and above respondents rated the session I between 4 and 5 scale. They rated the session as effective.

Figure 9: Family Indicator & Mode validation tool



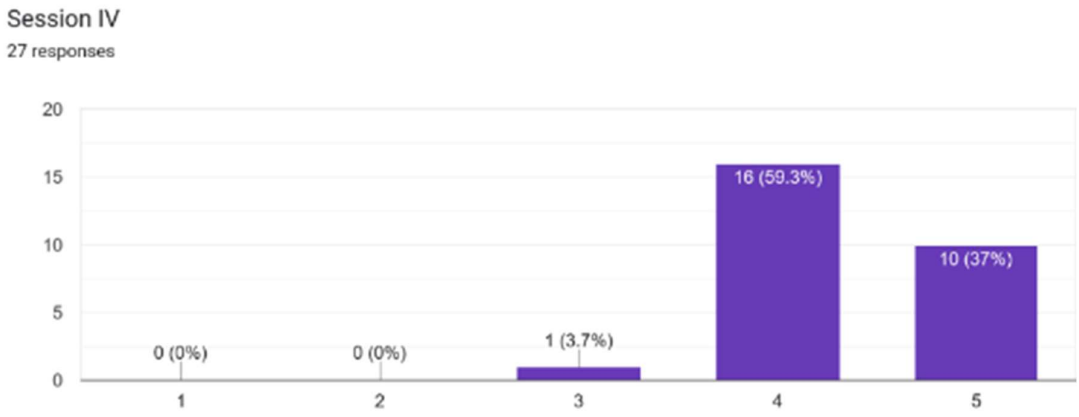
All the respondents rated the session II between 4 and 5 scale. They rated the session as effective and liked the quality of delivery of the session.

Figure 10: Financial viability indicator tool



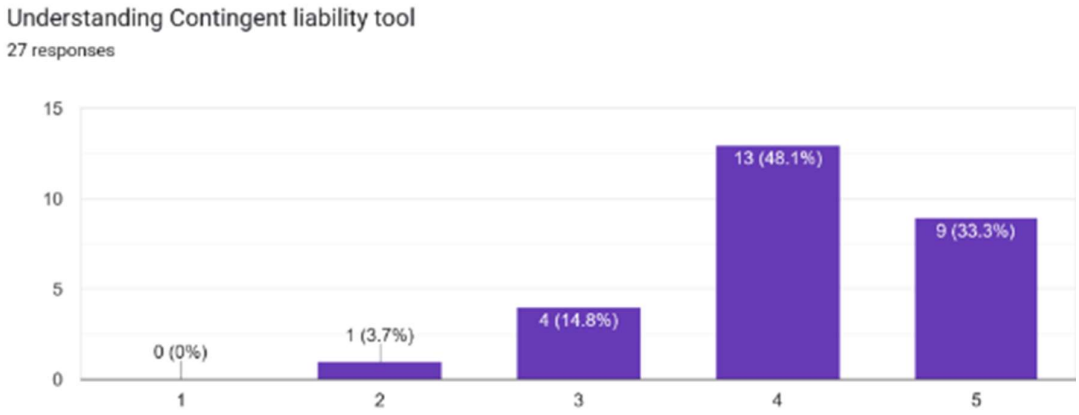
~88% respondents were extremely satisfied with the case study used to learn the financial viability tool.

Figure 11: Value for money indicator tool



~95% respondents were extremely satisfied with the learning of Value for money indicator tool.

Figure 12: Feedback on Contingent liability tool



~95%+ respondent was satisfied with the delivery and understanding of the Contingent Liability Toolkit. They have rated the session on a scale of 4 and 5 respectively.

2.4. Key Takeaways and Feedback received

- Use of Structuring Toolkit
- Learnt Economic analysis of the project
- Importance of assessing proper viability of the project
- Understood Project feasibility(financial) to attract investors.
- Knowing the unknowns or narrowing down the uncertainties are keys to sound appraisal of projects. Workshop of this kind where tested and successful toolkits are exposed to stakeholders will act as enabler to realize this end.
- Assessment of viability of project using respective tool kit is going to be quite useful in initial decision making. However, it requires a deeper understanding of its working.
- This toolkit used to assess soundness of a PPP project, can also be used in govt funded projects for cost optimization and time with little customisation. Today in govt projects, we generally see an ecosystem of lackadaisical attitude of players, resulting in cost and time overrun with no commensurate quality and life of assets so created.

2.5. Suggestion for improvement

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

- **Initial briefing of concept and terminologies** involved in PPP and then go for a walkthrough the tool kit.
- **Extend the coverage of PPP toolkits for other sectors**: Participant requested that these tools should be customised and extended for other sectors and sub-sectors also such as hydel sector project
- Programme should have **One week program** to get more exercise on case studies.

- **Workshops** to be conducted at **state and UT level** to greater reach to the persons dealing with PPP.
- **Access to training Video and materials**: participants indicated that they would like to have access to training workshop video and presentation slides for future reference.
- Participants should be **provided** with the workshop **learning materials in advance**, online or otherwise, with instructions to familiarize with the subject materials.
- **More hands-on training using excel sheet**. Financial viability tool could have been more elaborate.

2.6. Vote of Thanks

Figure 13: Director DEA addressing the particpants

The workshop was concluded with Vote of Thanks from Ms. Preeti Jain, Director, Department of Economic Affairs, Ministry of Finance, Government of India. On behalf of Private Investment Unit (PIU) - DEA, Ms. Preeti Jain thanked to honourable Secretary EA, Shri Ajay Seth, Adviser, CBU Shri. Antony Cyriac who had taken time out of their busy schedule to inaugurate and contribute to the workshop and Shri. Baldeo Purushartha, Joint Secretary, (ISD), DEA, Ministry of Finance who was the driving force behind development of these toolkits. Ms. Preeti Jain thanked Deputy Director Arya Balan Kumari and Consultant Puja Sharma for their important role in the revamping the PPP Structuring toolkit. She also thanked Ms. Nikita Chhabra for presenting the Contingent Liability toolkit. She also expressed her gratitude and well wishes to all the participants joining physical and virtually from various central ministries, state departments, Public Sector Undertakings, etc. for their active participation and contributions to the discussions. Ms. Preeti Jain acknowledged and appreciated the feedback and the suggestions from the participants and indicated that DEA is already in process of incorporating many of the suggestions and feedback received.

Ms. Preeti Jain concluded the workshop 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.

Appendix A **– Snapshots of the workshop**

Following are the glimpse of the workshop:

Figure 14: Inaugration of workshop. Ms. Balan welcoming the Secretary DEA, Shri Ajay Seth, Adviser CBU, Shri Antony Cyriac and Director, ISD Ms Preeti Jain

Figure 15: Secretary DEA lighting lamp

Figure 16: Inaugral Address by Secretary DEA, Shri Ajay Seth

Figure 17: Address by Adviser CBU, Shri Antony Cyriac

Figure 18: Day 1 Ms. Balan presenting Overview of PPP structuring toolkit

Figure 19: Day 1 Session I presentation by Ms. Puja Sharma

Figure 20: Day 1 Q&A session by Ms. Puja Sharma and Ms. Arya Balan Kumari

Figure 21: Day 2 Session III presentation by Ms. Puja Sharma

Figure 22: Day 2 Interactions with participants

Figure 23: Day 2 Ms. Nikita Chhabra presenting Contingent liability toolkit

Figure 24: Dr Kartik Agrawal presenting VGF, IIPDF and other schemes of DEA

Appendix B - **Participants List**

List of Physical participants			
S. No.	**Full Name of Participant**	**Designation**	**Name of the Organization/Firm**
Participants from Department of Economic Affairs			
1.	Ms. Preeti Jain	Director	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
2.	Sh. Manoj Kumar Madholia	Joint Director	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
3.	Sh. R Shiva Kumar	Deputy Secretary	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
4.	Dr. Kartik Agrawal	Deputy Director	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
5.	Ms. Arya Balan Kumari	Deputy Director	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
6.	Sh. Madhav Jha	Section Officer	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
7.	Sh. Rajender Singh	Section Officer	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
8.	Ms. Puja Sharma	Consultant, PPP Expert	Asian Development Bank
9. ;			
10.	Sh. Haider Saikh	Consultant, Finance Expert	Asian Development Bank
11.	Sh. Sunny Goel	Consultant	Asian Development Bank

List of Physical participants			
S. No.	**Full Name of Participant**	**Designation**	**Name of the Organization/Firm**
12.	Sh. Dhruv Rohatgi	OSD	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
13.	Sh. Gaurav Jumrani	Consultant	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
14.	Ms. Nikita Chhabra	Consultant	KPMG
15.	Sh. Amritesh	Consultant	KPMG
16.	Sh. Rahul Agrawal	Consultant	KPMG
17.	Sh. Shubham Varun	Stenographer	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
18.	Sh. Anurag Choudhary	DEO	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
19.	Sh. Anup Kumar	MTS	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance

List of Physical participants - PSA			
S. No.	**Full Name of Participant**	**Designation**	**Name of the Organization/Firm**
Participants from States/ Line Ministries			
20.	Shri Rakesh Kumar	Deputy Director	NRIDA, M/o Rural Dvt.
21.	Shri Amit Bhardwaj	Deputy. Adviser	NITI Aayog, Government of India
22.	Shri. Tanuj Kamboj	Executive Engineer	PWD, Uttarakhand
23.	Shri A V Vishwa Kumar	Joint Director, Road Research Station (Executive	O/o The Engineer-in Chief (R&B), Erramanzil,

List of Physical participants - PSA			
S. No.	**Full Name of Participant**	**Designation**	**Name of the Organization/Firm**
Participants from States/ Line Ministries			
		Engineer(R&B)	Hyderabad
24.	Shri C Lalsawmliana	Superintending Engineer	Power & Electricity Department, Govt. of Mizoram
25.	Shri Daniel Lalrempuia	Sr Executive Engineer	Power & Electricity Department, Govt. of Mizoram
26.	Shri NIMIT PATEL	GENERAL MANAGER	Gujarat Infrastructure Development Board (GIDB)
27.	Priyanka Kumar	Senior Manager (Projects)	Gujarat Infrastructure Development Board (GIDB)
28.	Shri Ranganath Audam	Deputy Director	D/o Expenditure
29.	Shri Tanveer Ahmad Khan	Assistant Director	D/o Expenditure
30.	Shri T. Raja Srinivasa Reddy	Assistant Director	Finance Dept. Govt. of Andhra Pradesh
31.	Shri Akash Bansal	IAS, ADC (Rural Development)	Dept. of Rural Dvt, M/o Rural Dvt.
32.	Shri ADO BURANG	SUPERINTENDING ENGINEER	PwD, Govt. of Arunachal Pradesh
33.	Shri B. MUGUNTHAN	EXECUTIVE DIRECTOR/FINANCE	Ircon International Limited, GoIU, M/o Railway
34.	Shri Lalbiaknunga	Sr. Executive Engineer	PwD Dept., Govt. of Mizoram
35.	Shri Samuel Ramdinthara	Senior Executive Engineer	PwD Dept., Govt. of Mizoram
36.	Shri V L Dhankar	Member	Rajasthan State Highway Authority
37.	Shri Vinay Kr Gupta	GM Tech (RSHA)	Rajasthan State Highway Authority
38.	Shri Hibu Tadey	Executive Engineer	PwD Dept., Govt. of Arunachal Pradesh
39.	Ms. LATHIKA P	Section officer	Finance Department, Government Secretariat, Thiruvananthapuram
40.	Ms. N Sreelatha Sukumaran	Additional Secretary	Finance Department, Government Secretariat,

List of Physical participants - PSA			
S. No.	**Full Name of Participant**	**Designation**	**Name of the Organization/Firm**
Participants from States/ Line Ministries			
			Thiruvananthapuram
41.	Shri. Tsewang Thinglas	Executive Engineer	Executive Engineer of Pradhan Mantri Gram Sadak Yojna, Ladakh
42.	Shri. Michael M D'Souza	Administrative Secretary	Administrative Head of the Public Works (Roads & Buildings) and Public Health Engineering/Irrigation & Flood Control Department of the UT of Ladakh.
43.	Shri. Dorjay Gyatso	Superintending Engineer	Public Works (Roads & Buildings) Circle, Leh. District head of Public Works (Roads & Buildings) of Leh District.
44.	Shri. Hibu Tadey	Executive Engineer	PWD Department in Tawang District of Arunachal Pradesh.
45.	Sh. R.C. Pandey	Assistant Engineer	PwD, Govt. of Uttarakhand
46.	Sh. B.S. Chathrapathy	AEE, KRDCL	PwD, Government of Karnataka
47.	Sh. Y.S. Murthy	AEE, KRDCL	PwD, Government of Karnataka
48.	Sh. Suresh R.	AEE, NH Sub Division, Shimoga	PwD, Government of Karnataka
49.	Sh. Ningappa N.	AEE, NH Sub Division, Shimoga	PwD, Government of Karnataka
50.	Shri Raj	Chief Engineer	UPEIDA, GoUP
51.	Nissar Ahmad Mandloo	Deputy Director	Planning Development & Monitoring Department, Govt. of J&K
52.	Sh. Akhilendra Pratap	Chief Engineer	PwD, Uttar Pradesh
53.	Sh. Rittwik Bhattacharyya	Research Assistant	Transformation And Development Department, Govt. of Assam
54.	Shri Anirban Acharyya	Executive Engineer	Quality Control and Gati Shakti Cell, Ministry of road

List of Physical participants - PSA			
S. No.	**Full Name of Participant**	**Designation**	**Name of the Organization/Firm**
Participants from States/ Line Ministries			
			Transport & Highways
55.	Shri Nazim Khan	Assistant Executive Engineer	BP&SP Cell, Ministry of road Transport & Highways
56.	Shri K.D. Singh Gaur	Divisional Transport Officer	Transport Department, GoUP
57.	Shri Rajeev Kumar Bansal	Assistant Divisional Transport Officer	Transport Department, GoUP
58.	Shri Divyansh Srivastava	Executive Officer	CII Infra / Road & Highway
59.			

List of Online participants			
S. No.	**Full Name of Participant**	**Designation**	**Name of the Organization/Firm**
Participants from States/ Line Ministries			
1.	Ms. Ranjana Saini	Asst. Director	NRIDA, M/o Rural Dvt.
2.	Ms. Amrita Singh	Officer On Special Duty Finance Department	Finance Dept., Govt. of W.B.
3.	Shri. Anil Shukla	Joint Secretary	Finance Dept., Govt. of W.B.
4.	Ms. Vandana Dixit	Jr. Account Officer	PPP Cell, Directorate of Institutional Finance, MP
5.	Ms. K R Devika	Executive Engineer	PPP Cell, IDD, Bengaluru, Govt of Karnataka
6.	Shri. Sk. Hasanuj Jaman	Executive Engineer	P.W. D, West Bengal
7.	Shri. Chetram Koli	Consultant, HEAD – PMU	DEPARTMENT OF HIGHER EDUCATION, MINISTRY OF EDUCATION
8.	Shri. C. Ravindranath	Superintending Engineer, NH, Bangalore	PwD, Government of Karnataka
9.	Ms. Rinaj Pathan	Superintending Engineer	Pune Metropolis, Maharashtra
10.	Shri. Arindam Chakraborty,	TES Grade-III, Executive Engineer	PwD, Government of Tripura

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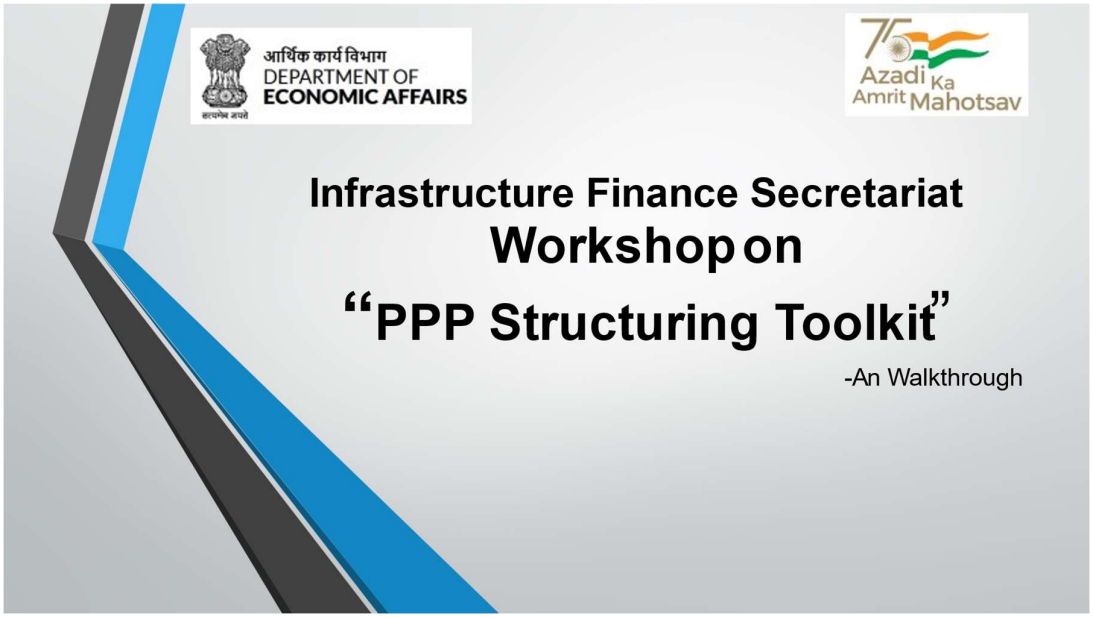
S. No.	**Full Name of Participant**	**Designation**	**Name of the Organization/Firm**
Participants from States/ Line Ministries			
11.	Shri Rupak Das	TES Grade-IV, Assistant Engineer	PwD, Government of Tripura
12.	Shri. Farooque Sayeed Nasser	General Manager, Projects – Western Region	Power Finance Corporation Ltd.
13.	Ms. Soumya Panigrahi	Assistant Manager, Projects – Western Region	Power Finance Corporation Ltd.
14.	Shri GAGANDEEP	Manager, IPP & New Business Unit	Power Finance Corporation Ltd.
15.	Shri Arun Kumar Choudhary	Scientist	MNRE
16.	Shri Pranab Nanda	Senior Manager (PROJECTS)	Gujarat Infrastructure Development Board (GIDB),

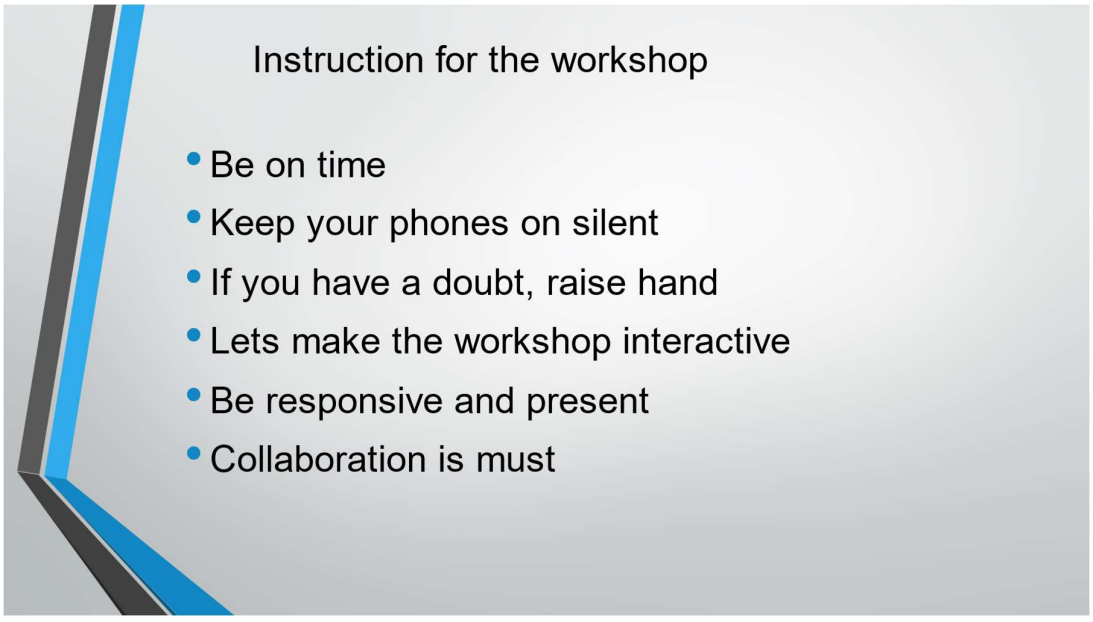
List of Online participants			
S. No.	**Full Name of Participant**	**Designation**	**Name of the Organization/Firm**
Participants from Private Sector			
1.	Shri. K.B. Anitthaasree	M. Arch in Building management	Tamil Nadu
2.	Shri. Riyas K Basheer	Consultancy support to Government/Quasi Government Organisations	Kerala
3.	Shri. Vijay Patil	Assistant Highway Engineer	Pune, Maharashtra
4.	Shri. Tushar Deochakke	Founder and President of a Real Estate & Infrastructure Exchange at GIFT City	Gujarat
5.	Shri. Ashwini Kumar Shrivas	Entity Appraisal	PPP Cell, IDD, Bengaluru, Govt of Karnataka
6.	Ms. Deepti Arora	CA	Manesar, Haryana
7.	Ms. Surabhi	Student	Lucknow
8.	Shri. Pranab Nanda	Superintending Engineer, NH, Bangalore	PwD, Government of Karnataka
9.	Ms. Pucha Tejaswi	Superintending Engineer	Pune Metropolis, Maharashtra
10.	Dr. D.Sreenivasa Chary	TES Grade-III, Executive Engineer	PwD, Government of Tripura

List of Online participants			
S. No.	**Full Name of Participant**	**Designation**	**Name of the Organization/Firm**
Participants from Private Sector			
11.	Shri. Bhargav	TES Grade-IV, Assistant Engineer	PwD, Government of Tripura
12.	Shri. Aditya Prakash Mamdapure	General Manager, Projects – Western Region	Power Finance Corporation Ltd.
13.	Shri. Gadhiya Harshkumar Sureshbhai	Assistant Manager, Projects – Western Region	Power Finance Corporation Ltd.
14.	Shri. Vignesh R M	Manager, IPP & New Business Unit	Power Finance Corporation Ltd.
15.	Shri. Dhirendra Singh	Scientist	MNRE
16.	Shri. Ravi Subramaniam	Adviser	Chennai
17.	Ms. Roopali Srinivas	Student	Bangalore
18.	Ms. Ramadevi Ankusu	Teacher	Visakhapatnam
19.	Ms. Keerthana Ramesh	Student	Hyderabad
20.	Shri. Brahmareddy Desireddy	Associate Professor	New Delhi
21.	Ms. Mariya Saleh	Director	The Plaza, 23 Ibrahim Tahir Lane, Utako, Abuja
22.	Shri. R N Goel	Adviser	Lucknow
23.	Shri. Rajeev Chadha	Advisor (PPP & Infrastructure Finance)	Gurgaon
24.	Ms. Sritik K Sinha	Associate Vice President	New Delhi
25.	Shri. A Vinoth Kumar	External Consultant	IIHS, Tamil Nadu

Appendix C – Presentation on PPP structuring toolkit and Contingent liability toolkit

- **Presentation of PPP structuring toolkit**





Agenda – Day 1

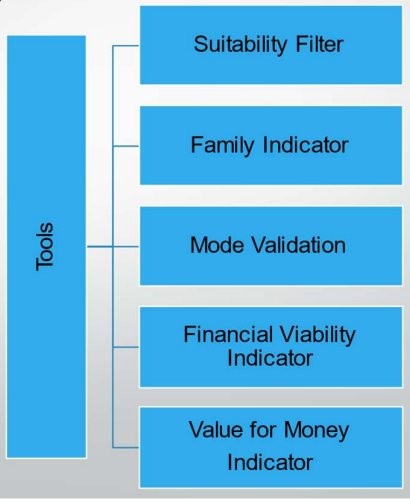
Day	Timing	Details	Presenter
Day 1	1000 – 1030	Registration & Tea	
	1030 - 1045	Inauguration by Secretary DEA	Shri Ajay Seth
	1045 – 1100	Context setting	Shri Antony Cyriac, Adviser, (CBU), DEA Ms. Preeti Jain, Director (ISD),DEA
	1100 – 1130	Introduction of the participants, their expectation from the workshop	Participants
	1130 – 1215	Introduction of PPP structuring toolkit (Objectives, sectoral coverage, modules etc)	Ms. Arya B Kumari
Session I	1215 – 1245	Walkthrough of Tool 1: Suitability filter	Ms. Puja Sharma
	1245 – 1315	Case study	Ms. Puja Sharma
	1315 – 1400	Lunch Break	
Session II	1400 – 1500	Walkthrough of the Tool 2: Family mode and Tool 3: Mode selection tool	Ms. Arya B Kumari
	1500 – 1530	Case study	Ms. Puja Sharma
Session III	1530 – 1600	Financial Viability Indicator Tool	Ms. Puja Sharma
	1600 – 1630	Tea Break	
	1630 – 1700	Q & A session	

Agenda – Day 2

Day	Timing	Details	Presenter
Day 2	0915 – 0945	Tea	
Session III	1000 – 1130	Financial Viability indicator tool	Ms. Puja Sharma
	1130 – 1230	Case Study	Ms. Puja Sharma
	1230 – 1330	Lunch Break	
Session IV	1330 – 1400	Value for money indicator tool	Ms. Puja Sharma
Session V	1400 – 1545	Contingent Liability toolkit	Ms. Nikita Chhabra
	1545 – 1615	Tea	
	1615 – 1630	Q & A session	
	1630 – 1645	Vote of thanks and next steps	Ms. Preeti Jain

Module 3: Tools and resources

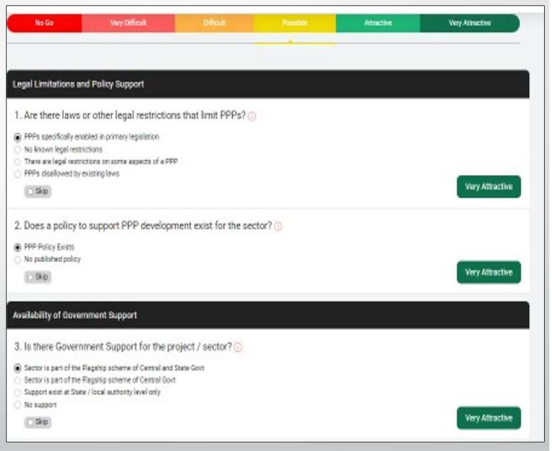
Contains the **five** decision-making tools, and other PPP resources:



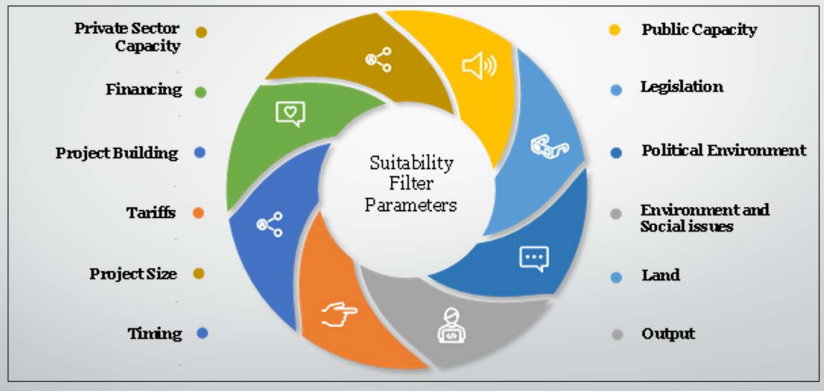
Module 3 –Tools – Suitability Filter

Is the key tool to test whether the project is suitable to be developed on PPP basis.

- 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



Module 3 –Tools – Suitability Filter



Module 3 –Tools – Suitability Filter

Parameters	Questions	Explanation
Legal	• Are there laws or other legal restrictions that limit PPPs? • Does a policy for private participation in the sector exist?	Legal parameters help the user to understand if the law permits the implementation of PPPs or not?
Political	• Is there Political Support for the sector/project? Is there support of PPP in the affected communities?	Political parameter helps the user to understand if the public environment is supportive implementation of PPP projects.
Public sector PPP capacity and experience	• Is there a PPP Unit/Dept in the State? • Does the Public Sponsoring Agency have the capabilities to procure PPPs? • Does the Sponsoring Agency have the capabilities to manage and monitor a PPP contract? • Does the Sponsoring Agency have previous experience with PPPs? • Would the physical infrastructure pass through multiple jurisdictions?	This parameter analyses PSAs capacity to execute and implement PPP project

Module 3 –Tools – Suitability Filter

Parameters	Questions	Explanation
Public sector funding assistance for PPPs	• Is funding assistance available for project development? • Is the project likely to be eligible for Viability Gap Funding? • Is the project likely to be eligible for funding from other grant schemes? • Is the project eligible for funding / guarantees from multi-lateral agencies?	This parameter helps in understanding difference funding options that may be available for development of the project to the PSA.
Private Sector	• Are multiple firms active in the PPP market? • Have other similar PPP projects reached Financial Close?	These parameters assess private sector participation and interest in the PPP projects in the chosen sector

Module 3 –Tools – Suitability Filter

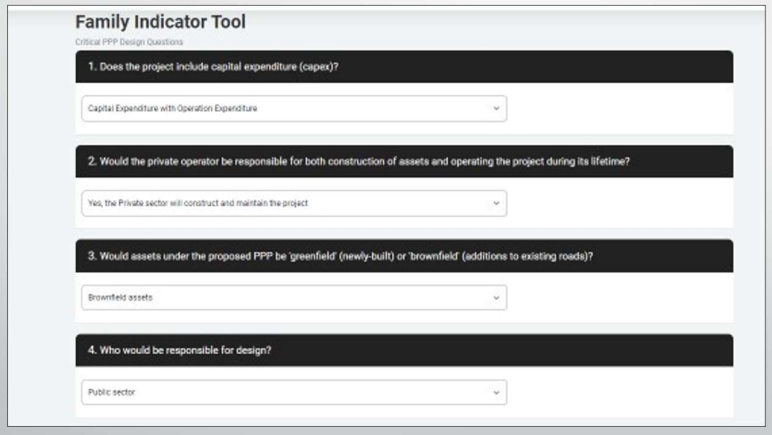
Parameters	Questions	Explanation
Land availability and acquisition	• Will the PPP require land acquisition? • If land acquisition is required, will the public sector do this?	These parameters assess the land requirement and potential issues related to acquisition of land for the project and their impact on the project timelines.
Environmental and Social Impact	• Will the PPP have significant environmental impacts? • Will the PPP have significant social impacts?	These parameters assess the impact of the project on Environment and social factors related to it.
Labour	• Will a significant transfer of employees take place under the PPP? • Have there been successful transfers under previous PPPs? • Is the project likely to result in job losses?	This parameter helps the PSA evaluate potential unrest by the employees and to prepare for its resolution.

Module 3 –Tools – Suitability Filter

Parameters	Questions	Explanation
Outputs	• Are outputs definable, measurable and verifiable?	If it is not possible to clearly specify outputs then there is a high risk of disputes arising during the course of the PPP. There should also be an agreed understanding on the desired outputs before proceeding to PPP procurement .
Timing	• Are there time constraints? • Can PPP project be tendered at a short notice?	A PPP procurement will generally take more time than a conventional procurement -although this will be offset by the faster speed of delivery once the contract is awarded . If there are significant time constraints on the contracting process, a PPP may not be appropriate . This parameter understands the time available to procure the PPP.

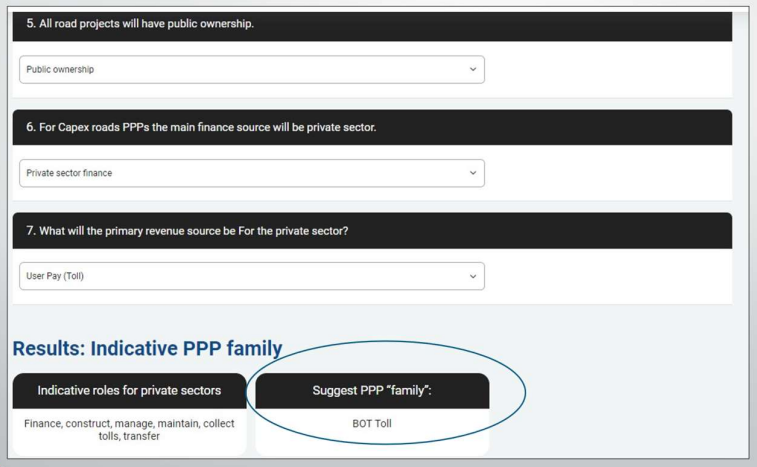
Module 3 –Tools – Family indicator (1/2)

Is the key tool to suggest PPP mode " **Family"** for the particular project



Module 3 –Tools – Family indicator (2/2)

Is the key tool to suggest PPP mode "**Family"** for the particular project



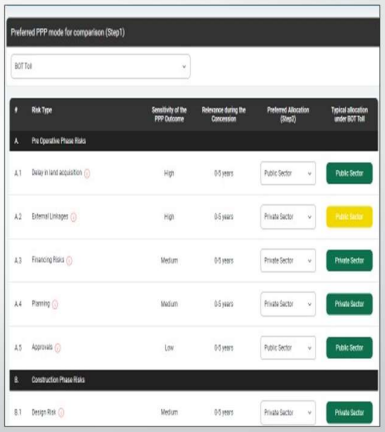
Module 3 –Tools – Mode validation

The tool uses a risk allocation analysis to help decide further whether the selected PPP mode is best for the project.

The risk are assigned based on the latest model concession agreement.

Risks are broadly classified in the following major categories

1. Pre operative Risk
2. Construction Risk
3. Operation Risk
4. Other Risk



Outputs of the tool

Number of matches to preferred risk allocation:	
BoT Toll	**17of 20**
BOT Annuity	**15 of 20**
BOT Annuity - HAM	**16 of 20**
OMT	**9 of 20**
BOT – TOT	**11 of 20**
Score of 20 = perfectly matched	

Module 3 –Tools – Mode validation

Risks	Description
Pre-Operative Phase Risks	
Delay in land acquisition	Refers to the risk that the project site will be unavailable or unable to be used within the required time, or in the manner or the cost anticipated or the site will generate unanticipated liabilities due to existing encumbrances and native claims being made on the site.
External linkages	Refers to the risk that adequate and timely connectivity to the project site is not available, which may impact the commencement of construction and the overall pace of development of the project Eg. Road's connectivity to the project site.
Financing risks	Refers to the risk that sufficient finance will not be available for the project at a reasonable cost (e.g., because of changes in market conditions or credit availability) resulting in delays in the financial closure of a project
Planning risks	Refers to the risk that the pre-development studies (technical, legal, financial, and others) conducted are inadequate or not robust enough resulting in possible deviations from the planned or expected outcomes in the PPP project development
Approval risk	Refers to the risk that necessary permits, authorisations and approvals required before the start of construction are not obtained in a timely fashion, resulting in delays to construction and the project as a whole

Module 3 –Tools – Mode validation

Risks	Description
Construction Phase Risk	
Design risk	Refers to the risk that the proposed design will not meet the performance and service requirements in the output specification. It can result in additional costs for modification and redesign
Construction risk	Refers to the risk that the construction of the assets required for the project will not be completed on time, within budget, or to specification. It may lead to additional raw materials and labour costs, an increase in the cost of maintaining existing infrastructure or providing a temporary alternative solution due to a delay in the provision of the service.
Approval risk	Refers to the risk that delays in approvals to be obtained during the construction phase will result in a delay in the construction of the assets as per the construction schedule Such delays in obtaining approvals may lead to cost overruns.

Module 3 –Tools – Mode validation

Risks	Description
Operation Phase risk	
Technology risk	Refers to the risk that the technology used will be unexpectedly superseded during the term of the project and will not be able to satisfy the requirements in the output specifications It would result in increased costs of replacement technology
Operations and maintenance risk	Refers to the risks associated with the need for increased maintenance of the assets over the term of the project to meet performance requirements
Volume / Demand risk	Refers to the risk that demand for service will vary from that initially projected, such that the total revenue derived from the project over the project term will vary from initial expectations. There is no risk in annuity contracts for the private sector.
Payment risk	Refers to the risk that tolls are not collected in full or are not set at a level that allows recovery of costs. This is a risk for the public sector under shadow tolls and for the private sector under user tolls. There is no risk in annuity contracts.
Financial risk	Refers to the risk that the private sector overstresses a project by inappropriate financial structuring It can result in additional funding costs for increased margins or unexpected refinancing costs.
Handover risk	Refers to the risk that the concessionaire will default in the handover of the asset at the end of the project term or will deviate from the minimum quality/value of the asset that needs to be handed back to the public entity.

Module 3 –Tools – Mode validation

Risks	Description
Other risks	
Change in law	Refers to the risk that the current legal/regulatory regime will change, having a material adverse impact on the project
Force Majeure	Refers to the risk that events beyond the control of either entity may occur, resulting in a material adverse impact on either party's ability to perform its obligations under the PPP contract E.g.: pandemics, strikes, act of war.
Sponsor risk	Refers to the risk that the Public Sponsoring Authority will prove to be an unsuitable partner for the project, for example, due to poor project management or a failure to fully recognise the agreed terms of the Concession Agreement
Concessionaire event of default	Refers to the risk that the private entity will not fulfil its contractual obligations and that the Public Sponsoring Authority will be unable to either enforce those obligations against the sponsors or recover some form of compensation or remedy from the sponsors for any loss sustained by it as a result of the breach or the private partner will prove to be inappropriate or unsuitable for delivery of the project
Authority event of default	Refers to the risk that the Public Sponsoring Authority will not fulfil its contractual obligations and that the Concessionaire will be unable to either enforce those obligations against the Authority or recover some form of compensation or remedy from the Authority for any loss sustained by it as a result of the breach.

Risk allocation

	Risk Type	BOT Toll	BOT Annuity	BOT Annuity - HAM	OMT	BOT - TOT
A	PRE-OPERATIVE TASK RISKS					
A.1	Delays in land acquisition	Public Sector	Public Sector	Public Sector	Not Relevant	Not Relevant
A.2	External linkages	Public Sector	Public Sector	Public Sector	Not Relevant	Not Relevant
A.3	Financing risks	Private Sector	Private Sector	Private Sector	Not Relevant	Not Relevant
A.4	Planning	Private Sector	Private Sector	Private Sector	Not Relevant	Not Relevant
A.5	Approvals	Public Sector	Public Sector	Public Sector	Not Relevant	Not Relevant

Risk allocation

	Risk Type	BOT Toll	BOT Annuity	BOT Annuity - HAM	OMT	BOT - TOT
B	CONSTRUCTION PHASE RISKS					
B.1	Design Risk	Private Sector	Private Sector	Private Sector	Not Relevant	Not Relevant
B.2	Construction Risk	Private Sector	Private Sector	Private Sector	Not Relevant	Not Relevant
B.3	Approvals	Private Sector	Private Sector	Private Sector	Not Relevant	Not Relevant

Risk allocation

	Risk Type	BOT Toll	BOT Annuity	BOT Annuity - HAM	OMT	BOT - TOT
C	OPERATIONS PHASE RISKS					
C.1	Technology Risk	Private Sector	Private Sector	Private Sector	Private Sector	Private Sector
C.2	Operations & Maintenance Risk	Private Sector	Private Sector	Private Sector	Private Sector	Private Sector
C.3	Volume Risk	Private Sector	Public Sector	Public Sector	Public Sector	Private Sector
C.4	Payment Risk	Private Sector	Public Sector	Public Sector	Public Sector	Private Sector
C.4	Financial Risks	Private Sector	Private Sector	Private Sector	Private Sector	Private Sector
C.5	Handover risk	Private Sector	Private Sector	Private Sector	Private Sector	Private Sector

Risk allocation

	Risk Type	BOT Toll	BOT Annuity	BOT Annuity - HAM	OMT	BOT - TOT
D	OTHER RISKS					
D.1	Change in Law	Public Sector*	Public Sector*	Public Sector	Public Sector	Public Sector
D.2	Force Majeure	Shared	Shared	Shared	Shared	Shared
D.3	Concessionaire risk	Private Sector	Private Sector	Private Sector	Private Sector	Private Sector
D.4	Sponsor risk	Private Sector	Private Sector	Private Sector	Private Sector	Private Sector
D.5	Concessionaire event of default	Private Sector	Private Sector	Private Sector	Private Sector	Private Sector
D.6	Authority event of default	Public Sector	Public Sector	Public Sector	Public Sector	Public Sector

Module 3 – Tools – Financial Viability Tool – Road & Highway

Category	BOT – Toll	BOT – Annuity	BOT – HAM	OMT	TOT
Traffic	Included	n/a	n/a	n/a	Included
Bidding Criteria	Highest Upfront premium Highest Revenue Share Lowest VGF	Lowest Annuity Lowest VGF	Lowest Annuity	Lowest annual maintenance	Highest upfront Premium
Revenue	Toll Revenue	Annuity	Annuity	Annual maintenance	Toll Revenue
Operating Cost	Toll Plaza cost Toll Collection Expense O&M Cost Other Office Expenditure Electricity and Patrolling IE/IA expenses Insurance Routine Maintenance	Toll Plaza cost O&M Cost Other Office Expenditure Electricity and Patrolling IE/IA expenses Insurance Routine Maintenance	Toll Plaza cost O&M Cost Other Office Expenditure Electricity and Patrolling IE/IA expenses Insurance Routine Maintenance	Toll Plaza cost O&M Cost Other Office Expenditure Electricity and Patrolling IE/IA expenses Insurance Routine Maintenance	Toll Plaza cost O&M Cost Other Office Expenditure Electricity and Patrolling IE/IA expenses Insurance Routine Maintenance
Financing					
Sources of Funds	Equity	Equity	Equity	Equity	Equity
	Senior Debt Sub Debt	Senior Debt Sub Debt	Senior Debt Sub Debt	Senior Debt Sub Debt	Senior Debt Sub Debt
	VGF Grant	VGF Grant	Grant – 40% construction	n/a without Capital Expenditure	VGF Grant
Taxes	GST / Corp Tax	GST / Corp Tax	GST / Corp Tax	GST / Corp Tax	GST / Corp Tax
Major Maintenance	Included	Included	Included	n/a	included

Module 3 –Tools – Value for Money

Testing for Value for Money (VfM) should be an important part of any PPP project development.

VFM is used as procurement decision i.e. What is the best mode for project implementation? (Public procurement or PPP)

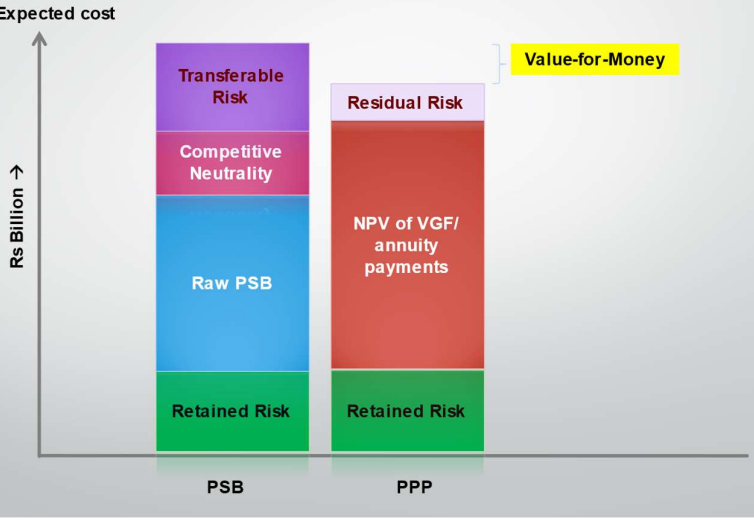
Value for Money (VfM) means the public sector is financially better off if the project is implemented as a PPP rather than if it is done as a traditional public sector project.

If a project is not expected to provide VFM for the public sector then the project should not be implemented as a PPP.

A VFM test compares the estimated cost of procuring the project in the public sector (the traditional route) with the estimated cost of procuring it as a PPP. The public sector procurement option is called the public sector benchmark (PSB).

VFM = Cost of PSB – Cost of PPP

Module 3 –Tools – Value for Money



Elements of Quantitative VFM– PSC

Transferable risks

- These capture the impact of the specific risks which are generally transferred to the private sector in case of PPP
- Typically includes– construction cost/ time over-run, design risk, O&M cost overun, interest rate, exchange rate, inflation and revenue risks.

Competitive neutrality

- Identify effects of PSA ownership and the advantages/ disadvantages it brings in vis à-vis private sector
- Typical example is the taxation

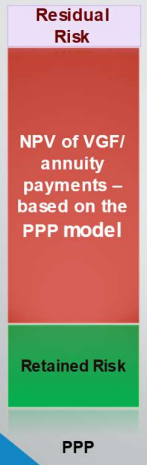
Retained risks

- These are risks retained with the public sector in case of traditional procurement and PPP

Raw PSC

- Generally the lifecycle cost of the project
- This includes the total project and the NPV of the annual O&M cost
- This cost is relevant only during the estimation of PSC

Elements of Quantitative VFM– PPP



Residual risks

- These the residual risks retained by the PSA on the ones transferred to the private sector
- For example: renegotiation risks

Annuity payments/ VGF

- In case of annuity model wherein the private sector is supported by annuity payments. Calculated as the NPV of the payments
- It also includes any upfront VGF or capital grant paid by the Govt. to the private sector

Retained risks

- These are risks retained with the public sector in case of traditional procurement and PPP

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Module 3 –Tools – Value for Money

Present value inputs are calculated using cashflows provided by the Financial Viability Indicator tool, discounted at the user-input discount rate.
All calculations should be made in nominal terms.

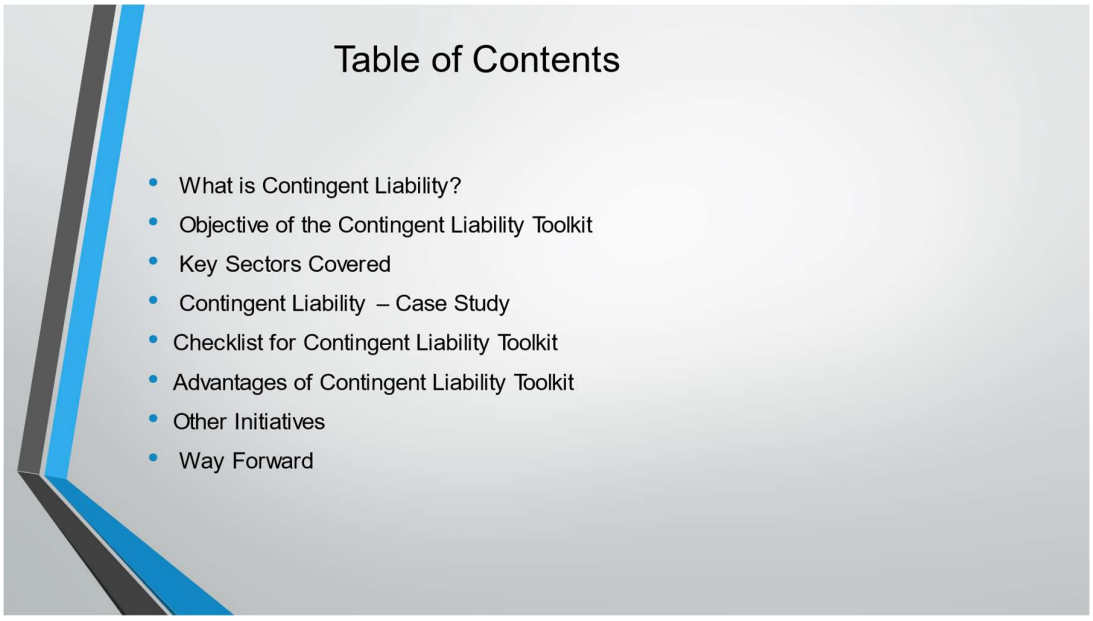
Cash costs and receipts - from Financial Viability Indicator tool		PSB		PPP
PV of payments for a public sector project	R cr.	495.5		
PV of payments under PPP	R cr.			249.8
Total costs for public finances	R cr.	495.5		249.8
Gross VAT received	R cr.	0.0		0.0
Corporate tax (including MAT) received	R cr.			82.7
Third party income (eg, tolls, charges, advertising) received	R cr.	422.5		
Total receipts for public finances	R cr.	422.5		82.7
Net cash cost to Public Finances (= costs - receipts)	R cr.	72.9		167.1

Risk adjustment		PSB		PPP
Expected value of risk that would be transferred under PPP	R cr.	199.2		
Expected cost of added risks from a PPP for the public sector	R cr.			12.1
Adjusted net cost to Public Finances	R cr.	272.1		155.0
Expected VFM	R cr.			117.1

Module 3: Summary of the Tools

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

- **Presentation on Contingent Liability Toolkit**

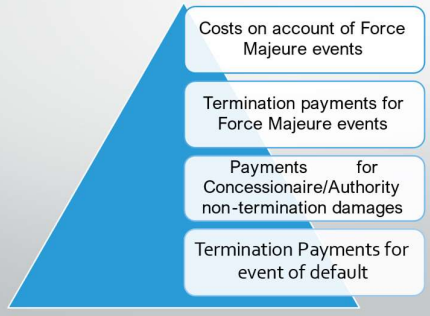


What is Contingent Liability?

What is Contingent Liability?

Obligations of the government arising from a valid PPP contract whose occurrence, timing, and amount depend on some uncertain future event or circumstance.

Contingent Liabilities arising from a PPP Contract:



Direct Liability versus Contingent Liability

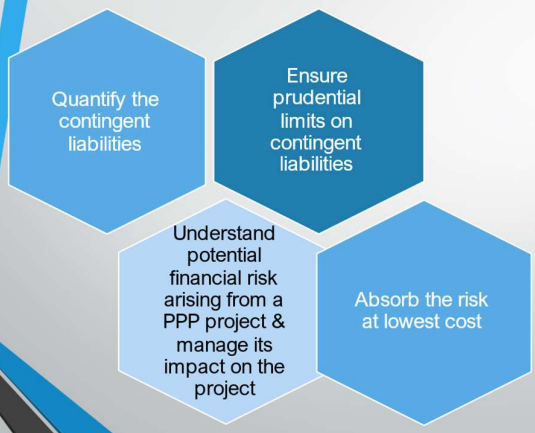
Element of Liability	Direct Liability	Contingent Liability
Obligation and Need for Payment	Present and certain obligation resulting from a past event; obligations and payment needs are known upfront.	Possible obligation from a past event; obligations may be confirmed by occurrence/ nonoccurrence of uncertain future events.
Quantum of amount	Known upfront with certainty; reliable estimates of the amount of the obligation can be made for accounting and budgeting.	Uncertain amounts; estimates may also not be possible with reasonable accuracy and reliability.
Timing	Known with certainty	Uncertain/ unknown
Outflow of resources	Known with certainty	Uncertain and depend on the occurrence/nonoccurrence of an event in future;

Types of Direct and Contingent Liabilities

Direct Liabilities	Contingent Liabilities
1. Viability Gap Payments	1. Cost on account of Force Majeure Events
2. Annuity Payments	2. Termination payment for Force Majeure Events
3. Any project related specific subsidies	3. Payment for Concessionaire/Authority event of defaults, if such defaults lead to termination of contract

Objective & Applicability of the Contingent Liability Toolkit

Key Objectives



Applicability

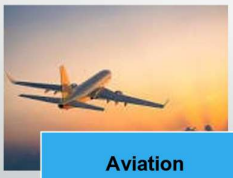
- To be used by **Project Sponsoring Agencies (PSAs)** to calculate the contingent liability arising from a PPP project.
- Accordingly, **appropriate funds** could be demarcated at the beginning itself to meet any contingent liabilities arising in the future.
- Also, this would help PSAs in taking measures such as introduction of **suitable clauses** in **bid documents** to minimize the impact of adverse events and **wisely allocate risks**.

Key Sectors Covered under the Toolkit

Road & Highway

Port

Solid Waste Management



Aviation

Sports

Contingent Liability Toolkit – Case Study

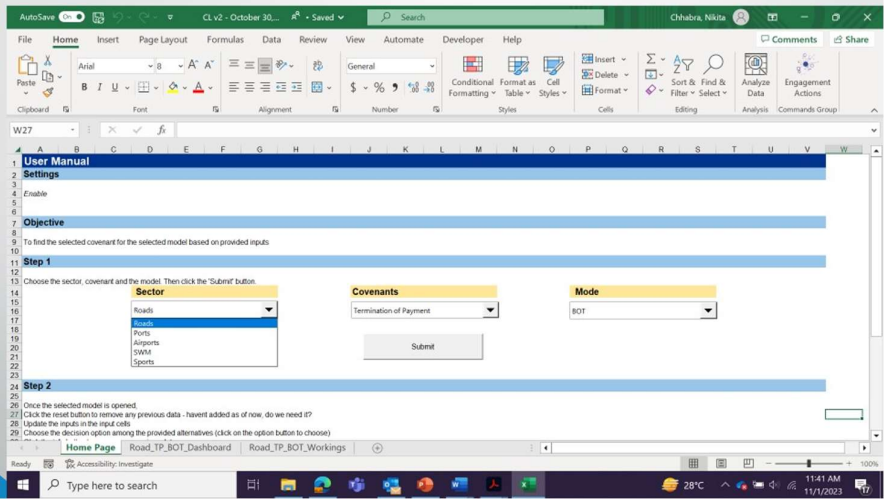
Case Study: Construction of Six-lane Highway on BOT (Toll)

S.No.	Particulars	Key Details
1.	Name of the project	Construction of six -lane highway
2.	Type of PPP (BOT, BOOT, BOLT, OMT etc.)	BOT (Toll)
3.	Location	State: Jharkhand District: Bokaro
4.	Administrative Ministry/Department	Ministry of Road Transport and Highways, Government of India
5.	Implementing Agency	National Highways Authority of India
6.	Length (km)	28.70
7.	Estimated Project Cost (Rs. Cr)	i. Civil Construction Cost: 718.42 ii. Utility Shifting Cost: 12 iii. Pre-Operative Cost: 7.30 iv. Financing Charges: 3.85 v. Interest during Construction: 22.44 vi. 18% GST on Civil Cost: 131.48 vii. Land acquisition, resettlement and rehabilitation cost: 400 viii. Supervision charges for utility shifting: 24 **ix. Total Capital Cost: 1319.49**

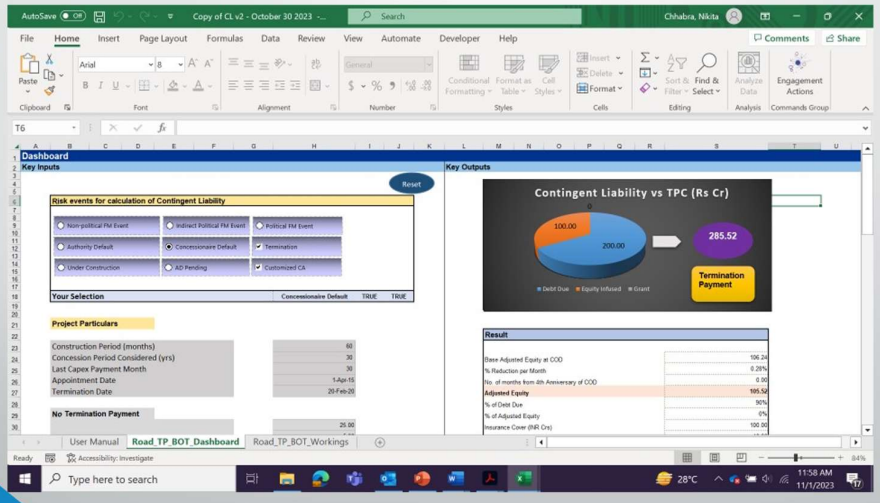
Case Study: Construction of Six-lane Highway on BOT (Toll)

S.No.	Particulars	Key Details
8.	Concession Period (years)	30
9.	Construction Period (years)	2
10.	Financing (Rs. Crore)	Equity: 395.847 (30%) Debt: 923.643 (70%)
11.	Appointed Date	30.04.2020
12.	COD	30.04.2022
13.	End of Concession Period	30.04.2050
14.	Date of Termination of Contract	30.04.2027

Step 1: Choose the Sector, Convenant and the PPP mode on the Home Page

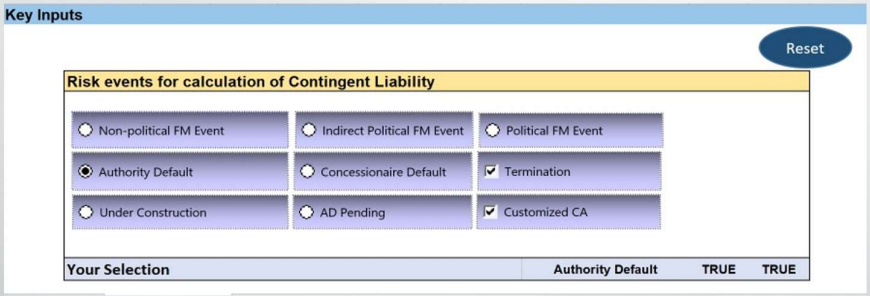


Step 2: Once the selections are made, press submit. Dashboard and workings sheet will appear



Risk Event: Authority Event of Default leading to Termination

Step 3: Key Inputs to be provided on the Dashboard



The Dashboard Page consists of **Key Inputs** and **Key Outputs.** On the **Key Inputs** side, **following actions are required:**

1. **Select the Risk Event**
2. **Select Termination/Non-termination**
3. **Select Customized CA, if not based on Model Concession Agreement**
4. **Provide Project Details/Particulars - Key Dates, Concession Period, Construction Period, Means of Finance, etc.**

Step 3: Key Inputs to be Edited/Updated

	B	C	D	E	F	G	H	I
	Debt Due						200.00	
	Insurance Cover						100.00	
	Insurance Claims (not admitted and paid)						50.00	
	General Inputs							
	Year count for 4th Anniversary						4 Yrs	
	Click here to update WPI figures if project timeline is not between 2011-2021							
	Click here to update Norms.							
	Click here to update Inputs							

Once the key project features are provided, Users can click on the **clickable links** provided on the **Dashboard** to update/change:

1. **WPI figures**
2. **Norms/Articles/Clauses for Termination Payment**
3. **Other Key Inputs, if any**

Step 3: Key Inputs to be Edited/Updated

MCA Norms & Values	Auto-filled
To be filled in for Customised CA	L116-122; M116-122;

Selected Option	4
Termination Pe	1

Risk event	% of Debt Due as per MCA	% of Adjusted Equity as per MCA	Insurance Cover switch	Insurance Claim switch	Norms	Norms - Non Termination	Clauses as per MCA	Debt due as per Customized CA	Adjusted Equity as per Customized CA
Non-political FM Event	90%	-	1	1	If Termination is on account of a Non-Political Event, the Authority shall make a Termination Payment to the	NA	*Proposal, Article 34.8.3*	100.00%	0.00%
Indirect Political FM Event	100%	110%	1	1	If Termination is on account of an Indirect Political Event, the Authority shall make a Termination Payment to the Concessionaire in an amount equal to: (a)Debt Due less Insurance Cover, provided that if any insurance claims in respect of the Insurance	Upon occurrence of an Indirect Political Event, all Force Majeure Costs attributable to such Indirect Political Event, and not exceeding the Insurance Cover for such Indirect Political Event, shall be borne by the Concessionaire, and to the extent Force Majeure Costs exceed such Insurance Cover, one half of such excess amount shall be	*Proposal, Article 34.8.3*	80.00%	150.00%
Political FM Event	100%	150%	1	1	If Termination is on account of a Political Event, the Authority shall make Termination Payment equal to (a)Debt Due, and (b) 150% of the		*Proposal, Article 34.8.3*	90.00%	100.00%
Authority Default	100%	150%	1	1	If Termination is on account of a Authority Default, the Authority shall make Termination Payment equal to (a)Debt Due, and (b) 150% of the	NA	*Proposal, Article 34.8.3*	90.00%	100.00%
Concessionaire Default	90%	-	1	1	If Termination is on account of a Concessionaire Default, the Authority shall pay to the Concessionaire, an amount equal to 90% of the Debt Due less Insurance Cover, provided that if	NA	*Proposal, Article 34.8.3*	90.00%	100.00%
AD Pending	-	-	-	-	(iv) - For the avoidance of doubt, the Concessionaire hereby acknowledges that no Termination Payment shall be	NA	*Proposal, Article 34.8.3*	90.00%	100.00%
Underconstruction	-	-	-	-	(iv) - For the avoidance of doubt, the Concessionaire hereby acknowledges	NA	*Proposal, Article 34.8.3*	90.00%	100.00%

*Please provide details of the additional Clause, if any

In case of Concession Agreement being based on the **Model Concession Agreement, Norms** will be auto-filled in based on the clauses provided in the MCA.

Step 3: Key Inputs to be Edited/Updated

Risk event	Debt due as per Customized CA	Adjusted Equity as per Customized CA	Insurance cover	Insurance claim	Any other Clause (please provide the value	Clauses as per the DCA/Signed CA
Non-political FM Event	100.00%	0.00%				
Indirect Political FM Event	80.00%	150.00%				
Political FM Event	90.00%	100.00%				
Authority Default	90.00%	100.00%				
Concessionaire Default	90.00%	100.00%			100	
AD Pending	90.00%	100.00%				
Underconstruction	90.00%	100.00%				
*Please provide details of the additional	Clause, if any					

In case of Customized CA, the User will need to termination payment clauses/norms for risk events to be updated

Step 4: Workings would be updated based on Key Inputs

Model Concession Agreement	Authority Default	100%	150%	1	1	If Termination is on account of a Authority Default, the Authority shall make Termination Payment
Customised CA	Authority Default	90.00%	100.00%	0	0	0

	Based on MCA	Customised CA
Selected option	Authority Default	Authority Default
% of Debt Due	100%	90.00%
% of Adjusted Equity	150%	100.00%
Insurance Cover switch	1	0
Insurance Claim switch	1	0
Any other Clause		0

Insurance	Based on MCA	Customised CA
Insurance Cover	100.00	100.00
Insurance Cover switch	1	0
Insurance Cover (INR Crs)	100	0
Insurance Claim Limit	80.00%	80.00%
Insurance Claims (not admitted and paid)	50.00	50.00
Insurance Claim switch	1	0
Insurance Claims	40	0

Termination Payment		
Insurance Cover	100.00	100.00
Insurance Claims	40.00	0.00
Unclaimed Insurance Cover	60.00	100.00
Debt Due	200.00	200.00
Unclaimed Insurance Cover	60.00	100.00
Net Debt Due	200.00	200.00
% of Debt Due	100%	90%
Net Debt Due	200.00	200.00
Termination Payment - Debt	140	80
% of Adjusted Equity	150%	100%
Adjusted Equity	105.52	105.52

Step 4: Workings would be updated based on Key Inputs

WHOLESALE PRICE INDEX (WPI)

WPI Inputs

Source: GOI, Ministry of Commerce & Industry
File Name: Annual Average of Monthly Index (Financial Year 2012-13 Onwards)
Link: https://eaindustry.nic.in/download_data_1112.asp

Do not delete the cells below

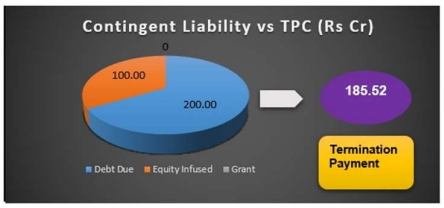
Year	WHOLESALE PRICE INDEX
2011	100.00
2012	106.90
2013	112.50
2014	113.90
2015	109.70
2016	111.60
2017	114.90
2018	119.80
2019	121.80
2020	123.40
2021	139.40
2022	0.00
2023	0.00
2024	0.00
2025	0.00
2026	0.00
2027	0.00
2028	0.00
2029	0.00
2030	0.00
2031	0.00
2032	0.00
2033	0.00
2034	0.00
2035	0.00
2036	0.00

WPI Figures can be updated by clicking on the link given in the Dashboard page under Key Inputs.

Once all the Key Inputs have been provided and norms have been updated based on MCA/Customized CA, Termination Payment will be automatically calculated and shown on the Dashboard.

Step 3: Key Outputs for Calculation of Contingent Liability

Key Outputs



Result	
Base Adjusted Equity at COD	106.24
% Reduction per Month	0.28%
No. of months from 4th Anniversary of COD	0.00
Adjusted Equity	**105.52**
% of Debt Due	100%
% of Adjusted Equity	150%
Insurance Cover (INR Crs)	100.00
Insurance Claims	40.00
Termination Payment	**Rs. 185.52 Cr**

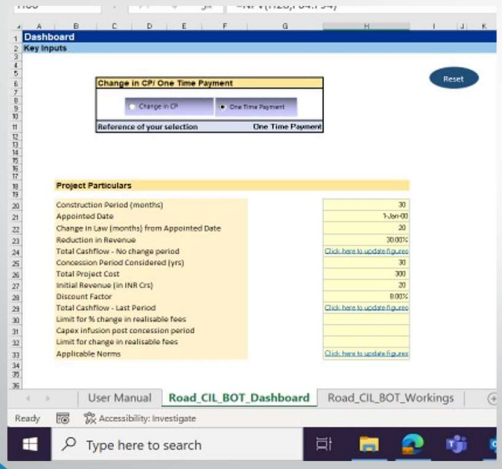
Termination Payment for the selected risk event is shown on the Dashboard

Important inputs for calculation of Termination Payment:

- **Adjusted Equity**
- **Debt Due**
- **Insurance Cover**
- **Force Majeure Cost**

Risk Event: Change in Law

Step 1: Key Inputs for Calculation of Contingent Liability



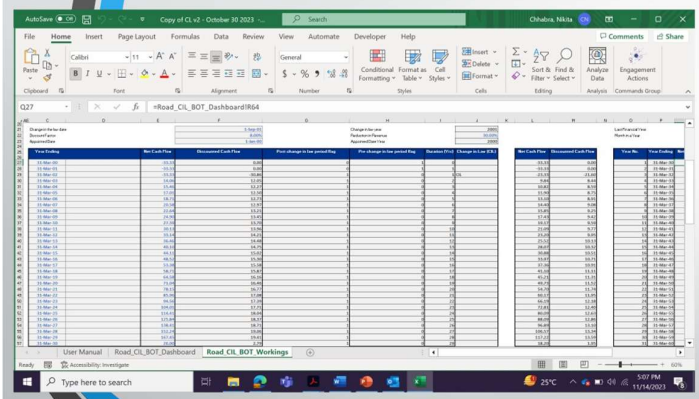
In case of Change in Law, Termination Payment will be in the form of:

- **Change in Concession Period**
- **One Time Payment**

Important inputs for calculation of Termination Payment:

- **Change in Law Date**
- **Months from Appointed Date**
- **Reduction in Revenue**
- **Initial Revenue**
- **Discount Factor**

Step 1: Key Inputs for Calculation of Contingent Liability



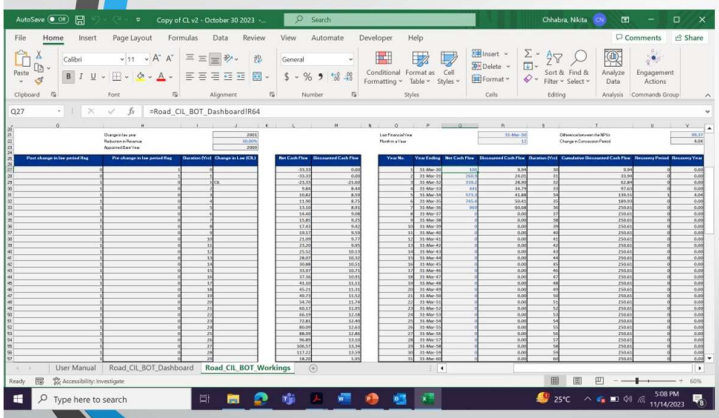
One time payment:

- **Difference in NPVs without and with Change in Law is paid to the Concessionaire**

Important inputs for calculation of Termination Payment:

- **Net Cash Flows**
- **Discount Factor**
- **Reduction in Revenue**
- **Appointed Date**
- **Change in Law Date**

Step 1: Key Inputs for Calculation of Contingent Liability



Change in Concession Period:

- **Concession Period is increased until the cumulative discounted cash flow is equal to the difference in NPV**

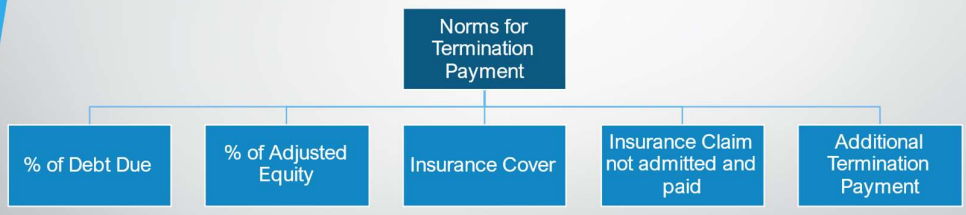
Important inputs for calculation of Termination Payment:

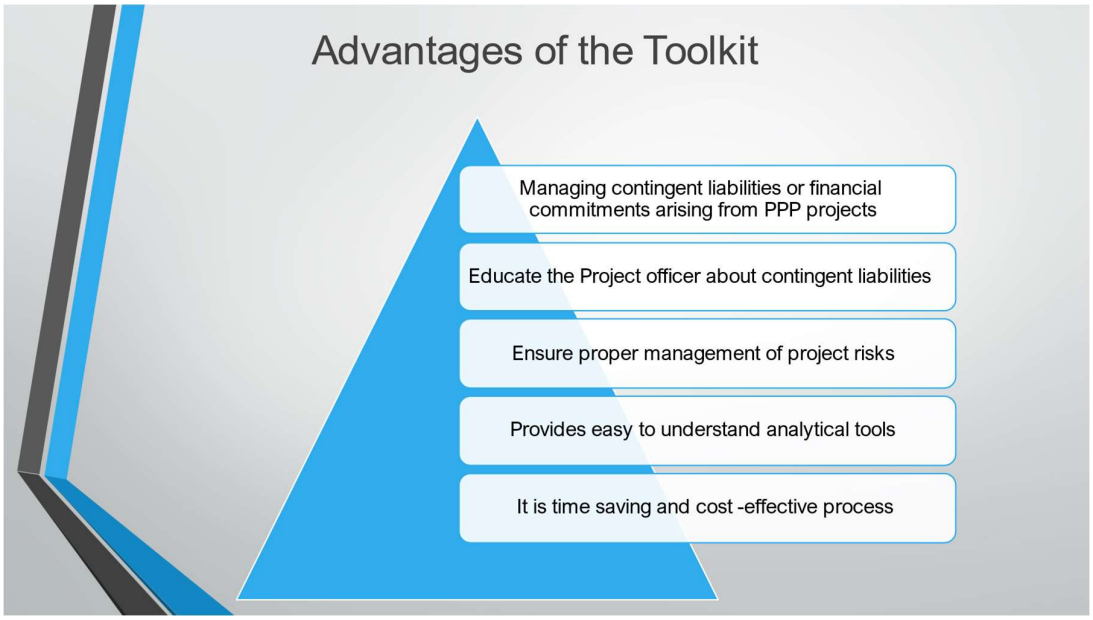
- **Net Cash Flows**
- **Discount Factor**
- **Reduction in Revenue**
- **Appointed Date**
- **Change in Law Date**

Checklist for Calculation of Contingent Liability

- √ Total Project Cost
- √ Concession Period
- √ Construction Period
- √ Appointed Date
- √ Commercial Operation Date (COD)
- √ Termination Date
- √ Debt
- √ Equity
- √ Det Due
- √ Grant/VGF
- √ Insurance Cover
- √ Insurance Claim (not admitted and paid)

Checklist for Calculation of Contingent Liability




Advantages of the Toolkit
Managing contingent liabilities or financial commitments arising from PPP projects
Educate the Project officer about contingent liabilities
Ensure proper management of project risks
Provides easy to understand analytical tools
It is time saving and cost -effective process


Thank you