

Models for Public Private Partnership in Infrastructure Development

Public Private Partnership (PPP)

“Public-Private Partnership (PPP) constitutes a sustained collaborative effort between the Public sector (government agencies) and Private enterprises to achieve a common objective (e.g., the infrastructure facility).”

Need and Advantages of PPP to Governments

- Large difference in the funds required and available with the Government
- Making Subsidies more efficient (subjecting them to competition and capital market scrutiny)
- Optimized life cycle costs of a Project
- Leverage
 - Government funds
 - Capital Markets without direct liability on the Government
 - Resources and skills available with the Private Sector
- Sharing of Risks
 - Design/Solution Risk
 - Financing Risk
 - Construction Risk
 - Market Risk
 - Operations Risk

Various PPP Models

- Toll Models
 - BOT - Toll (min concession period)
 - BOT - Grant/ Premium + Toll

- Annuity(Availability Payments) Models
 - BOT - Annuity
 - BOT - Grant + Annuity
 - PDA based Concession

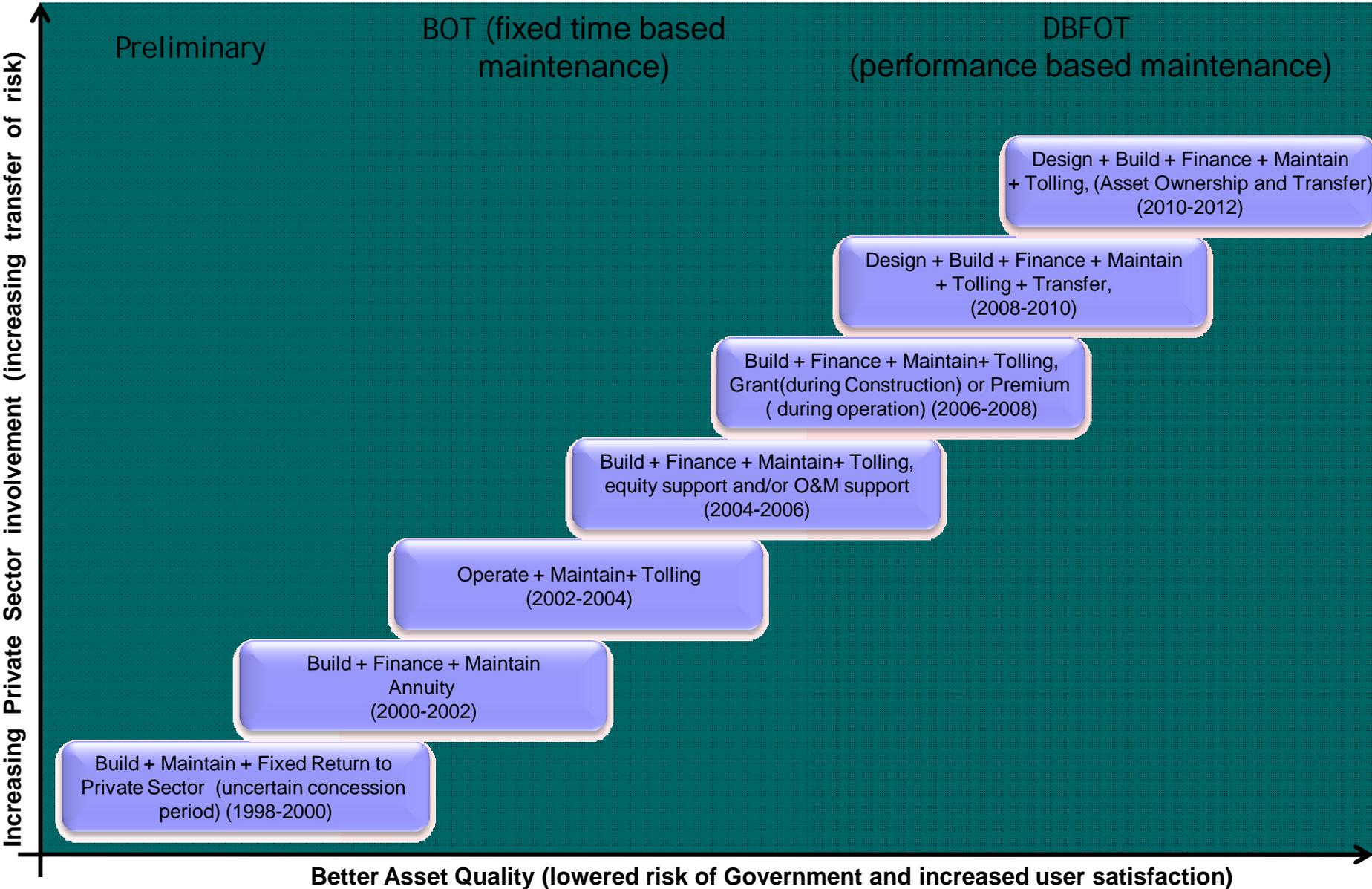
- Other Models
 - BOT - Toll + Annuity
 - BOT - Toll (Minimum Traffic Guarantee)
 - BOT - Fixed Return to private sector
 - OMT - Operate Maintain Transfer

PPP models listed above are explained in the subsequent slides

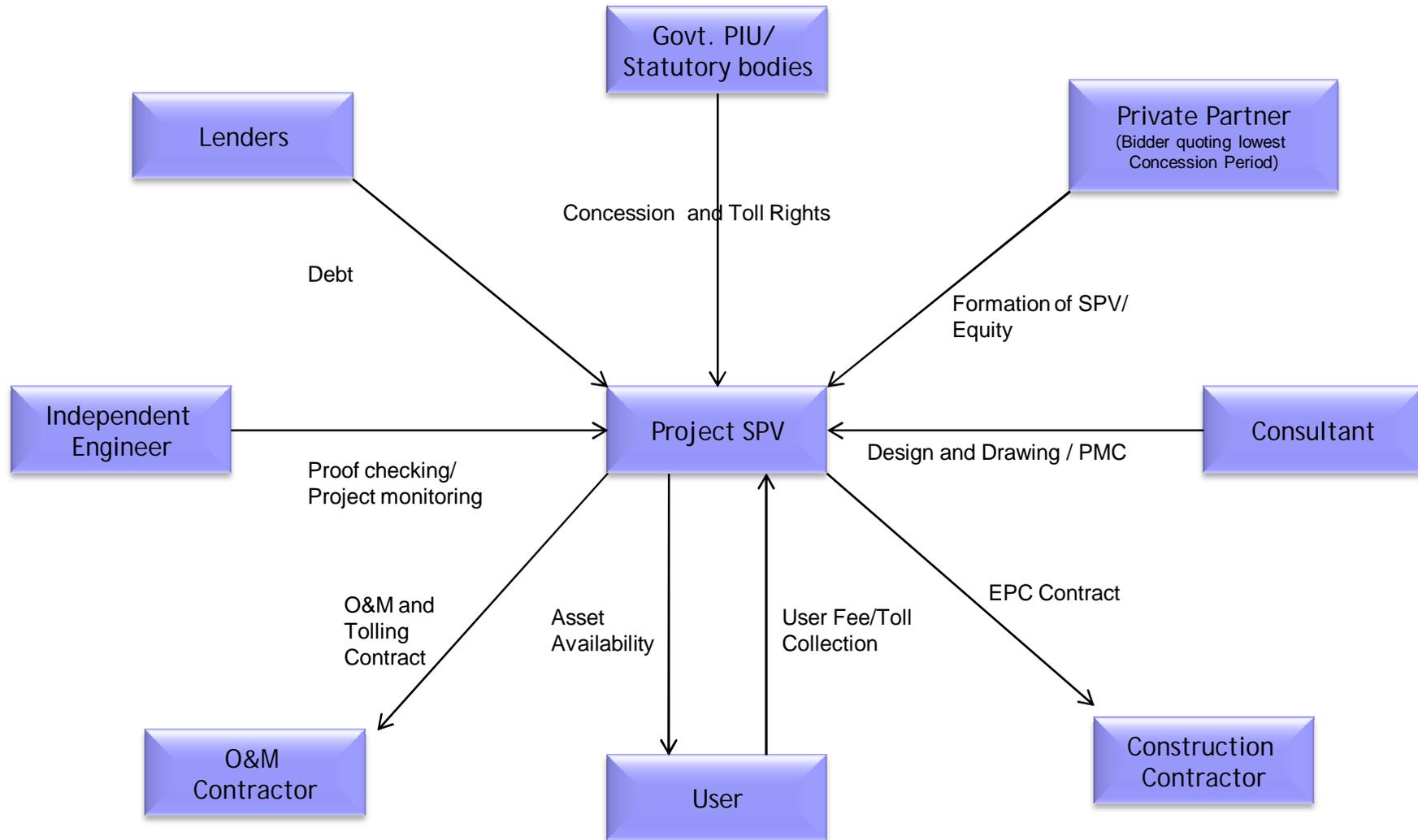
Broad Roles & Responsibilities

- Government Agency
 - Providing encumbrance free Project Site/ Assets
 - Environmental Clearances
 - Supporting Infrastructure and Utilities
 - Specific Obligations
 - Regulatory Functions
 - Subsidies, as applicable
- Concessionaire
 - Designing, Engineering, Financing
 - Construction/ augmentation / upgradation
 - Operation and Maintenance
 - Transfer of assets at expiry of concession period
- In exchange the concessionaire has the right to receive revenue - tolls or annuity or any other mechanism

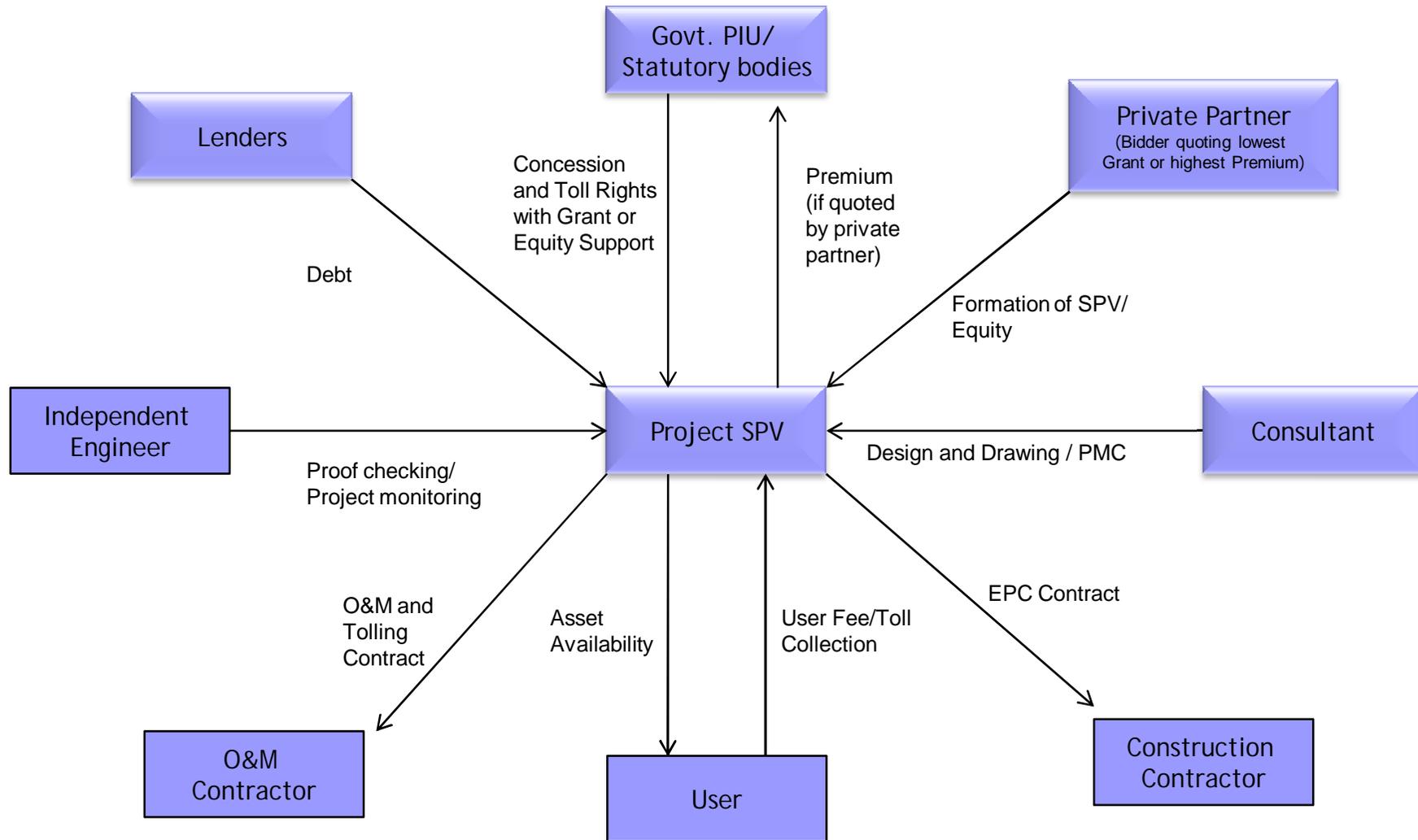
Evolution of PPP Models in India



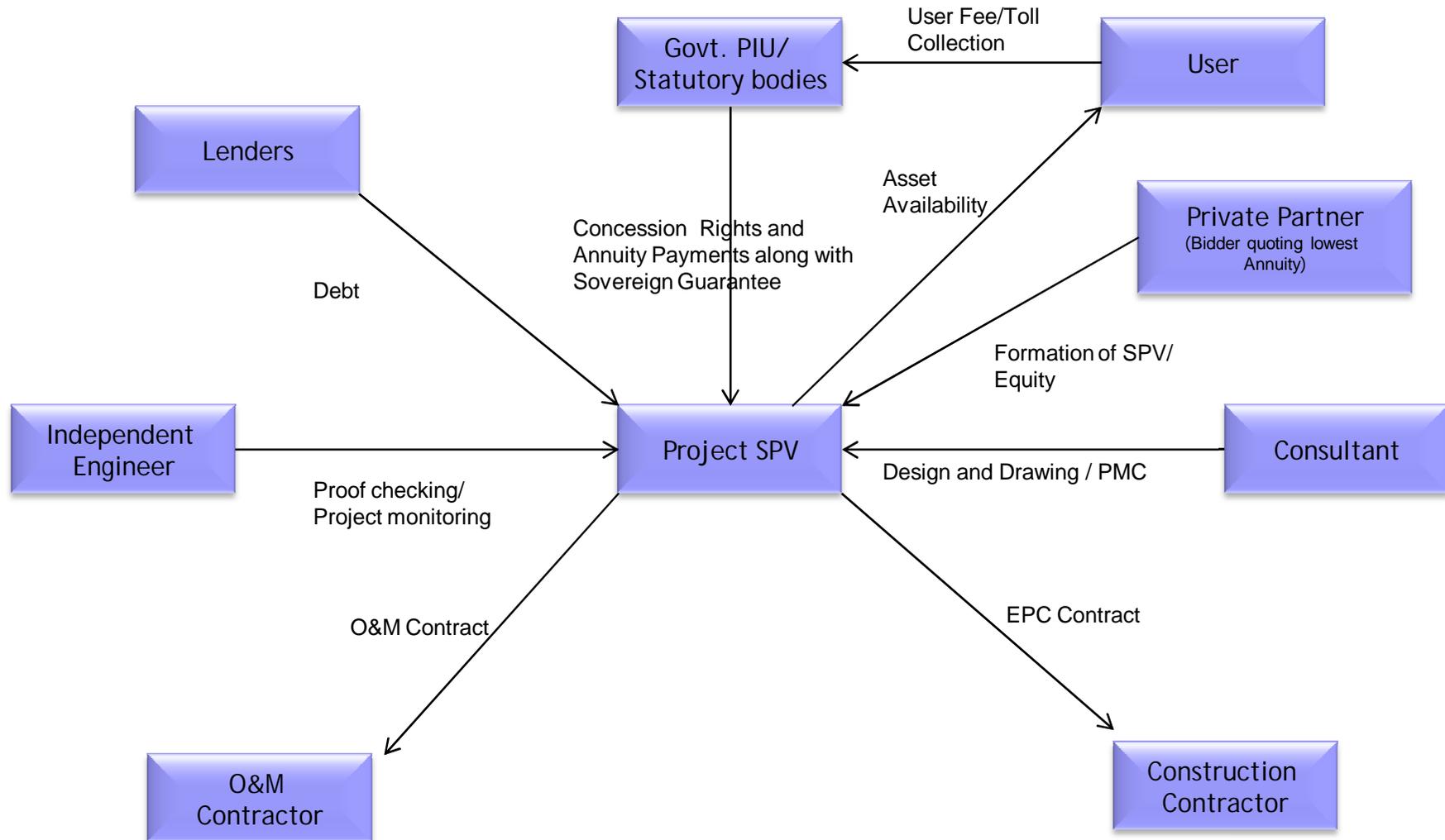
Toll Models - BOT - Toll



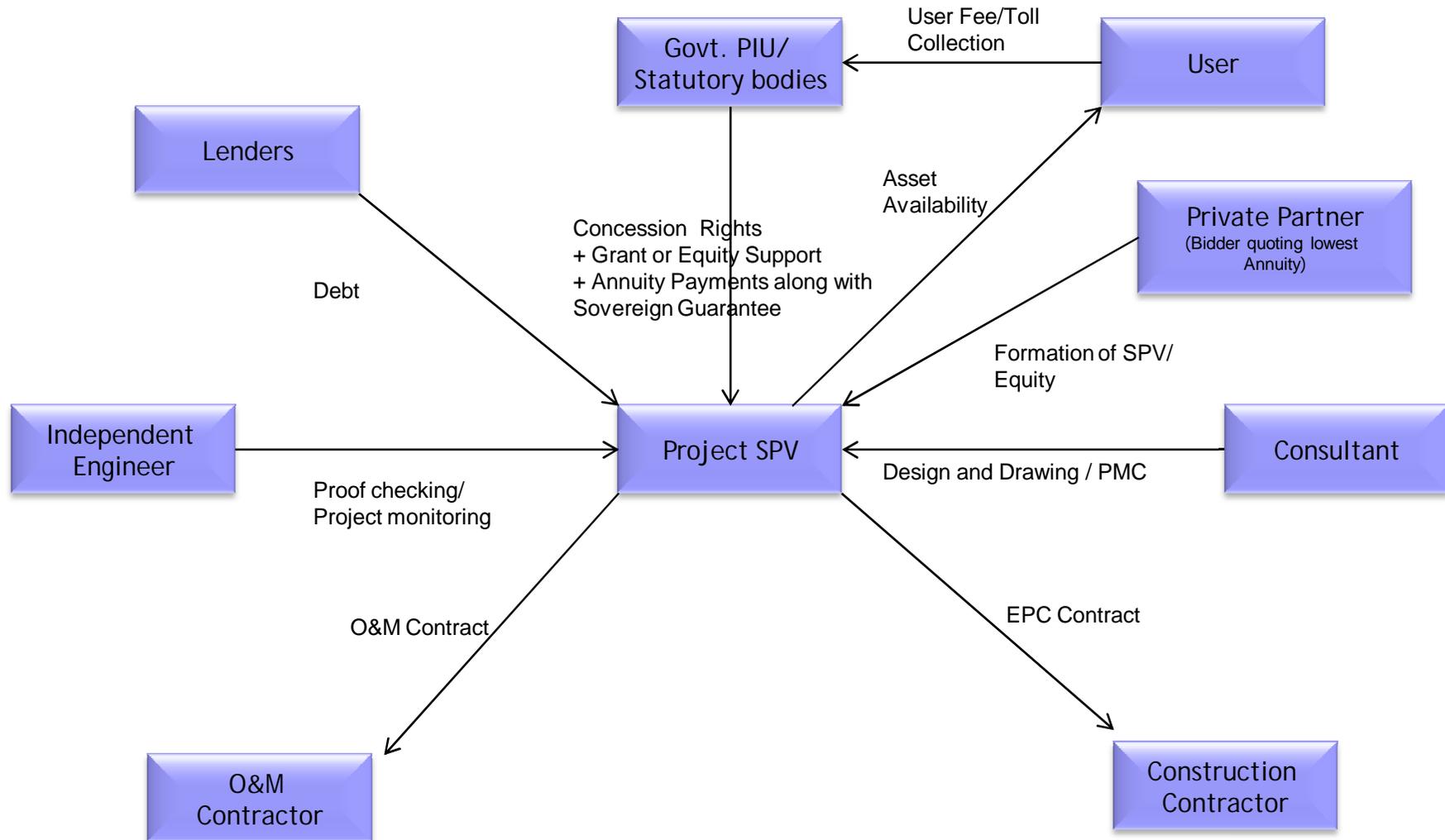
Toll Models - BOT - Grant/ Premium + Toll



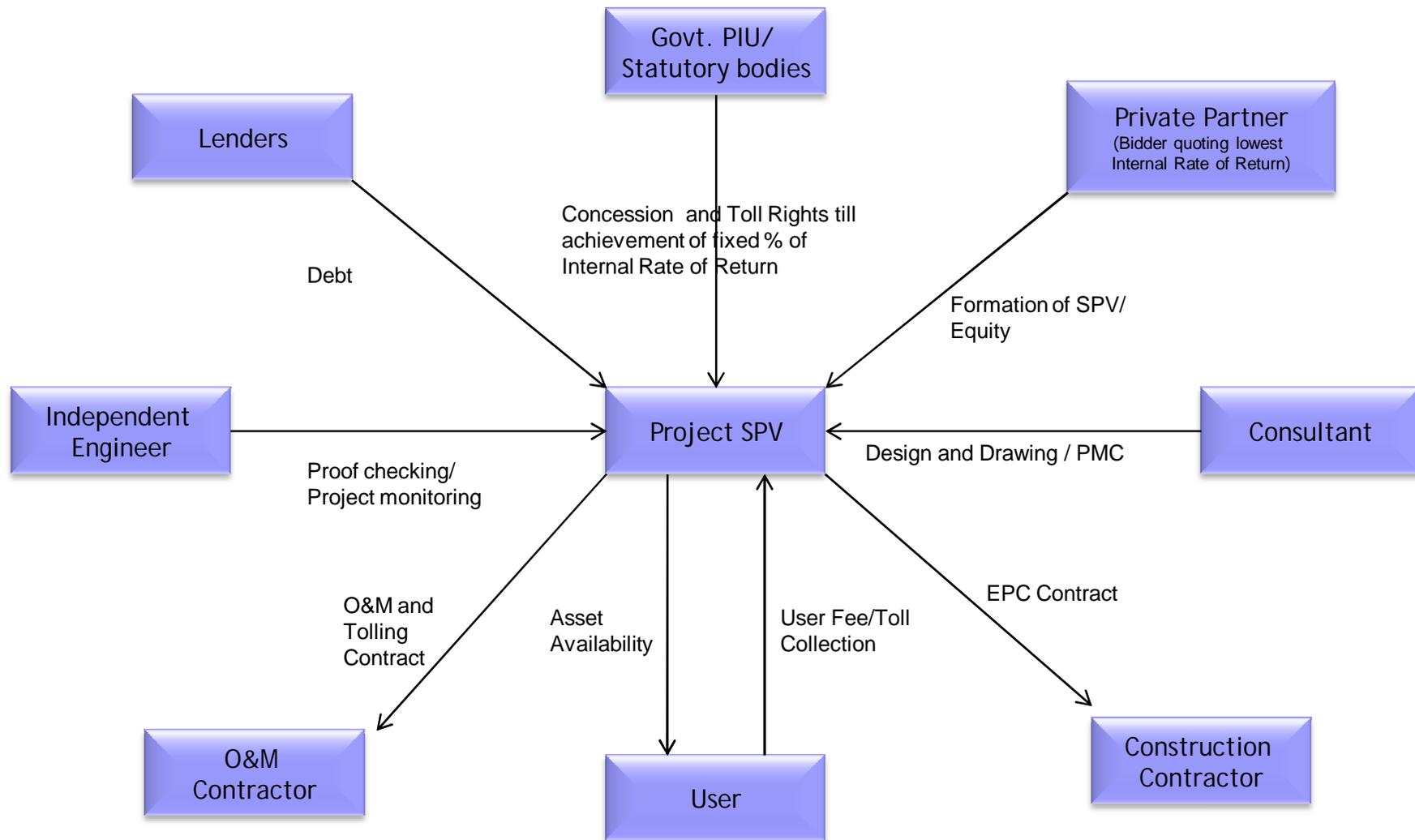
Toll Models - BOT - Annuity



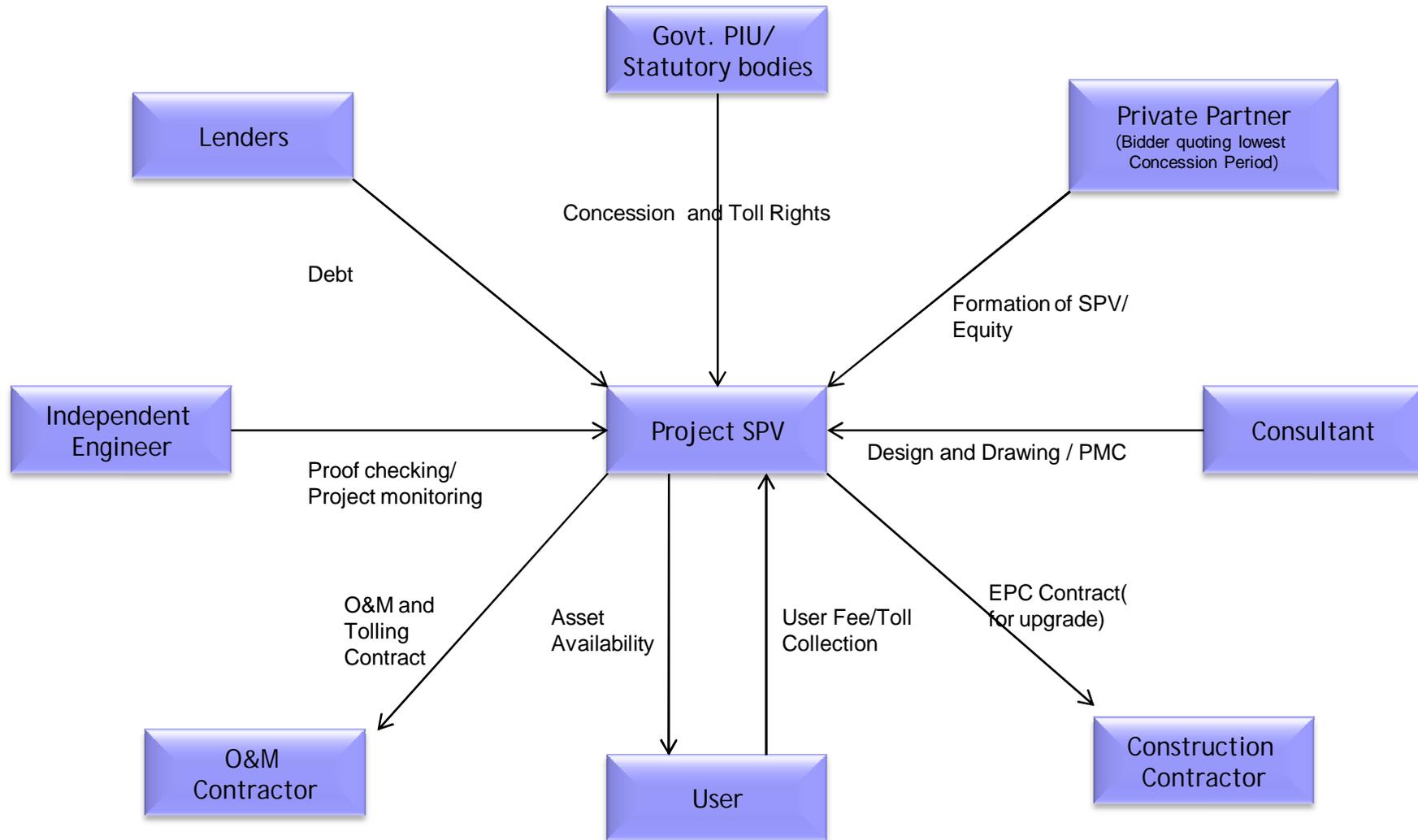
Toll Models - BOT - Grant + Annuity



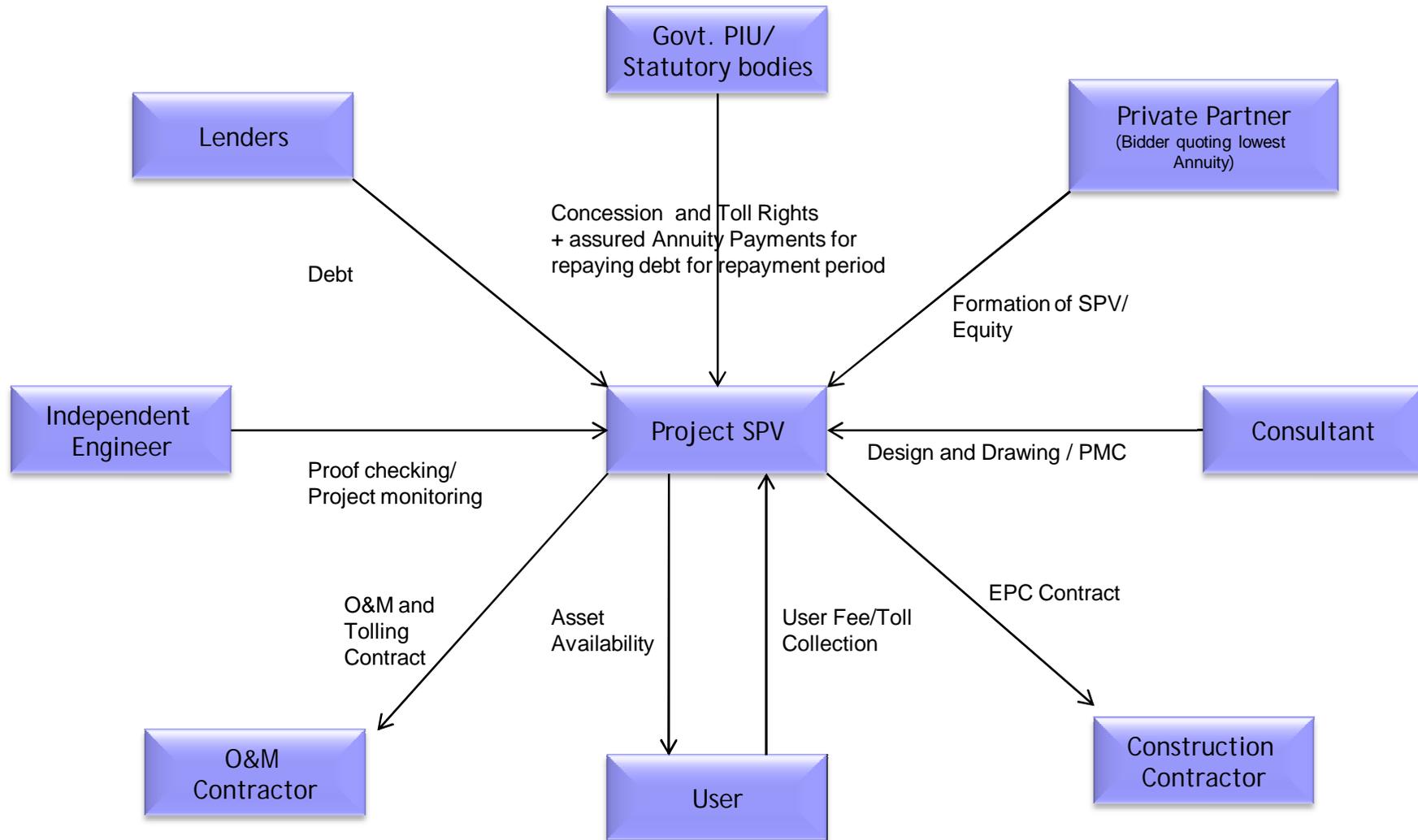
Toll Models - BOT - Toll - Fixed Return to private sector



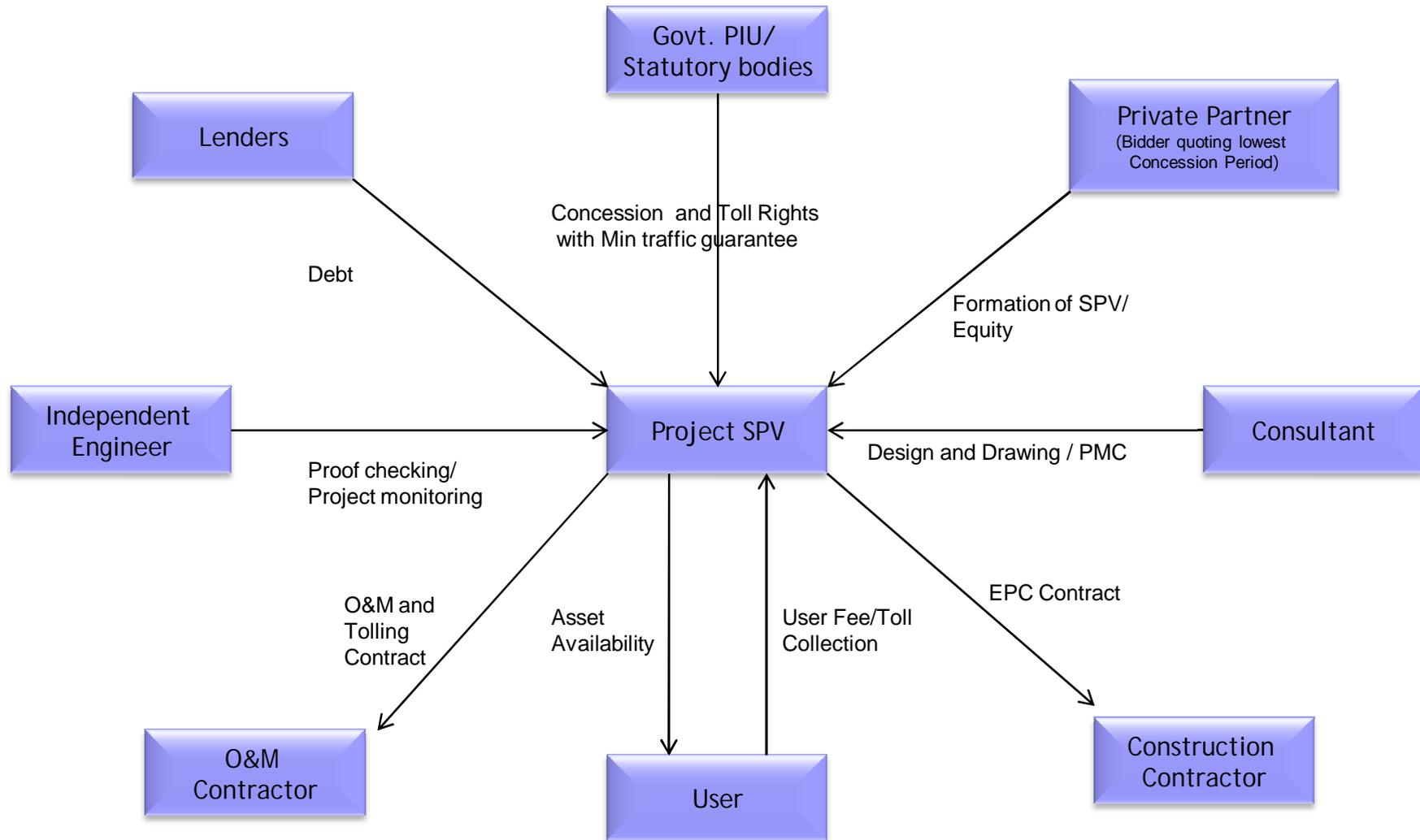
Toll Models - BOT - Toll



Toll Models - BOT - Toll + assured debt repayment (Annuity)



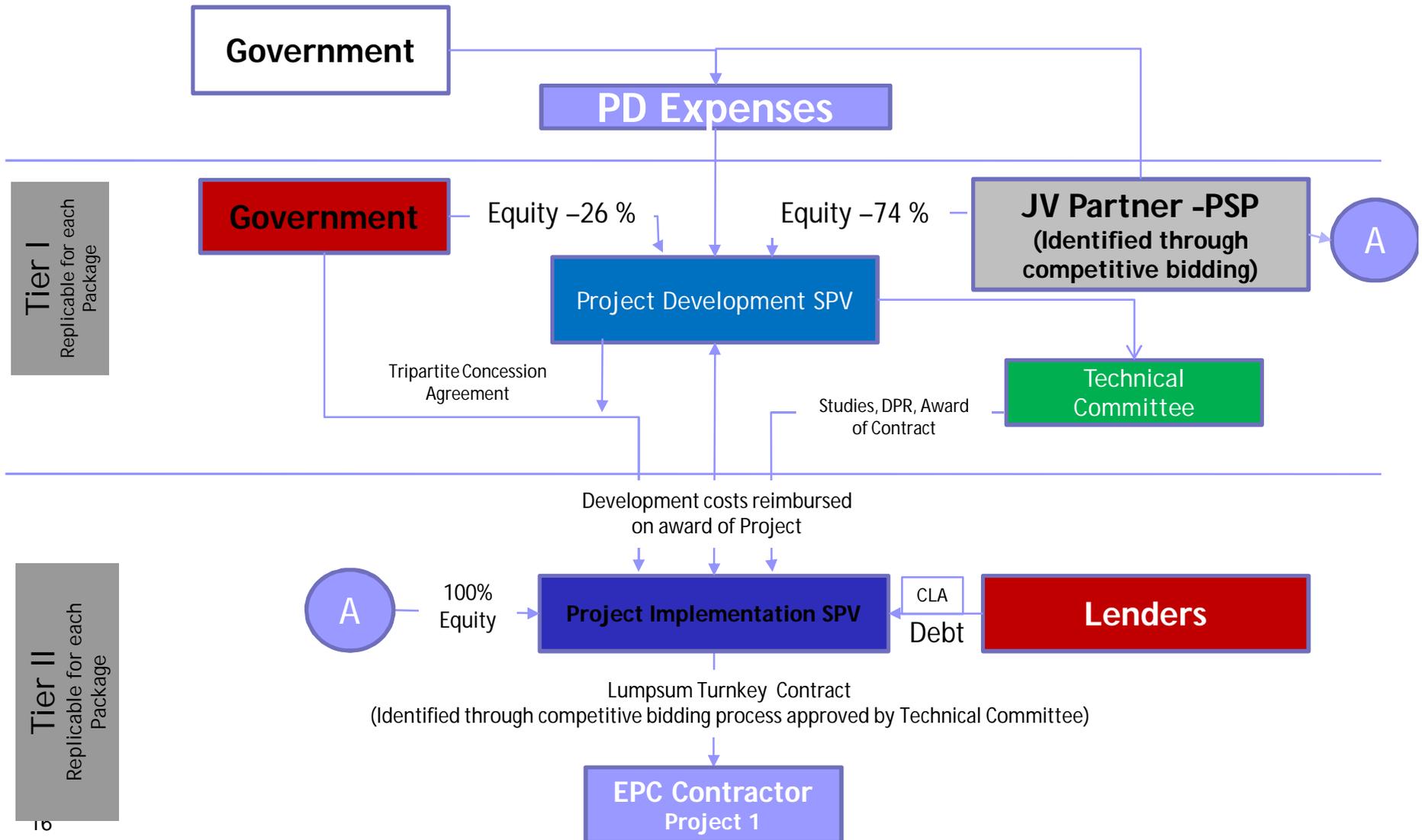
Toll Models - BOT - Toll (Minimum Traffic Guarantee)



Risk & Responsibility Sharing

	Toll	Annuity	Toll + assured debt repayment (Annuity)	Toll (Minimum Traffic Guarantee)	Land Leasehold rights	Fixed Return
Project development Phase						
Undertaking Bidding Process	Government					
Design & Development - Post Award	Concessionaire					
Project Financial Closure	Concessionaire					
Project Insurance	Concessionaire					
Land Acquisition & Utility Shifting	Government					
Project Construction Phase						
Construction Risk	Concessionaire					
Project Cost Risk + Grant, if any	Government for Grant/Concessionaire for Project Cost					
Regulatory & Administrative Risk	Government					
Political & Social Risk	Government					
Inflation	Concessionaire					Government /Concessionaire
Interest Rate Risk	Concessionaire	Concessionaire	Government /Concessionaire	Concessionaire	Concessionaire	Government /Concessionaire
Operation & Maintenance Phase						
Revenue Collection (Toll) + Premium, if any	Concessionaire	NA	Government /Concessionaire	Government /Concessionaire	NA	Government /Concessionaire
Revenue Collection (Annuity)	NA	Government	Government	NA	NA	NA
Revenue Collection (Lease)	NA	NA	NA	NA	Concessionaire	NA
Routine & Periodic Maintenance	Concessionaire	Concessionaire	Concessionaire	Concessionaire	Concessionaire	Concessionaire
Tolling Technology	Concessionaire	NA	Concessionaire	Concessionaire	NA	Concessionaire
Regulatory framework for ensuring Leasehold Rights	NA	NA	NA	NA	Government	NA

Proposed Project Framework for Kenya



Concept of Two Tier Special Purpose Vehicle (SPV)

- Development Program through setting up of two different SPV
 - Project Development SPV
 - Implementation SPV
- To dedicate staff and finances without any diversion of resources to other activities initially for Project Development and subsequently for implementation
- Implementation SPV to have focused monitoring of implementation
- Dedicated financial resources - monitoring through escrow account

Project Development SPV

- Promoted by Government and Private Sector Participant
- Main Objectives
 - Identification of Projects to be taken up on priority
 - Monitoring of DPR/Feasibility Study and Finalization of the Construction Cost with the Technical Committee
 - Selection of Construction Contractor through a transparent bidding procedure based on DPR/Feasibility Study
 - Approval of selection process of the contractor by Technical Committee and the Board
 - Recommend to the Government to authorize the implementation of each project/package through a Concession Agreement
 - Be eligible to receive reimbursement of expenses incurred by it on each project from the Implementation SPV

Implementation SPV

- Promoted by PSP
- Appointment of Independent Engineer to monitor the work during concession period
- Implementation SPV shall be authorized to undertake the Construction of the project through selected EPC Contractor and Maintenance of the identified packages by PSP
- Concession Agreement to finance, construction and maintenance of the project with Government
- Construction Contract with Contractor for construction of particular Project
- Receive semi Annuity / Annuity Payment from Government till end of Concession Period with penalty provision to non adherence to prescribed maintenance standards

Benefits of Dedicated SPV

- By creating Project Development SPV
 - determination of the Cost of Construction
 - relief from the liabilities for Government in the implementation and financing
- Project Development SPV facilitates Government
 - to develop new projects through Project Development SPV
 - to focus on development rather than being burdened with implementation and maintenance
- To off load construction, price, quantity and interest rate risks on to the implementation SPV
- Cost Overrun Risk to be borne by Implementation SPV
- Relieve Government from infusing the additional equity in case of Cost Overrun
- The total equity infusion by Government shall be limited in Project Development SPV

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- Leveraging equity infusion from Government by participating in Project Development SPV
- Revolving cycle of Project Development expenditure - reimbursement from implementation SPV and reinvesting for development of new Projects.
- No new equity infusion in Project Development SPV for development of new Project

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- Avoid liabilities to the Government due to various covenants imposed by lenders
 - undertakings towards non disposal of shares
 - Cost overrun during construction and maintenance
 - guarantees on paying interest and principal on time
 - top up if termination payments are insufficient
- Non-participation in implementation SPV relieves Government from equity commitments for a long period.
- Penalties under in the event of default will pass on to Government (in case Government remains in implementation SPV)
- Government can continue to play an active role as a Concession Grantor without taking equity stake and utilize effective regulatory mechanism through Independent Engineer (IE)

Project Development Steps

Step	Activity
1	Invitation of Expression of Interest (EOI) to Identify the Private Sector Partner (PSP) and Selection of PSP
2	Signing of PDA with PSP
3	Formation of Project Development SPV
4	Formation of Technical Committee
5	Preparation of DPR / Feasibility Study (FS) for Identified Projects
6	Monitoring and approval of DPR / FS by Technical Committee
7	Undertake Competitive Bidding Process for selection of Contractor as per approved DPR/FS
8	Approval of Contract Price and EPC Contractor by Technical Committee
9	Formation of Implementation SPV
10	Signing of Concession Agreement between Government and Implementation SPV
11	Signing of EPC Contract between Implementation SPV and Contractor
12	DPR / FS cost reimbursement by Implementation SPV to Project Development SPV
13	Construction Completion by Contractors and start of O&M Period
14	Annuity Payment by Government to Implementation SPV till end of Concession Period
15	Transfer of Project to Government at the end of Concession Period

Bid Parameter

- The fixed semi-annuity quoted by the PSP as a percentage of Total Project Cost
 - Total Project Cost = $((100+Z)/100) \times \text{EPC cost}$, Z is the premium required to cover for the Interest During Construction, Project Development, Insurance, financing and other costs (to be defined up front as part of the bid document)
 - EPC Cost is as ascertained through a transparent bidding process which will be monitored by the technical committee (comprising of government and PSP) and the board of the Project development SPV

Thank You