



Global Compact
Network India



Vision360
Management Consulting



Public Private Partnership Framework For Infrastructure Sector



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Preface



Over the last few years Public Private Partnership (PPP) projects have seen a sharp rise in India as Govt. of India has started recognizing PPP as an effective & efficient strategy for meeting ever-growing demand for better infrastructure across the country, while keeping the exchequer's investment in such projects on the lower side. Govt. of India has introduced various initiatives such as establishment of *Public Private Partnership Appraisal Committee (PPPAC)*, an *Infrastructure Project Development Fund*, and *Viability Gap Fund* to provide financial support for various PPP projects that are being planned & executed across the country.

Lack of clarity in various components of PPP projects as well as lack of well-defined processes have created substantial huddle in selecting suitable project to be executed under the PPP mode, their procurement process & the implementation of PPP projects. There is significant confusion in place in absence of provisions such as PPP dispute resolution bill etc.

This document has been developed by **VMC Management Consulting Pvt. Ltd.** subsequent to the larger framework released earlier, as a Knowledge Partner for **UN Global Compact Network, India** for smart cities for specific purpose of creating a support system for **Pune Smart City (PSCDCL)** for fulfillment of requirements thus defined under the MoU signed between UN GCNI & PSCDCL.

This document can be used while implementing PPP projects in the Infrastructure sector. It has been developed with an intent to provide a transparent and balanced business environment to avoid any process and procedure related roadblocks while implementing prospective PPP projects. For further details of each process, you may choose to refer to the detailed framework.

We hope you find this framework a useful tool in itself. This is a broad framework and a much detailed and customized toolkit can be developed for any specific project as the need may be.

A handwritten signature in black ink, appearing to read 'Ranjan' with a stylized flourish underneath.

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Foreword



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Purpose Statement:

1. Public Private Partnership (PPP) is well established and fairly old concept in Europe & other part of the world but as far as India is concerned, it has started developing Infrastructure project via PPP mode in last 10-15 years only.
2. Most of the projects have been delayed by one or another reason in different phases of project lifecycle.
3. As per the Smart Cities initiative (by Govt. of India), infrastructure has been one of the major thrust areas in all the major cities in India.
4. PPP framework for Infrastructure sector is being developed so Govt. entity & Private partner would work as per various processes indicated in framework without any ambiguity.
5. This also adheres to guidelines thus prescribed by Govt of India.
6. The previously released PPP framework is very large and detailed. This document aims to demystify various phases involved in PPP project lifecycle. For further clarification and various formats, you may refer the detailed framework.
7. This document summarizes the every chapter in form of activity, output & who will perform the activity.
8. Some of the chapters & pointers have guidelines to be followed by Govt. Entity & Private entity.
9. It summarizes various processes in pointer form so understand what will be steps for the process.



1 Introduction to Public Private Partnership (PPP)

1.1 Definition of PPP

Public Private Partnership means an arrangement between a government / statutory entity / government owned entity on one side and a private sector entity on the other, for the provision of public assets and/or public services, through investments being made and/or management being undertaken by the private sector entity, for a specified period of time, where there is well defined allocation of risk between the private sector and the public entity and the private entity receives performance linked payments that conform (or are benchmarked) to specified and pre-determined performance standards, measurable by the public entity or its representative.

Essential conditions in the definition are as under:

Arrangement with private sector entity: The asset and/or service under the contractual arrangement will be provided by the Private Sector entity to the users. An entity that has a majority non-governmental ownership, i.e., 51 percent or more, is construed as a Private Sector entity.

Public asset or service for public benefit: The facilities/ services being provided are traditionally provided by the Government, as a sovereign function, to the people. To better reflect this intent, two key concepts are elaborated below:

- (a) **Public Services** are those services that the State is obligated to provide to its citizens or where the State has traditionally provided the services to its citizens.
- (b) **Public Asset** is that asset the use of which is inextricably linked to the delivery of a Public Service, or, those assets that utilize or integrate sovereign assets to deliver Public Services. Ownership by Government need not necessarily imply that it is a PPP.

Various Modes of PPP are:

1. Build operate transfer (BOT)
2. Design build finance operate transfer (DBFOT)
3. Build lease transfer (BLT)
4. Operate maintain transfer (OMT)



1.2 Key stakeholders of PPP Project

- Public Entity
- Private Partner
- Concessionaire
- Special Purpose vehicle (SPV)
- Transaction Advisors
- Lead bank / lender
- Lead Financial Institution
- Independent Engineer
- Users

1.3 Objectives of PPP in Infrastructure Sector is to (Chapter 2.1.1 in main framework document)

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

PPP Makes this possible because:

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

1.4 Why use PPP (benefits of PPP) (Chapter 2.2 in main framework document)

- Mobilizing additional funding for infrastructure
- Providing better value for money
- Ensuring transparency
- Reducing construction time & cost
- Improving service delivery
- Ensuring regular maintenance

Chapter	Details	Stakeholders Involved
2	Project Identification	Public Entity; Users; Consultant; Lead bank
3	Feasibility Study & PPP Due diligence	Public Entity; Users; Consultant; Financial institution
4	Procurement, Final Approval & Award	Public Entity, Private Entity; Consultant
5	Contract Management & Monitoring	Public Entity, Private Entity; Consultant; Independent Engineer
5	Exit Strategy	Public Entity, Private Entity; Independent Auditor; Users



Framework Processes

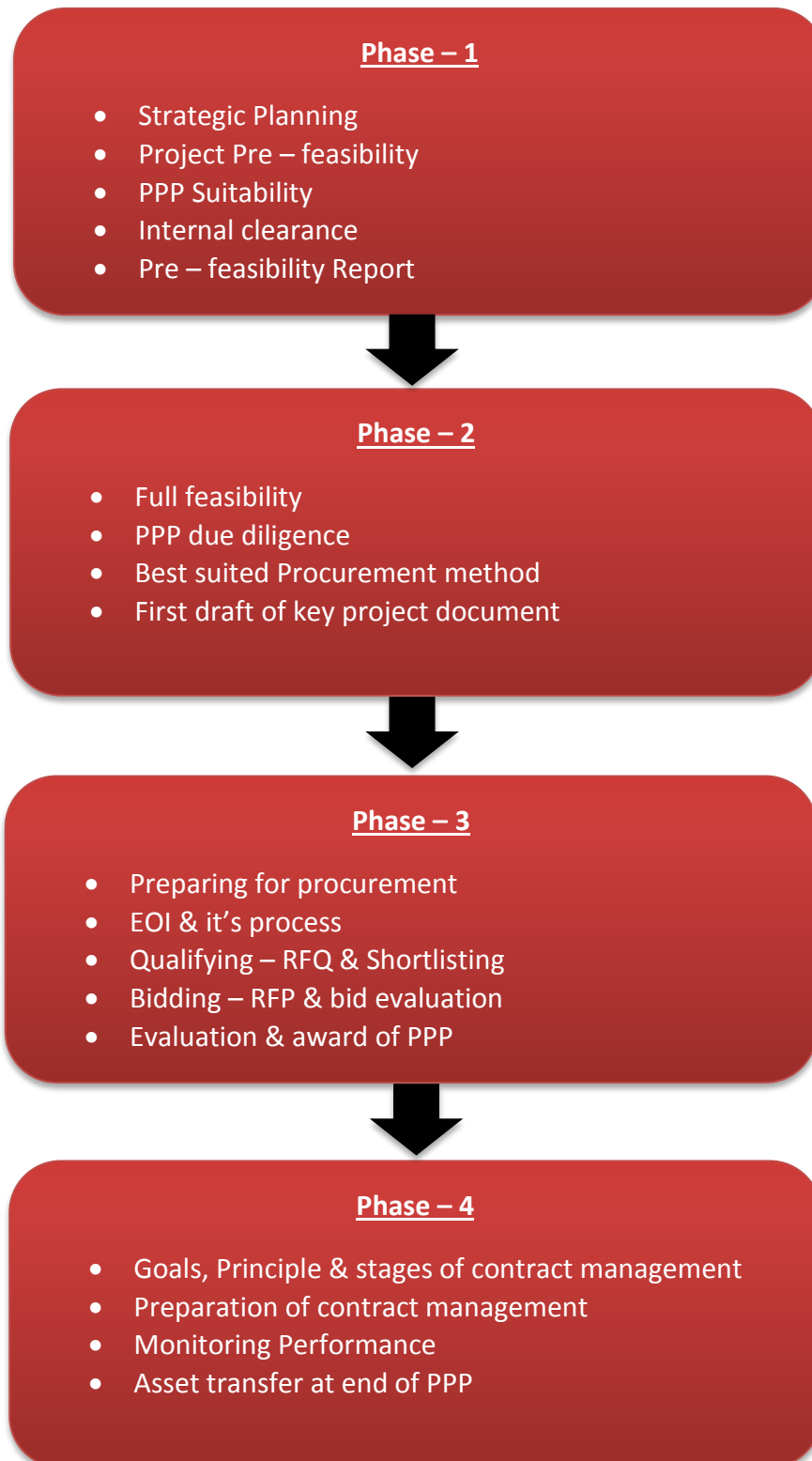


Figure No. 1 -PPP Framework : Decision Making Process

2 Phase 1 – Project Identification *(Ref: Chapter 6 Detailed Framework)*

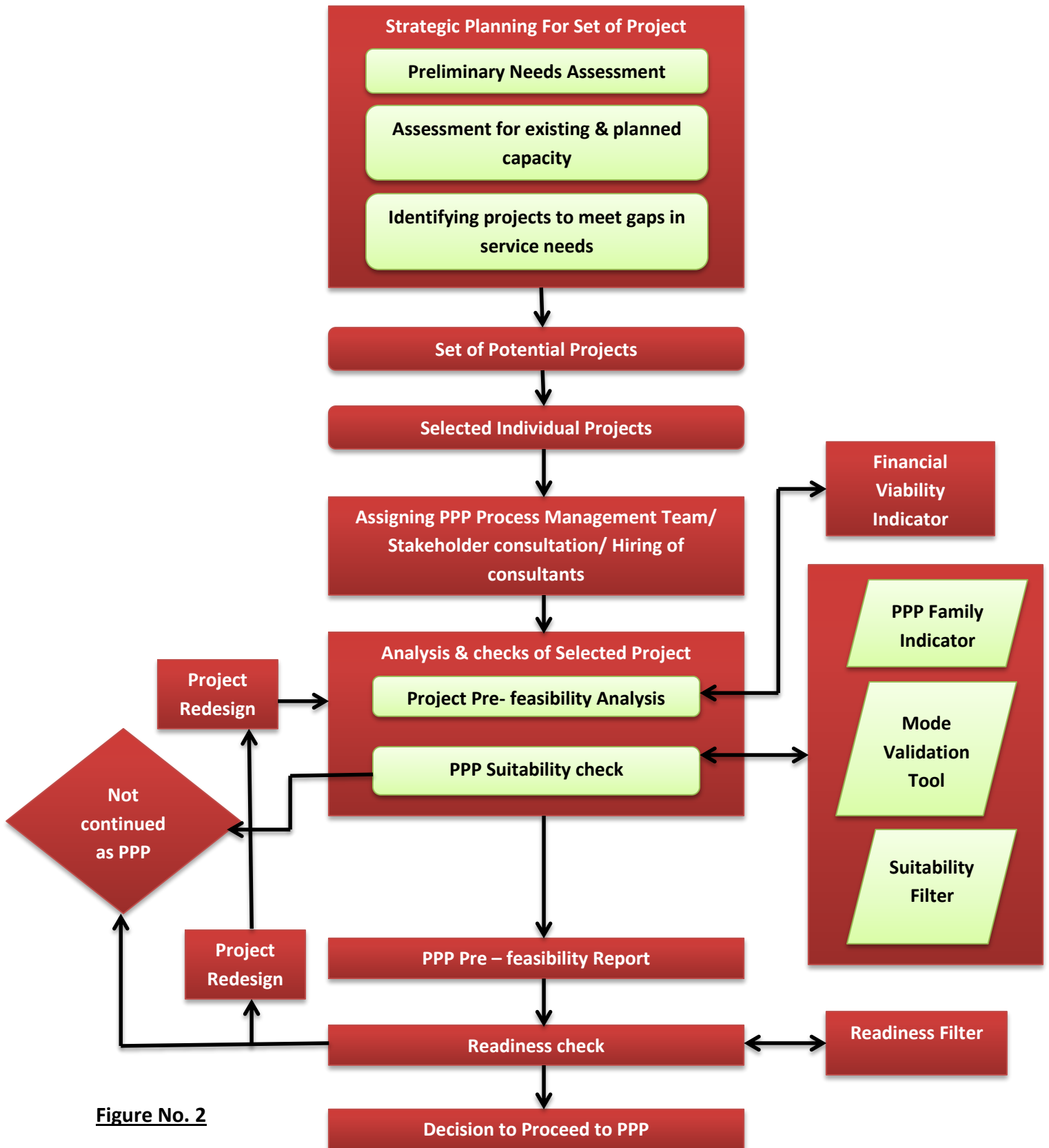


Figure No. 2

Project Identification

- Project identification is the first stage of a project life cycle and precedes project preparation and procurement stages.
- It is a crucial stage in which the public entity seeks to identify the needs of the community for provision of public services along with its quantum, duration and the best procurement approach to fulfilling those needs.
- The process of project identification typically has two parts: one is the Conceptualization of the project along with clarity about what social need it will meet and another is the formation of the team that will manage it.
- In Project Identification stage will help Govt. entity to identify need of end user & modes to execute the project.

- **This stage will cover following stages :**
 - Strategic Planning for Set of Project;
 - Preliminary Need Assessment Study;
 - Assessment of Existing & Planned Service Capability;
 - Identifying Projects to meet Service Needs;
 - Expression of Project Need;
 - Assigning PPP Process Management Team;
 - Activities Post Project identification;
 - Preliminary Analysis & Checks of the Selected Project;
 - Pre - feasibility Analysis

Project Identification Stage Addresses:

- Whether there exists a pressing need for the project?
- Whether all possible service delivery options have been considered for the project?
- What are the benefits of constituting a cell within the department for the project?
- What goes into the pre-feasibility study?
- Why is it advisable to hire advisors and how are they hired?



2.1 Strategic Planning for Project (Chapter 6.1 in framework document)

1. **Activity** – Strategic Planning of Project
 - Identifying infrastructure service needs & planning to meet these needs according to set objectives. Plan will typically relate to a sector or sub – sector but may also cut across sectors.
 - Strategic plan results in formulation of medium or long term expansion, rehabilitation & investment plan
2. **Output** –
 - Infrastructure service needs
 - Plan to meet the infrastructure needs
 - Plan for long term expansion, investment plan
3. **Activity Performed by** - Government Entity
 - Govt. should hire PPP Consultant for Strategic Planning of the project.

2.2 Preliminary Need Assessment Study (Chapter 6.2 in framework document)

1. **Activity** – Preliminary Need Assessment Study
 - Service needs of the end user
 - Total user demand for the services, sources of existing & planned delivery of service
2. **Output** –
 - Service needs of end user defined
 - What will be demand in future as per need of the service
3. **Activity Performed by** – Government Entity
 - This assessment will require detailed primary research.
 - Without this Govt. will not be able to understand the primary need of the end user i.e. common people.
 - When Govt. understands the preliminary need of common man, they can create infrastructure service which will be used at its full potential.



2.3 Assessment of Existing & Planned Service Capability

(Chapter 6.3 in main framework document)

1. **Activity** – Assessment of Existing & Planned Service Capability
 - Service capacity & Service standard of existing asset
 - Condition of existing asset
2. **Output** -
 - Service Capacity of Existing assets
 - Report regarding condition of existing asset
 - Plan for new service infra facility
3. **Activity Performed by** – Government Entity
 - Govt. need to assess what is existing capability of service so it can plan new services accordingly.
 - Govt. should also assess the condition of existing services, major reconstruction required or maintenance, life of infrastructure, technical due diligence etc.
 - Without assessment of existing & planned service capability Govt. will not be able to plan the new infra service which will serve purpose coupled with existing service facility.

2.4 Identifying Projects to meet Service Need

(Chapter 6.4 in main framework document)

1. **Activity** – Identifying Projects to meet Service Need
 - Identification of the need for the project and the options which can address the need
 - Economic analysis of these options to determine whether project is beneficial to society.
 - Assessment results of existing & planned service capability can be used to assess can be used to assess medium or long term strategic infra requirement, it also provide basis for identification of project intervention.
 - Once project identification is done, projects will be prioritised on cost benefit analysis.
2. **Output** –
 - Project identified as per service need
 - Economic Analysis, Strategic infra requirement plan





Figure No. 3 - Identification of Project to meet Service Needs

3. **Activity Performed by** – Government Entity

- This is multistage analysis which will provide exact project suited to need of people.
- It's very important that the project should be identified which will cater to the needs of end user.
- Without proper identification of project analysis, a project which doesn't cater to the needs of the end user (misconceived projects) can be executed; this project will be used by few end users creating issue to govt. & private sector in paying the loan back.

2.5 Expression of Project Need

(Chapter 6.5 in main framework document)

1. **Activity** – Explaining Expression of Project Need

- Projects are conceived on the basis of existing or future need among a cross section of society
- Misconceived projects tend to fail because there was never any real demand for the service or asset in the first place.
- There are two types of needs – improvement on the existing facility & need for new facility which was never there before.

2.6 Assigning PPP Process Management Team

(Chapter 6.6 in main framework document)

1. **Activity** - Assigning PPP Process Management Team
 - Managing PPP development process within Sponsoring Authority from early stages of project.
 - People in team should have experience of PPP & knowledge of finance, legal, planning & technical aspects of proposed project.
2. **Output** -
 - Project Manager, who will handle team of people working on the different areas of project.
 - Technical & financial Consultants will be engaged to carry our pre – feasibility & feasibility study as well as various other activities.
3. **Activity Performed by** – Govt. entity
 - Govt. will have control over various activates carried out for the project
 - Govt. can intervene if some major issues are created in project

2.7 Activities Post Project Identification

(Chapter 6.7 in main framework document)

1. **Activity** – Activities Post Project Identification
 - Stakeholder Consultation
 - Hiring of Consultants
 - Appointing PPP Project Manager & Project Team
 - Preparation of Project Plan
2. **Output** –
 - Stakeholder consultation is done to ensure an inclusive approach to development through adequate information dissemination to user, existing employees, trade unions, other stakeholder
 - Increase transparency & trust among stakeholder in project development activities
 - Consultants for Financial advisory, Transaction advisory, PPP consultants
 - Project team for over project management, engaging advisors
 - Project plan will be detailed plan on how the PPP process will be carried out



3. **Activity Performed by** – Govt. entity

- Project will be more successful if it's going ahead with discussion of all stakeholders.
- It has been observed that if project doesn't have stakeholder approval/ backing project generally gets into trouble
- Consultant appointment so project will have expert advisors from start of the project.
- Project Plan will be major document indicating how progress should be made in the project

2.8 Preliminary Analysis & checks out of the selected project

(Chapter 6.8 in main framework document)

1. **Activity** – Preliminary Analysis & check out of the selected project

- Project pre – feasibility analysis
- PPP Suitability check

2. **Output** –

- Project pre - feasibility analysis - is the project itself feasible?
- PPP Suitability check – is this project suited to being PPP?

3. **Activity will be performed by** – Govt. entity (Consultants appointed)

2.9 Pre – feasibility Analysis

(Chapter 6.9 in main framework document)

1. **Activity** – Pre – feasibility Analysis

- Need & Option Analysis
- Legal feasibility
- Scoping Social & Environmental safeguard analysis
- Preliminary Financial Viability
- Institutional capability analysis
- Identifications of next step required

2. **Output** –

- Need analysis – Existing level of service, desired level of service, benefits that would be provided to user, sponsoring agencies objective.
- Option Analysis – Best delivery option for identified need.



- Technical analysis – Engineering & technical aspect of the project will be studied, management of operational aspect of the project, preliminary assessment of technical & operational risk
 - Financial & Economic viability - Cost recovery/ income generation of the project, overall cost of the project, possible financial risk, economic benefits generated by project
 - Resource required for project preparation process, roles & responsibilities of involved parties, timeframe required for completion of project
3. **Activity Performed by** – Govt. Entity
- Pre – feasibility analysis will be performed by Consultant for the govt. entity. This analysis will be studied by govt. entity.
 - Pre – feasibility study is an important tool to study preliminary financial, economic, operational, legal aspects of the project & determine whether project is viable or not in preliminary stage of the project.
 - Depending upon finding of these projects govt. entity will take decision upon viability of the project & if govt. entity should go ahead with project or not.

2.10 PPP Suitability Check

(Chapter 6.10 in main framework document)

1. **Activity** – PPP Suitability Check
- Assessment of the project as per politics, policies related to project sector & sub sector, laws & regulations, economics & finance, execution of the project
2. **Output** –
- Projects suitability as PPP project.
 - This helps the Project Officer to choose & prioritize project for development of PPP & continuously refine project design so as to increase the likelihood of achieving VfM.
3. **Activity Performed by** – Govt. Entity (Consultant)
- This tool kit assess all political, policies related to sector & sub sector, law & regulation, economics & finance, execution related pointer in analysis.
 - It gives comprehensive idea on whether is project will be suitable in PPP mode or not.



2.11 Suitability Criteria & Drivers of Value

(Chapter 6.11 in main framework document)

1. **Activity** – Information regarding different type of project contracts like PPP, Alliance/ Joint Venture, Construct only.
2. **Output** –
 - Information regarding when to use different kind of contracts & value for money drivers for the project.
 - Some of the value for money drivers for PPP project are long term project, measurable service output, innovation, whole of life costing, market appetite, opportunity for risk transfer, bundling of contracts, non – core services, complementary commercial service

2.12 PPP Family Decision Tree

(Chapter 6.12 in main framework document)

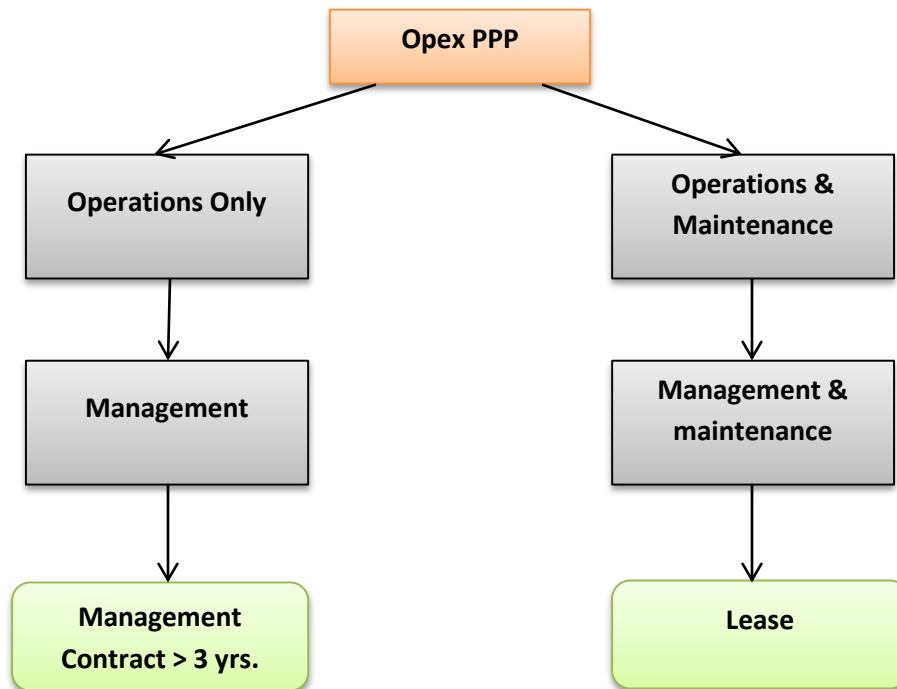


Figure No. 4 – Opex PPP

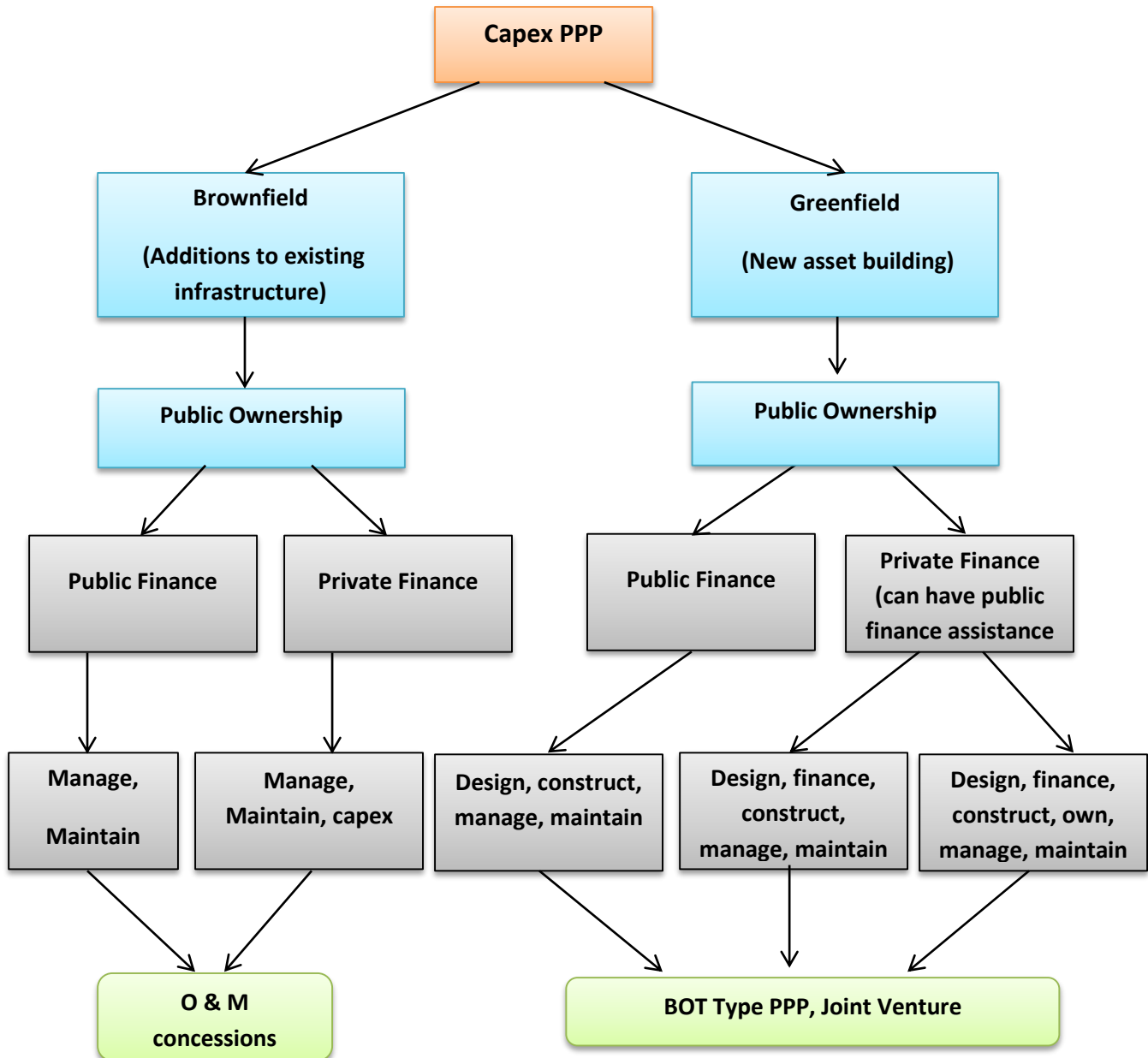


Figure No. 5 – Capex PPP

2.13 Pre – feasibility Report

(Chapter 6.13 in main framework document)

- It contains general scope of project, preliminary cost estimates, identified resettlement, environmental issues & requirements, income generating opportunities, initial financial viability, private sector opportunities, identified project risk, further action required to complete project preparation
- This report will to internal review committee to assess whether project is ready to proceed with further development.

2.14 Readiness Check

(Chapter 6.14 in main framework document)

1. **Activity** – Readiness Check
 - To ensure that only projects that are suited being a PPP are allowed to proceed into PPP
 - To check for & raise flags about risks areas & aspects of the project that needs particular attention during the project development.
2. **Output** –
 - Readiness check will contain five check lists; Project design, need & justification, Project suitability for PPP, initial commercial viability, initial risk management strategy, forward planning
3. **Activity Performed by** – Govt. Entity (Project Officer)



3 Phase 2 – Full Feasibility Study & PPP Due Diligence

(Chapter 7 in main framework document)

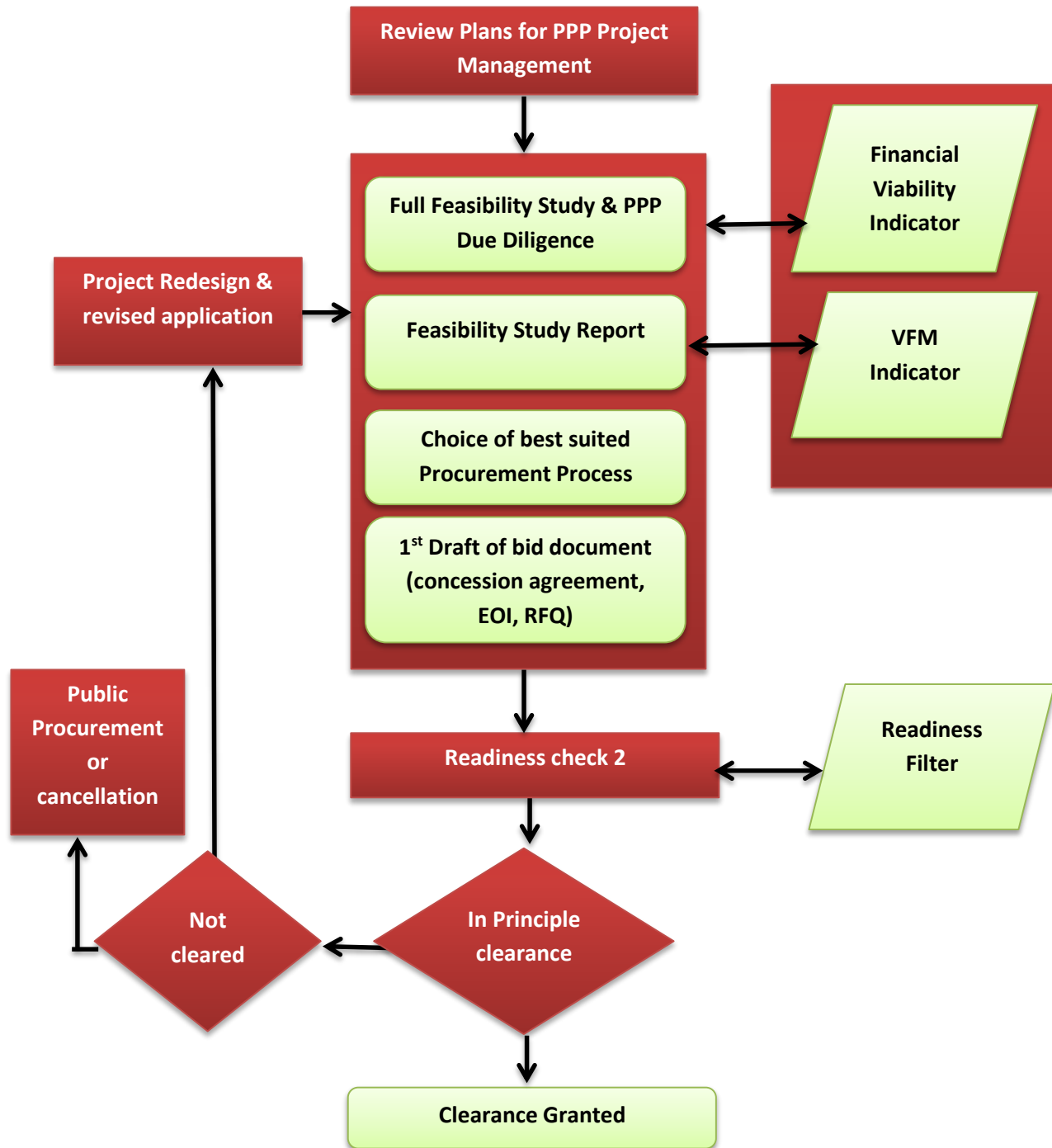


Figure No. 6 - Full Feasibility Study & PPP Due Diligence

Feasibility Study & PPP Due Diligence

- The purpose of the feasibility study is to investigate in detail whether the project is a desirable, viable and achievable investment.
- The 'full' feasibility study will expand on the preliminary scoping in the Pre-Feasibility Report to enable a more thorough assessment of project costs, benefits and risks, and further refine its development as a PPP.
- The feasibility study will assess and describe the technical, social, environmental, legal, financial and economic and risk characteristics of the project and produce a project implementation schedule. It will also specify the particular PPP mode for the project.
- A more comprehensive analysis is required for capex projects, in which design, planning and construction are major components.
- The FSR will provide crucial information for the drafting of key project documents, including the RFP.
- It will also help with the evaluation of bids if the project continues to the PPP procurement phase. The aim at that stage is to help the public sector sponsor to negotiate and sign a PPP contract with confidence.

- **Feasibility Study will cover following :**
 - Market Analysis & Project Scope;
 - Need Analysis;
 - Options Analysis;
 - Technical Feasibility;
 - Risk Studies & Redefined PPP Mode;
 - Financial Feasibility (Viability) & PPP Due Diligence;
 - Economic Feasibility;
 - Value for Money (VfM)
- Feasibility Study is the most important part of project. Many projects have stopped due to feasibility study was never done for the project or wrong assumptions were made for study.
- Its Govt. entities & appointed consultant responsibility to do feasibility study for every project & study the report to understand the viability of project.
- Risk allocation between govt. & private entity in project will see sharing of risk in the project which is beneficial for project.
- Financial viability of project will give idea about revenue & costs component of the project. Also it will give indication of various financing options available for project & implications.
- Value for Money will analyse if project is valuable to society & will it provide value for the money being spent on the project.



3.1 Contents of Full Feasibility Report

(Chapter 7.1 in main framework document)

1. Market Analysis & Project Scope – Need Analysis, Option Analysis, Define the output, estimate & forecast the demand
2. Social & environmental feasibility
3. Technical feasibility
4. Risk studies & redefine PPP mode
5. Preliminary Cost assessment
6. Financial Analysis & due diligence
7. Economic feasibility
8. Value for Money (VfM)
9. Project implementation schedule

3.2 Market Analysis & Project Scope

(Chapter 7.2 in main framework document)

1. **Activity** – Market Analysis
 - Market analysis & demand analysis
 - Market analysis will be done in sector & sub sector of the project
 - Demand analysis for end service provide by the project
2. **Output** –
 - Market analysis – size of the market in country, market potential, demographics, current market trends, market priorities & concern, market segment challenges, market risk vs. reward risk, target customers, advertising channels
 - Demand analysis – end user survey to understand demand of service
3. **Activity Performed by** – Govt. Entity (Consultant)
 - Market & demand analysis is most important report as far as revenue generation from project is concerned.
 - If demand analysis is not done or done improperly, service might have less demand than predicted it will affect revenue generated from service, in effect it will affect financial stability to repay loan.
 - If demand is more than predicted, service facility will not be able to handle more end user.



3.3 Need Analysis

(Chapter 7.3 in main framework document)

1. **Activity** – Need Analysis
 - Identifying outputs & objective of the project which is critical to achieving desired public outcome.
 - Service capacity of existing assets, service standard provided by existing asset
 - Planned delivery of services
2. **Output** –
 - Service delivery is most important aspect of PPP project. What will be the output of the project as per the need of the service is decided.
 - Service capacity of existing assets. Technical study of the asset like life of the asset, maintenance required etc.
 - Need of planned services to end user
3. **Activity performed by** – Govt. entity (Consultant)
 - Need analysis will give clarity about service output of the project.

3.4 Options Analysis

(Chapter 7.4 in main framework document)

1. **Activity** – Options Analysis
 - Identify options to address need of service facility
 - Evaluating the options available – demand & cost projections, lifecycle cost estimation, service delivery model, performance requirements, technical information, permits & approvals, site characteristics & constraints, revenue generating options, suitability/ condition of any relevant existing infrastructure
 - Choosing the best option available from available ones
2. **Output** –
 - List of all options to address service need, merits & demerits of each options
 - Selecting the optimum option which is best suited to the service need
 - There are three options available; existing asset based option, non – asset based option, New asset based option
 - One of the option will be decided as per evaluation of the available options
3. **Activity Performed by** – Govt. Entity (Consultant)
 - Option analysis will give clarity on whether project will be green field or brown field project.



3.5 Social & Environmental Feasibility

(Chapter 7.5 in main framework document)

1. **Activity** – Social & Environmental Feasibility
 - Environmental clearance & Environmental Impact Assessment (EIA)
 - Social Impact Analysis (SIA)/ Social Feasibility

2. **Output** –
 - Environmental impact – predicts & assesses the projects likely positive & negative impact in quantitative term
 - Mitigation, monitoring & institutional measures to be taken during construction & operation to eliminate adverse impact
 - Report on alternative project site, technology, design & operation (Analysis of alternatives)
 - Social Impact –

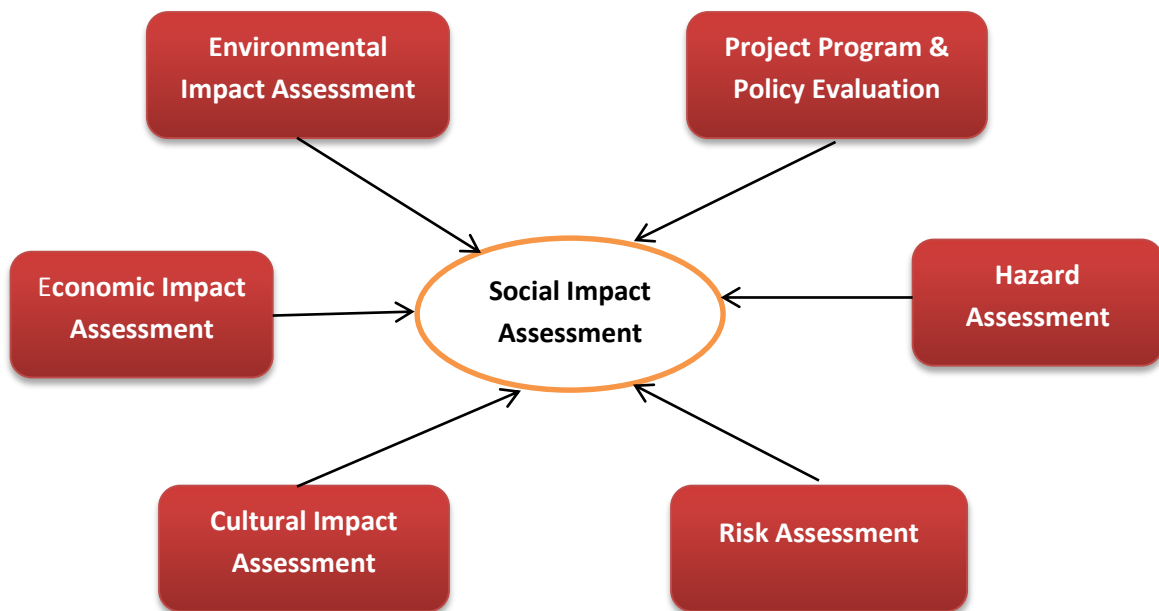


Figure No. 7 – Social Impact assessment in relation to other assessments

3. **Activity Performed by** – Govt. Entity (Consultant)

3.6 Technical Feasibility

(Chapter 7.6 in main framework document)

1. **Activity** –

- Field survey of project site
- Analysis of environmental conditions that impact technical design
- Preliminary technical design

2. **Output** –

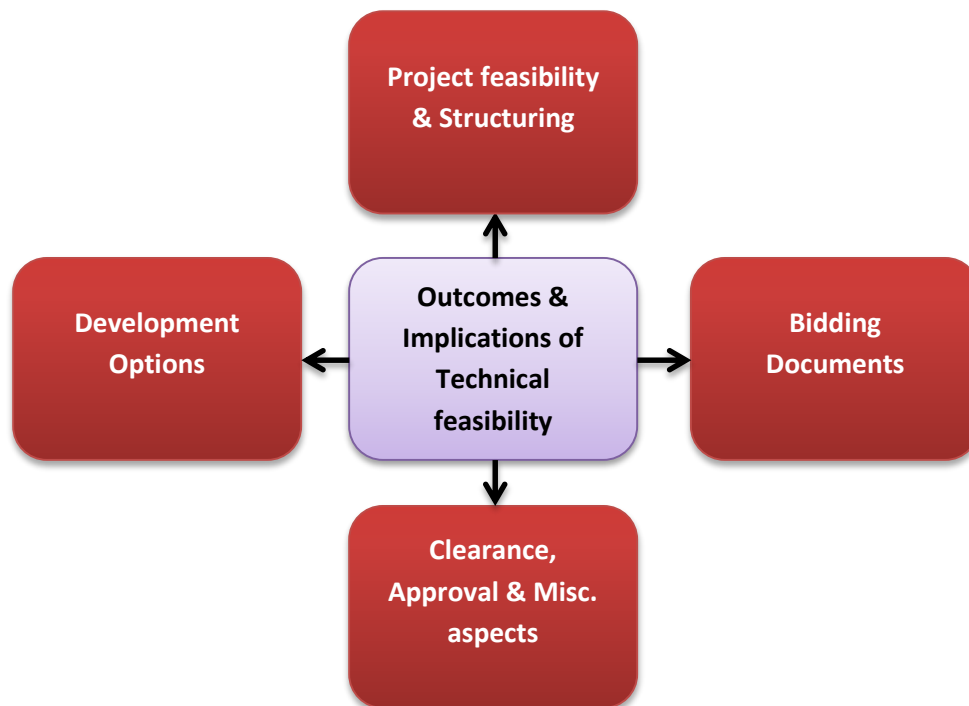


Figure No. 8 – Outcomes of Technical Feasibility

3. **Activity Performed by** – Govt. Entity (Consultant)

- Technical feasibility will serve as input to many different analysis
- Various engineering/ design options & optimum options
- Cost associated & serviced expected from engineering & design options
- Effect of each option on environment & society
- Extent of public entity's involvement in land acquisition & associated infrastructure creation

3.7 Risk Studies & Redefined PPP Mode

(Chapter 7.7 in main framework document)

1. Activity –

- Goals of risk assessment
- Framework for Risk Assessment (Risk assessment steps)

2. Output –

- Goals of risk assessment – realistic risk valuation as part of financial feasibility & VfM assessment; effective risk management measures & strategies; efficient & realistic risk allocation to be used structuring contract
- Framework for Risk Assessment

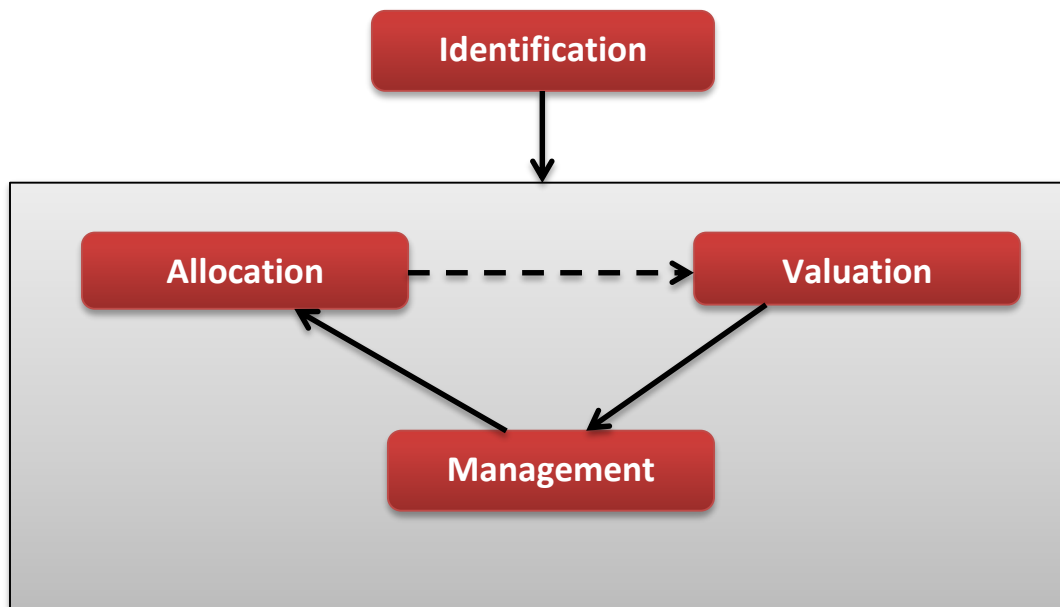


Figure No. 9 – Stages in Risk Assessment

Sample Risk Analysis Guidance Chart

			Cost Consequence				
			> 25 %	10% to 25%	3% to 10%	1% to 3%	< 1%
Scale			5	4	3	2	1
Probability	> 70%	5	Very High	High	High	Medium	Low
	40% to 70%	4	High	High	Medium	Medium	Low
	20% to 40%	3	High	Medium	Medium	Low	Low
	5% to 20%	2	Medium	Medium	Low	Low	Low
	0% to 5%	1	Low	Low	Low	Low	Very Low

Typical Risks in Infrastructure Project

Risk Type	Description
Pre-Operative Risks	
Delays in Land Acquisition	Refers to the risk that the project site (or sites) 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 overall pace of development of the project.
Financing Risks	Refers to the risk that sufficient finance will not be available for the project at reasonable cost (eg, because of changes in market conditions or credit availability) resulting in delays in the financial closure for 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 outcomes that were planned or expected in the PPP project development.
Construction Phase Risks	
Design Risks	Refers to the risk that the proposed design will be unable to 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, on budget or to specification. It may lead to additional raw materials and labour costs, additional financing costs, increase in the cost of maintaining existing infrastructure or providing a temporary alternative solution due to a delay in the provision of the service.
Approvals Risks	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.
Operational Phase Risks	
Operations & 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.
Tariff Risk	Refers to the risk that demand for a service will vary from the initial forecast, such that the total revenue derived from the project over the project life will vary from initial expectations.
Payment Risk	Refers to the risk that fees for services are not collected in full or are not set at a level that allows recovery of costs.
Financial Risk	Refers to the risk that the concessionaire introduces too much financial stress on a project by using an inappropriate financial structure. It can result in additional funding costs for increased margins or unexpected refinancing costs.
Non Operations Revenue Risk	Refers to the revenue risk related to real estate or other similar business operations that are associated with the project. This risk is only relevant to Lease Develop Operate type PPPs, in which real estate development are often an important revenue source for the project.
Handover Risks	
Handover Risk/ Terminal Value	Refers to the risk that the concessionaire will default in the handover of the asset at the end of the project life, or that it will fail to meet the minimum quality standard or



Risk	realizable value of the asset that needs to be handed back to the public entity.
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. These events are sometimes also called "Acts of God", to indicate that they are beyond the control of either contracted party.
Concessionaire risk	Refers to the risk that the concessionaire will prove to be inappropriate or unsuitable for delivery of the project, for example due to failure of their company.
Sponsor Risk	Refers to the risk that the Sponsor 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 concessionaire will not fulfill its contractual obligations and that the public Sponsor will be unable to either enforce those obligations against the concessionaire, or recover some form of compensation or remedy from the concessionaire for any loss sustained by it as a result of the breach.
Govt. event of default	Refers to the risk that the public Sponsor will not fulfill its contractual obligations and that the concessionaire will be unable to either enforce those obligations against the Sponsor, or recover some form of compensation or remedy from the Sponsor for any loss sustained by it as a result of the breach.

3. **Activity Performed by** – Govt. Entity (Consultant)

- Risk assessment is continuous process but comprehensive risk analysis of project is undertaken at least three times
- Initially by govt. as part of project development process; at the time of bidding by perspective bidders; by financial investors, lenders, equity providers before investment
- If risk analysis is comprehensively done as part of project development process, there will be fewer surprises at later stages of project
- Private investors & lenders will have greater confidence in project ensuring quick & efficient financing
- Risk analysis is an iterative process & needs to be carried out at various stages of project development process



3.8 Financial Feasibility (Viability) & PPP Due Diligence

(Chapter 7.8 in main framework document)

1. **Activity** –

- Financial Feasibility
- PPP Due diligence

2. **Output** –

Financing Structure of PPP Project

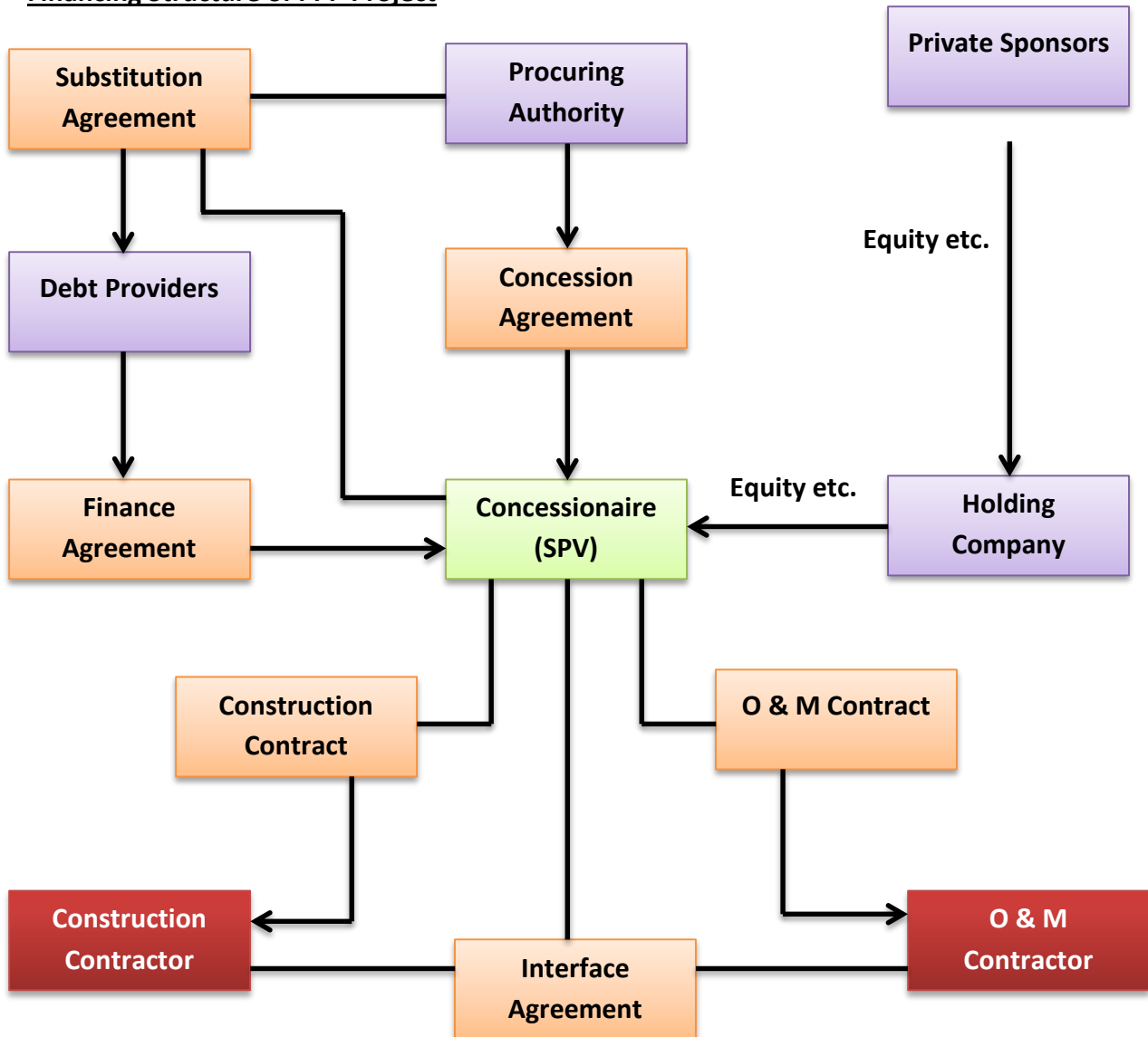
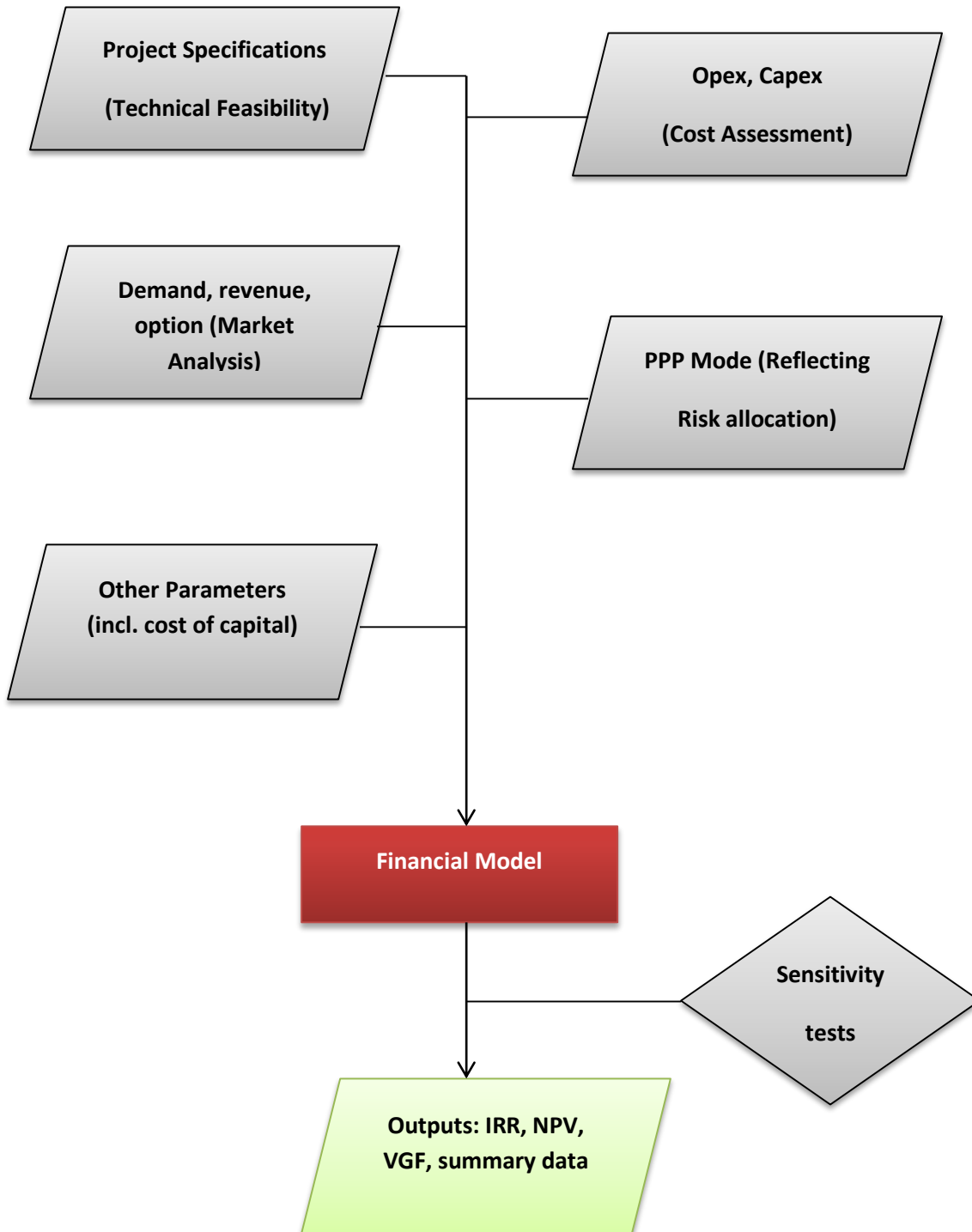
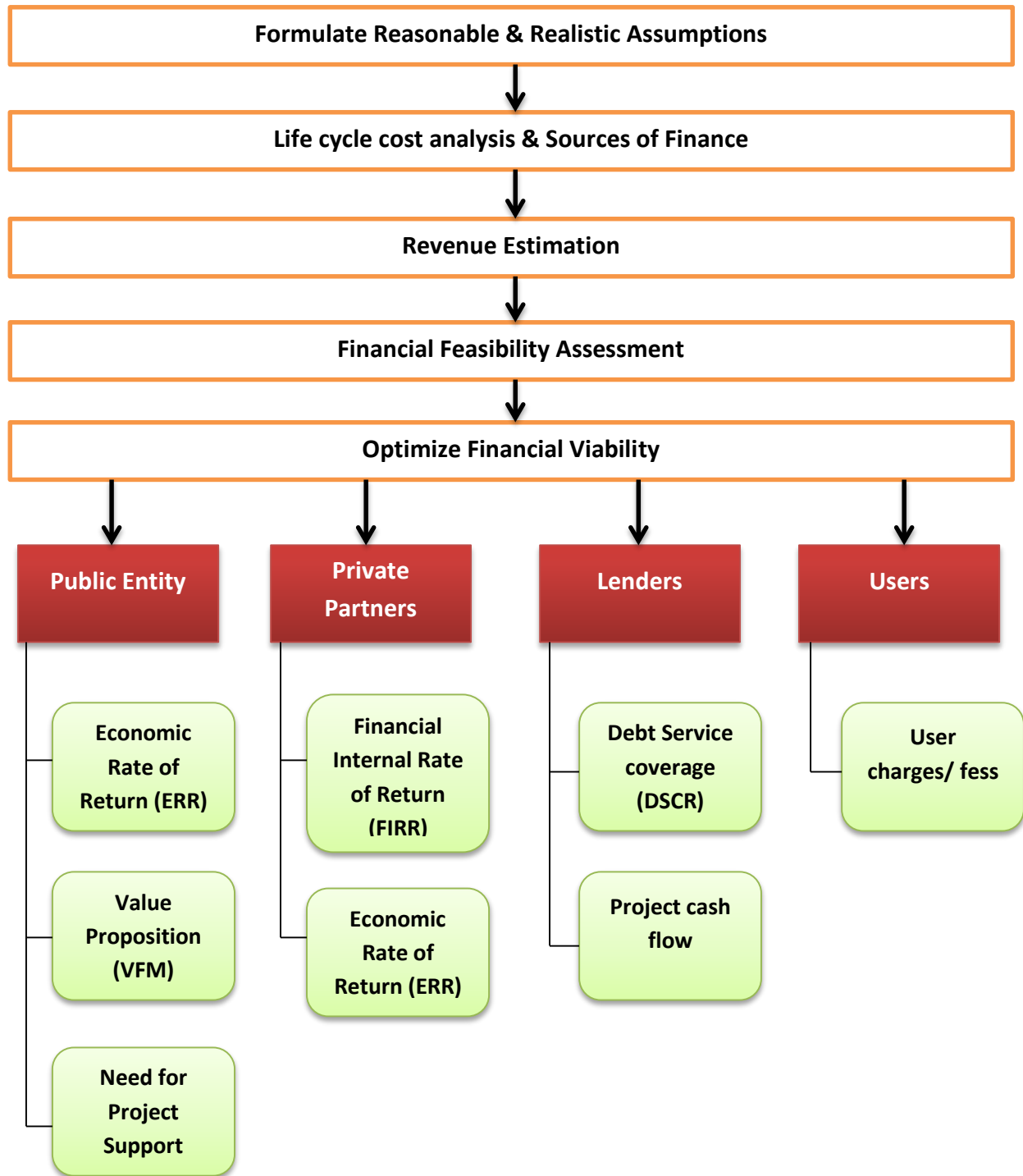


Figure No. 10 – Financing Structure of PPP Project

Typical Structure & Flows in Financial Model**Figure No. 11 – Typical Structure of Financial Model**

Steps Involved in Financial Feasibility**Figure No. 12 – Steps Involved in Financial Feasibility**

Output of Financial Feasibility will contain following information in detail

- Financing Structure
 - Steps involved in Financial feasibility
 - Formulation of reasonable & realistic assumptions
 - Lifecycle Cost Analysis
 - Sources of Finance
 - Innovative means of Finance
 - Credit Enhancement while raising debt finance
 - Equity in PPP Project
 - Cost of Capital
 - Revenue Estimations
 - Financial Viability Assessment
 - Sensitivity & Scenario Analysis
 - Optimise Financial Viability
 - Project Finance Model & Financial Statement
3. **Activity Performed by** – Govt. Entity (Consultant)
- Financial feasibility is most important analysis in PPP project.
 - If financial feasibility of project is not done project should not move forward for execution.
 - Financial feasibility will give clear idea about project cost, revenue estimations &

3.9 Economic Feasibility

(Chapter 7.9 in main framework document)

1. **Activity** –
- Economic Feasibility
 - Economic Performance Indicator
2. **Output** –
- Economic Feasibility – Economic option for every action required, quantification of costs, quantification of benefits like avoid unnecessary cost by taking appropriate action, cost saving, revenue, residual value of asset, benefits to project beneficiaries
 - Quantifiable economic cost & benefits over the project life in net present value. Sensitivity analysis using different assumptions about some or all key variables.



- Economic Performance Indicator with following Economic Net Present Value (ENPV), Economic Rate of Return (ERR), Benefit to cost ration
3. **Action Performed by** – Govt. Entity (Consultant)
- The economic analysis report would ideally need to include the project background justifying the need for the project and its objectives, identifying the economic costs and benefits, and analysing the net economic benefit/cost of the project in terms of economic viability indicators.

3.10 Value for Money (VfM)

(Chapter 3.10 in main framework document)

1. **Activity** – Value for Money (VfM)
2. **Output** -

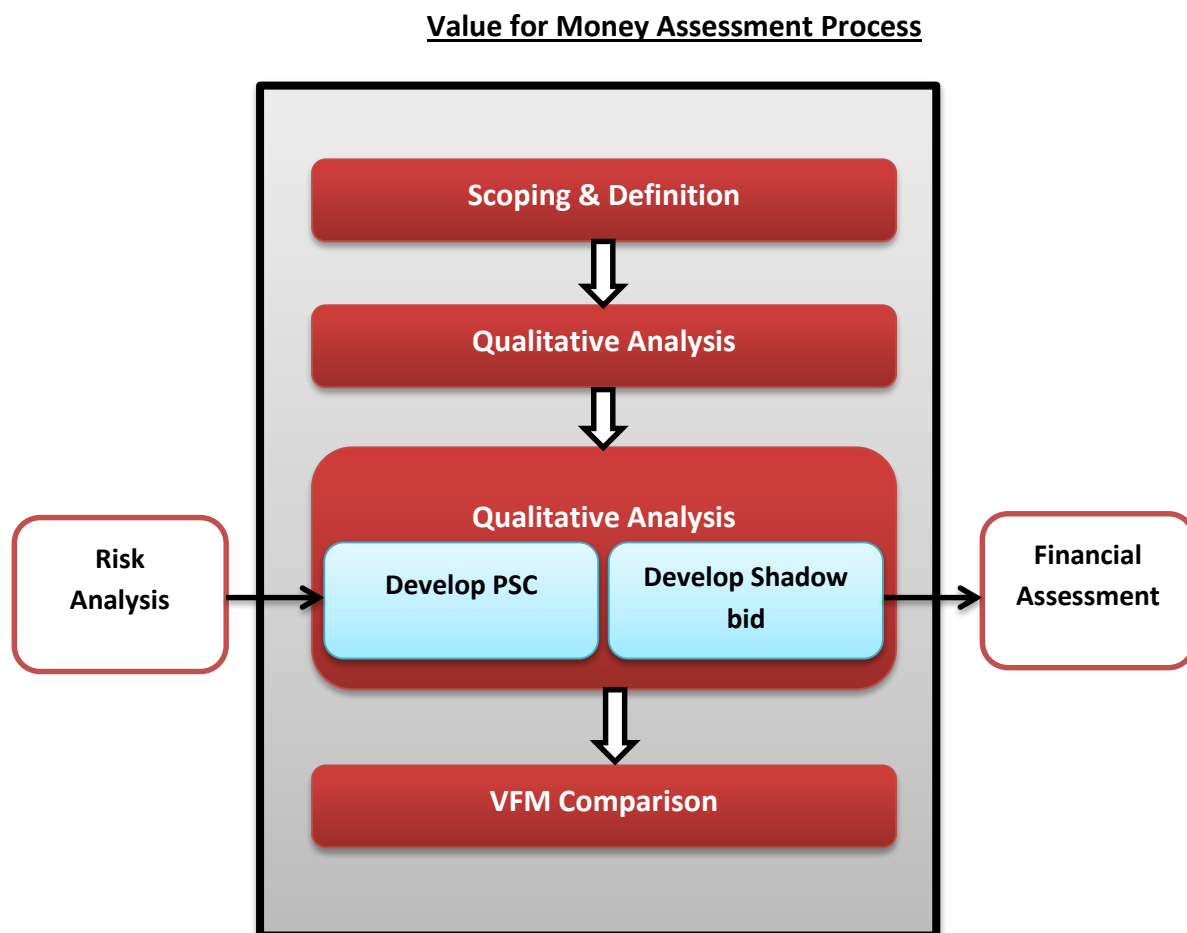


Figure No. 13 – Value for Money

- Scoping & definitions – geographical scope, functional scope, temporal scope
- **Quantitative Analysis**

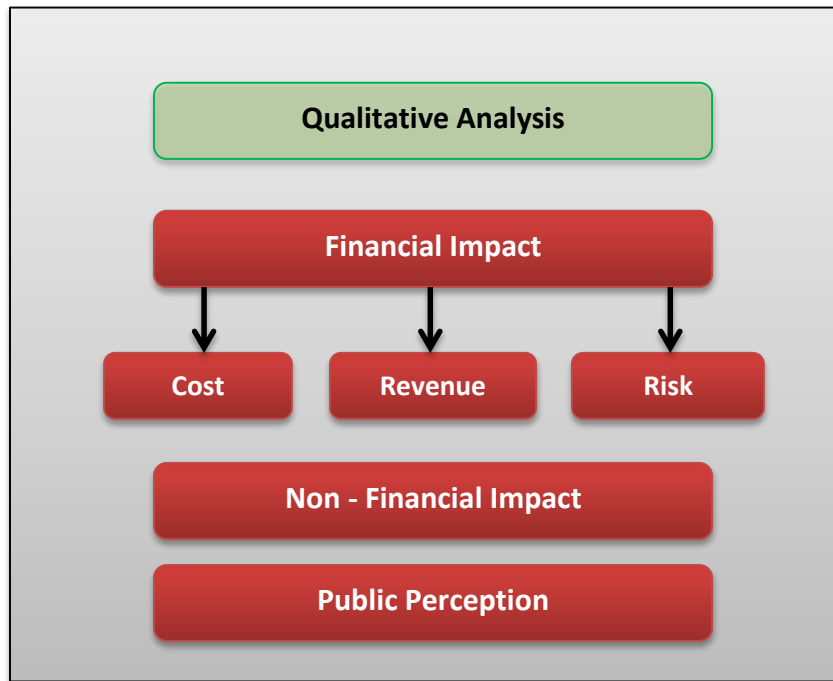


Figure No. 14 – Quantitative Analysis

- Quantitative Analysis - **PSC Cash Flow**

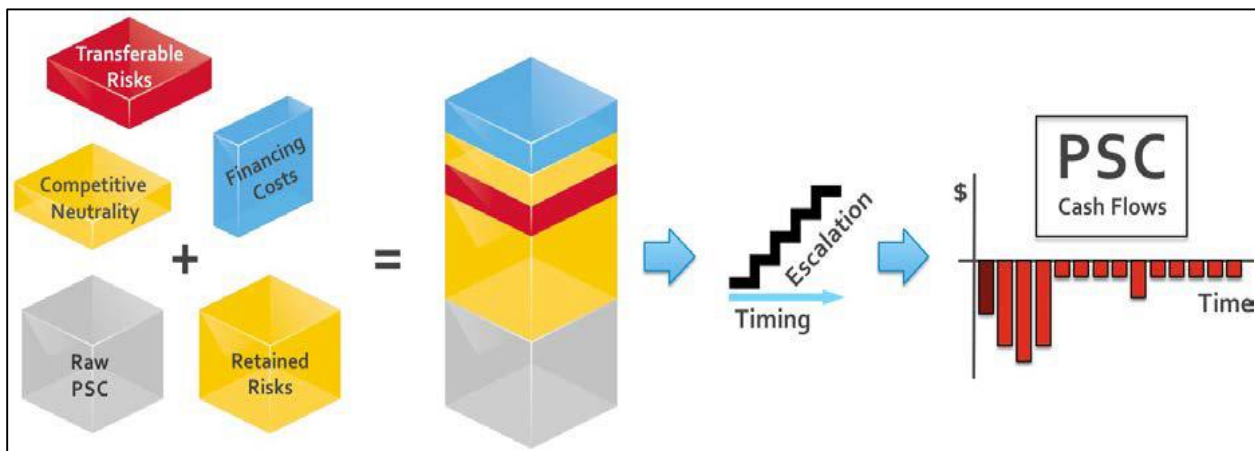


Figure No. 15 – PSC cash flow

Qualitative & Quantitative Impact on Project

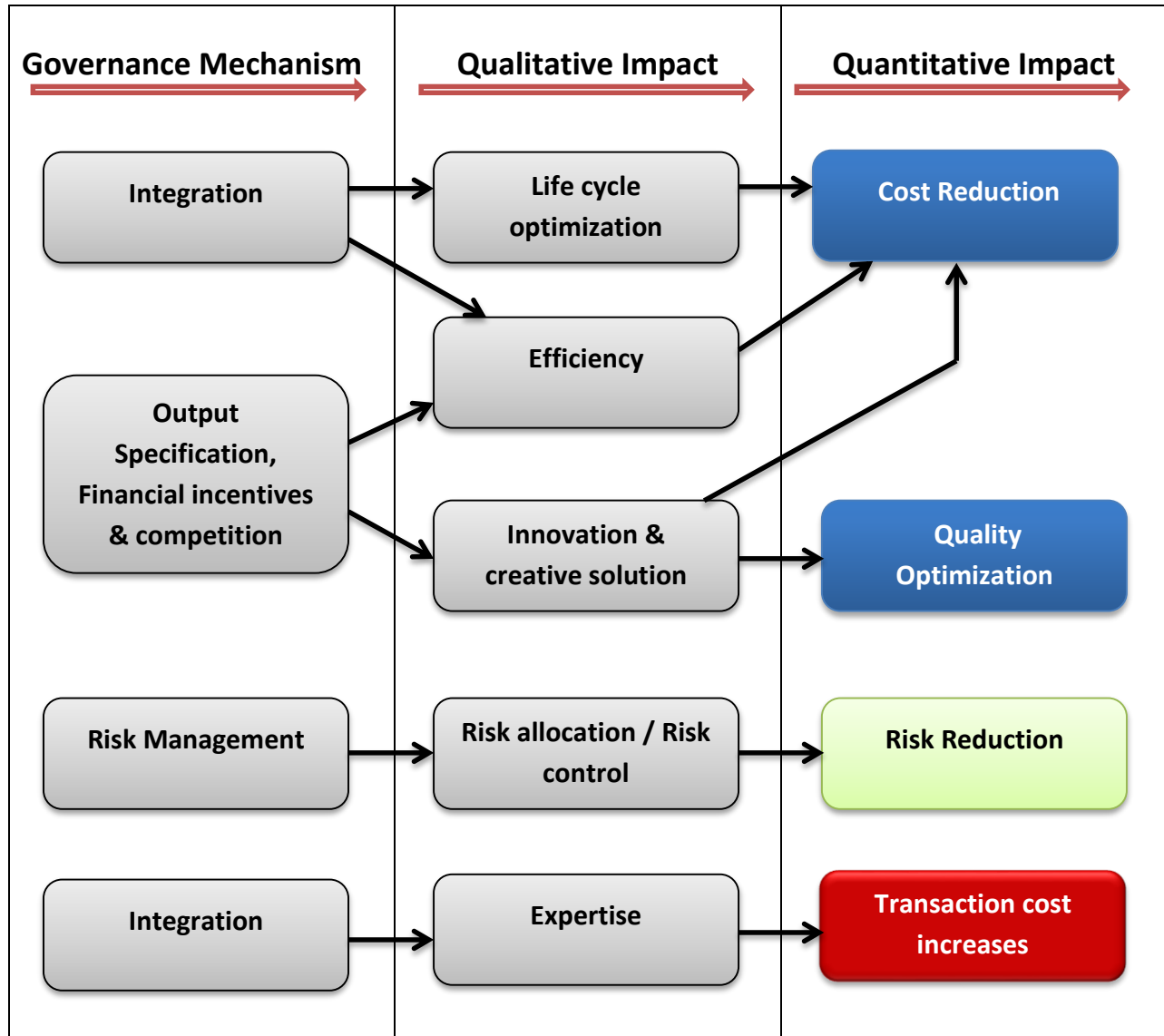


Figure No. 16 – Qualitative & Quantitative Impact on Project

3. **Activity Performed by** – Govt. Entity (Consultant)

3.11 Checklist for Implementation Schedule

(Chapter 7.11 in main framework document)

No.	Information to covered in Implementation Schedule	Included?
1	In – Principle clearance timeline	
1a	First draft of tender document & other key project document	
1b	Application for in – principle clearance for the PPP	
2	Pre – qualification & final document preparation timeline	
2a	Issue RFQ	
2b	Pre – qualification of bidders	
2c	Final draft of tender document & feedback on bid documents from bidder for complex / new sector projects	
3	Application for final approval of PPP	
4	Procurement & Award timeline	
4a	Issue RFP, allowing adequate time to respond to bidder queries	
4b	Evaluation of bids	
4c	Negotiations & awards	
5	Technical & Financial closure timeline	
5a	Detailed technical studies & planning	
5b	Obtaining clearances	
5c	Arranging & finalizing finance	
5d	Concessionaire event of default	
6	Engineering, procurement and construction (EPC) activities and timeline (for projects that involve a capital expenditure component)	
6a	Detailing each major milestone through the EPC process	
7	Post – construction activities	
7a	Such as surveys & commissioning facilities	
8	Expected date for commencement of operations	
9	Major milestones in Operating lifecycle of project	

3.12 First Draft of Key Project Documents

(Chapter 7.1 in main framework document)

RFQ/ EOI should include

Description of Key Project Details including:

- Description of the project scope and objectives, with a focus on the services to be provided including indication of performance levels
- Envisaged PPP mode and financing mechanism
- Payment mechanism (e.g. user charges, government payment, other source, or a combination)
- Project timeframe and indicative schedule



Details of the Procurement including:

- Qualifying criteria for the evaluation and selection of shortlisted bidders
- Process for submission and evaluation
- Details of pre-submission conference or meeting and of other opportunities to ask questions or seek clarifications
- Indicative procurement schedule
- Other general instructions to applicants
- Application forms

Standard Clauses in Concession Agreement include:

- Contract date and key dates in the concession life (including termination)
- Obligations, rights and restrictions on the private partner (concessionaire), including a description of the services to be provided and performance obligations
- Obligations and rights of the public partner
- Mechanisms for payment, including the rights (if any) of the concessionaire to gather direct or indirect revenue from the project
- Rules and procedures for making changes to the scope during the life of the project
- Requirements and procedures for auditing and monitoring performance
- Penalties in case of non-performance
- Step-in and substitution rights
- What happens at the end of the project (termination) including, if appropriate, transferring assets to the public sector
- What happens if the project is terminated early
- Arrangements for dispute resolution
- Other standard clauses such as change in law, force majeure etc.



4 Procurement, Final Approval & Award

(Chapter 8 in main framework document)

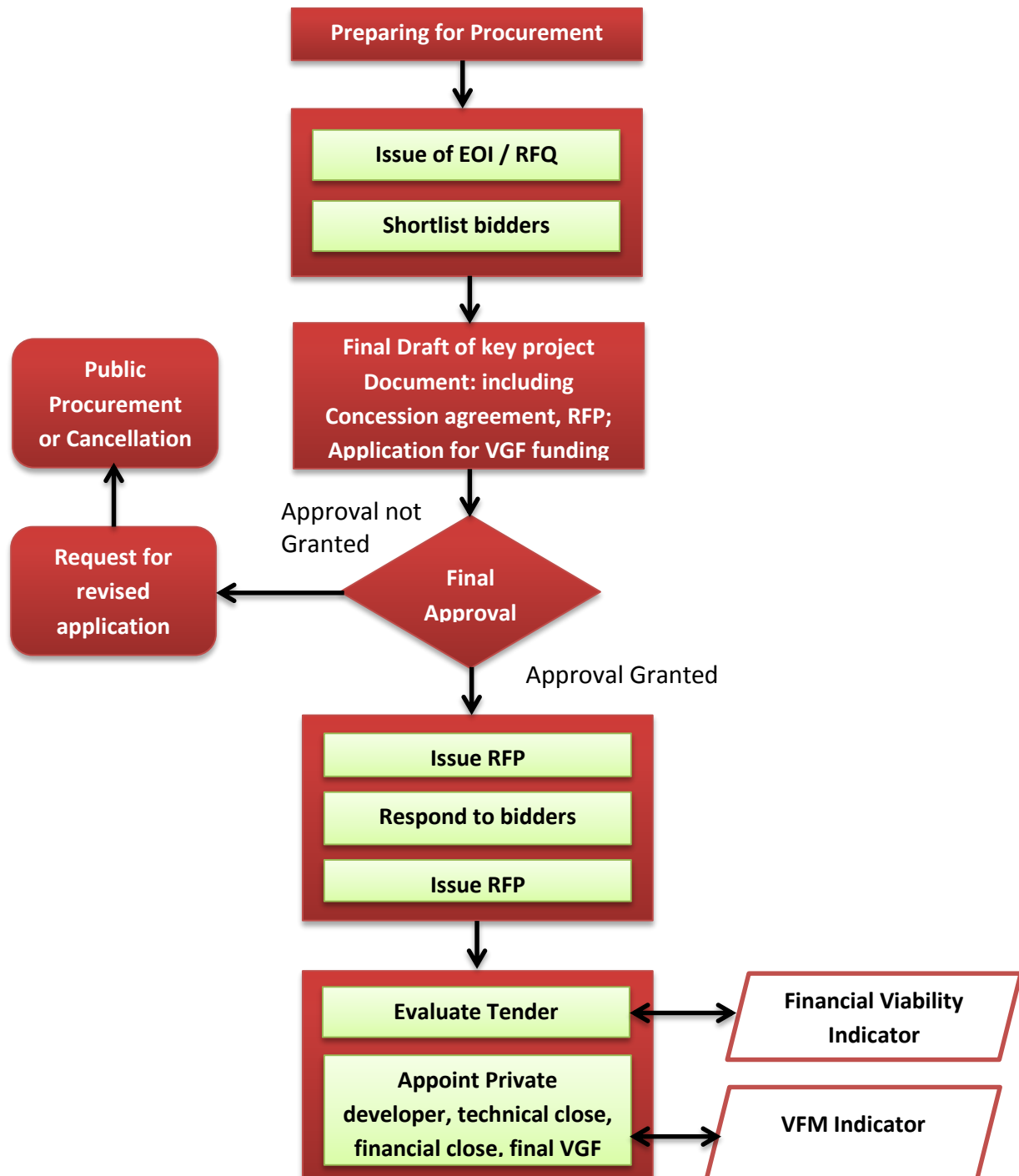


Figure No. 17 - Procurement, Final Approval, Award

Procurement, Final Approval & Award

- Procurement will follow the long & unbiased process in PPP contract.
- Procurement process will be bringing transparency, fairness, enhanced completion & value for money to procuring agency.
- Many projects have seen corruption happening in procurement process but the process laid out in framework will minimise the wrong doing & in some cases it will eliminate.
- Procurement will go through following stages
Preparing for Procurement; Procurement Process; Expression of Interest (EOI); Request for Proposal (RFP); Selection of Proffered bidder
- For evaluation of bids & final approval process is defined which intern will help in choosing preferred bidder in unbiased way.

4.1 Pre – Procurement Activities

(Chapter 8.1 in main framework document)

1. **Activity** – Pre Procurement Activities
2. **Output** –
 - Land Acquisition, Right of Way and Shifting of Utilities
 - Administrative approvals - Permissions from State Government, Cabinet approvals, Permission from GOI, etc.
 - Familiarity with Government Schemes - VGF, IIPDF, etc.
 - Clearances & Permits - From statutory and regulatory Authorities
 - Inter-departmental coordination as per requirement
3. **Activities Performed by** – Govt. Entity & Private entity, depending upon terms & conditions in Concession Agreement
 - If pre procurement activities are not done procurement activities will take much more time to complete.
 - Even if procurement is done, due to delay in activities mentioned in pre procurement activities construction work will not start or get delay.



4.2 Choosing Best Suited Procurement Method

(Chapter 8.2 in main framework document)

1. **Activity** – Choosing best Suited Procurement Method
2. **Output** –
 - Competitive & Unsolicited are major types of Procurement method.
 - Competitive mode of procurement is best suited to PPP project as revealed by many studies done around the world.
 - Procurement method will play decisive role in procurement being corruption free.
3. **Activity Performed by** – Govt. Entity (Consultant)

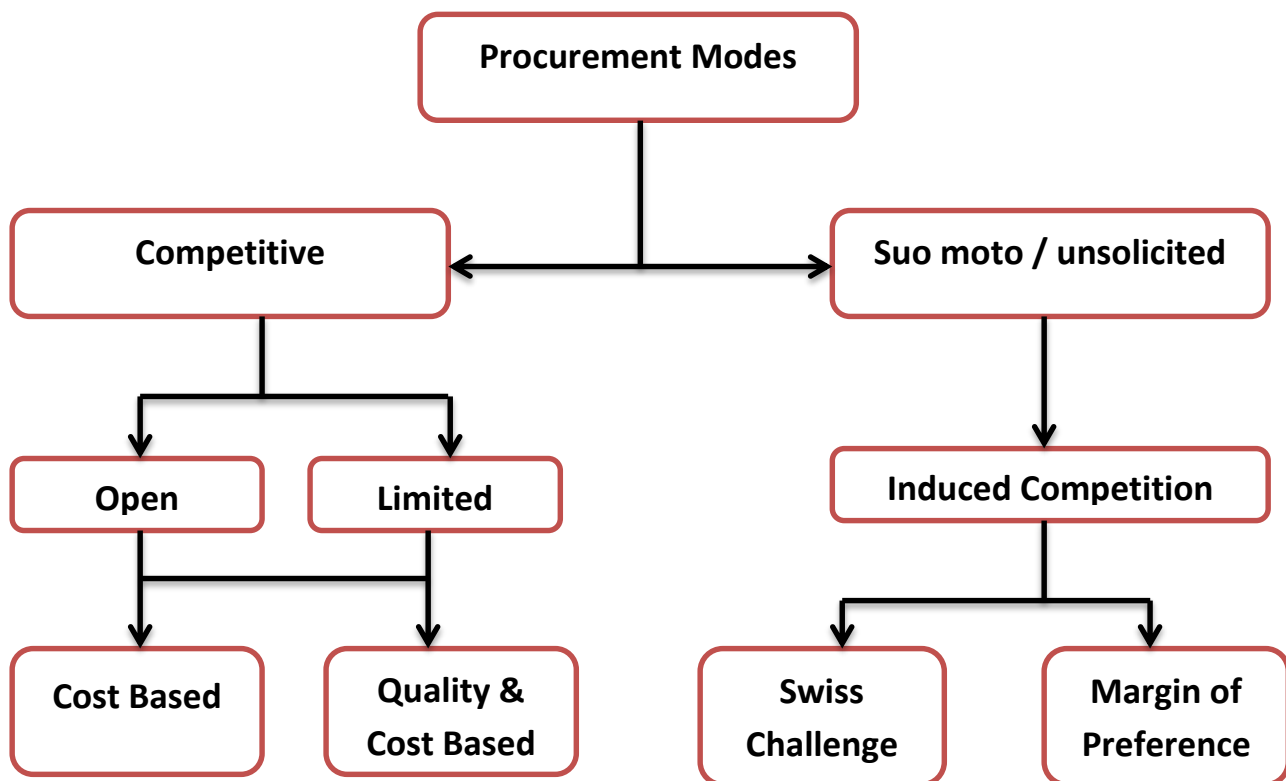


Figure No. 18 - Procurement Strategies

4.3 Design of Procurement Process (Chapter 8.3 in main framework document)

1. **Activity** – Design of Procurement Process
 - Basis for bid evaluation
 - Types of Procurement Process

2. **Output** –
 - Basis for bid evaluation – Quality cum Cost based selection (QCBS); Quality based selection (QBS); Least Cost method (LCM)
 - Single stage process & Multi stage process

3. **Activity Performed by** – Govt. Entity (Consultant)

Factors to Consider when Choosing Procurement Option

Procurement Options	Factors to Consider	
	How well defined is the Project?	How well defined are bidders? How much work will proposal require?
Single Stage : RFP	Project scope is clear Service options have been well-defined	Number of interested bidders is limited Potential bidders are known and identified In this case it is not necessary to identify interested bidders or to reduce their number
Multi-stage option 1: RFQ + RFP (with or without RTP)	Project scope is not clear, extensive discussions are needed to finalize the service option	Potential bidders are known and identified, but Number of interested bidders is large Considerable effort required by bidders to submit proposals In this case RFQ is useful to reduce number of bidders.
Multi-stage option 2: EOI + RFP (with or without RTP)	Project scope is not clear, extensive discussions are needed to finalise the service option	Number of interested bidders likely to be limited, but Potential bidders not yet well known or identified Considerable effort required by bidders to submit proposals In this case EOI is useful to identify interested bidders.
Multi-stage option 3: EOI + RFQ + RFP (with or without RTP)	Project scope is not clear, extensive discussions are needed to finalise the service option	Uncertainty about the level of interest in the project – unknown if interest is limited or large Potential bidders not yet well known or identified Considerable effort required by bidders to submit proposals In this case EOI is useful to identify interested bidders and level of interest; RFQ is useful to reduce the number of bidders if necessary.



4.4 Preparing for Procurement

(Chapter 8.4 in main framework document)

1. **Activity** – Preparing for Procurement
2. **Output** –
 - Forming Procurement & Evaluation team
 - Reviewing & updating project information
 - Appointing an Independent Monitor
3. **Activity Performed by** – Govt. Entity

4.5 Procurement Process

(Chapter 8.5 in main framework document)

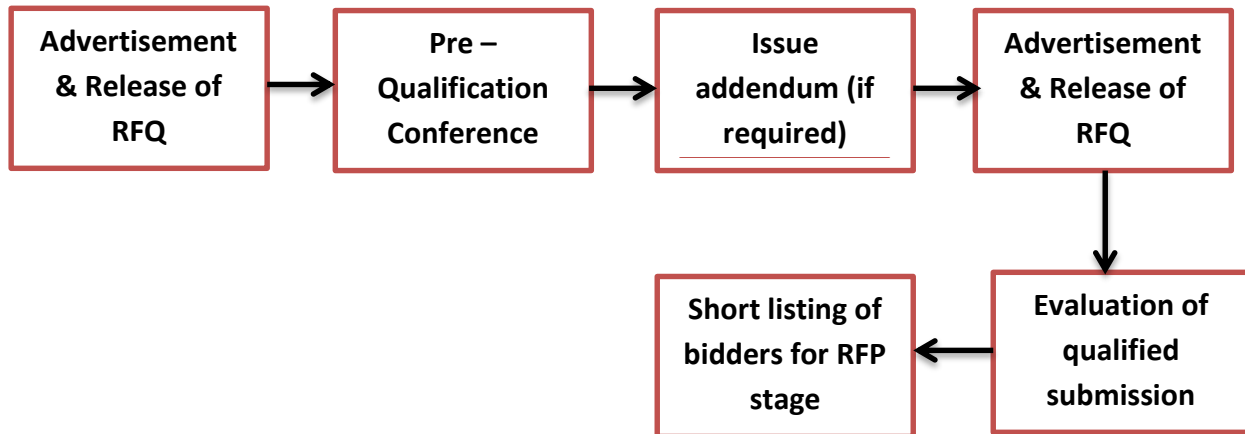
1. **Activity** – Design Procurement Process
2. **Output** –
 - Objectives of Procurement Process
 - Procurement guidelines by Chief Vigilance Commission & other State Govt.
 - Expression of Interest (EOI)
 - Request for Proposal (RFP)
 - Selection of preferred bidder
3. **Activity Performed by** – Govt. Entity

4.6 Expression of Interest (EOI)

(Chapter 8.6 in main framework document)

1. **Activity** – Expression of Interest (EOI)
2. **Output** –
 - Contents of EOI
 - Process for Expression of Interest
 - Request for Qualification (RFQ)
 - Contents of RFQ
 - RFQ Process



Figure No. 19 – RFQ Process

3. **Activity Performed by** – Govt. Entity

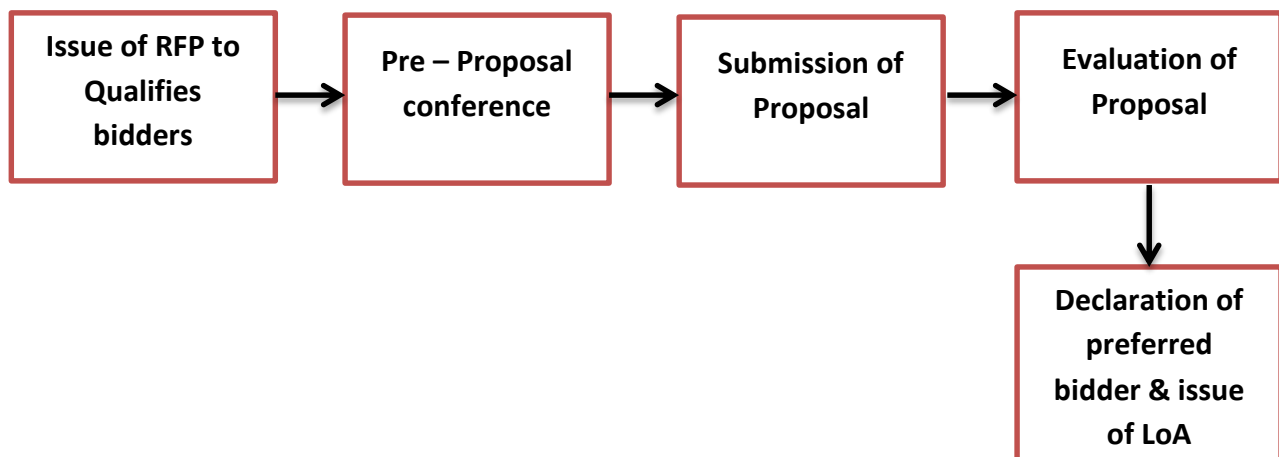
4.7 Request for Proposal (RFP)

(Chapter 8.1 in main framework document)

1. **Activity** – Request for Proposal (RFP)

2. **Output** –

- Process for RFP
- Contents of RFP
- RFP Evaluation phase
- Bid Clarifications & Presentations
- Technical Proposal Stage
- Evaluation report

Figure No. 20 - Process of RFP

3. **Activity Performed by** – Govt. Entity (Consultant)

4.8 Selection of preferred Bidder

(Chapter 8.8 in main framework document)

1. **Activity** – Selection of preferred bidder
2. **Output** –
 - Based on the evaluation process, evaluation panel in consultation with Steering Committee should nominate single preferred bidder as soon as practicable.
 - If a single preferred bidder cannot be identified after the evaluation phase but the Project Steering Committee believes a value for money solution can be achieved, the Project Steering Committee may agree to an alternative approach to resolve a preferred bidder through:
 - Short listing two bidders & undertaking best & final offer (BAFO)
 - Short listing two bidders & undertaking a structured negotiations process where a greater level of interaction will be required to address issue.
 - Government approval
3. **Activity Performed by** – Govt. Entity



5 Contract Management & Monitoring

(Chapter 9 in main framework document)

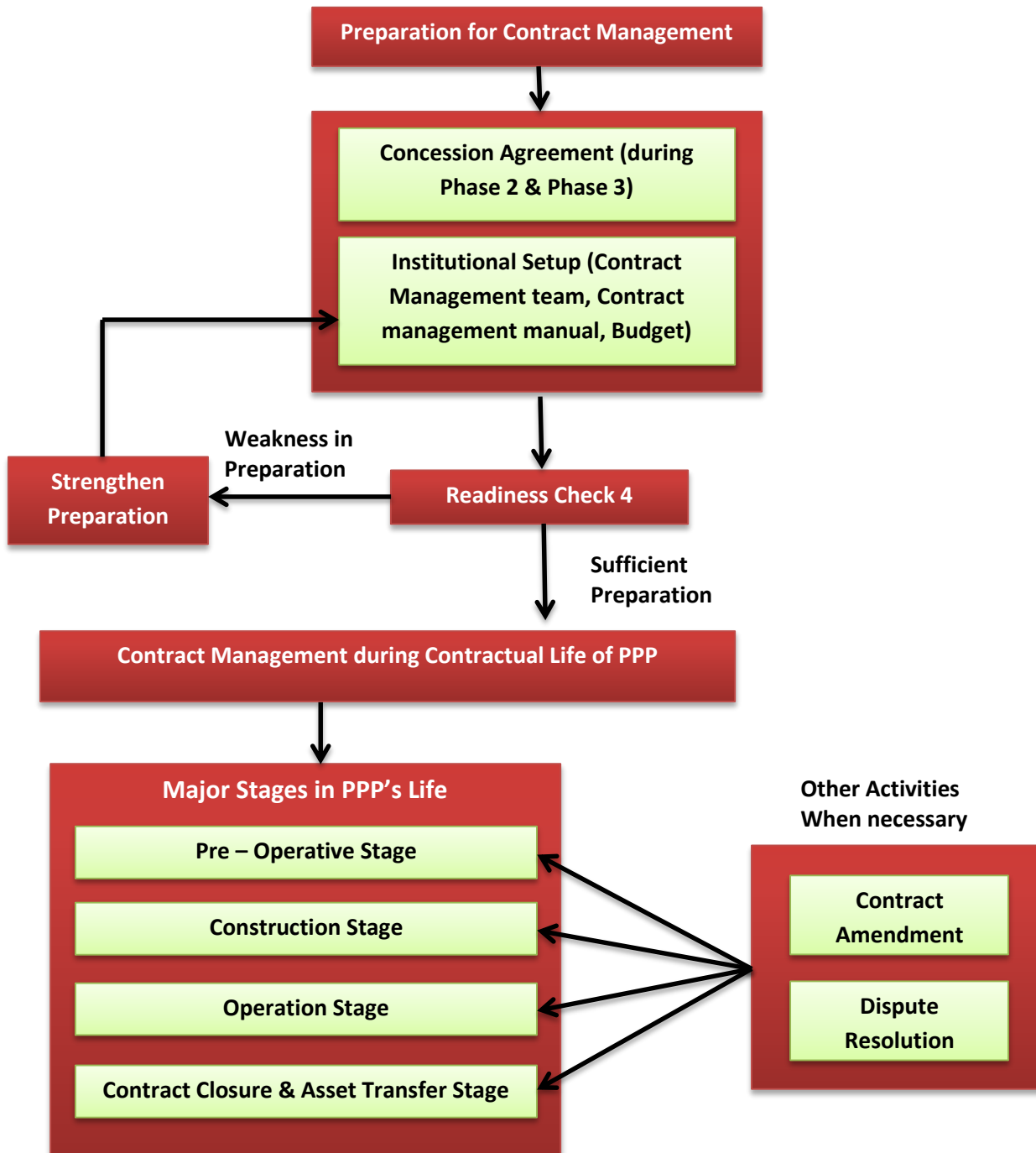


Figure No. 21 – Contract Management & Monitoring (Flow Chart)

Contract Management & Monitoring

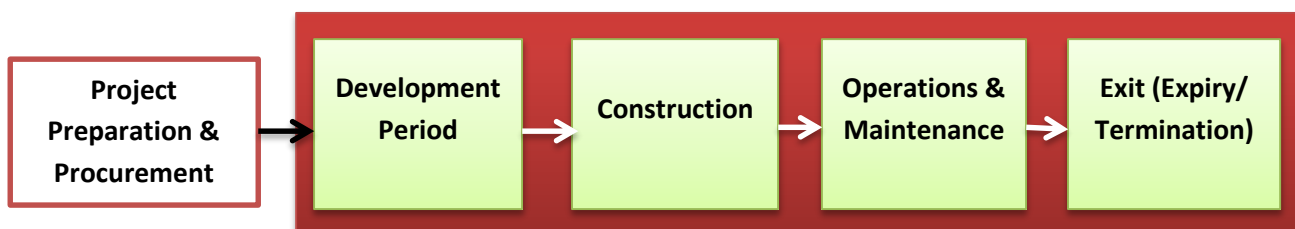
- In Public Private Partnership (PPP) projects the Concession Agreement (CA) is signed between two parties i.e. the Authority and the Private Party/ Concessionaire.
- Each party is assigned certain rights and obligations under the terms of Agreement. Consequently, the parties are entitled to not only avail their rights but also obligated to perform their duties in a time bound manner and jointly accomplish the project objectives.
- From the Authority's perspective, Contract Management denotes all those activities that are required to be undertaken by the Authority to administer, manage, govern and execute the project.
- Key objective of Contract Management is to ensure that the PPP project meets its objective on continuous basis, while managing risks proactively and taking stakeholders together in this process.
- In Contract management & monitoring, Govt. entity can monitor work of Private entity while due to this Private entities work can be always on the schedule.

5.1 Introduction to Post Award Contract Management in Infrastructure Sector PPP Concession

(Chapter 9.1 in main framework document)

1. **Activity** – Introduction to Post Award Contract Management (Understanding)
2. **Output** –
 - Defining Post award contract management
 - Project Life Cycle Stages
 - Post Award Contract stages

Figure No. 22 – Post Award Contract Stages



3. **Activity Performed by** – Govt. Entity (Consultant)

5.2 Post Award Contract Management mainly consist of: (Chapter 9.2 in main framework document)

1. Contract Management team – Contract Manager; Operation level (Field & HQ); Supervisory level (Field & HQ); Decision Making Level
2. Contract Management Plan – Stage wise contract management plan i.e. development, construction, O & M, exit, Ongoing review plan
3. Managing the Concession – Lifecycle stage wise active post award contract management, rare event management, issue & dispute management
4. Performance Monitoring & review – KPI monitoring
5. Reporting & Escalation Mechanism
6. Risk Management
7. Other Contract management activities – Training & development, knowledge management, relationship management

5.3 Key Elements of Post Award Contract Management (Chapter 9.3 in main framework document)

1. Setting up Contract Management team

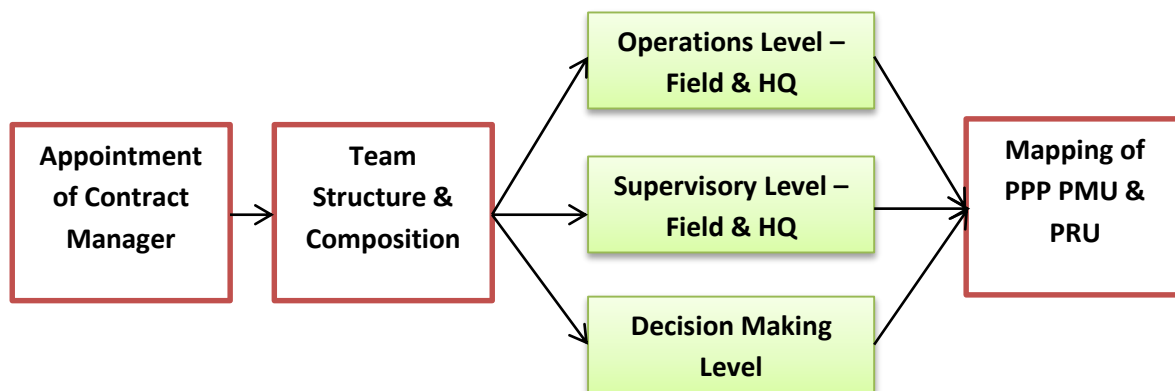


Figure No. 23 – Setting up contract Management team

2. Developing Contract Management Plan

Activity Performed By – Govt. Entity

5.4 Managing Infra Project PPP Concession

(Chapter 9.5 in main framework document)

1. **Activity** – Managing Infra Project PPP Concession
2. **Output** –
 - Key Milestones to be achieved in Infra Sector PPP Concession – In development period; Construction stage; O & M stage; Exit stage
3. **Activity Performed by** – Govt. Entity

5.5 Key Activities in Infra Sector Project Concession Lifecycle Stages

(Chapter 9.5 in main framework document)

1. Development Period (from Letter of Award Issuance to Appointment Date)
2. Construction Stage
3. Operation & Maintenance Stage
4. Exit Stage
5. Contract Management Activities throughout the Project Lifecycle
6. Performance Monitoring & Review
7. Reporting & Escalation Mechanism
8. Risk Management
9. Other Important Contract Management Activities

5.6 Development Period (from Letter of Award Issuance to Appointment Date)

(Chapter 9.6 in main framework document)

- Activities to be undertaken by Operation Level – HQ Officer
- Activities to be undertaken by Operation Level – Field Officer
- Activities to be undertaken by Supervisory Level – Field Technical Officer
- Activities to be undertaken by Supervisory Level – HQ Finance Officer
- Activities to be undertaken by Supervisory Level – HQ Technical Officer
- Activities to be undertaken by Decision Making Level – Technical Officer
- Activities to be undertaken by Decision Making Level – Finance Officer



5.7 Construction Stage (from Appointment date till declaration of COD) (Chapter 9.1 in main framework document)

- Activities to be undertaken by Operation Level – Field Officer
- Activities to be undertaken by Operation Level – HQ Officer
- Activities to be undertaken by Supervisory Level – Field Technical Officer
- Activities to be undertaken by Supervisory Level – HQ Technical Officer
- Activities to be undertaken by Decision Making Level – Technical Officer

5.8 Operation & Maintenance Stage (From commercial operation date till end of Concession)

(Chapter 9.8 in main framework document)

- Activities to be undertaken by Operation Level – HQ Officer
- Activities to be undertaken by Operation Level – Field Officer
- Activities to be undertaken by Supervisory Level – HQ Technical Officer
- Activities to be undertaken by Supervisory Level – Field Technical Officer
- Activities to be undertaken by Decision Making Level – Technical Officer

5.9 Exit Stage (From termination date till Final settlement)

(Chapter 9.9 in main framework document)

- Activities to be undertaken by Operation Level – HQ Officer
- Activities to be undertaken by Operation Level – Technical Officer
- Activities to be undertaken by Supervisory Level – HQ Technical Officer
- Activities to be undertaken by Supervisory Level – Field Technical Officer
- Activities to be undertaken by Decision Making Level – Technical Officer

5.10 Contract Management Activities throughout the Project Lifecycle (From appointed date till final settlement)

(Chapter 9.10 in main framework document)

- Activities to be undertaken by Operation Level – HQ Officer
- Activities to be undertaken by Supervisory Level – Finance Officer
- Activities to be undertaken by Decision Making Level – HQ Officer
- Activities to be undertaken by Decision Making Level – Finance Officer



5.11 Performance Monitoring & Review

(Chapter 9.11 in main framework document)

- Concessionaire
- Independent Engineer
- Safety Consultant
- Financial Consultant

5.12 Reporting & Escalation Mechanism

(Chapter 9.12 in main framework document)

- Regular Reporting & Review – Operation level to Supervisory level reporting; Supervisory level to Decision making level reporting
- Escalation in case of default – Escalation in case of default by concessionaire or other parties; Escalation in case of default within the Authority

5.13 Managing Issues & Disputes

(Chapter 9.13 in main framework document)

- Managing Issues
- Dispute resolution mechanism
- Dispute resolution tracker for Effective Management

5.14 Risk Management

(Chapter 9.14 in main framework document)

- Risk mitigation & monitoring – Risk category, type of risk, threshold, likelihood, impact, responsible authority, frequency of monitoring, mitigation strategy, action plan in case risk materializes

5.15 Handling Rare Events

(Chapter 9.15 in main framework document)

- Activities undertaken by Operation Level
- Activities undertaken by Operation Level (field)
- Activities undertaken by Supervisory Level (finance)
- Activities undertaken by Supervisory Level (HQ) - Technical
- Activities undertaken by Supervisory Level (field) - Technical
- Activities undertaken by Supervisory Decision Making (Finance)
- Activities undertaken by Supervisory Decision Making (Technical)



5.16 Other Important Activities for Post Award Contract Management

(Chapter 9.16 in main framework document)

- Identification of Training requirement
- Establishing regular review forums for Relationship management
- Knowledge management plan
- Public disclosure
- Online & other IT systems for Knowledge management
- Knowledge management policy
- List of registers & reports

5.17 Financial Closure

(Chapter 9.17 in main framework document)

- Defining Financial closure
- Process of Financial Closure
- Financial Agreement
- Escrow Agreement
- Achieving Financial close
- Review of Contents of Final Letter form Lender



6 Exit Strategy

(Chapter 10 in main framework document)

- Many private entities have doubts about exiting from the PPP project.
- This section gives some guideline on how to exit from PPP project so that it will be beneficial for private entity as well as govt. entity.
- Training of new employees, operation, finance & documents handover are the major points in exit strategy.
- This section gives systematic approach on how to exit from PPP project.

6.1 Phasing Down Over the time

(Chapter 10.1 in main framework document)

1. **Activity** – Phasing down over the time
2. **Output** –
 - Reducing activity level
 - Special challenges: timing, sensitizing target population, maintaining benefit stream, capacity building
 - Authority taking over responsibility; viability of activity with reduced support; managing reputational risk
3. **Activity Performed by** – Govt. entity & Private entity

6.2 Transfer of responsibility

(Chapter 10.2 in main framework document)

1. **Activity** – Transfer of Responsibility
2. **Output** –
 - Authority or other company will continue providing service
 - Assisting successor institute in securing needed resources & management capacity
 - Special challenges: timing & transition; capacity building; whether scope, scale & quality of service can continue; viability of handover; managing reputational risk to company if handover is unsuccessful
3. **Activity Performed by** – Govt. entity & Private entity



6.3 Phasing Out

(Chapter 10.3 in main framework document)

1. **Activity** – Phasing Out
2. **Output** –
 - Discontinued support by contractor company & involvement
 - Special challenge: impact on target population; safety net considerations; reputational risk
3. **Activity Performed by** – Govt. Entity & Private entity

6.4 Strategy Points

(Chapter 10.4 in main framework document)

1. In Phasing down, contractor company should reduce the level of activity in O & M, finance.
2. While reducing the activity Contractor Company should start training the PSCDCL staff members. They can't directly phase down on daily activities without giving training & until PSCDCL's staff can't operate whole functions by themselves.
3. All the necessary documents should be handed over to PSCDCL at the time of transfer of responsibility.

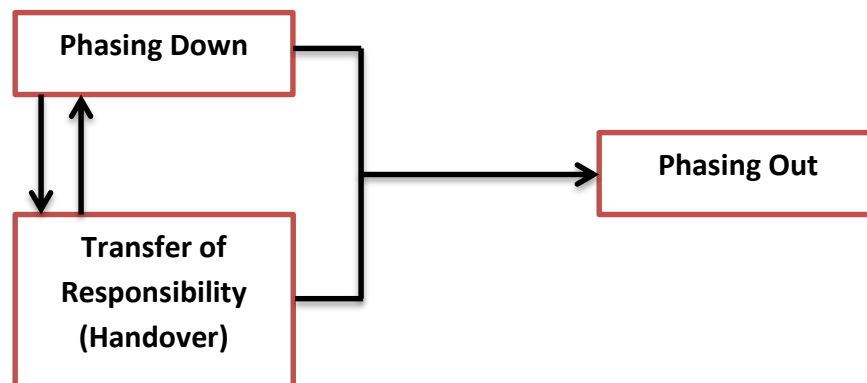


Figure No. 24 – Exit Strategy

Points

- Phasing down & Transfer of Responsibility (Handover) will be taking place simultaneously.
- As Contractor will be Phasing down his operations in step by step process, all those responsibilities will be handed over to PSCDCL over the period of time.
- Phasing out will be stage after Phasing down & handover is done properly

6.5 Steps for Phasing Down & Handover will include

(Chapter 10.5 in main framework document)

1. **Activity** – Steps for Phasing down & Handover
2. **Output** –
 - Training new staff
 - Co-working of PSCDCL new employees & Contractor employees in handover phase
 - Phasing out
3. **Activity Performed by** – Govt. entity & Private entity

6.6 Alternative Strategy Instead of Phasing out

(Chapter 10.6 in main framework document)

- Training the new employees, problem solving of the project in future is difficult & time consuming task.
- PSCDCL can retain all the employees from contractor except the Management team that Control will be taken over by PSCDCL.
- In this we avoid training of new employees, time & money spent for training
- Only Project employees, employer will change to PSCDCL other things will remain as it is as all the policies are developed with assistance & clearance from PSDCL
- Operation will run seamless as employees will not change. All operations queries will get solve without any delay in operation.
- All the decision making management will get replaced with PSCDCL management.



6.7 Documentation

(Chapter 10.7 in main framework document)

- Risk Register (Risk Log)
- Issue Log
- Financial resources
- Human resources
- Physical resources
- Change request throughout the project
- Financial reports & processes
- Financial management manual
- Project status report
- Lesson Learned
- Leased property & equipment
- All permits taken from concern authorities with their renewal date & procedures
- Daily, weekly, monthly, yearly maintenance schedule
- All Project & Internal Audit reports
- Post Project Evaluation (After construction period, after end of maintenance & operation contract is over)
- Various security measures taken
- Maintenance, repair & Operation SOP; Operation Manual
- Communication Management Plan
- List of past big problems & how they were solved

6.8 Clauses for Exit & Service Transfer Agreement

(Chapter 10.8 in main framework document)

- General clauses
- In assisting authority &/or the Replacement contract to transfer the Service
- Transfer of Asset
- Transfer of Software licenses
- Transfer of Gateway software
- Transfer of Documentation
- Transfer of Service management processes
- Transfer of Knowledge base
- Transfer of Service builds
- Transfer of Data
- Transfer of Support activities



- Use of Authority Premises
- Transfer regulation
- Govt. furnished equipment
- Incumbent Owned equipment



Annexure – 1: Environmental Impact Assessment (EIA)

1. Common points included in EIA irrespective of the sector are :
 - Project Description
 - Baseline data
 - Environmental Impact
 - Analysis of alternatives
 - Environmental Monitoring Programme
 - Environmental Management Plan

2. Environmental Clearance
 - Categorization of Project Activities – Category A; Category B
 - Environmental Clearance Process
 - EC Process for New Projects – 1. Screening (Only for category B project & activities); 2. Scoping; 3. Public Consultation; 4. Appraisal
 - EC Process for Existing Projects – In case of expansion, modernisation or changes in product mix for existing projects the EAC or SEAC will decide on the requirements for EIA & Public consultation

Annexure – 2: Social Impact Assessment (SIA)

1. Stages in Social Impact Assessment
 - Describe the relevant human environment/ area of influence and baseline conditions
 - Develop an effective public plan to involve all potentially affected members of the public
 - Describe the proposed action or policy change and reasonable alternatives
 - Scoping to identify the full range of probable social impacts
 - Screening to determine the boundaries of the SIA
 - Predicting Responses to Impacts
 - Develop Monitoring Plan & Mitigation Measures

2. Ideally SIA should be an Integral part of other assessment:
 - Environmental Impact Assessment (EIA)
 - Project Program & Policy evaluation
 - Hazard Assessment
 - Risk Assessment
 - Cultural Impact; Economic Impact Assessment

3. Social Impact Assessment of the Project should also cover:

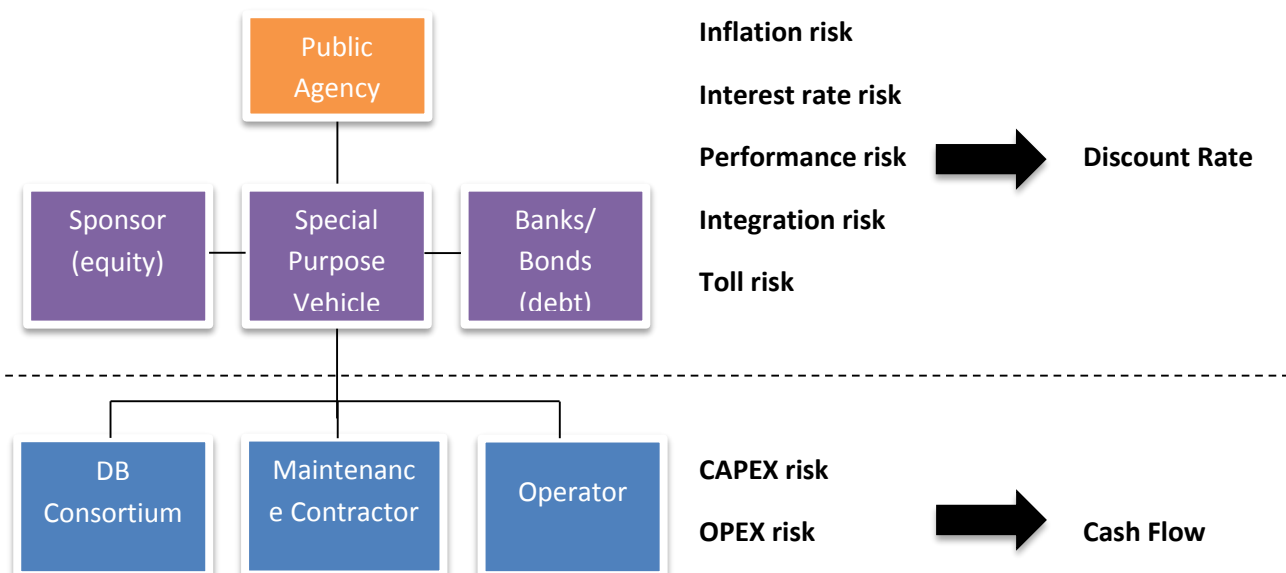


- Authorities for Rehabilitation & Resettlement
 - Rehabilitation & Resettlement benefits for Affected families
 - Grievance redressal
4. SIA facilitates the achievement of Social development goals within Infra Sector so that:
- The access of the poor and vulnerable in infrastructure and services is expanded and improved
 - Poor peoples' assets (homes and communities) and capacities (education and willingness to work) are enhanced through improved and affordable access
 - Capabilities of communities to participate in the design and operations of infra services are strengthened
 - Adverse risks that people, especially the poor and the vulnerable, may disproportionately shoulder are reduced or mitigated
 - Public accountability is improved as is the ability of remote people to participate in the political process, and
 - Policy reform is facilitated by the results of social analysis, which in many cases provides a social framework of support for making difficult choices.

Annexure – 3: Determination of Discount Rate

1. Defining Discount Rate
2. Determination of Risk Free Rate
3. Determination of risk premium using a theoretical approach
4. Determination of risk premium using market based information (WACC)

Annexure – 4: PPP Organizational Structure



Annexure – 5: Template for Contract Management Plan

Activity	Detail activities assigned	Primary Responsibility	Reporting Authority	Timelines	Escalation of default
Stage wise Contract Management Activities					
Development stage – Signing of concession agreement					
Performance Management					
Concessionaire's KPI					
Rare Event Management					
Handling Variations					
Change in Law					
Liquidated Damages					
Handling Issues & Disputes					
Dispute Management					

Procedure to Develop Contract Management Plan

1. Need for Assessment for Contract Management Plan
2. As-in Analysis for Contract Management Activities
3. Draft the Plan
4. Develop & implement contract management tool & processes
5. Establish system of ongoing contract management tools & processes

Annexure – 6: Template for ongoing Review Plan

Template is being prepared for following categories:

1. Contract Management arrangement
2. Performance Obligations
3. Project Risks
4. Rare events

Annexure – 7: Contract Management Activities in Development Period

1. Activities Undertaken by Operations Level - HQ Officer
 - Execution of Concession Agreement
 - Submission of Performance Security
 - Written consent from Authority



- Covenant
 - Maintenance of Infra Project
 - Appointment of Safety consultant
2. Activates Undertaken by Operation Level – Field Officer
 - Condition Precedent (Authority) – Handing over of ROW
 - Condition Precedent (Authority) – Approval of general arrangement drawings (GAD)
 - Condition Precedent (Authority) – Environmental clearance
 - Condition Precedent (Authority) – Utility Shifting
 - Utilities, Associated old infra, Roads & trees
 - Obligations relating to Project Agreements
 3. Activities Undertaken by Supervisory Level – Finance Officer
 - Damage for delay by Authority
 - Escrow & substitution agreement
 - Financial Closure
 - Condition precedent
 4. Activities Undertaken by Supervisory Level (HQ) – Technical Officer
 - Damage for delay by authority
 5. Activities Undertaken by Supervisory Level (Field) – Technical
 - Monthly status report & review of documents
 6. Activities Undertaken by Decision Making Level – Technical
 - Monthly status report & review of documents
 7. Activities Undertaken by Decision Making Level – Finance
 - Monthly status report & review of documents



Annexure – 8: Contract Management Activities in Construction Period

1. Activities Undertaken by Operations Level – HQ Officer
 - Release of Performance Security
 - Grant

2. Activities Undertaken by Operations Level – Field Officer
 - Right of Way
 - Milestone monitoring
 - Monitoring of construction
 - Completion certificate

3. Activities to be undertaken by Independent Engineer
 - Construction of Project (Infrastructure)

4. Activities Undertaken by Supervisory Level (field) – Technical
 - Monthly status report & review of documents

5. Activities Undertaken by Decision Making Level – Technical
 - Monthly status report & review of documents

Annexure 9 – Contract Management Activities in Operation & Maintenance Stage

1. Activities Undertaken by Operation Level – HQ Officer
 - User fee
 - Revenue Shortfall loan
 - Effect of Variation in Infra facility usage growth

2. Activities to be undertaken by Operations Level – Field Officer
 - Replacement of O & M contractor
 - Operation & Maintenance
 - Safety requirements
 - Monitoring of O & M
 - Infra Facility sector regulation
 - Usage data & census



3. Activities to be undertaken by Supervisory Level (HQ) – Technical Officer
 - Monthly status report & review of document
4. Activities undertaken by Supervisory Level (field) – Technical
 - Monthly status report & review of document
5. Activities undertaken by Decision Making Level – Technical
 - Monthly status report & review of document

Annexure – 10: Contract Management Activities in Exit Stage

1. Activities to be undertaken by Operation Level – HQ Officer
 - Divestment of Rights & Interest
2. Activities to be undertaken by Operation Level – Field Officer
 - Defects Liability after termination
3. Activities to be undertaken by Supervisory Level (HQ) – Technical Officer
 - Monthly status report & review of document
4. Activities to be undertaken by Supervisory Level (Field) – Technical
 - Monthly status report & review of document
5. Activities to be undertaken by Decision Making Level (Field) – Technical
 - Monthly status report & review of document

Annexure – 11: Contract Management activities throughout the Project Lifecycle

1. Activities to be undertaken by Operations Level – HQ Officer
 - Independent Engineer
 - Disclosures
 - Redressal of Public Grievances



2. Activities to be undertaken by Supervisory Level – Finance Officer
 - Accounts & Finance
 - Appointment of Auditors
3. Activities to be undertaken by Supervisory Level (HQ) – Technical Officer
 - Monthly status report & review of document
4. Activities undertaken by Decision Making Level – Technical
 - Monthly status report & review of document
5. Activities undertaken by Decision Making Level – Finance
 - Monthly status report & review of document

Annexure – 12: Performance Monitoring & Key Performance Indicators

1. Stage wise Concessionaire KPIs
 - Concessionaires KPI during Development Stage
 - Concessionaires KPI during Construction Stage
 - Concessionaires KPI during Operation & Maintenance Stage
2. Independent Engineer
3. Safety Consultant
4. Financial Consultant

Annexure – 13: Handling Rare events (Contingencies)

1. Activities to be undertaken by Operations Level – HQ Officer
 - Change in Law
 - Force Majeure
 - Compensation for Breach of Agreement
 - Assignment & Change creation request
 - Indemnity claims
 - Suspension of Concessionaires rights
 - Termination



2. Activities to be undertaken by Operations Level – Field Officer
 - Change of Scope Proposed by Authority
 - Change of Scope Proposed by Concessionaire
 - Payment for Change in scope
3. Activities to be undertaken by Supervisory Level – Finance Officer
 - Financial restructuring & Novation request
 - Equity transfer
4. Activities to be undertaken by Supervisory Level (HQ) – Technical Officer
 - Monthly status reports & review of documents
5. Activities to be undertaken by Supervisory Level (filed) – Technical Officer
 - Monthly status reports & review of documents
6. Activities to be undertaken by Decision Making Level – Technical
 - Monthly status reports & review of documents
7. Activities to be undertaken by Decision Making Level – Finance
 - Monthly status reports & review of documents

Annexure – 14: Checklist

1. Financial Restructuring & Novation
2. Equity transfer
3. Change in scope
4. Change in law
5. Renegotiation
6. Force Majeure
7. Termination



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