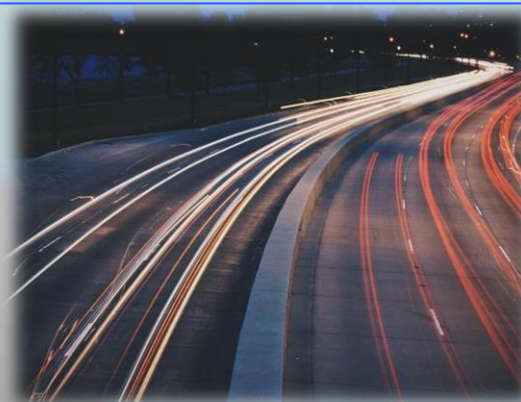


Post- Award Contract Management Manual for PPP Concessions

Volume – I: Highway Sector



सत्यमेव जयते

PPP Cell, Infrastructure Division,
Department of Economic Affairs,
Ministry of Finance

The Post Award Contract Management Manual for Highway PPP Concessions has been commissioned by the Department of Economic Affairs, Ministry of Finance, Government of India (DEA) with funding support from the World Bank and advisory facilitation from Deloitte.

All necessary care and due diligence has been undertaken by the sector experts and the execution team to adhere to all copyrights as specified in the literature sources and references used while creation of this manual. Also, it has been ensured that the accuracy, adequacy or completeness of any information published here is maintained as specified in the sources. However, any errors/omissions that may have occurred unwittingly are regretted and all suggestions/feedback in this regard for improvement will be highly appreciated.

While the guidance material is available for free use in public domain for reference purposes, the Department of Economic Affairs, Ministry of Finance holds the copyright on this guidance material and it shall not be reproduced in any form, other than those intended by DEA, without prior written permission from DEA. Apart from the stakeholders in India, relevant aspects of the guidance material may also be referred to by various international entities, as suitable and as required. PPP Cell, Infrastructure Division, DEA can be contacted in case of any queries or permission requirements.

© 2015 PPP Cell, Infrastructure Division, Department of Economic Affairs

Published by:

PPP Cell,

Infrastructure Division,

Department of Economic Affairs,

Ministry of Finance

Government of India

www.pppinindia.com

Preface

Over the last decade, Government of India (GoI) has been placing a strong emphasis on the use of Public Private Partnerships (PPPs) in its strategy for expanding the provision of infrastructure services. Also, to facilitate a large scale expansion of PPPs on a sustainable basis, GoI introduced several initiatives which inter-alia included establishment of PPPAC, PPPIADF, an Infrastructure Project Development Fund, Viability Gap Fund to provide financial support for PPP projects, implementation of a National PPP Capacity Building Program, development of knowledge products and guidance material including PPP toolkit. These initiatives have helped India develop a large PPP program in the infrastructure sector.

In the process of implementation of PPP projects, policy makers have been increasingly identifying issues related to project delivery of PPP projects. Such issues primarily focus on Post Award Contract Management of these PPP projects, at the transaction as well as programmatic level and also the broader fiscal implications such as, for example, direct and contingent liabilities.

With this objective, the Department of Economic Affairs, Ministry of Finance, Government of India has made an attempt to develop guidance material for improving the post-award management of PPPs, with particular focus on day-to-day monitoring and proactive management of key risks in a manner that best preserves the interests of the users of infrastructure services and the concessioning authority. The guidance material developed for Post Award Contract Management of PPP Concessions has three components:

Post Award Contract Management Guidelines: “Post-Award Contract Management Guidelines” have been developed as a quick reference strategic road map for Authorities and Contract Managers. The guidelines provide the foundation principles of post award contract management for PPP projects irrespective of the sectors. The Guidelines establish only “Why” and “What” of contract management practices and therefore, to understand “How” contract management needs to be undertaken in a specific sector, the “Post-Award Contract Management Manual” has been developed.

Post Award Contract Management Manuals: The Post Award Contract Management Manual for PPP Concessions has been designed to provide guidance on various activities required to be undertaken by the Authority officials at different stages of project lifecycle. The manuals have been developed for PPP projects in three sectors, viz. Highways, Ports and Schools (Volume I, II and III respectively), where each manual is based on the Model Concession Framework of Government of India for that sector. These manuals serve as model post award contract management guides with a detailed, step-by-step approach to effective contract management in these sectors.

Online Toolkit: The online toolkit is a web-based application which provides a quick reference, interactive and user friendly toolkit to understand and manage PPP projects. The online toolkit provides option to the users to use various checklists, project progress plans and excel tools to manage the PPP contracts. It also provides an interactive toolbox which is a dedicated tool for tracking progress of various post award activities. This feature allows officials to update the status of the activities, save their details and print for future use.

This toolkit would be available in the existing www.pppinindia.com web portal hosted by PPP Cell, Infrastructure Division, DEA. It can also be accessed through an existing online database by DEA for Infrastructure Projects, www.infrastructureindia.gov.in.

This guidance material for Post Award Contract Management for PPP Concessions has been developed by Deloitte Touche Tohmatsu India Private Limited. We would like to acknowledge the support and guidance of staff and officers of DEA, especially, Ms. Sharmila Chavaly, Joint Secretary, DEA and Ms. Abhilasha Mahapatra, Director, PPP Cell, DEA for providing their valuable inputs and feedback in making this guidance material highly comprehensive and user-friendly.

Table of Contents

I. Introduction to Post- Award Contract Management in Highway PPP Concessions ...	14
1. Defining Post- Award Contract Management in PPP Projects	14
2. Understanding Project Lifecycle Stages for Post- Award Contract Management	14
3. Need of Post- Award Contract Management Manual for Road & Highway Concessions	16
4. Objectives of Post- Award Contract Management Manual for Road & Highway Concessions.....	16
5. Coverage of Post- Award Contract Management Manual for Highway PPP Concessions	17
6. Users of the Road & Highway Concessions Manual	18
II. Key Elements of Post- Award Contract Management manual for Road & Highway Concessions	19
1. Setting up the Contract Management Team	19
1.1. Appointment of Contract Manager	20
1.2. Team structure and composition	20
Operations Level Authority	21
Supervisory Level Authority	21
Decision Making Level Authority	21
2. Developing Contract Management Plan	23
3. Managing Highway PPP Concessions.....	24
3.1. Key Milestones to be achieved in PPP Road & Highway Concessions	26
3.2. Key Activities in a Highway Concession Lifecycle Stages	28
4. Performance Monitoring & Review	37
5. Reporting & Escalation Mechanism	37
6. Risk Management	38
7. Other Important Contract Management Activities	38
III. Contract Management Activities in Development Stage (from Letter of Award issuance till Appointed Date)	39
1. Activities undertaken by Operation Level (HQ):	41
1.1. Signing of the Concession Agreement:	41
1.2. Receipt and verification of Performance Security:	42

Post Award Contract Management Manual for Highway PPP Concessions

1.3.	Execution of the various agreements:	42
1.4.	Written Consent from the Authority before making any Change in the Financing Agreement:	43
1.5.	Covenant:	43
1.6.	Maintenance of Project Highway:.....	43
1.7.	Appointment of Safety Consultant:.....	44
2.	Activities undertaken by Operation Level (Field):.....	44
1.1.	Handing over the Right of Way (ROW):	44
1.2.	Approval of general arrangement drawings (GAD):.....	45
1.3.	Environmental Clearance:.....	45
1.4.	Utility Shifting:	46
1.5.	Utilities, Associated Roads and Trees:.....	46
1.6.	Obligations relating to Project Agreements:	46
3.	Activities undertaken by Supervisory Level (HQ) - Finance:	47
3.1.	Damage for delay by the Authority:	47
3.2.	Condition Precedent - Concessionaire:.....	47
3.3.	Financial Closure:	48
3.4.	Condition Precedent and declaration of Appointed Date:	48
4.	Activities undertaken by Supervisory Level (HQ) - Technical:.....	49
5.	Activities undertaken by Supervisory Level (field) - Technical:.....	49
6.	Activities undertaken by Decision making Level (Technical):.....	50
7.	Activities undertaken by Decision making Level (Finance):.....	50
IV.	Contract Management Activities in Construction stage (from Appointed Date till declaration of COD)	51
1.	Activities undertaken by Operation Level (Head Quarters or HQ):.....	52
1.1.	Release of Performance Security:.....	52
1.2.	Release of Grant:.....	53
2.	Activities undertaken by Operation Level (field):	53
1.1.	Handing over of Right of Way (ROW):	53
1.2.	Construction of Project Highway:	54
1.3.	Milestone:	54
1.4.	Monitoring of Construction:	55
1.5.	Completion Certificate:.....	55
2.	Activities undertaken by Supervisory Level (HQ) - Technical:.....	56
3.	Activities undertaken by Supervisory Level (field) - Technical:.....	56
4.	Activities undertaken by Decision making Level (Technical):.....	57

V. Contract Management Activities in Operations & Maintenance Period (From Commercial Operation Date (COD) till end of the Concession).....	58
1. Activities undertaken by Operation Level (HQ):	60
1.1. User Fee:.....	60
1.2. Revenue Shortfall Loan:	60
1.3. Effect of variation in Traffic growth rate:.....	61
1.4. Construction of Additional Toll way:	61
1.5. Insurance:.....	62
2. Activities undertaken by Operation Level (field):	62
2.1. Replacement of O&M Contractor:	62
2.2. Construction of Service Road:	62
2.3. Operation & Maintenance:	63
2.4. Safety Requirements:	63
2.5. Monitoring of Operation & Maintenance:	64
2.6. Traffic Regulation:.....	64
2.7. Traffic Census and Sampling:	64
3. Activities undertaken by Supervisory Level (HQ) - Technical:.....	65
4. Activities undertaken by Supervisory Level (field) - Technical:.....	65
5. Activities undertaken by Decision making Level (Technical):.....	65
VI. Contract Management Activities during Exit Stage (From Termination Date till Final settlement).....	67
1. Activities undertaken by Operation Level (Head Quarters or HQ):.....	68
1.1. Divestment of Right and Interest:.....	68
2. Activities undertaken by Operation Level (field):	69
2.1. Defect Liability after Termination:.....	69
3. Activities undertaken by Supervisory Level (HQ) - Technical:.....	69
4. Activities undertaken by Supervisory Level (field) - Technical:.....	69
5. Activities undertaken by Decision making Level (Technical):.....	70
6. Asset handover plan.....	70
7. Service continuity plan.....	71
7.1. Step 1 – Assessing ability of existing Highway to serve market requirements	71
7.2. Step 2 – Analyze and choose amongst options.....	71
VII. Contract Management Activities throughout the Project Life Cycle (From Appointed Date till Final settlement)	73
1. Activities undertaken by Operation Level (Head Quarters or HQ):.....	74

Post Award Contract Management Manual for Highway PPP Concessions

1.1.	Independent Engineer:.....	74
1.2.	Disclosure:.....	75
1.3.	Redressal of Public Grievances:	75
2.	Activities undertaken by Supervisory Level (finance):.....	75
2.1.	Accounts and Audit:	75
2.2.	Appointment of Auditor:	76
3.	Activities undertaken by Supervisory Level (HQ) - Technical:.....	76
4.	Activities undertaken by Decision making Level (Technical):.....	77
5.	Activities undertaken by Decision making Level (Finance):.....	77
VIII.	Performance Monitoring & Review	78
1.	Concessionaire.....	78
2.	Independent Engineer	79
3.	Safety Consultant	80
4.	Financial Consultant.....	81
IX.	Regular Reporting & Escalation Mechanism.....	83
1.	Regular Reporting & Review	83
1.1.	Operations Level to Supervisory Level Reporting	83
1.2.	Supervisory Level to Decision Making Level Reporting.....	87
2.	Escalation in Cases of Default.....	88
2.1.	Escalation in case of default by concessionaire or other parties:	89
2.2.	Escalation in case of default within the Authority:.....	89
X.	Managing Issues & Disputes.....	90
1.	Managing Issues	90
2.	Dispute Resolution Mechanism as per MCA.....	90
3.	Dispute Resolution Tracker for effective management.....	91
XI.	Risk Management.....	93
1.	Risk Mitigation & Monitoring	93
XII.	Handling Rare Events	98
1.	Activities undertaken by Operation Level (Head Quarters or HQ):.....	98
1.1.	Change in Law:.....	98
1.2.	Force Majeure.....	99
1.3.	Compensation for Breach of Agreement:	99
1.4.	Assignment & Charge Creation Requests:.....	100
1.5.	Indemnity Claims:	100

Post Award Contract Management Manual for Highway PPP Concessions

1.6.	Suspension of Concessionaire's Rights:	101
1.7.	Termination:.....	101
2.	Activities undertaken by Operation Level (field):.....	102
2.1.	Change of Scope	102
3.	Activities undertaken by Supervisory Level (finance):.....	104
3.1.	Financial Restructuring & Novation Requests:	104
3.2.	Equity Transfer:	105
4.	Activities undertaken by Supervisory Level (HQ) - Technical:.....	105
5.	Activities undertaken by Supervisory Level (field) - Technical:.....	105
6.	Activities undertaken by Decision making Level (Finance):.....	106
7.	Activities undertaken by Decision making Level (Technical):.....	106
XIII.	Other Important Activities for Post- Award Contract Management	107
1.	Identification of Training Requirements	107
2.	Establishing regular review forums for relationship management	109
3.	Knowledge Management Plan.....	110
4.	Public disclosures	110
5.	Online and other IT systems for knowledge management.....	111
6.	Knowledge Management Policy	112
7.	List of registers and reports.....	112
Annexures	114
A.	Template for Contract Management Plan.....	115
B.	Procedure for Development of Contract Management Plan	116
	Step 1: Need Assessment for Contract Management	116
	Step 2: As- is analysis of Contract management practices	116
	Step 3: Draft the plan.....	116
	Step 4: Develop and implement contract management tools and processes	117
	Step 5: Establish a system of ongoing contract management & review	117
C.	Template for Ongoing Review Plan	118
D.	Contract Management Activities in Development Period.....	119
1.	Activities to be undertaken by Operations Level - HQ Officer	119
i.	Execution of Concession Agreement.....	119
ii.	Submission of Performance Security	121
iii.	Written Consent from the Authority.....	122
iv.	Covenant.....	122

Post Award Contract Management Manual for Highway PPP Concessions

v.	Maintenance of Project Highway	123
vi.	Appointment of Safety Consultant	123
2.	Activities to be undertaken by Operations Level- Field Officer	123
i.	Condition Precedent (Authority).....	123
i.1.	Condition Precedent (Authority) – Handing over of ROW.....	123
i.2.	Condition Precedent (Authority) – Approval of general arrangement drawings (GAD) 124	
i.3.	Condition Precedent (Authority) – Environmental Clearance.....	124
i.4.	Condition Precedent (Authority) – Utilities Shifting	125
ii.	Utilities, Associated Roads and Trees	125
iii.	Obligations relating to Project Agreements.....	127
3.	Activities to be undertaken by the Supervisory Level- Finance Officer	127
i.	Damage for delay by the Authority.....	127
ii.	Condition Precedent (Concessionaire)	128
ii.1	Escrow & Substitution	128
ii.2	Financial Closure	130
iii.	Condition Precedent.....	132
4.	Activities undertaken by the Supervisory Level (HQ) – Technical Officer.....	134
	Escalation:	134
5.	Activities undertaken by Supervisory Level (field) - Technical:.....	134
	Escalation:	135
6.	Activities undertaken by Decision making Level (Technical)	135
	Escalation:	135
7.	Activities undertaken by Decision making Level (Finance):.....	135
	Escalation:	135
E.	Contract Management Activities in Construction Period.....	136
1.	Activities to be undertaken by Operations Level- HQ Officer	136
i.	Release of Performance Security	136
ii.	Grant	136
2.	Activities to be undertaken by Operations Level- Field Officer	137
i.	Right of Way.....	137
ii.	Milestone.....	137
iii.	Monitoring of Construction.....	138
iv.	Completion Certificate	140

Post Award Contract Management Manual for Highway PPP Concessions

3.	Activities to be undertaken by Independent Engineer	142
i.	Construction of the Project Highway	142
4.	Activities to be undertaken by the Supervisory Level (HQ) – Technical Officer	144
	Escalation:	144
5.	Activities undertaken by Supervisory Level (field) - Technical:.....	144
	Escalation:	144
6.	Activities undertaken by Decision making Level (Technical)	144
	Escalation:	145
F.	Contract Management Activities in Operations & Maintenance Stage.....	146
1.	Activities to be undertaken by Operation Level- HQ Officer	146
i.	User Fee	146
ii.	Revenue Shortfall Loan	146
iii.	Effect of Variations in Traffic Growth	147
iii.1.	Effect of Variations in Traffic Growth Toolkit	148
iv.	Construction of Additional Toll way	148
v.	Insurance	150
2.	Activities to be undertaken by Operations Level- Field Officer	151
i.	Replacement of O&M Contractor.....	151
ii.	Construction of Service Road	152
iii.	Operation & Maintenance	152
iv.	Safety Requirements	155
v.	Monitoring of Operation & Maintenance.....	156
vi.	Traffic Regulation	158
vii.	Traffic Census and Sampling	158
3.	Activities to be undertaken by the Supervisory Level (HQ) – Technical Officer	159
	Escalation:	160
4.	Activities undertaken by Supervisory Level (field) - Technical:.....	160
	Escalation:	160
5.	Activities undertaken by Decision making Level (Technical)	160
	Escalation:	161
G.	Contract Management Activities in Exit Stage.....	162
1.	Activities to be undertaken by Operations Level- HQ Officer	162
i.	Divestment of Rights and Interest.....	162
2.	Activities to be undertaken by Operations Level- Field Officer	164

Post Award Contract Management Manual for Highway PPP Concessions

i. Defects Liability after Termination.....	164
3. Activities to be undertaken by the Supervisory Level (HQ) – Technical Officer.....	165
Escalation:	165
4. Activities undertaken by Supervisory Level (field) - Technical:.....	165
Escalation:	166
5. Activities undertaken by Decision making Level (Technical)	166
Escalation:	166
H. Contract Management Activities throughout the Project Lifecycle.....	167
1. Activities to be undertaken by Operations Level- HQ Officer	167
i. Independent Engineer	167
ii. Disclosure	169
iii. Redressal of Public Grievances.....	169
2. Activities to be undertaken by Supervisory Level- Finance Officer.....	170
i. Accounts and Audit	170
ii. Appointment of Auditors	171
3. Activities to be undertaken by the Supervisory Level (HQ) – Technical Officer.....	172
Escalation:	172
4. Activities undertaken by Decision Making Level - Technical:	173
Escalation:	173
5. Activities undertaken by Decision making Level (Finance)	173
Escalation:	173
I. Performance Monitoring Key Performance Indicators.....	174
1. Stage wise Concessionaire KPIs.....	174
i. Concessionaire KPIs during development stage	174
ii. Concessionaire KPIs during the construction stage	182
iii. Concessionaire KPIs during the Operation and Maintenance stage.....	189
2. Independent Engineer	200
3. Safety Consultant.....	206
4. Financial Consultant.....	210
J. Handling Rare Events (Contingencies)	212
1. Activities to be undertaken by Operations Level- HQ Officer	212
i. Change in Law	212
ii. Force Majeure	213
iii. Compensation for Breach of Agreement.....	215

Post Award Contract Management Manual for Highway PPP Concessions

iv.	Assignment & Charge Creation Requests	216
v.	Indemnity Claims.....	217
vi.	Suspension of Concessionaire's Rights.....	218
vii.	Termination.....	219
2.	Activities to be undertaken by Operations Level- Field Officer	222
i.	Change of Scope.....	222
i.1	Change of Scope- Proposed by Authority	222
i.2	Change of Scope – Proposed by Concessionaire	223
i.3	Payment for Change in Scope	225
3.	Activities to be undertaken by Supervisory Level- Finance Officer.....	225
i.	Financial Restructuring & Novation Requests.....	225
ii.	Equity Transfer.....	226
4.	Activities to be undertaken by the Supervisory Level (HQ) – Technical Officer	226
	Escalation:	227
5.	Activities undertaken by Supervisory Level (field) - Technical:.....	227
	Escalation:	227
6.	Activities undertaken by Decision making Level (Technical)	227
	Escalation:	228
7.	Activities undertaken by Decision making Level (Finance):.....	228
	Escalation:	228
K.	Checklists.....	229
1.	Financial Restructuring & Novation.....	229
2.	Equity Transfer	230
3.	Change in Scope.....	231
4.	Change in Law	232
5.	Renegotiation	232
6.	Force Majeure	233
7.	Termination	234
L.	Tools	235
1.	Estimation of Variation in Traffic	235
2.	Termination Payments.....	236
3.	Change in Law Toolkit.....	237
M.	Appointment & Responsibilities of Other Related Parties	238

I. Introduction to Post- Award Contract Management in Highway PPP Concessions

1. Defining Post- Award Contract Management in PPP Projects

Public Private Partnerships (PPPs) have gained immense importance in India in the last decade. Much of the India's success in rapid development of its infrastructure capabilities can be attributed to PPP projects undertaken by the Government of India (GOI).

For any PPP project to commence, a Concession Agreement (CA) is signed between two parties i.e. the Authority and the Private Party/ Concessionaire. Each of these parties is assigned a set 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.

The Post- Award period in any PPP Project, commences upon Award of Concession/ Project (i.e. from the Date of issue of Letter of Award to the Successful Bidder) and ends after the completion of the Project and expiry/ termination of Concession Agreement.

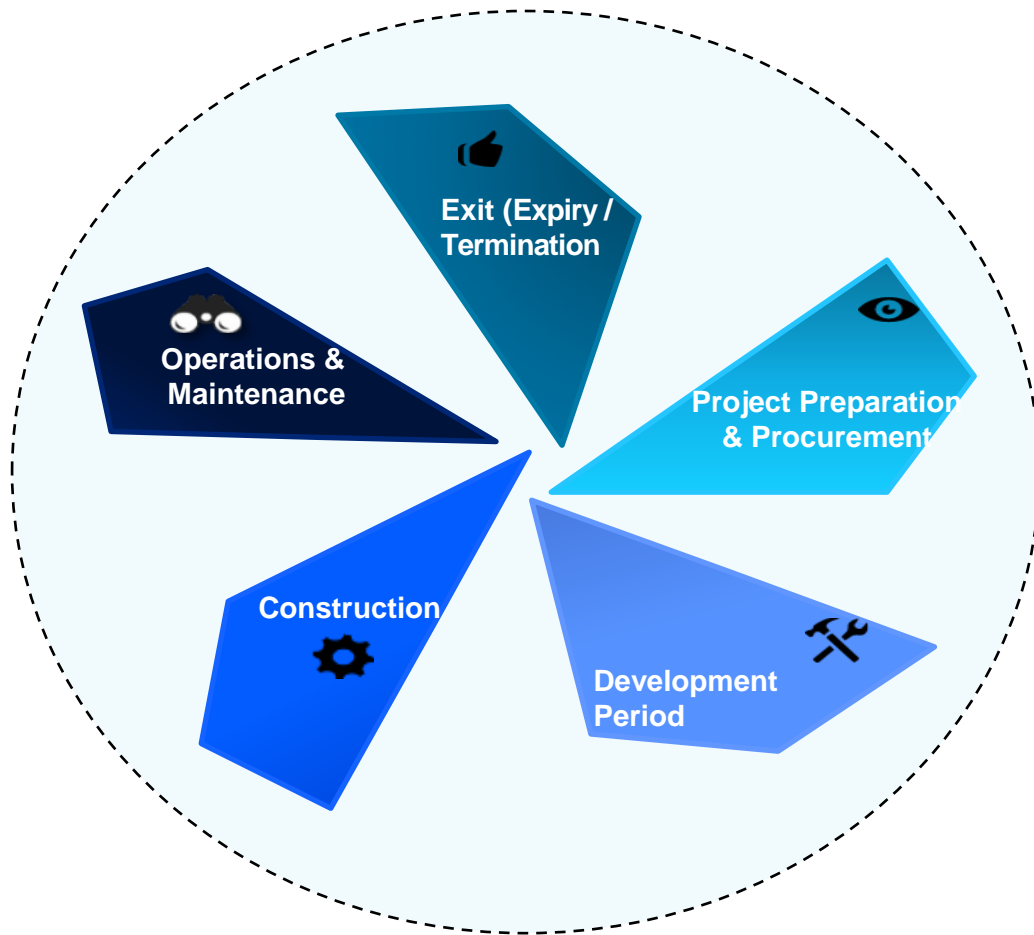
Thus, with regards to the **Authority**,

“Post- Award Contract Management denotes all those activities that are required to be undertaken by the Authority to administer, manage, govern and execute the project from time of Award of project up till its termination.”

Moreover, key objective of PPP Contract Management is to ensure that the PPP project meets its objective on continuous basis, while managing risks proactively and maintaining cordial working relationships and partnerships among various stakeholders.

2. Understanding Project Lifecycle Stages for Post- Award Contract Management

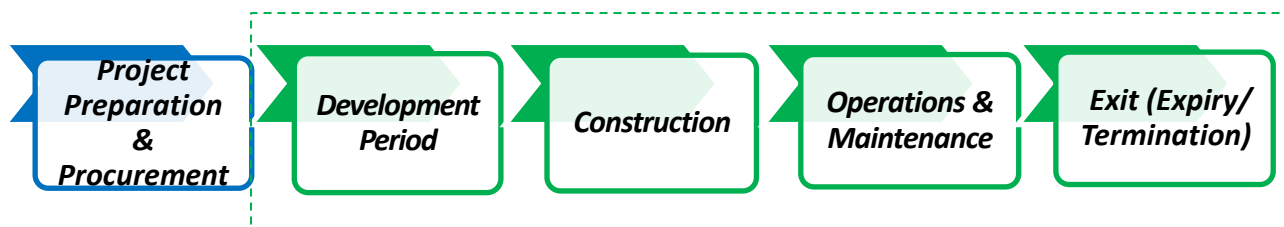
PPP projects are generally long tenure in nature and undergo a full lifecycle, right from the Authority inviting applications from the interested Private Parties and terminating with its handover to the Authority upon expiry of Concession Period/ termination of Concession Agreement, in case of early terminations. In any typical Highway PPP concession, there are a number of stages through which a project undergoes. The project lifecycle may be split into namely five stages, typically indicated as:



Highway PPP Lifecycle

Among these 5 stages, post-award stage commence upon issuance of Letter of Award (LOA) to the successful bidder, which triggers the signing of Concession Agreement and consequently the Development Period. Post-Award stages in a Highway PPP lifecycle consist of:

Post- Award Stages



All the four stages of a Highway project are marked by a timeline comprising a start and an end date. In each of these stages, a number of activities are required to be undertaken by the

various officials within the Authority ranging from routine activities, rare event management to dispute management.

This Post- Award Contract Management manual for Highway PPP Concessions has been designed to provide guidance on various activities required to be undertaken by officials within the Authority at different stages of project lifecycle. Thus, before execution of any such activities begins, it is important to take note of what all is contained in this manual, to understand the criticality of development of this manual and the objectives it desires to serve. The next set of sections describe 'Why' and 'How' this manual will add value to the Authority officials and is of great importance to them.

3. Need of Post- Award Contract Management Manual for Road & Highway Concessions

It has been observed that after the concession agreement is signed, many issues crop up during the project execution stages which lead to major overhauls and stalling of projects. In such a scenario, contract management in post-award phase of a PPP project becomes equally important as the management of pre-award phase and many a times it becomes more complex because of various reasons like, long time-period, impact of pre-award phase, number of stakeholders etc.

For managing each activity in this phase, it is important that a clear understanding is developed by the Authority responsible for executing and supervising the concession agreement on the Governments' behalf. In India, there exist Highway authorities at National as well as state level. It is important that both these types of Authorities manage the project activities actively so that major issues are avoided and those already existing can be resolved in a timely manner. Moreover, it is also important for each of the Authority members to understand their obligations and duties for each activity and act accordingly. To serve, all these needs, the "**Post- Award Contract Management Manual for Highway Concessions**", hereby referred to as "**Manual**" has been developed.

The "**Post- Award Contract Management Guidelines**" illustrate the importance of Contract Management and define the key aspects encompassing it. These Guidelines are designed to be a user-friendly, quick reference strategic road map for Authorities and Contract Managers. While, they establish "Why" and "What" of Contract management practices, they are generic in nature and are sector agnostic. Hence, to understand, "How" contract management needs to be undertaken in a particular sector, *Post Award Contract Management Manuals* need to be developed to serve as *Model Guides* describing action plan for Authority officials. To serve this need, this manual is developed to lay down a detailed action plan especially for the Highway sector Authority officials at national as well as state level as highway concessions form the majority of PPP investment in India.

4. Objectives of Post- Award Contract Management Manual for Road & Highway Concessions

As described above, while the Guidelines lay down key principles of contract management, this Manual adapts those key principles and makes them specific to highway sector projects.

Post Award Contract Management Manual for Highway PPP Concessions

This Manual for contract management in the highways and road sector has been designed to act as a *Model Guide* for all Highway sector Authorities to manage the contract during the development, construction, operations & maintenance and exit/ exit stages of a PPP concession. It provides guidelines on:

- **Responsibilities and obligations** of each Authority official
- **Development of comprehensive Contract Management Plans**
- **Reporting and escalation mechanisms** for project status and any defaults
- **Rare event & disputes management instructions** for effective and faster resolution

Thus, the objectives of this Manual are summarized as follows:

- To act as a **model guide** to manage highway PPP concessions
- To develop an **understanding among Authority officials** in the contract management team on their obligations and timelines; among others.
- To effectively **manage project transition** and **project exit**
- To provide **templates, checklists and tools** to be used on an ongoing basis during project implementation

The Manual has been developed in reference to the Model Concession Agreement (MCA) for four-laning National Highways. Any reference, at any time, to any agreement, deed, instrument, license, Act or document of any description in this manual will be construed as reference to that agreement, deed, instrument, license, Act or other document as amended, varied, supplemented, modified or suspended at the time of such reference in this manual. Although, it is comprehensive enough to be adopted directly for any road or highway concession, each road/highway concession is structured differently according to technical, market, operational, financial and other nuances. Also, rules, regulations and laws prevailing in each state are also different from each other and from those applicable to national highways. Hence, while planning for Contract Management of a project, the recommendations, templates and tools in this Manual also need appropriate customization to meet project-specific requirements by the Authority.

5. Coverage of Post- Award Contract Management Manual for Highway PPP Concessions

Post- award contract management commences from appointing a dedicated team within the Authority, having clear understanding of roles and responsibilities to be played in a highway concession execution. This team further establishes all guiding rules and principles for effective management of the highway concession through development of a contract management plan. Finally, the team executes all contract management actions including routine as well as rare event management in reference to the plan.

The manual majorly consists of the following:

1 *Setting up the Contract Management Team*

- a. Appointment of Contract Manager
- b. Identify officials within the organization/ authority for each of the 3 levels i. e.
 - i. **Operational Level (Field and HQ)**
 - ii. **Supervisory Level (Field and HQ)**
 - iii. **Decision Making Level**
- c. Setting up PPP Project Monitoring Unit (PMU) & PPP Project Review Unit (PRU)

2 *Development of Contract Management Plan*

- a. Stage- wise Contract management Activities i.e. Development, Construction, O&M & Exit
- b. Ongoing review plan

3 *Managing the Concession*

- a. Stakeholder & Lifecycle stage- wise Active Post award contract management
- b. Managing Rare events
- c. Managing Issues & Disputes

4 *Performance Monitoring & Review*

- a. KPI Monitoring- Stakeholder- wise
- b. KPI Monitoring- Stage-wise

5 *Reporting & Escalation Mechanism*

- a. Status Reporting & review within the Authority
- b. Escalation mechanism in cases of default

6 *Risk Management*

- a. Risk mitigation & monitoring

7 *Other Important Contract Management Activities*

- a. Contract Management Team Training & Development
- b. Relationship Management
- c. Knowledge Management

6. Users of the Road & Highway Concessions Manual

The Users of this manual would include:

- **The Authority** officials at each level to develop a knowhow of their roles and obligations
- **Policy Making & Regulatory Bodies** to understand key contract management aspects & challenges and action points for to Road & Highway PPP Concessions
- **Private parties/ Concessionaires** to understand and proactively support the Authority in contract management and avoid disputes
- **Other related parties such as the Independent Engineer**, to understand their responsibilities and performance evaluation parameters
- **Highway Users**, for their rights as per agreement on seeking project updates

II. Key Elements of Post- Award Contract Management manual for Road & Highway Concessions

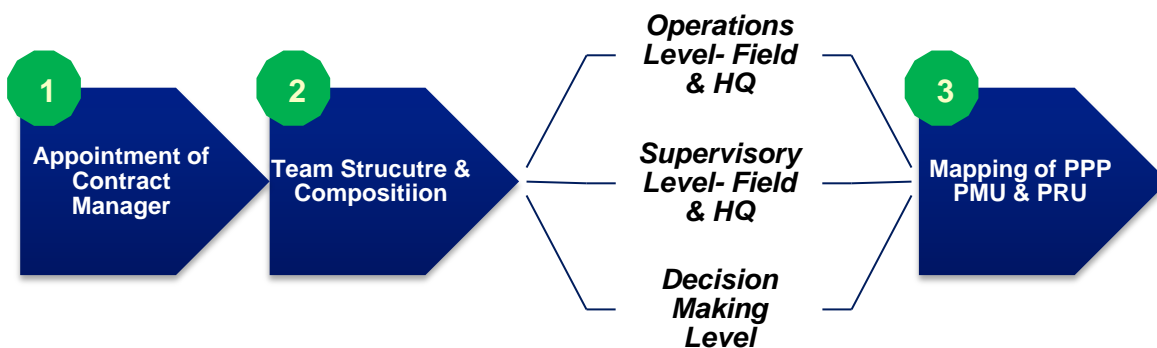
Post- award contract management is not a single- focused activity. It encompasses a gamut of activities which form the overall contract management framework. There are times when multiple activities run simultaneously in a highway concession. Also, appointment of team and development of contract management plan are also critical activities. This chapter provides a snapshot on each of these activities covered in this manual and describes major duties to be undertaken by the Authority.

1. Setting up the Contract Management Team

1 *Setting up the Contract Management Team*

- a. Appointment of Contract Manager
- b. Identify officials within the organization/ authority for each of the 3 levels i. e.
 - i. **Operational Level (Field and HQ)**
 - ii. **Supervisory Level (Field and HQ)**
 - iii. **Decision Making Level**
- c. Setting up PPP Project Monitoring Unit (PMU) & PPP Project Review Unit (PRU)

The contract management team plays an important role in managing the entire gamut of activities in a highway project execution, seeking cooperation from the concessionaire & other stakeholders and smooth transition & exit formalities. Hence care must be taken to appoint and evaluate each profile based on the required skillset for each role. The process of setting up a contract management team consists of:



The Contract management team is to be identified and it should consist of representatives' at all three (3) levels required for the contract management:

1. **Operations Level (Field and HQ)**
2. **Supervisory Level (Field and HQ) and**
3. **Decision Making Level**

Thus, members of Contract Management Team from each level within the Authority have to be clearly appointed keeping in mind their roles and responsibilities and ensuring that each one of them is apprised of his/ her duties in a clear and transparent manner. The process of identification and setting up of the team begins from appointing the contract manager who plays a critical role in coordinating with each team member and is the overall in-charge of the project. The next section describes the main qualities and timelines for appointment of the contract manager and the team.

1.1. Appointment of Contract Manager

The Contract Manager (Project Director/ Field Officer at Operations Level) has direct responsibility for the project execution and contract administration. He/she is the first point of contact for all project related issues and coordinates with other officials within the Authority's institutional structure.

Since the Contract Manager is appointed during the procurement stage itself, immense care is needed to ensure that the right person is appointed. The key personnel from the Authority's side during the operational phase of the PPP project will be the Contract Manager. Hence, he/ she will represent the Authority's interests and ensure that service quality is in sync with the contract terms.

1.2. Team structure and composition

After the Contract Manager is selected, the next task in the series of Transition planning activities is defining the team requirements, its structure and composition. The Contract Manager must communicate the requirements for the contract management team and its operations to the Chairman at Decision Making Level, along with details of roles and responsibilities of each member of the team. The Chairman may then delegate responsibilities to each Member at Decision Making Level.

The size of the team is required to be decided based on:

- Size of Project
- Complexity of Project Activities
- Risks estimated and their potential consequences
- Amount of regular duties each of the appointed officials is required to fulfill

Usually, not more than 2-3 representatives from each level, Operations, Supervisory and Decision Making need to be appointed as a part of the team. The roles and responsibilities of officers at each level and the frequency of their meetings are specified as below:

1 Operations Level Authority

Constitution

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

Responsibilities

- Project execution duties – all post award phase activities
- Escalate issues to Supervisory Level
- Communicate with stakeholders & conduct review meetings
- Initiator of dispute resolution
- Execution of the Transition & Exit Plan

2 Supervisory Level Authority

Constitution

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

Responsibilities

- Review all disputes escalated by Operations Level
- Escalation of issues and disputes to Decision Making Level
- Coordinate with other related parties
- Conduct quarterly review meetings with stakeholders

3 Decision Making Level Authority

Constitution

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

Responsibilities

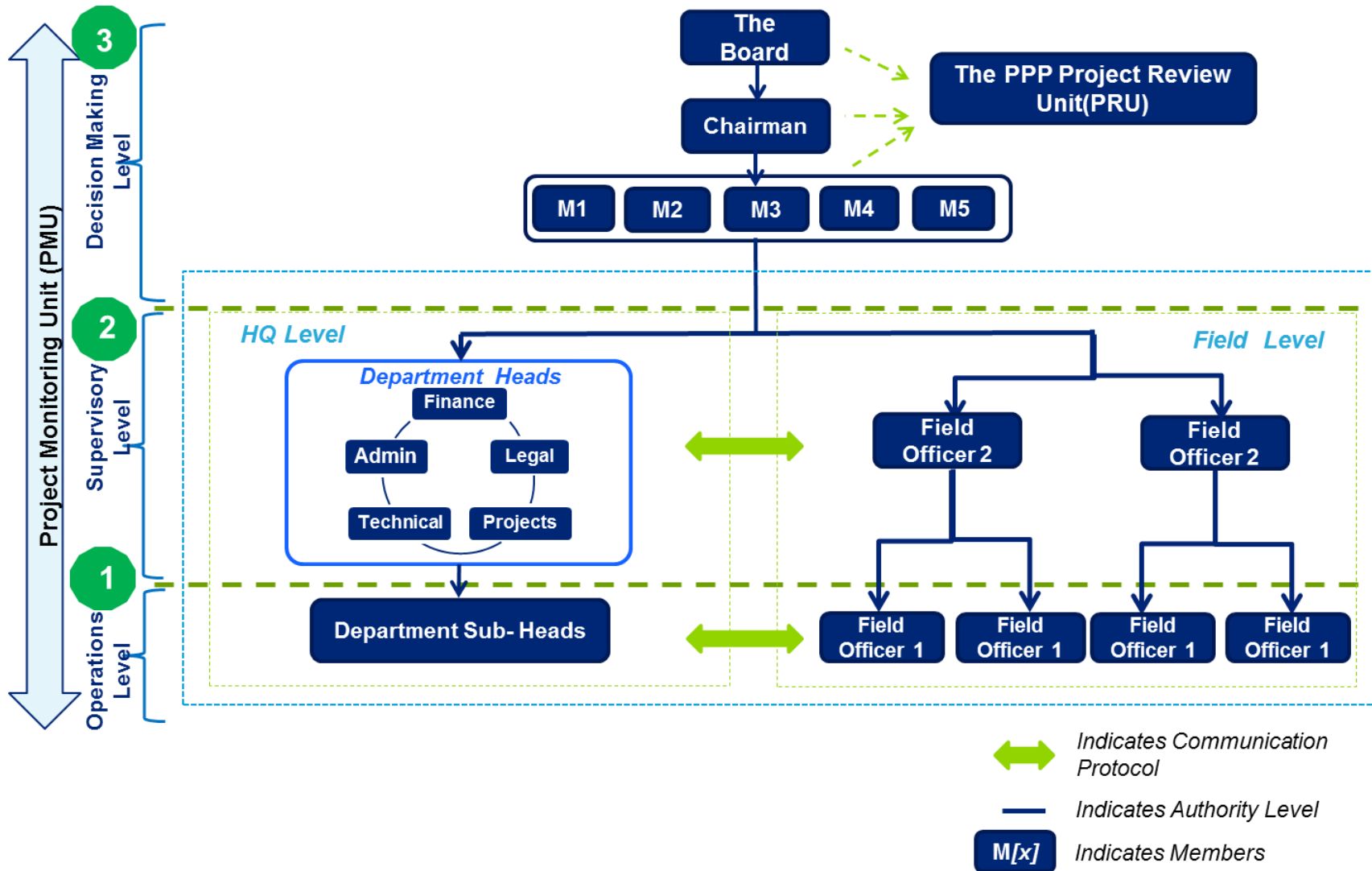
- Approval of rare events management
- All approvals on financial matters
- All approvals needed by Supervisory Level
- Decisions on escalated issues & disputes by Supervisory Level
- Conduct bi-annual review meetings with stakeholders

Salient features of this team structure are:

1. There may be segregation based on **Field and Headquarter** Level Officers in Authority
2. The designations of responsibilities to the relevant person may vary as per State and National Level Authorities. As seen above, at the Operations Level, while at National level the Field officers' duties may be assigned to Project Director, at State level the Divisional General Manager may take care of those responsibilities

Post Award Contract Management Manual for Highway PPP Concessions

The contract management team structure for the National and State level Highway Authorities must be designed as per the project requirements. A model contract management team structure can be seen below. This must be used as a model structure and segregated into all levels allocating responsibilities as per requirements.



There are also other related parties such as the Independent Engineer, Safety Consultant, etc. which play an important role in managing a Highway PPP Concession effectively on behalf of the Authority and are appointed by it. Hence, these parties also form a part of the Contract Management Team. The appointment mechanism and major responsibilities for these parties have been listed in **Annexure M, Appointment & Responsibilities of Other Related Parties**. They must be referred before selecting any related party.

2. Developing Contract Management Plan

2 Development of Contract Management Plan

- a. Stage- wise Contract management Activities i.e. Development, Construction, O&M & Exit
- b. Ongoing review plan

A Contract Management Plan is necessary for a comprehensive understanding of procedures of approaching each contract management activity in a highway concession. It needs to be designed with great care so that all aspects of contract management are covered in it and Authority officials can grasp all its nuances with ease. This makes a contract management plan is one of the most important documents for any Authority to run the project well.

After the Contract management team is appointment, the first step to be undertaken it is the development of the contract management plan. The process includes:



Template for a typical Contract Management Plan is provided in **Annexure A** and procedure for development of Contract Management Plan is provided in **Annexure B**.

The main contents in any contract management plan include:



Post Award Contract Management Manual for Highway PPP Concessions

After the contract management plan is designed it is also necessary that it is reviewed and updated from time-to-time to ensure it remains most relevant for implementation. Changes or updates to the project which have a possible impact on contract management (both positive and negative), must be documented as they occur. Rare events

Appropriate modifications must be made in the contract management plan to reflect the new scenario. Persons or teams responsible for tracking and implementing each change must be identified. A template for the ongoing review plan has been added as **Annexure C**.

Thus, a stage wise plan, effective from date of project award till contract termination, will help the Authority manage routine, regular and rare events and ensure project objectives are achieved. The next section presents how Highway PPP Concessions are to be managed and the responsible Authority officials for it, leading to smooth exit.

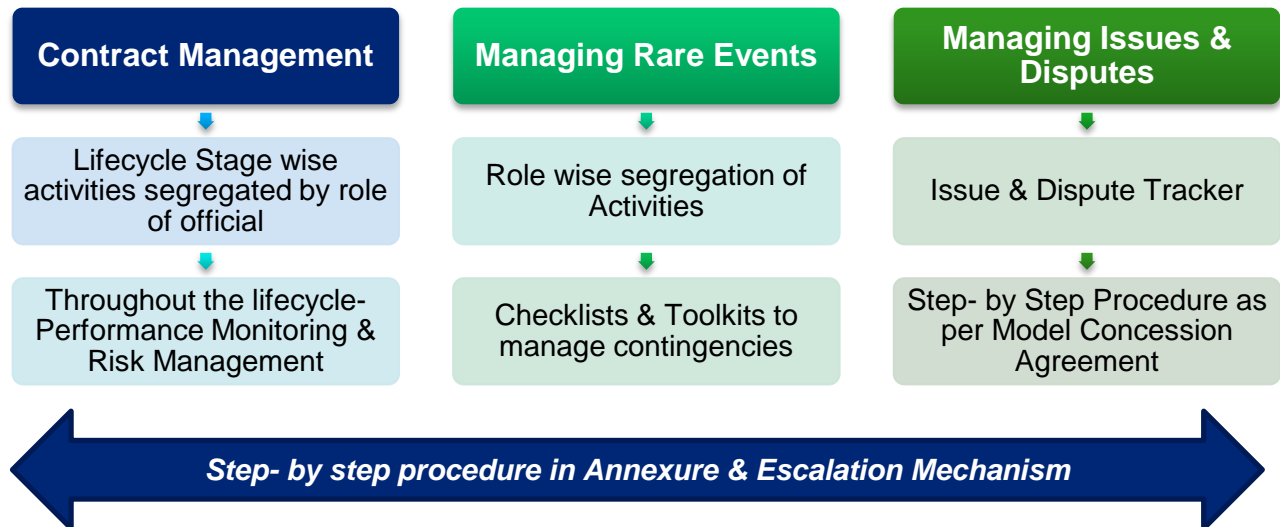
3. Managing Highway PPP Concessions

3 *Managing the Concession*

- a. Stakeholder & Lifecycle stage- wise Active Post award contract management
- b. Managing Rare events
- c. Managing Issues & Disputes

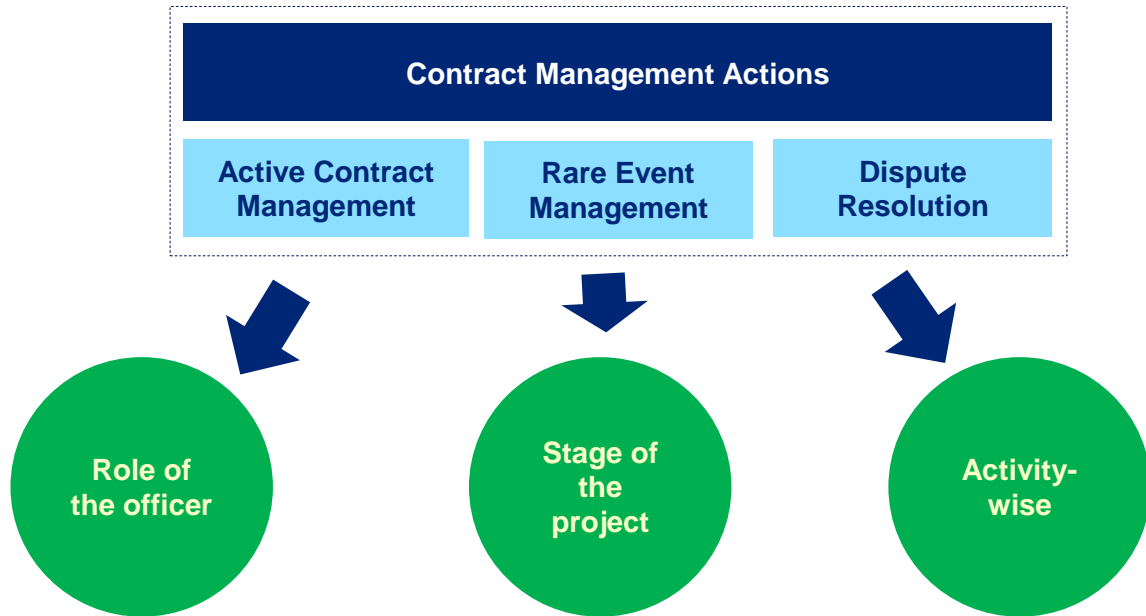
Managing Highway PPP Concessions is a complex task with management of multiple activities throughout the project lifecycle. Also, each official within the Authority needs to undertake a set of tasks and report to the senior member in time in case of any default or discrepancy in the same.

Contract Management Activities covered in this manual comprise:

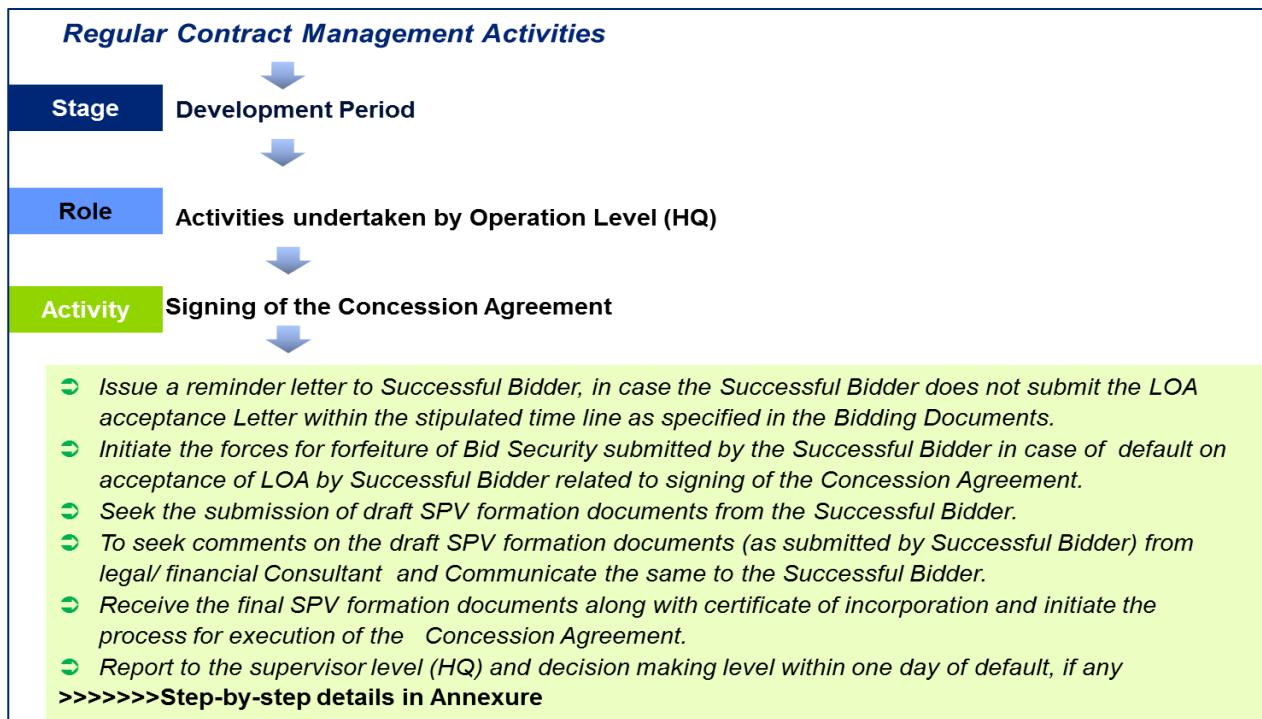


Post Award Contract Management Manual for Highway PPP Concessions

For each of the contract management action, an activity wise roadmap under each stage of the project execution lifecycle has been covered which clearly lists down the role the authorized officer has to play in execution of the activity.



To illustrate as an example:



1. Activities to be undertaken by Operations Level - HQ Officer

i. Execution of Concession Agreement

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Concession Agreement Signing	Step 1: The Authority to accept the LOA acceptance letter from the Successful Bidder.	Within 7 days of issuance of LOA
		Step 2: The Authority may send reminder letter to the Successful Bidder in case the Successful Bidder does not submit the LOA acceptance letter to the Authority.	Within 15 days of issuance of LOA
		Step 3: The Authority to accept the LOA acceptance letter from the Successful Bidder after the reminder.	Within 7 days of receipt of reminder letter from Authority
		Step 4: The Authority may forfeit the Bid Security in case the Successful Bidder does not submit the LOA acceptance to the Authority within 7 days of reminder letter.	Within 7 days of issuance of reminder letter
		Step 5: The Authority to review & approve the submitted the draft documents for incorporation of an SPV under the Companies Act 1956 by the Successful Bidder, after submission of the LOA acceptance letter.	Within 15 days of acceptance of LOA
		Step 6: Authority to send all Legal document (as submitted by Successful	Within 7 days of receipt of such

Thus, for managing Highway Concessions, as per all four project execution stages, namely, Development Period (from issuance of Letter of Award up till Appointment Date), Construction, Operations & Maintenance and Exit, contract management activities are described which are to be undertaken by the Authority officials as per the set deadlines. Along with this management of issues and disputes and rare events are also critical activities which have been elaborated upon later in this manual. For details refer to **Chapter X, Managing Issues & Disputes & Chapter XII, Handling Rare events.**

In the nutshell, the manual tries to serve all the objectives set from contract management perspective in the best possible manner.

For an entire Highway PPP Project lifecycle, the Concession Agreement lists down the tasks and the timelines to be followed for each milestone to be achieved. The next section, lists all those key milestones to be achieved in a Highway concession.

3.1. Key Milestones to be achieved in PPP Road & Highway Concessions

The tables below summarize timelines for key milestones in the project as per the Model Concession Agreement (MCA). These must be referred to from time to time by the Authority officials to gain understanding on timelines for each project activity to be undertaken by them.

Post Award Contract Management Manual for Highway PPP Concessions

Also, for those concessions signed prior to the development of MCA or for state level highways, the Authority officials should modify them according to project requirements.

A. Development Period (from Issuance of Letter of Award up till Appointment Date) Stage

Activities	Key Dates
Signing of Concession Agreement	Within 45 days of issuance of LOA
Submission of Performance Security	Within 180 days of CA Signing Date
Financial Closure	Within 180 days of CA signing date or before Appointed Date
Condition Precedent (CP)	Within 180 days of CA Signing Date
Appointed Date	Within 180 days of CA Signing Date
Handing over of entire ROW	Within 90 days of Appointed Date.

B. Construction Stage

Activities	Key Dates
Release of Performance Security	After 1 year from Appointed Date
Construction Completion Date	Within 912 days from Appointed Date or any other day specified in Concession Agreement
Commercial Operation Date (COD)	After Completion of Construction

C. Operations & Maintenance Stage

Activities	Key Dates
Traffic sampling for a continuous period of 7 days	<ul style="list-style-type: none"> One year prior to the Target Date On the Target Date On the First anniversary of the Target Date
Target Date	After 10 years from Appointed Date
Construction of Additional Tollway, if any	On or after 12 th anniversary of the Appointed Date

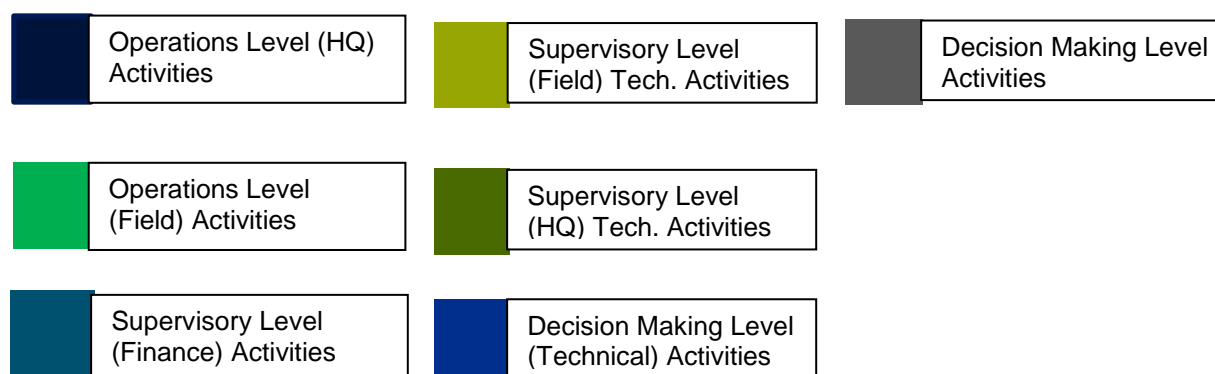
D. Exit Stage

Activities	Key Dates
Termination Notice	At least 180 days before the Termination Date
Termination Date	After Expiry of the Concession Period or any date mutually agreed by both parties
Termination Payment	Within 15 days from Termination Date

In each of these stages, there are a number of activities which are to be taken up by the Authority officials to ensure that the project is executed smoothly without any major hitches. Apart from the Authority, there will also be representatives from the Concessionaires' SPV and other related parties such as the Independent Engineer. This makes the task of monitoring and reviewing the performance of these parties essential and hence it is very important that the Authority officials have a sound understanding of all activities, timelines and escalation mechanisms to be followed in case of default. The following sections mention all major activities to be taken up the Authority officials in each stage.

3.2. Key Activities in a Highway Concession Lifecycle Stages

During any Highway PPP Concession, as mentioned before, Post- Award Activities are spread over from the Development Period up till the Exit stage. There are few activities which are spread across the entire project lifecycle too. Also, for each stage each official within the Authority is assigned a certain set of tasks and he/ she is accountable for them. This section lists down all major activities to be taken by each Authority official for each post- award project lifecycle stage. The activities for each official are indicated as per the following color format:



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

This stage leads up to contract execution, starting from the **Date of issuance of Letter of Award (LOA)** up till the **Appointed Date** of a highway project. In the Development stage, the major activities which the Authority is responsible for are:





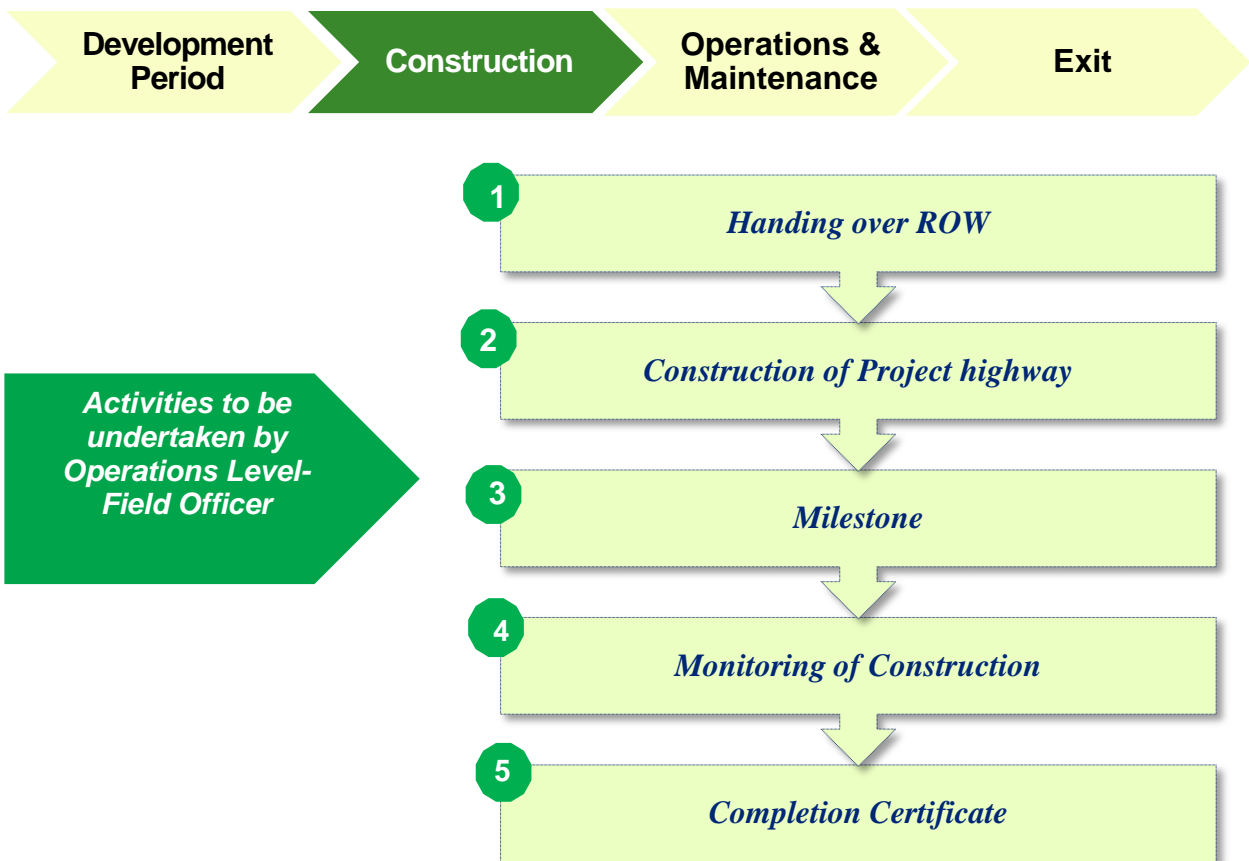
Post Award Contract Management Manual for Highway PPP Concessions

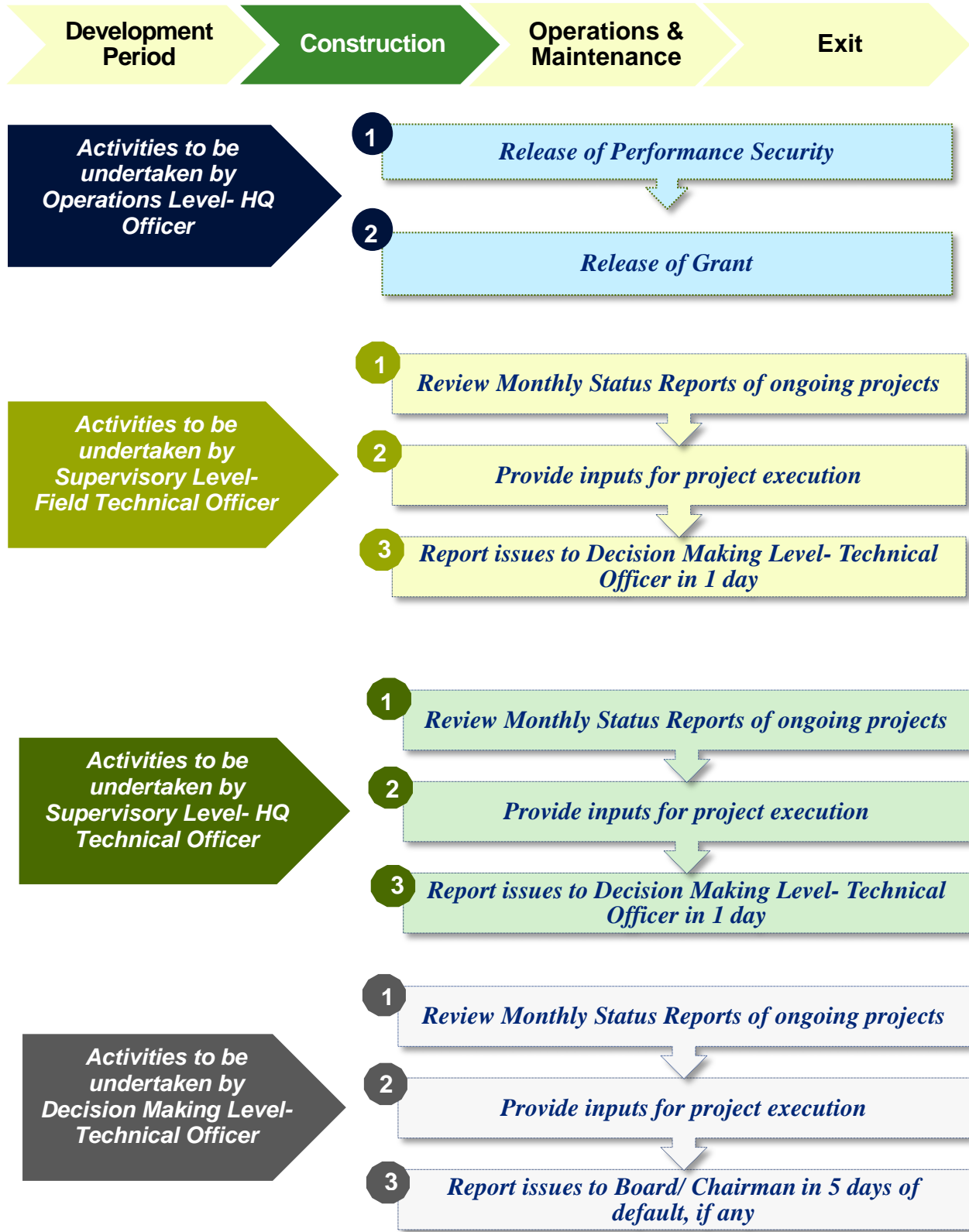
In each of these activities, both the Authority and the Concessionaire need to adhere to timelines and work in tandem so that all conditions before construction are met on time. It has often been observed in Indian projects that delays in acquisition of land and meeting other condition precedents form the root cause of all the further delays in timely completion of projects causing user inconvenience. If such issues are proactively managed before the signing of Concession Agreement and clauses for any delay are added as a part of the Concession Agreement, such issues can be avoided to a great extent.

For more refer to **Chapter III, Contract Management Activities in Development Stage.**

B. Construction Stage:

The construction stage begins from the time construction starts on the **date of commencement of construction** through the commissioning process to **the completion of construction** as specified in the terms and conditions of concession agreement. The activities over which the Authority has to observe control over in the Construction Stage are:





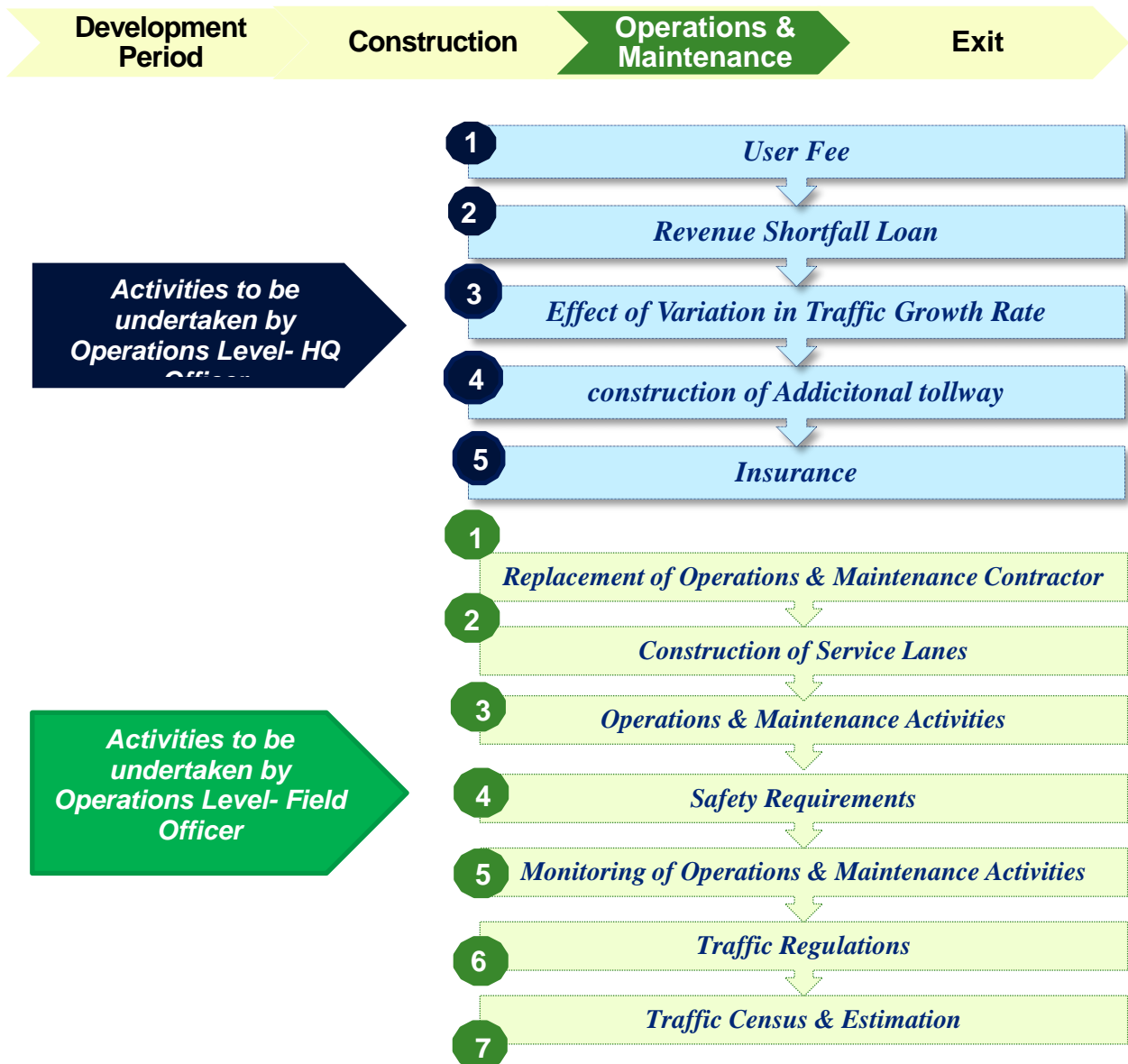
Post Award Contract Management Manual for Highway PPP Concessions

In all these activities, it is very important that the Authority oversees the entire construction process with detail so that responsibility shirking or adherence to quality construction standards by the Concessionaire is maintained. The Independent Engineer needs to monitor the construction activities on regular basis and submit progress report to the field officers on time so that necessary actions can be taken to prevent major delays. Completion certificate should be issues only after satisfactory work is observed during inspection.

For more details, refer to **Chapter IV, Contract Management Activities in Construction Stage.**

C. Operations & Maintenance Stage

This stage extends for the longest portion of the contract life-cycle. It covers the provision and use of the contracted services during the remaining life of the concession. During the Operations & Maintenance stage, the following set of activities requires active supervision for the Authority officials:





The operations & maintenance stage is extremely critical for any project as it forms the longest period of any concession period and is the stage when the users of the highway actually experience the convenience or the inconvenience due the newly constructed highway asset. The Authority should exercise highly précised supervision and control over these activities and take strict actions against any defaults by the Concessionaire. In case the actual traffic is observed to be higher than the existing capacity, it is important that timely construction of new toll ways and up gradation of existing ones in line with new technology is done so that users are not inconvenienced due to it. Also the toll charges need to be set in line with the existing market conditions.

For more details refer to **Chapter V, Contract Management Activities in Operations & Maintenance Stage.**

D. Exit Stage

This stage leads up to and after contract expiry or termination. During the Exit Stage of the project, the activities to be taken up by the Authority are:



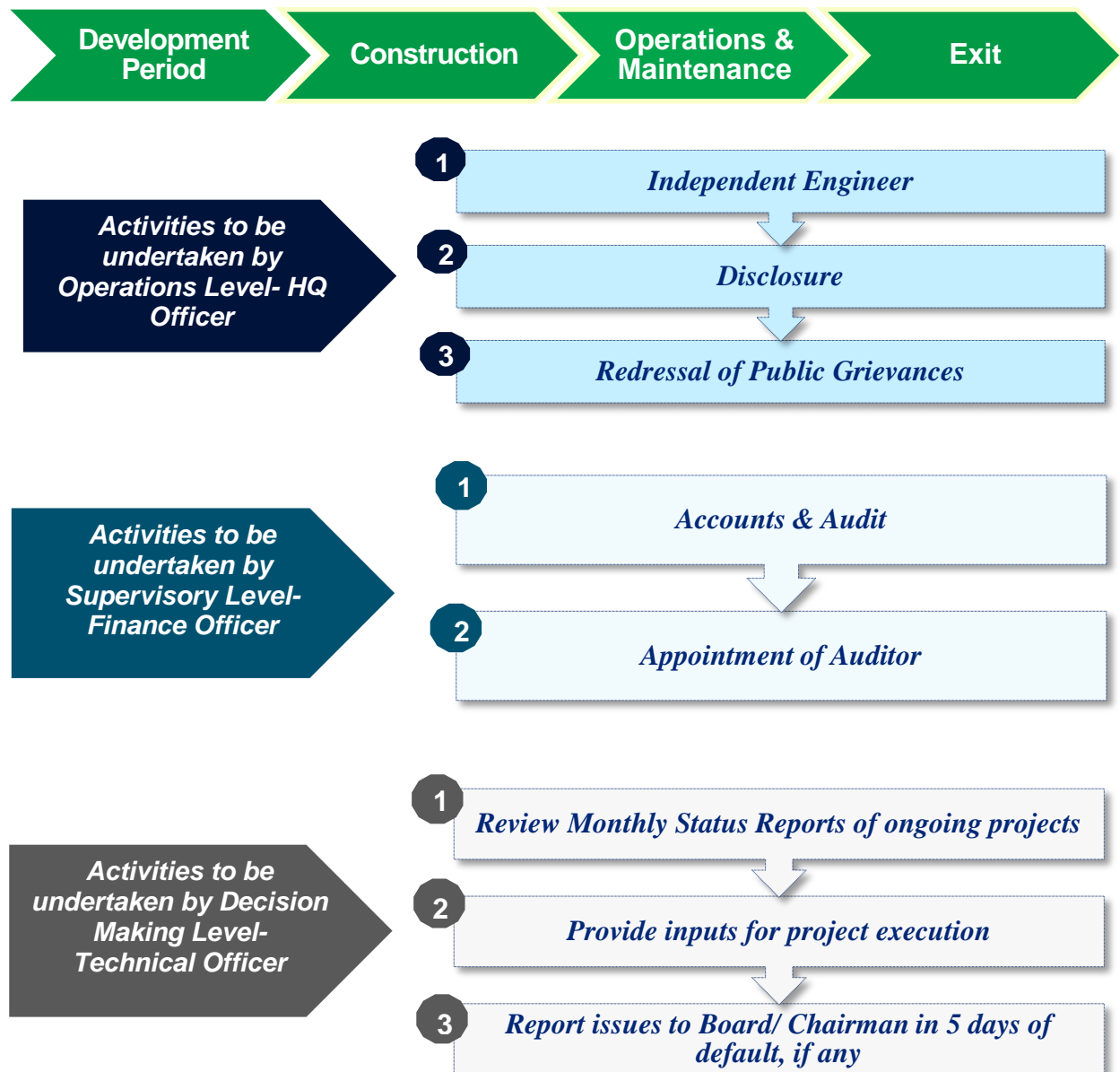
Post Award Contract Management Manual for Highway PPP Concessions

At the time of exit, there are two things Authority needs to ensure, smooth asset handover and service continuity. It is important that the “No Objection Certificate” is issued only when the highway asset is handed over in good condition by the Concessionaire to the Authority and due compensation for all defects has been accounted for. There are also situations when an untimely termination of a project might take place. In such a scenario, it is important that the compensation to be paid by either party is calculated and received on time and a new partner for the pending completion is sought by the Authority.

For more details, refer **Chapter VI, Contract Management Activities in Exit Stage.**

E. Contract management activities throughout the Project lifecycle

There are few activities that include all those tasks to be taken up by the Authority officials and the Concessionaire’s team throughout the project execution lifecycle. Such activities include:





It is important that such activities are managed well as they have a direct impact on the entire project lifecycle. It must be ensured rare issues are given immediate attention and priority as they can have dire consequences in case not resolved timely. Also, not addressing public grievances in a timely manner may lead to huge damage on the Concessionaire's as well as Govt.'s reputation. Hence, immense care must be taken to avoid these issues becoming a dispute.

For more details refer **Chapter VII, Contract Management Activities throughout the Lifecycle.**

4. Performance Monitoring & Review

4 Performance Monitoring & Review

- a. KPI Monitoring- Stakeholder- wise
- b. KPI Monitoring- Stage-wise

Performance Monitoring & Review is also an important activity from Contract management perspective as it establishes the accountability among stakeholders and increases transparency. All major stakeholders in a Highway PPP concession include:

- **Concessionaire**
- **Independent Engineer**
- **Safety Consultant**
- **Financial Consultant**

For each of these stakeholders, Key Performance Indicators measure their performance and any discrepancies found are reported to a higher level Authority. More details on performance monitoring and review are provided in **Chapter VIII, Performance Monitoring & Review.**

5. Reporting & Escalation Mechanism

5 Reporting & Escalation Mechanism

- a. Reporting & review within the Authority
- b. Escalation mechanism in cases of default

For each contract management activity, reporting forms an important part as review of current status and performance of a project is essential for the project execution to progress well as per the timelines. In case of any default, the relevant Authority official needs to escalate it to the appropriate senior level Authority in time for timely action and resolution. Thus, for such reporting, registers and status reports need to be maintained on regular basis. Templates for such registers and more details have been provided in **Chapter IX, Regular Reporting & Escalation Mechanism**.

6. Risk Management

6 Risk Management

- a. Risk mitigation & monitoring

Any Highway Project faces many potential risks. It is important for the authority to proactively and actively manage these risks. The process of risk management involves identification, mitigation and monitoring of risks. It needs to be ensured that the threshold levels are never breached and sound mitigation and management strategies are developed to prevent dire consequences. More details on risk management along with a list of major risks to be managed are provided in **Chapter XI, Risk Management**.

7. Other Important Contract Management Activities

7 Other Important Contract Management Activities

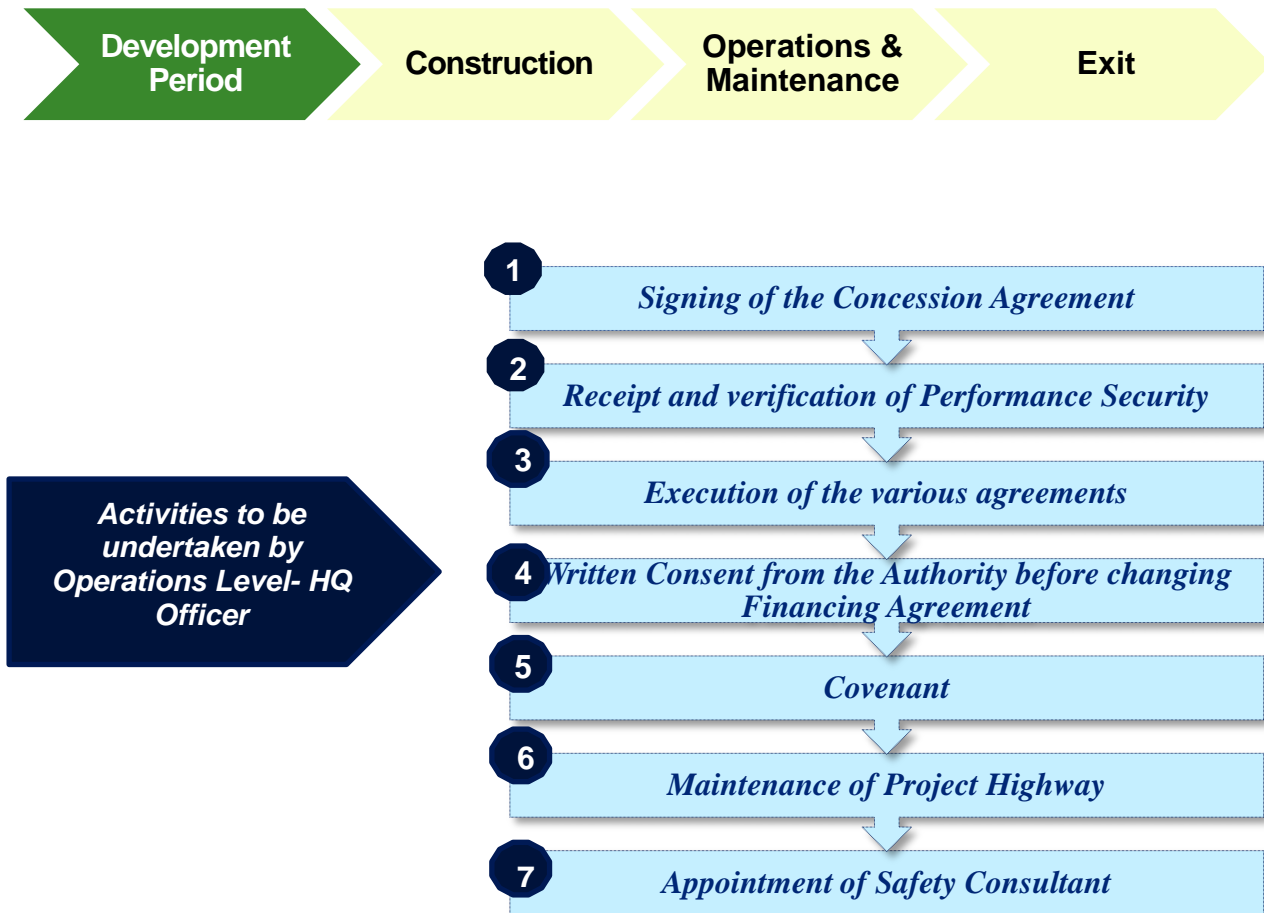
- a. Contract Management Team Training & Development
- b. Relationship Management- Forums for relationship management
- c. Knowledge Management

Apart from the activities mentioned above, there are other important activities from contract management perspective, which include training the Authority officials from time to time to keep their skill set updated for effective contract management, establishing sound relationships with the stakeholders in a project and establishing Knowledge Management policies which provide disclosure policies, knowledge management systems and list of registers to be maintained.

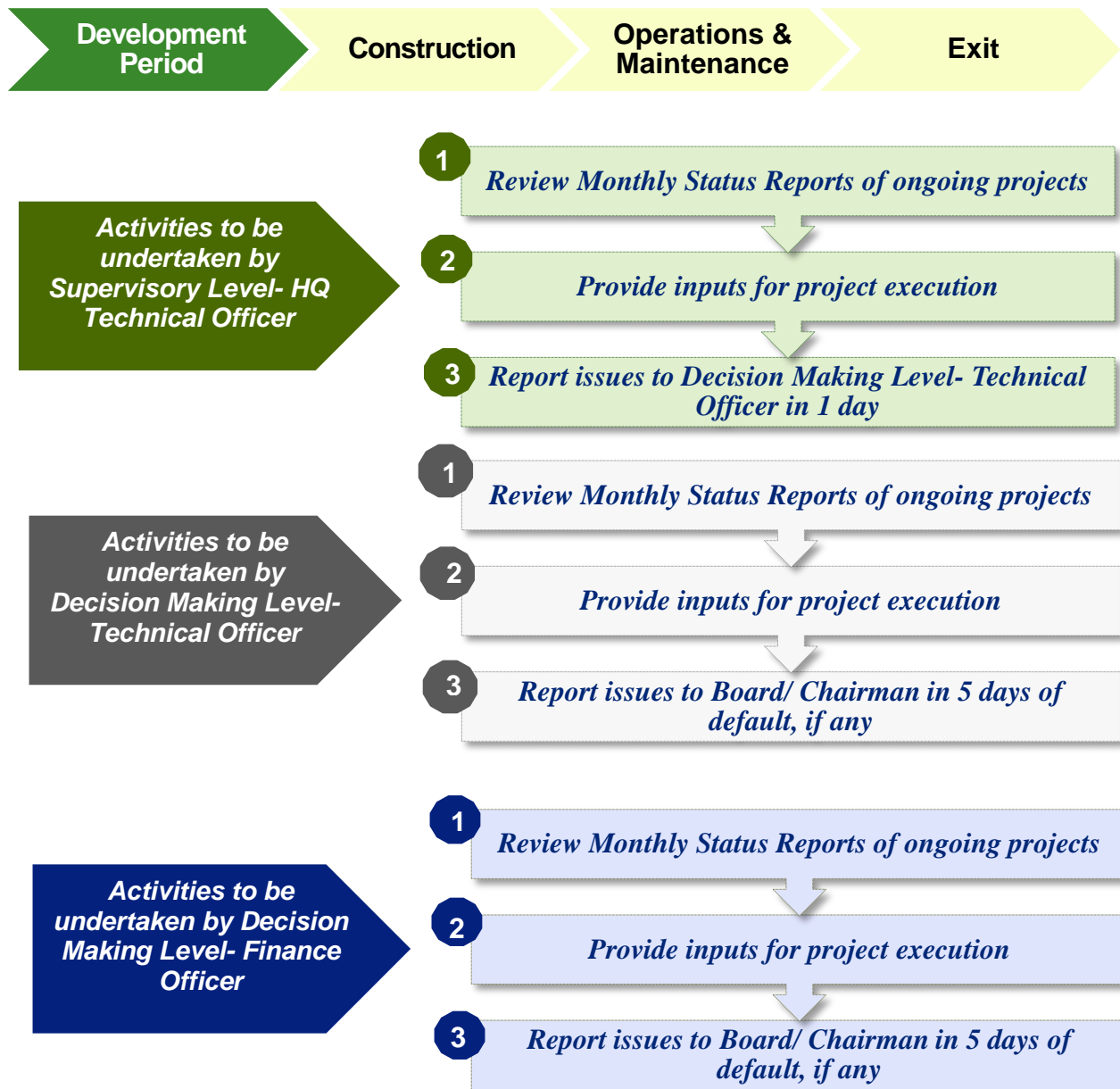
For more details, refer to **Chapter XIII, Other Important Contract Management Activities**.

III. Contract Management Activities in Development Stage (from Letter of Award issuance till Appointed Date)

For the purpose of contract management, Development Period commences from the date of issuance of Letter of Award (LOA) and continues till the declaration of Appointed Date (generally the date from which the concession period starts). During the Development Period various key activities are undertaken within the Authority for which different level of officials are made responsible as per the Project Contract Management Plan. This chapter provides an activity based roadmap for post- award management in the development stage.







1. Activities undertaken by Operation Level (HQ):

The Operation Level (HQ) would be responsible for following key activities:

1.1. Signing of the Concession Agreement:

The various activities need to undertake before Signing of the Concession Agreement. Some of the key activities need to be undertaken by Operation Level (HQ) in this regard are provided below:

Post Award Contract Management Manual for Highway PPP Concessions

- *Issue a reminder letter to Successful Bidder, in case the Successful Bidder does not submit the LOA acceptance Letter within the stipulated time line as specified in the Bidding Documents.*
- *Initiate the forces for forfeiture of Bid Security submitted by the Successful Bidder in case of default on acceptance of LOA by Successful Bidder related to signing of the Concession Agreement.*
- *Seek the submission of draft SPV formation documents from the Successful Bidder.*
- *To seek comments on the draft SPV formation documents (as submitted by Successful Bidder) from legal/ financial Consultant and communicate the same to the Successful Bidder.*
- *Receive the final SPV formation documents along with certificate of incorporation and initiate the process for execution of the Concession Agreement.*
- *Report to the supervisor level (HQ) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 1.i., in **Annexure- D, Contract Management Activities in Development Period.**

1.2. Receipt and verification of Performance Security:

Once, the Concessionaire submit the Performance Security in form of the Bank Guarantee, the Authority needs to verify the same from the Bank from which the Bank Guarantee is issued. Some of the key activities undertaken by the Operation Level (HQ) in this regard are provided below:

- *Verify the Bank Guarantee from issuing bank branch and its supervisory branch.*
- *After verification of Bank Guarantee, issue an acknowledgement to the Concessionaire*
- *In case of non-submission of Bank Guarantee within a stipulated time line as mentioned in the Concession Agreement, proceed for encashment of Bid Security*
- *Report to supervisor level (HQ) and decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 1.ii. in **Annexure- D, Contract Management Activities in Development Period.**

1.3. Execution of the various agreements:

Prior to declaration of Appointed Date various Agreements (i.e. Escrow Agreement, Substitution Agreement etc.) need to be executed between the Concessionaire, Authority and Other Stakeholders such as Lenders, Escrow Agent etc. Such Agreements are to be signed by the Operation Level (HQ). Some of the key activities involved in this process are provided below:

- *In case the draft Agreements submitted by Concessionaire have not been reviewed by other department or legal / financial consultant, seek the opinion from legal/financial consultant prior to execution of any Agreement.*
- *Report to the supervisor level (HQ) & decision making level within one day of default, if any*

1.4. Written Consent from the Authority before making any Change in the Financing Agreement:

The Concessionaire needs to take a written consent from the Authority before making any addition, replacement or amendments to any of the Financing Agreements. Some of the key activities undertaken by the Operation Level (HQ) in this regard are provided below:

- *To seek comments on Financing Agreements (as submitted by the Concessionaire) from legal/ financial Consultant and communicate the same to the Concessionaire.*
- *After verification of the revised documents, issue an approval letter for the changes requested by Concessionaire.*
- *Report to the supervisor level (HQ) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 1.iii. in **Annexure- D, Contract Management Activities in Development Period.**

1.5. Covenant:

As per the provision of the Concession Agreement, Project Agreements contains provisions that entitle the Authority to step into such agreement, in its sole discretion, in substitution of the Concessionaire in the event of Termination or Suspension. Some of the key activities undertaken by Operation Level (HQ) in the event of Termination or Suspension are:

- *To evaluate the project with respect to the substitution*
- *Secure necessary approvals*
- *Implement the right of substitution*
- *Report to the supervisor level (HQ) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 1.iv. in **Annexure- D, Contract Management Activities in Development Period.**

1.6. Maintenance of Project Highway:

As per the provision of the Concession Agreement, the Authority shall maintain the Project Highway as compared to its condition 7 days prior to the last date for submission of the Bid. Some of the key activities undertaken by the Operation Level (HQ) in this regard are provided below:

Post Award Contract Management Manual for Highway PPP Concessions

- To ask for the financial quote for maintaining the project highway from various contractors through open tender process
- Review the financial quotations received from the interested parties and finalize the same.
- If maintenance is done by the Concessionaire, request the Independent Engineer to determine the cost of the same.
- Reimburse/process the cost determined by the Independent Engineer to the Concessionaire
- Report to the supervisor level (HQ) & decision making level within one days of default, if any

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 1.v. in **Annexure- D, Contract Management Activities in Development Period.**

1.7. Appointment of Safety Consultant:

As per the provision of the Concession Agreement, the Authority to appoint one or more Safety Consultant for carrying out safety audit at the design stage of the Project Within 90 days of signing of Agreement. Some of the key activities undertaken by the Operation Level (HQ) in this regard are provided below:

- To call the proposal from various agency by open tender process
- To evaluate the proposals and finalise the selection of Safety Consultant
- Report to the supervisor level (HQ) and decision making level

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 1.vi. in **Annexure- D, Contract Management Activities in Development Period.**

2. Activities undertaken by Operation Level (Field):

The Operation Level (Field) would be responsible for following key activities:

1.1. Handing over the Right of Way (ROW):

As per the provision of the Concession Agreement the Authority has to provide at least 80% of ROW before the declaration of Appointed Date. During the Land Acquisition process various officials/ agencies are involved such as Competent Authority of Land Acquisition (CALA), Revenue Department (State Govt.), dedicated officer for Land Acquisition within the Authority etc. Some of the key activities to be undertaken by the Operation Level (field) in the process of making sure the at least 80% of ROW, are provided below:

- To make sure the availability of at least 80% Right of Way (ROW) before the Appointed Date
- Coordination with Competent Authority of Land Acquisition (CALA), Revenue Department (State) etc.
- Report to the supervisor (field) level & decision making level within 5 days of default, if any

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 2.i.1. in **Annexure- D, Contract Management Activities in Construction Stage**.

1.2. Approval of general arrangement drawings (GAD):

As per the provision of the Concession Agreement the Authority to procure approval of the Railway authorities in the form of a general arrangement drawing to construct road over bridges / under bridges at level crossings on the Project Highway before the declaration of Appointed Date. Some of the key activities undertaken by the Operation Level (field) in this regard are provided below:

- *To procure the approval of the Railway authorities in the form of a general arrangement drawing to construct road over bridges / under bridges at level crossings on the Project Highway*
- *Request to the Railway Authority for GAD approval*
- *To send a notice to the Concessionaire to extend the GAD approval by 6 months, if required*
- *Report to the supervisor level (field) & decision making level within 5 days of default, if any*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 2.i.2.in **Annexure- D, Contract Management Activities in Construction Stage**.

1.3. Environmental Clearance:

As per the provision of the Concession Agreement, the Authority has to procure all Applicable Permits relating to environmental protection and conservation of the Site. Some of the key activities undertaken by the Operation Level (field) in this regard are provided below:

- *To procure all Applicable Permits relating to environmental protection and conservation of the Site*
- *To send a notice to the Concessionaire to extend the Applicable Permits by 6 months, if required*
- *Request to the competent authority for environmental clearance approval*
- *Report to the supervisor level (field) & decision making level within 5 days of default, if any*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 2.i.3. in **Annexure- D, Contract Management Activities in Development Period**.

1.4. Utility Shifting:

As per the provision of the Concession Agreement, the Authority has to make the appropriate arrangement for Utility Shifting. Some of the key activities undertaken by the Operation Level (field) in this regard are provided below:

- *To make the appropriate arrangement of Utility shifting*
- *To ask for the financial quotation for utility shifting from interested parties through open tender*
- *To seek necessary financial approval based on the sanctioned value*
- *Report to the supervisor level (field) and decision making level*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 2.i.4. in **Annexure- D, Contract Management Activities in Development Period.**

1.5. Utilities, Associated Roads and Trees:

As per the provision of the Concession Agreement, the Authority to provide adequate assistance, right of way for diversions if any and bear the cost as applicable in the Concession Agreement etc. during the development of the project. Some of the key activities undertaken by the Operation Level (field) in this regard is provided below:

- *To make the appropriate arrangement, in case of any written request from the Concessionaire*
- *To Process the invoices for reimbursement of cost, which is required to be borne by the Authority, as per the terms of the Concession Agreement*
- *To assist the Concessionaire in obtaining the Applicable Permits*
- *To seek necessary financial approval based on the sanctioned value*
- *Report to the supervisor level (field) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 2.ii. in **Annexure- D, Contract Management Activities in Development Period.**

1.6. Obligations relating to Project Agreements:

As per the provision of the Concession Agreement, the Concessionaire to submit the drafts of all Project Agreements, or any amendments or replacements thereto to the Authority for its review and comments. The Responsibilities of the Operation Level (field) in this regard is provided below:

- *To issue an acknowledgement to the Concessionaire*
- *To review the documents submitted by the Concessionaire and suggest the changes, if any*

- *Seek the response of above and acknowledge the revised communication*
- *Report to the supervisor level (field) and decision making level within one day default, if any*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 2.iii. in **Annexure- D, Contract Management Activities in Development Period.**

3. Activities undertaken by Supervisory Level (HQ) - Finance:

The Supervisory Level (HQ) - Finance would be responsible for following key activities:

3.1. Damage for delay by the Authority:

As per the provision of the Concession Agreement the Damage for delay has to be paid by the Authority in case of delay in fulfilling the Condition Precedent as specified in the Concession Period. Although, various level of official are involved in the process of fulfilling the Condition Precedent. However, damage for delay is processed by Supervisory Level (HQ) – Finance. Some of the key activities undertaken by the Supervisory Level (HQ) - Finance in this regard are provided below:

- *To review the request received from the Concessionaire for Damage for delay by the Authority*
- *To negotiate with the Concessionaire for the Damage payment*
- *To Initiate the Damage claim process for Delays*
- *Report and escalate to the decision making level within one day of default, if any*

For detailed activities to be undertaken by Supervisory Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 3.i. in **Annexure- D, Contract Management Activities in Development Period.**

3.2. Condition Precedent - Concessionaire:

In the process of fulfilling the Condition Precedent the Concessionaire does the Communication at various levels within the Authority. Some of the key activities undertaken by the Supervisory Level (HQ) - Finance in this regard are provided below:

- *To seek comments on the draft Escrow & Substitution Agreement (as submitted by Concessionaire) from legal/ financial Consultant and communicate the same to the Concessionaire.*
- *To issue a letter to the Concessionaire regarding approval / acceptance of the Escrow & Substitution Agreement*
- *To review the supporting documents of the Applicable permits and representations & warranties as submitted by Concessionaire.*

Post Award Contract Management Manual for Highway PPP Concessions

- *Issue an acknowledgement letter the Concessionaire after receiving any documents with respect to the Condition Precedent.*
- *Report to the decision making level within one day of default, if any*

For detailed activities to be undertaken by Supervisory Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 3.ii.1. in **Annexure- D, Contract Management Activities in Development Period.**

3.3. Financial Closure:

Prior to declaration of the Appointed Date the Concessionaire needs to achieve the Financial Closure. Declaration of Financial Closure is also the part of the Condition Precedent of the Concessionaire. Some of the key activities undertaken by the Supervisory Level (HQ) - Finance in this regard are provided below:

- *To seek comments on the Financial Closure documents (as submitted by Concessionaire) from legal/ financial Consultant and communicate the same to the Concessionaire.*
- *To issue a letter to the Concessionaire regarding approval / acceptance of the Financing Agreement*
- *In case of Delay in Financial Close, Initiate the Damage claim for Delays*
- *In case failure to achieve Financial Close, initiate the termination process as per the Concession Agreement.*
- *To encash the Bid Security and appropriate the proceeds thereof as Damages*
- *Report to the decision making level within one day of default, if any*

For detailed activities to be undertaken by Supervisory Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 3.ii.2. in **Annexure- D, Contract Management Activities in Development Period.**

3.4. Condition Precedent and declaration of Appointed Date:

After fulfilling the Condition Precedent by each party (i.e. Authority and Concessionaire) the Authority may declare the Appointed Date. Some of the key activities undertaken by the Supervisory Level (HQ) - Finance in this regard are provided below:

- *To inform/ notify in writing to Concessionaire at least once in a month about the status / progress of the Condition Precedent for which Authority is responsible*
- *To issue acknowledgement to Concessionaire after receiving the status of Condition Precedent from the Concessionaire*

Post Award Contract Management Manual for Highway PPP Concessions

- To seek comments on the Condition Precedent documents (as submitted by Concessionaire) from legal/ financial Consultant and communicate the same to the Concessionaire.
- To issue a letter to the Concessionaire regarding approval / acceptance of the Financing Agreement
- If both the parties are fulfilling all of the Condition Precedents, declare the Appointed Date
- In case of delay, initiate the Damage claim for Delays and appropriate of Performance Security
- In case Concessionaire fails to cure its default within the cure period, initiate the termination process as further action as per the Concession Agreement.
- Report to the decision making level within one day of default, if any

For detailed activities to be undertaken by Supervisory Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 3.iii. in **Annexure- D, Contract Management Activities in Development Period.**

4. Activities undertaken by Supervisory Level (HQ) - Technical:

The Supervisory Level (HQ) - Technical would be responsible for following key activities:

- To ask for the monthly status reports of the all ongoing projects from the concerned Operation Level (HQ).
- To review all the files/documents forwarded by Operation Level (HQ)
- To provide the required inputs in the project execution
- Report and escalate to the decision making level (Technical) within one day of default, if any

For detailed activities to be undertaken by Supervisory Level (HQ) Technical including their corresponding stakeholder / party, timelines and reporting and escalations, refer sections 1,i.-vi. in **Annexure- D, Contract Management Activities in Development Period.**

5. Activities undertaken by Supervisory Level (field) - Technical:

The Supervisory Level (field) - Technical would be responsible for following key activities:

- To ask for the monthly status reports of the all ongoing projects from the concerned Operation Level (field).
- To review all the files/documents forwarded by Operation Level (field)
- To provide the required inputs in the project execution
- Report and escalate to the decision making level (Technical) within one day of default, if any

For detailed activities to be undertaken by Supervisory Level (field) Technical including their corresponding stakeholder / party, timelines and reporting and escalations, refer sections 2,i-iii., in **Annexure- D, Contract Management Activities in Development Period.**

6. Activities undertaken by Decision making Level (Technical):

The Decision making Level (Technical) would be responsible for following key activities:

- *To ask for the monthly status reports of the all ongoing projects from the concerned Supervisory Level (HQ) and Supervisory Level (Field).*
- *To review all the files/documents forwarded by Supervisory Level (HQ) and Supervisory Level (Field).*
- *To take the required decision as and when required*
- *Report and escalate to the Board / Chairman within 5 days of default, if any*

For detailed activities to be undertaken by Decision Making Level (Technical) including their corresponding stakeholder / party, timelines and reporting and escalations, refer sections 1& 2 in **Annexure- D, Contract Management Activities in Development Period.**

7. Activities undertaken by Decision making Level (Finance):

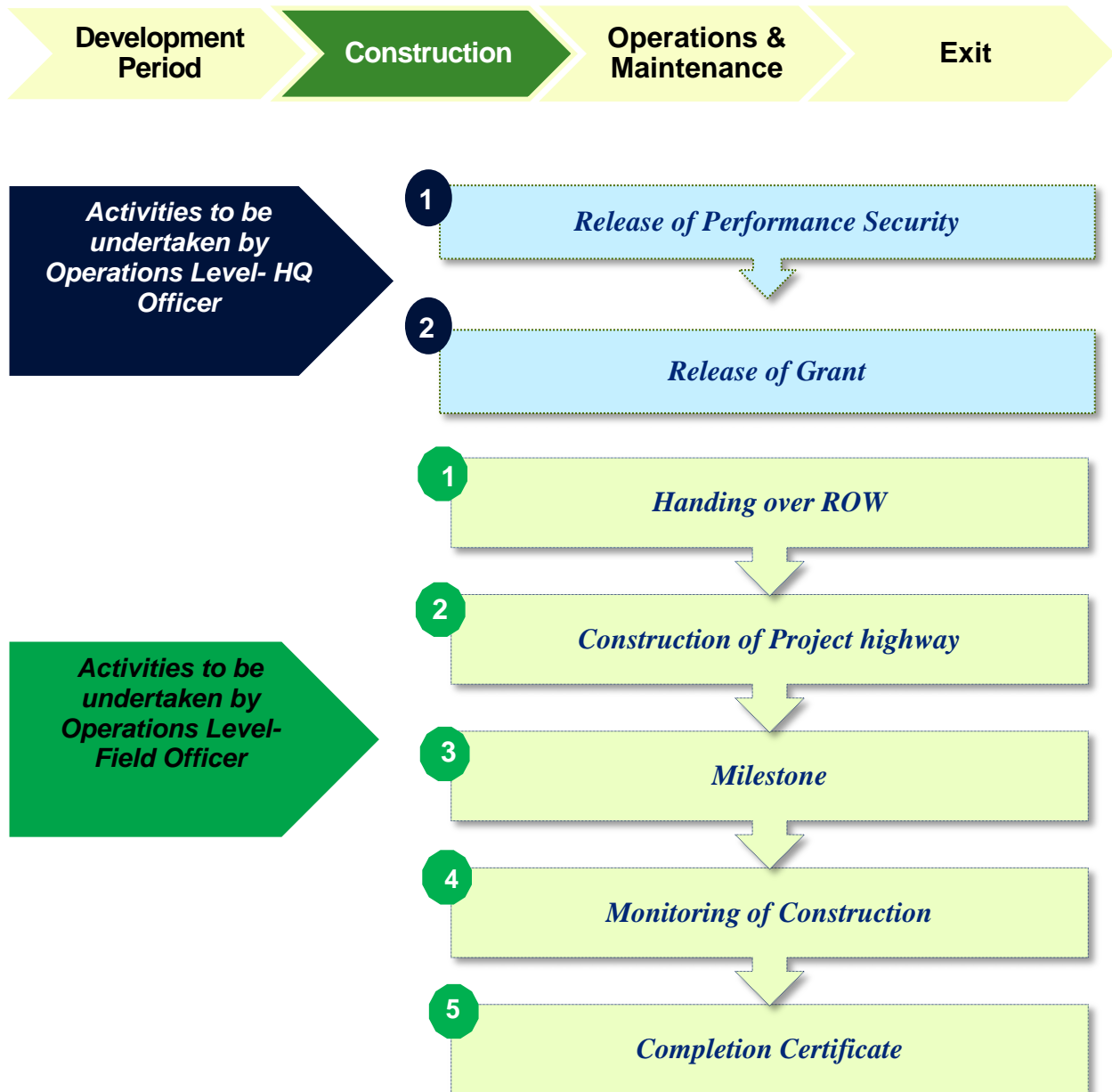
The Decision making Level (Finance) would be responsible for following key activities:

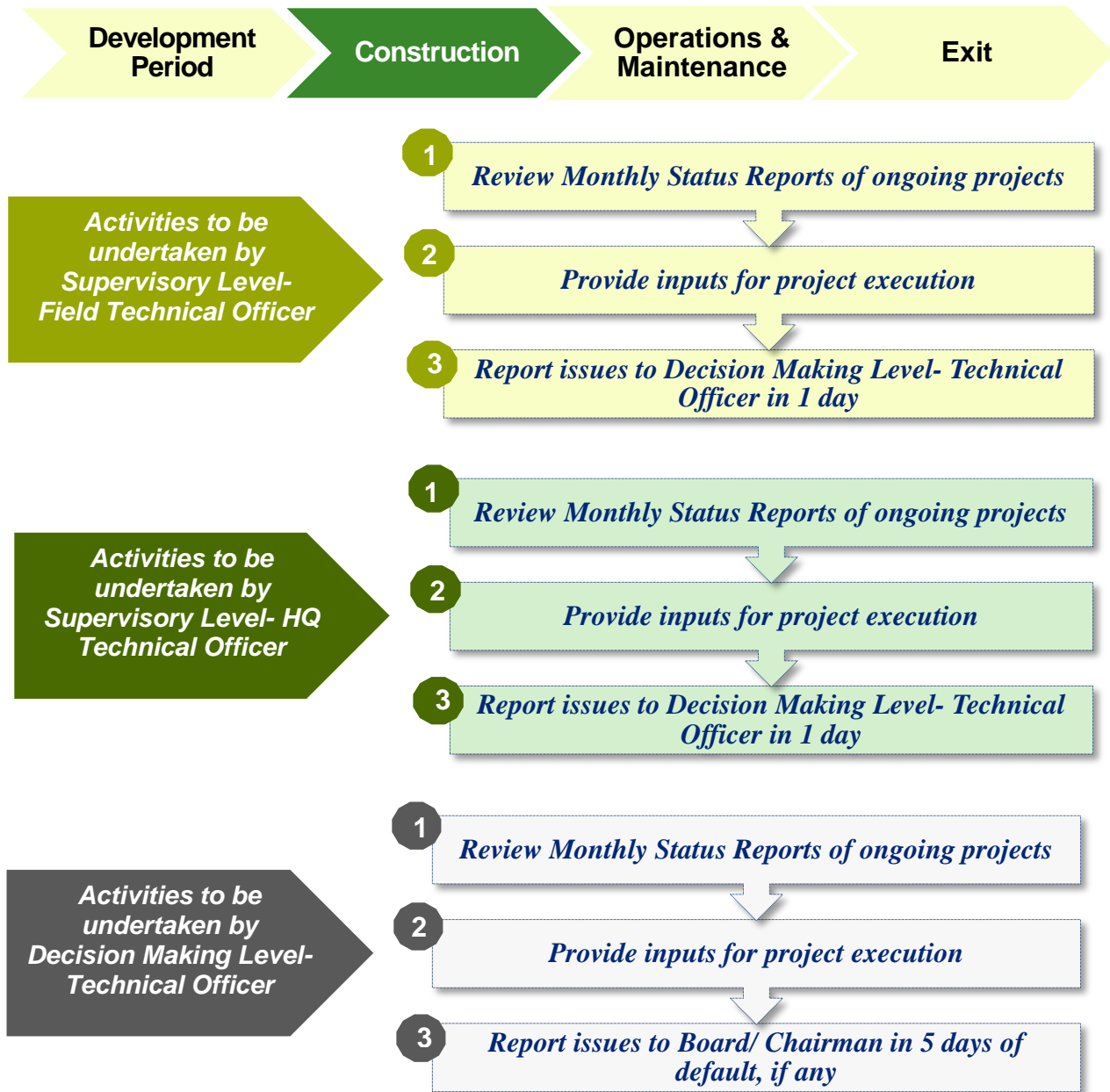
- *To ask for the monthly status reports of the all ongoing projects from the concerned Supervisory Level (Finance)*
- *To review all the files/documents forwarded by Supervisory Level (Finance).*
- *To take the required decision as and when required*
- *Report and escalate to the Board / Chairman within 5 days of default, if any*

For detailed activities to be undertaken by Decision Making Level (Finance) including their corresponding stakeholder / party, timelines and reporting and escalations, refer section 3 in **Annexure- D, Contract Management Activities in Development Period.**

IV. Contract Management Activities in Construction stage (from Appointed Date till declaration of COD)

For the purpose of contract management, Construction Period commences from the Appointed Date and continues till the Completion of the Construction (generally the date from which the Commercial Operation Date (COD) starts). During the Construction Period various key activities are undertaken within the Authority for which different level of officials are made responsible as per the Project Contract Management Plan. This chapter provides an activity based roadmap for post-award management in the construction stage.





1. Activities undertaken by Operation Level (Head Quarters or HQ):

During the Construction Period, the Operation Level (HQ) would be responsible for following key activities:

1.1. Release of Performance Security:

Before releasing the Performance Security some key aspects need to be looked into. Some of the key activities undertaken by Operation Level (HQ) in this regard are provided below:

- Verify the documentary evidence submitted by Concessionaire with respect to the capital expenditure in the Project.

Post Award Contract Management Manual for Highway PPP Concessions

- *If the Concessionaire is fulfilling the required criteria as per the Concession Agreement, Authority may release the Performance Security.*
- *Report to the supervisor level (HQ) and decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 1.i. in **Annexure- E, Contract Management Activities in Construction Stage.**

1.2. Release of Grant:

Highest Premium or Lowest Grant is the bidding parameter for the selection of Successful Bidder. In case of the Successful Bidder is quoted the Grant, the Authority will disburse the Grant during the Construction period as per the provisions of the Concession Agreement. Some of the key activities undertaken by Operation Level (HQ) in this regard are provided below:

- *Review the request received from the Concessionaire for disbursement of grant*
- *Initiate the grant disbursement process.*
- *Circulate/ forward correspondence to the related parties*
- *Report to the supervisor level (field) and decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 1.ii. in **Annexure- E, Contract Management Activities in Construction Stage.**

2. Activities undertaken by Operation Level (field):

During the Construction Period, the Operation Level (field) would be responsible for following key activities:

1.1. Handing over of Right of Way (ROW):

As per the Concession Agreement, the Authority has to fulfill some key obligations during construction period. Handing over of ROW is one of those key obligations. Some of the key activities undertaken by Operation Level (field) in this regard are provided below:

- *Review the request received from the Concessionaire with respect to remaining ROW, if any*
- *Coordinate with the line department to make sure the availability of ROW.*
- *Make sure 100% of ROW is provided within 90 days of Appointed Date*

Post Award Contract Management Manual for Highway PPP Concessions

- *In case the Authority does not hand over the 100% of ROW within 90 days of Appointed Date, Operation Level (field) would calculate the damages as per the provisions of the Concession Agreement.*
- *If Concessionaire requests for payment of damages, Operation Level (field) officer would process it.*
- *Report to the supervisor level (field) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 2.i. in **Annexure- E, Contract Management Activities in Construction Stage.**

1.2. Construction of Project Highway:

As per the provisions of the Concession Agreement, the Concessionaire and Independent Engineer submit drawings and all related reports to the Authority. The Authority has the right but not the obligation to review such reports. Some of the key activities undertaken by Operation Level (field) in this regard are provided below:

- *Review the drawings and reports submitted by the Concessionaire and Independent Engineer.*
- *Provide the comments on such reports to the Concessionaire / Independent Engineer, if any*
- *Report to the supervisor level (field) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 3.i. in **Annexure- E, Contract Management Activities in Construction Stage.**

1.3. Milestone:

As per provisions of the Concession Agreement, the Concessionaire is to meet the project milestone as specified in the Schedule G of the Concession Agreement. In case of any delay the Authority is to respond as per the provisions of the Concession Agreement. Some of the key activities undertaken by Operation Level (field) in this regard are provided below:

- *Review the project progress report submitted by Independent Engineer.*
- *In case the Concessionaire does not meet the milestone within specified period. Operation Level (field) to issue a notice to the Concessionaire is to pay damages for delay.*
- *Calculate damages as per the provisions of the Concession Agreement.*
- *In case the Concessionaire does not complete the Project Highway within 270 days from schedule completion date, the Operation Level (field) may initiate the Termination process.*

Post Award Contract Management Manual for Highway PPP Concessions

- *Report to the supervisory level (field) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 2.ii. in **Annexure- E, Contract Management Activities in Construction Stage.**

1.4. Monitoring of Construction:

Some of the key activities undertaken by Operation Level (field) for monitoring of Construction are provided below:

- *Process the reimbursement of the half of the cost incurred in the Test as certified by the Independent Engineer.*
- *In case Independent Engineer recommend to the Authority for Suspension of any construction work, Operation Level (field) may issue a notice to the Concessionaire is to suspend the construction work.*
- *After remedial measures from Concessionaire, and the independent Engineer recommendation the Operation Level (field) may process to revoke such suspension or instruct the Concessionaire is to carry out such other and further remedial measures as may be necessary in the reasonable opinion of the Authority.*
- *Report to the supervisor level (field) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 2.iii. in **Annexure- E, Contract Management Activities in Construction Stage.**

1.5. Completion Certificate:

Some of the key activities undertaken by Operation Level (field) for monitoring of Construction are provided below:

- *During the Test for issuing the Completion certificate, the Operation Level (field) may designate Authority's representative to witness the Test.*
- *In case the Concessionaire does not complete the Punch list, Operation Level (field) may process for the recovery of damages from the Performance Security as specified in the Concession Agreement.*
- *In case the Concessionaire does not complete the Punch list items within the specified period from the start of the payment of damages, Operation Level (field) may process the Termination of the Agreement.*

Post Award Contract Management Manual for Highway PPP Concessions

- *Review the report submitted by Independent Engineer (in case Project Highway or any part thereof does not conform to the provisions of the Agreement).*
- *Process the own inspection based on the report submitted by Independent Engineer.*
- *In case of any deficiency in the Project Highway, Operation Level (field) may notify to the Concessionaire*
- *Report to the supervisor level (field) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 2.iv. in **Annexure- E, Contract Management Activities in Construction Stage.**

2. Activities undertaken by Supervisory Level (HQ) - Technical:

The Supervisory Level (HQ) - Technical would be responsible for following key activities:

- *To ask for the monthly status reports of the all ongoing projects from the concerned Operation Level (HQ).*
- *To review all the files/documents forwarded by Operation Level (HQ)*
- *To provide the required inputs in the project execution*
- *Report and escalate to the decision making level (Technical) within one day of default, if any*

For detailed activities to be undertaken by Supervisory Level (HQ) Technical including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 1 and 3 in **Annexure- E, Contract Management Activities in Construction Stage.**

3. Activities undertaken by Supervisory Level (field) - Technical:

The Supervisory Level (field) - Technical would be responsible for following key activities:

- *To ask for the monthly status reports of the all ongoing projects from the concerned Operation Level (field).*
- *To review all the files/documents forwarded by Operation Level (field)*
- *To provide the required inputs in the project execution*
- *Report and escalate to the decision making level (Technical) within one day of default, if any*

For detailed activities to be undertaken by Supervisory Level (field) Technical including their corresponding stakeholder / party, timelines and reporting and escalations, refer section 2 in **Annexure- E, Contract Management Activities in Construction Stage.**

4. Activities undertaken by Decision making Level (Technical):

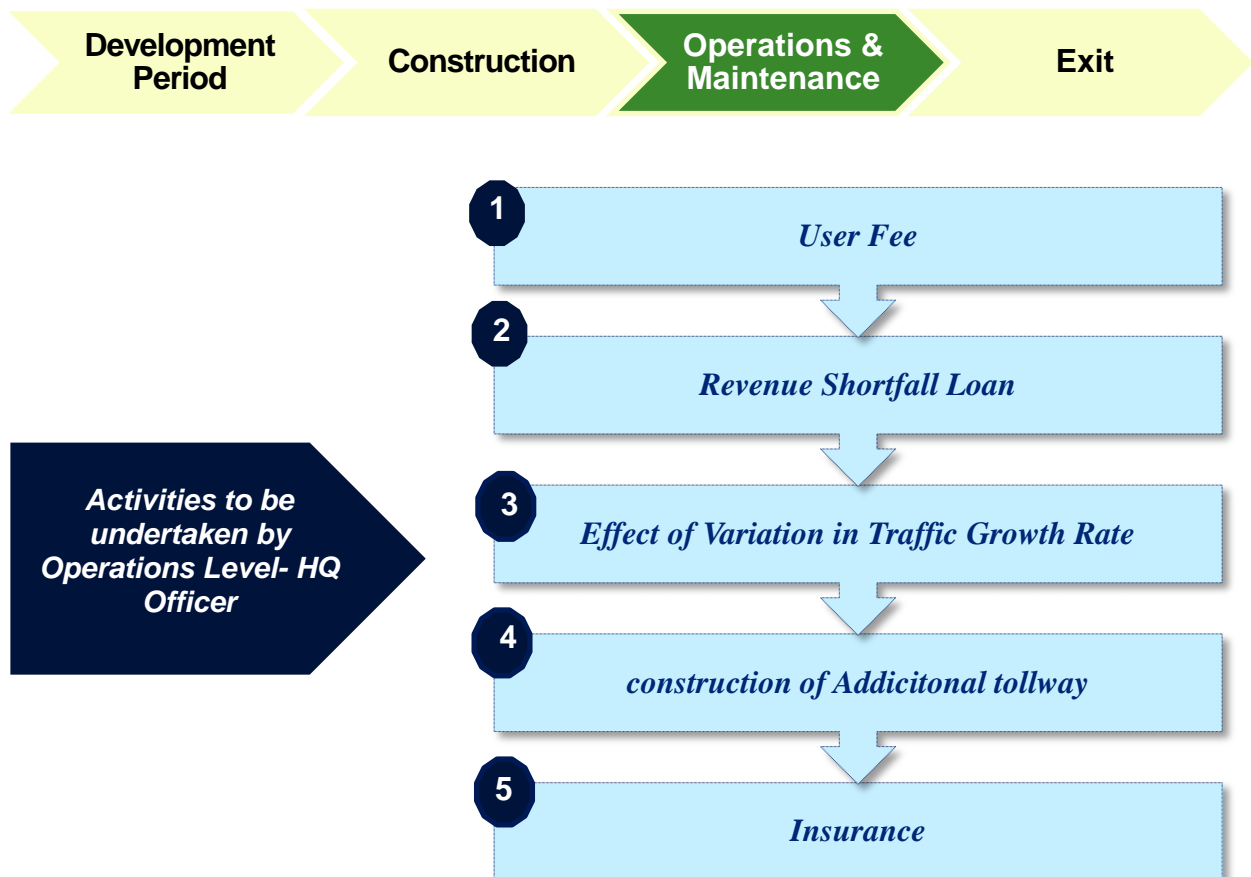
The Decision making Level (Technical) would be responsible for following key activities:

- *To ask for the monthly status reports of the all ongoing projects from the concerned Supervisory Level (HQ) and Supervisory Level (Field).*
- *To review all the files/documents forwarded by Supervisory Level (HQ) and Supervisory Level (Field).*
- *To take the required decision as and when required*
- *Report and escalate to the Board / Chairman within 5 days of default, if any*

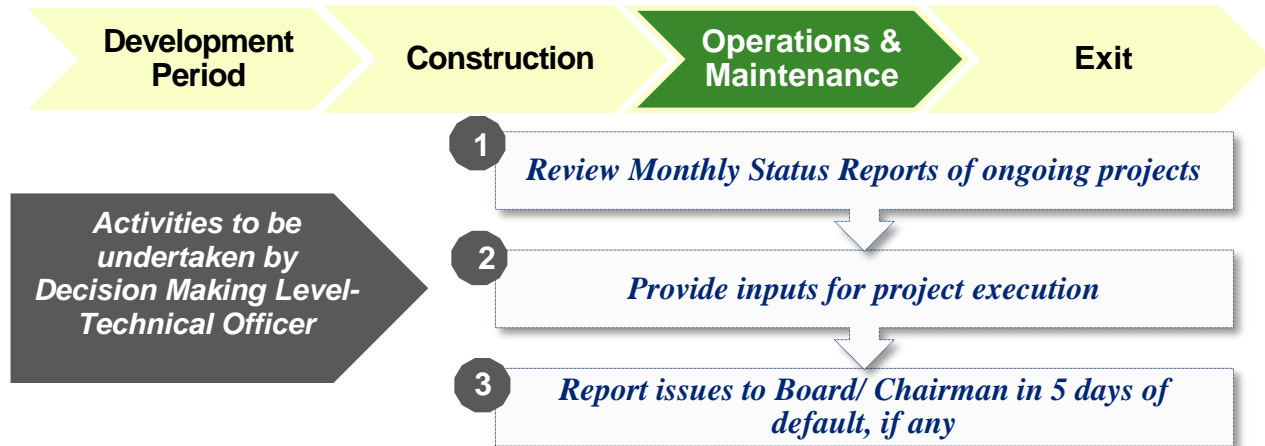
For detailed activities to be undertaken by Decision Making Level (Technical) including their corresponding stakeholder / party, timelines and reporting and escalations, refer sections 1, 2 & 3 in **Annexure- E, Contract Management Activities in Construction Stage.**

V. Contract Management Activities in Operations & Maintenance Period (From Commercial Operation Date (COD) till end of the Concession)

For the purpose of contract management, Operation & Maintenance Period commences from the Commercial Operation Date (COD) and continues till the Completion of the Concession Period. During the Operation & Maintenance Period various key activities are undertaken within the Authority for which different level of officials are made responsible as per the Project Contract Management Plan. This chapter provides an activity based roadmap for post- award management in the O&M stage.







1. Activities undertaken by Operation Level (HQ):

During the Operation & Maintenance Period, the Operation Level (HQ) would be responsible for following key activities:

1.1. User Fee:

As per the provisions of the Concession Agreement, the concerned ministry would issue an official fee notification. Some of the key activities undertaken by Operation Level (HQ) in this regard are provided below:

- Initiate the process for issuance of fee notification
- Report to the supervisor level (HQ) & decision making level within one day of default, if any

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 1.i. in **Annexure- F, Contract Management Activities in O & M Stage**.

1.2. Revenue Shortfall Loan:

As per the provisions of the Concession Agreement, the Authority may provide a Revenue Shortfall Loan to the Concessionaire. Some of the key activities undertaken by Operation Level (HQ) in this regard are provided below:

- Review the request received from the Concessionaire regarding Revenue Shortfall Loan.
- Process for the release of the loan, if required
- Report to the supervisor level (HQ) & decision making level within one day of default, if any

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 1.ii. in **Annexure- F, Contract Management Activities in O & M Stage**.

1.3. Effect of variation in Traffic growth rate:

As per the provisions of the Concession Agreement, the Authority may increase or decrease the Concession period based on the variation in traffic growth rate. Some of the key activities undertaken by Operation Level (HQ) in this regard are provided below:

- *Arrange for traffic survey for continuous period of 7 days.*
- *Start the process for engagement of traffic survey consultant through open bidding process.*
- *Based on the traffic survey report, decrease or increase the Concession period, as required*
- *After receiving the notice from the Concessionaire as per the provisions of the Concession Agreement, the Operation Level (HQ) may waive the reduction in Concession Period and recover the Concession Fee.*
- *If the average daily traffic of PCUs exceeds the designed capacity of the Project Highway in any accounting year, the Operation Level (HQ) may begin the process for the preparation of a DPR to augment the capacity of the Project Highway.*
- *Operation Level (HQ) may engage a DPR consultant through competitive bidding process for preparation of DPR*
- *Report to the supervisor level (HQ) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 1.iii. in **Annexure- F, Contract Management Activities in O & M Stage.**

1.4. Construction of Additional Toll way:

As per the provisions of the Concession Agreement, if the additional toll way would be opened during the Concession Period, the Concession period may be adjusted as per the provisions of the Concession Agreement provisions of the Concession Agreement. Some of the key activities undertaken by Operation Level (HQ) in this regard are provided below:

- *Send a notice to the Concessionaire prior to opening of additional toll way as per the provisions of the Concession Agreement provisions of the Concession Agreement.*
- *Process for the compensation to the Concessionaire, if any*
- *Ensure that the applicable toll rate on additional toll way is as per the provisions of the Concession Agreement provisions of the Concession Agreement.*
- *Report to the supervisor level (HQ) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 1.iv. in **Annexure- F, Contract Management Activities in O & M Stage.**

1.5. Insurance:

As per the provisions of the Concession Agreement, the Authority may require the Concessionaire is to effect and maintain insurances as may be necessary. Some of the key activities undertaken by Operation Level (HQ) in this regard are provided below:

- *Make sure that the Concessionaire is maintaining insurance as may be necessary*
- *In case the Concessionaire does not maintain necessary insurance the Operation Level (HQ) may process to pay the premia and recover the costs thereof from the Concessionaire.*
- *Report to the supervisor level (HQ) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 1.v. in **Annexure- F, Contract Management Activities in O & M Stage.**

2. Activities undertaken by Operation Level (field):

During the Operation & Maintenance Period, the Operation Level (field) would be responsible for following key activities:

2.1. Replacement of O&M Contractor:

As per the provisions of the Concession Agreement, prior approval from the Authority is required for Selection or replacement of an O&M Contractor and execution of the O&M Contract. Some of the key activities undertaken by Operation Level (field) in this regard are provided below:

- *Review the documents submitted by Concessionaire*
- *Convey its decision without any delay*
- *Report to the supervisor level (field) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 2.i. in **Annexure- F, Contract Management Activities in O & M Stage.**

2.2. Construction of Service Road:

The Authority can at any time after the 8th anniversary of the Appointed Date, construct at its own cost, a service road. Some of the key activities undertaken by Operation Level (field) in this regard are provided below:

Post Award Contract Management Manual for Highway PPP Concessions

- *Initiate the process for the construction of the Service Road*
- *Send the requirements and related information to Headquarter level*
- *Report to the supervisor level (field) and decision making level*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 2.ii. in **Annexure- F, Contract Management Activities in O & M Stage.**

2.3. Operation & Maintenance:

As per the provisions of the Concession Agreement, the Concessionaire is responsible for the Operation & Maintenance of the Project Highway. In case Concessionaire does not meet such requirements, the Authority may collect the damages from the Concessionaire based on the Independent Engineer report in this regard. Some of the key activities undertaken by Operation Level (field) in this regard are provided below:

- *Review the Inspection report and estimated damages submitted by Independent Engineer.*
- *In case the Concessionaire does not commence the remedial measures within the specified period, the Operation Level (field) to initiate the process to undertake the remedial measures by the Authority.*
- *The cost of the remedial measures along with damages as specified in the Concession Agreement would be recovered from the Escrow Account.*
- *Ensure that no barriers or diversions are erected or placed*
- *Report to the supervisor level (field) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 2.iii. in **Annexure- F, Contract Management Activities in O & M Stage.**

2.4. Safety Requirements:

As per the provisions of the Concession Agreement, Safety Consultant submits the safety audit report to the Authority and Authority take further action based on such report. Some of the key activities undertaken by Operation Level (field) in this regard are provided below:

- *Forward one copy of the Audit report to the Concessionaire and one copy to the Independent Engineer*
- *Process the cost & expenses on works and services not covered, which are to be borne from out of dedicated Safety Fund owned and operated by the Authority*
- *Report to the supervisor level (field) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 2.iv. in **Annexure- F, Contract Management Activities in O & M Stage.**

2.5. Monitoring of Operation & Maintenance:

As per the provisions of the Concession Agreement, the Independent Engineer monitors the Operation & Maintenance of Project Highway. In case Concessionaire does not maintain the project as per the provisions of the Concession Agreement, the Authority may recover the damages from the Concessionaire based on the Independent Engineer report in this regard. Some of the key activities undertaken by Operation Level (field) in this regard are provided below:

- *Process the reimbursement of cost incurred by Concessionaire for Test as per the provisions of the Concession Agreement and to the extent certified by Independent Engineer.*
- *Process to recover the payments for damages from the Concessionaire*
- *Report to the supervisor level (field) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 2.v. in **Annexure- F, Contract Management Activities in O & M Stage.**

2.6. Traffic Regulation:

As per the provisions of the Concession Agreement, the Authority is to assist the Concessionaire in procuring police assistance from the State Police Department or a substitute thereof. Some of the key activities undertaken by Operation Level (field) in this regard are provided below:

- *Process the procurement of police assistant from the competing department*
- *Report to the supervisor level (field) and decision making level*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 2.vi. in **Annexure- F, Contract Management Activities in O & M Stage.**

2.7. Traffic Census and Sampling:

Time-to-time the Authority may undertake a detailed traffic survey. Some of the key activities undertaken by Operation Level (field) in this regard are provided below:

- *Initiate the process of detailed traffic survey or ask the Concessionaire to do the same*
- *Inspect relevant records submitted by the Concessionaire*

- *Report to the supervisor level (field) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer 2.vii. in **Annexure- F, Contract Management Activities in O & M Stage.**

3. Activities undertaken by Supervisory Level (HQ) - Technical:

The Supervisory Level (HQ) - Technical would be responsible for following key activities:

- *To ask for the monthly status reports of the all ongoing projects from the concerned Operation Level (HQ).*
- *To review all the files/documents forwarded by Operation Level (HQ)*
- *To provide the required inputs in the project execution*
- *Report and escalate to the decision making level (Technical) within one day of default, if any*

For detailed activities to be undertaken by Supervisory Level (HQ) Technical including their corresponding stakeholder / party, timelines and reporting and escalations, refer section 1 in **Annexure- F, Contract Management Activities in O & M Stage.**

4. Activities undertaken by Supervisory Level (field) - Technical:

The Supervisory Level (field) - Technical would be responsible for following key activities:

- *To ask for the monthly status reports of the all ongoing projects from the concerned Operation Level (field).*
- *To review all the files/documents forwarded by Operation Level (field)*
- *To provide the required inputs in the project execution*
- *Report and escalate to the decision making level (Technical) within one day of default, if any*

For detailed activities to be undertaken by Supervisory Level (field) Technical including their corresponding stakeholder / party, timelines and reporting and escalations, refer section 2 in **Annexure- F, Contract Management Activities in O & M Stage.**

5. Activities undertaken by Decision making Level (Technical):

The Decision making Level (Technical) would be responsible for following key activities:

- *To ask for the monthly status reports of the all ongoing projects from the concerned Supervisory Level (HQ) and Supervisory Level (Field).*
- *To review all the files/documents forwarded by Supervisory Level (HQ) and Supervisory Level (Field).*
- *To take the required decision as and when required*

Post Award Contract Management Manual for Highway PPP Concessions

- *Report and escalate to the Board / Chairman within 5 days of default, if any*

For detailed activities to be undertaken by Decision Making Level (Technical) including their corresponding stakeholder / party, timelines and reporting and escalations, refer sections 1 and 2 in **Annexure- F, Contract Management Activities in O & M Stage**.

VI. Contract Management Activities during Exit Stage (From Termination Date till Final settlement)

For the purpose of contract management, Exit Stage commences from the Termination Date and continues till the final settlement. During the Exit stage various key activities are undertaken within the Authority for which different level of officials are made responsible as per the Project Contract Management Plan.

Also, any highway concession may end either at the natural end of the contract period or on mid-way on account of certain events. On such termination, the concessionaire is responsible for completing contract responsibilities and handing over the Highway Assets back to the Authority. The Authority, on the other hand, is responsible for ensuring service continuity for Users. This section outlines plans to manage asset handover and service continuity.

This chapter provides an activity based roadmap for post- award management in the exit stage. Also, it provides the exit plan for the Authority comprising the procedure to be followed for smooth Asset Handover and maintenance of Service Continuity.





1. Activities undertaken by Operation Level (Head Quarters or HQ):

During the Construction Period, the Operation Level (HQ) would be responsible for following key activities:

1.1. Divestment of Right and Interest:

For divestment of right and interest, following key activities are to be undertaken by the Operation Level (HQ):

- Make sure that both parties are meeting their respective obligations.
- Make sure the smooth transfer of the Project in accordance with the provisions of this Agreement so as to protect safety of and avoid undue delay or inconvenience to the Users.
- After fulfillment of all Divestment Requirements, the Operation Level (HQ) may issue Vesting Certificate.
- Report to the supervisor level (HQ) & decision making level within one day of default, if any

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 1.i. in **Annexure- G, Contract Management Activities in Exit Stage.**

2. Activities undertaken by Operation Level (field):

During the Construction Period, the Operation Level (field) would be responsible for following key activities:

2.1. Defect Liability after Termination:

Concessionaire is responsible for all defects and deficiencies in the Project Highway for a specified period after Termination. Some of the key activities undertaken by Operation Level (field) in this regard are provided below:

- *Make sure that the Project Highway is rectified and repaired for a specified period after Termination*
- *In case the Concessionaire fails to rectify, the Operation Level (field) may make the arrangement for rectify the same.*
- *Operation Level (field) may process for recovery of repair cost from the Escrow Account or Bank Guarantee as applicable as per the Concession Agreement.*
- *Report to the supervisor level (HQ) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 2.i. in **Annexure- G, Contract Management Activities in Exit Stage.**

3. Activities undertaken by Supervisory Level (HQ) - Technical:

The Supervisory Level (HQ) - Technical would be responsible for following key activities:

- *To ask for the monthly status reports of the all ongoing projects from the concerned Operation Level (HQ).*
- *To review all the files/documents forwarded by Operation Level (HQ)*
- *To provide the required inputs in the project execution*
- *Report and escalate to the decision making level (Technical) within one day of default, if any*

For detailed activities to be undertaken by Supervisory Level (HQ) Technical including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 1 in **Annexure- G, Contract Management Activities in Exit Stage.**

4. Activities undertaken by Supervisory Level (field) - Technical:

The Supervisory Level (field) - Technical would be responsible for following key activities:

Post Award Contract Management Manual for Highway PPP Concessions

- To ask for the monthly status reports of the all ongoing projects from the concerned Operation Level (field).
- To review all the files/documents forwarded by Operation Level (field)
- To provide the required inputs in the project execution
- Report and escalate to the decision making level (Technical) within one day of default, if any

For detailed activities to be undertaken by Supervisory Level (field) Technical including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 2 in **Annexure- G, Contract Management Activities in Exit Stage.**

5. Activities undertaken by Decision making Level (Technical):

The Decision making Level (Technical) would be responsible for following key activities:

- To ask for the monthly status reports of the all ongoing projects from the concerned Supervisory Level (HQ) and Supervisory Level (Field).
- To review all the files/documents forwarded by Supervisory Level (HQ) and Supervisory Level (Field).
- To take the required decision as and when required
- Report and escalate to the Board / Chairman within 5 days of default, if any

For detailed activities to be undertaken by Decision Making Level (Technical) including their corresponding stakeholder / party, timelines and reporting and escalations, refer sections 1 and 2 in **Annexure- G, Contract Management Activities in Exit Stage.**

6. Asset handover plan

For BOT contracts, Highway assets must be transferred back to the Authority at contract termination. The Authority must plan for the same sufficiently in advance, in coordination with the Concessionaire and Independent Engineer, to ensure the handover process is completed by the contract termination date. The table below presents an indicative asset handover plan. This must incorporate any additional termination requirements specified by the Concession agreement or mutually agreed to by the parties.

Activity	Responsible person / team	Supervisor person / team	Deadline
Major maintenance / replacement required	Concessionaire	Operations Level Authority, Independent Engineer	As per Contractually agreed timelines
Finalizing Highway Asset register	Concessionaire	Operations Level Authority, Independent Engineer	1 year before contract termination
Testing & Inspection	Independent Engineer	Operations Level Authority	90 days before contract termination

Activity	Responsible person / team	Supervisor person / team	Deadline
Certification	Independent Engineer	Operations Level Authority	90 days before contract termination
Handover of Highway operations records	Operations Level Authority	N/A	30 days before contract termination
Legal transfer of asset ownership	Legal consultant	Operations Level & Supervisory Level Authority	0-30 days after contract termination

7. Service continuity plan

Planning for service continuity involves a two-step process:

7.1. Step 1 – Assessing ability of existing Highway to serve market requirements

The condition of the existing highway and the market requirements need to be ascertained and compared to judge whether the existing highway can fulfil current market needs.

Category	Factor	Unit	Value / Remarks <i>(Illustrative)</i>
Condition of Highway	Residual life of pavement	Year(s)	10 years
	Residual life of key structures	Year(s)	6 years
	Quality of Highway assets	N/A	Good
	Maintenance requirements	N/A	Medium
Market requirements	Traffic levels	No. of vehicles	[xx] PCUs per day
	Alternative facilities	N/A	None
	Other market needs	N/A	None

Authority personnel at Operations Level must carry out such analysis and present a summary to L2. This will call for a detailed technical / engineering study and traffic study will be required for this analysis. This activity must be done at least 1 year before contract termination to allow sufficient time for ensuring service continuity.

7.2. Step 2 – Analyze and choose amongst options

Based on analysis in Step 1, L2 must analyze and choose amongst various options. A recommendation must be placed before L3. L3 must take the final decision. This process must be done at least 10 months to 1 year in advance of contract termination.

The table below presents various likely scenarios and illustrative recommended action under each scenario.

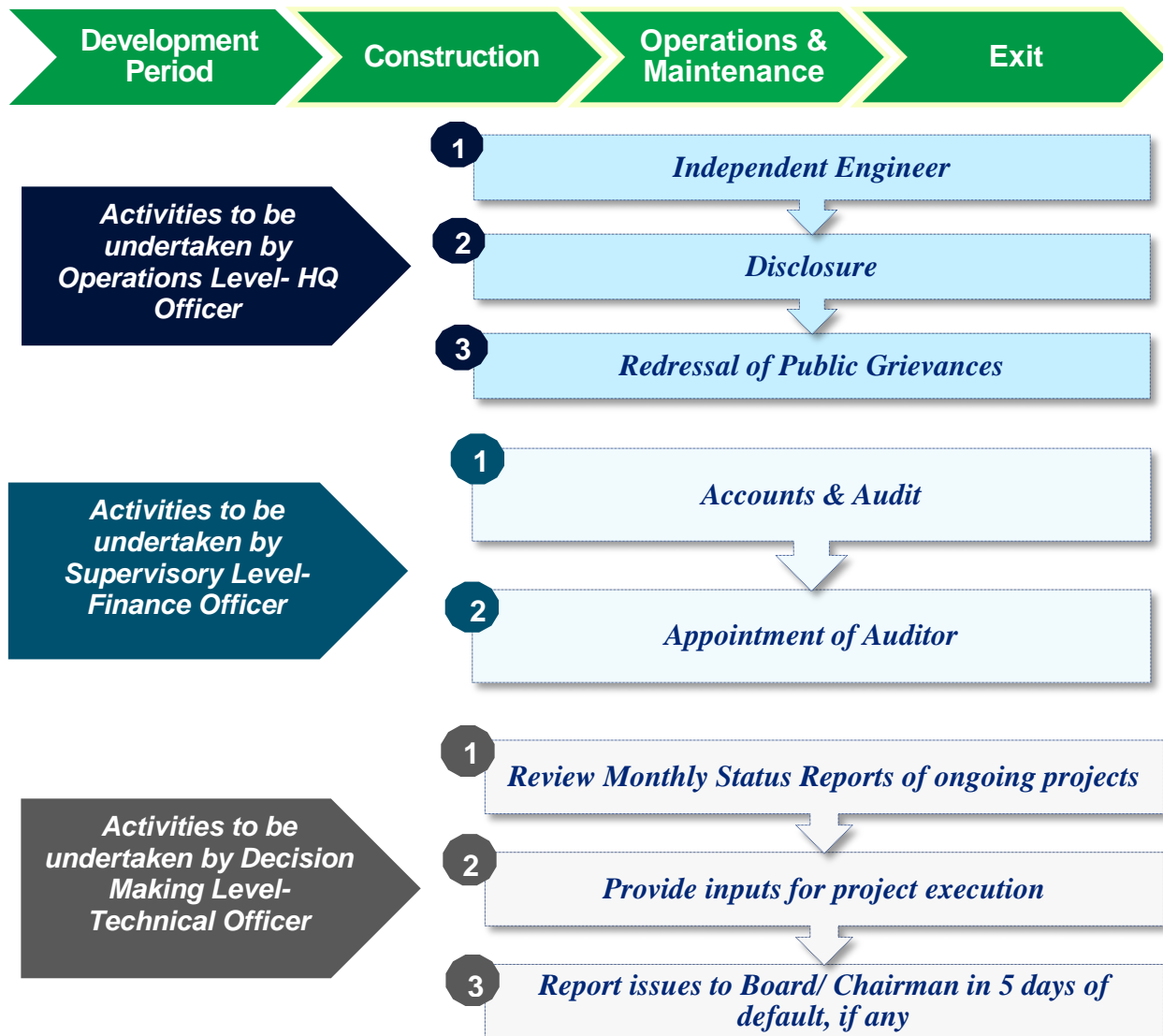
Post Award Contract Management Manual for Highway PPP Concessions

#	Scenario		Recommended action <i>(Illustrative)</i>
	Can existing highway serve market requirements?	PPP suitable?	
2	Yes	Yes	<i>Fresh OMT contract</i>
3	Yes	No	<i>Outsource O&M</i>
4	No	Yes	<i>Fresh BOT contract</i>
5	No	No	<i>EPC / Item rate contract</i>

Step 1 above will help conclude whether the highway can serve market requirements. For PPP suitability a pre-feasibility analysis must be carried out by appointing a financial consultant. Additional aspects may also affect the decision for service continuity. These will depend on the nature and complexity of the project and any special termination requirements of the Concession agreement. These must also be taken into account.

VII. Contract Management Activities throughout the Project Life Cycle (From Appointed Date till Final settlement)

During the Project Life cycle various key activities are undertaken within the Authority for which different level of officials are made responsible as per the Project Contract Management Plan. This chapter provides a roadmap for post-award management activities throughout the project life cycle.





1. Activities undertaken by Operation Level (Head Quarters or HQ):

During the Project Life cycle, the Operation Level (HQ) would be responsible for following key activities:

1.1. Independent Engineer:

As per the provisions of the Concession Agreement various activities are involved at Authority's end for Appointment of Independent Engineer. Some of the key activities undertaken by Operation Level (HQ) in this regard are provided below:

- Issue an EOI for selection of Independent Engineer.
- Undertake the evaluation of EOI received from the interested parties and shortlist the 10 firms based on the predetermined criteria.
- Send the aforesaid list to the Concessionaire for Scrutiny and comments, if any
- After considering the all relevant factors of the comments received from the Concessionaire, finalise and constitute a panel of 10 firms and convey its decision to the Concessionaire.
- From the shortlisted firm ask for the technical and financial offers
- Evaluate the technical and financial score and finalise the Independent Engineer.
- On termination or expiry of the tenure of Independent Engineer, renew or appoint the Independent Engineer for next turn as per the provisions of the Concession Agreement.
- Process for reimbursement of the remuneration/cost/ expense of Independent Engineer as per the provisions of the Concession Agreement.
- Submit the Statement of Expenditure to the Concessionaire.
- Hold a tripartite meeting with the Concessionaire and Independent Engineer, in case the Concessionaire submits a representation for termination of Independent Engineer.
- Report to the supervisor level (HQ) & decision making level within one day of default, if any

Post Award Contract Management Manual for Highway PPP Concessions

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 1.i. in **Annexure- I, Contract Management Activities throughout the Project Life cycle.**

1.2. Disclosure:

As per the provisions of the Concession Agreement, Authority shall be entitled to direct the Concessionaire, from time to time, to withhold the disclosure of Protected Documents. Some of the key activities undertaken by Operation Level (HQ) in this regard are provided below:

- *Direct the Concessionaire to protect the documents to any person as per the provisions of the Concession Agreement*
- *Report to the Supervisory level (HQ) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timeline and reporting and escalations, refer part 1.ii. in **Annexure- I, Contract Management Activities throughout the Project Life cycle.**

1.3. Redressal of Public Grievances:

As per the provisions of the Concession Agreement, Concessionaire shall maintain a public relations office at each of the Toll Plazas where it shall keep a Complaint Register open to public access at all times for recording of complaints by any person. Some of the key activities undertaken by Operation Level (HQ) in this regard are provided below:

- *Advise the Concessionaire to take action as appropriate for a fair and just redressal of any grievance.*
- *Report to the Supervisory level (HQ) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timeline and reporting and escalations, refer part 1.iii. in **Annexure – E.**

2. Activities undertaken by Supervisory Level (finance):

During the Project Life cycle, the Supervisory Level (finance) would be responsible for following key activities:

2.1. Accounts and Audit:

As per the provisions of the Concession Agreement, Concessionaire is to Maintain books of accounts recording all its receipts. The Authority is to inspect the records of the Concessionaire and require copies of relevant extracts of books of accounts. Some of the key activities undertaken by Supervisor Level (finance) in this regard are provided below:

- *Inspect and verify the books of accounts of the Concessionaire.*

Post Award Contract Management Manual for Highway PPP Concessions

- *In case of any discrepancy, communicate the same to the Concessionaire and make sure it is rectified*
- *Report to the decision making level (finance) and decision making level within one day of default, if any*

For detailed activities to be undertaken by Supervisory Level (finance) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 2.i. in **Annexure- I, Contract Management Activities throughout the Project Life cycle.**

2.2. Appointment of Auditor:

As per the provisions of the Concession Agreement various activities are involved at Authority's end for Appointment of Auditor. Some of the key activities undertaken by Supervisory Level (finance) in this regard are provided below:

- *Invite offers from all reputable firms of Chartered Accountants who fulfill the eligibility criteria.*
- *Scrutinize and evaluate the proposal submitted by interest firms as per the provisions of the Concession Agreement*
- *Shortlist the 10 firms as per the evaluated score of each firm.*
- *Send the aforesaid list to the Concessionaire for Scrutiny and comments, if any*
- *After considering the all relevant factors of the comments received from the Concessionaire, finalise and constitute a panel of 10 firms and convey its decision to the Concessionaire.*
- *Make a new panel of Auditors after 5 years as specified in the Concession Agreement.*
- *Report to the decision making level (finance) and decision making level within one day of default, if any*

For detailed activities to be undertaken by Supervisory Level (finance) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 2.ii.in **Annexure- I, Contract Management Activities throughout the Project Life cycle.**

3. Activities undertaken by Supervisory Level (HQ) - Technical:

The Supervisory Level (HQ) - Technical would be responsible for following key activities:

- *To ask for the monthly status reports of the all ongoing projects from the concerned Operation Level (HQ).*
- *To review all the files/documents forwarded by Operation Level (HQ)*
- *To provide the required inputs in the project execution*
- *Report and escalate to the decision making level (Technical) within one day of default, if any*

For detailed activities to be undertaken by Supervisory Level (HQ) Technical including their corresponding stakeholder / party, timelines and reporting and escalations, refer section 1 in **Annexure- I, Contract Management Activities throughout the Project Life cycle.**

4. Activities undertaken by Decision making Level (Technical):

The Decision making Level (Technical) would be responsible for following key activities:

- *To ask for the monthly status reports of the all ongoing projects from the concerned Supervisory Level (HQ) and Supervisory Level (Field).*
- *To review all the files/documents forwarded by Supervisory Level (HQ) and Supervisory Level (Field).*
- *To take the required decision as and when required*
- *Report and escalate to the Board / Chairman within 5 days of default, if any*

For detailed activities to be undertaken by Decision Making Level (Technical) including their corresponding stakeholder / party, timelines and reporting and escalations, refer section 2 in **Annexure- I, Contract Management Activities throughout the Project Life cycle.**

5. Activities undertaken by Decision making Level (Finance):

The Decision making Level (Finance) would be responsible for following key activities:

- *To ask for the monthly status reports of the all ongoing projects from the concerned Supervisory Level (Finance)*
- *To review all the files/documents forwarded by Supervisory Level (Finance).*
- *To take the required decision as and when required*
- *Report and escalate to the Board / Chairman within 5 days of default, if any*

For detailed activities to be undertaken by Decision Making Level (Finance) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 2 in **Annexure- I, Contract Management Activities throughout the Project Life cycle.**

VIII. Performance Monitoring & Review

Performance of the concessionaire and other related parties should be regularly monitored and reported by the contract manager to ensure the project remains within the pre-planned cost levels and timelines. In case a performance monitoring and rating system exists in the organization, the results of such regular monitoring shall be additionally sent to officials designated for that purpose.

This chapter identifies Key Performance Indicators (KPIs) that must be tracked, reported and reviewed on a regular basis to ensure efficient project execution. KPIs here have been separately identified for each stakeholder, i.e. the concessionaire, independent engineer, safety consultant and financial consultant for all major activities within a project lifecycle.

1. Concessionaire

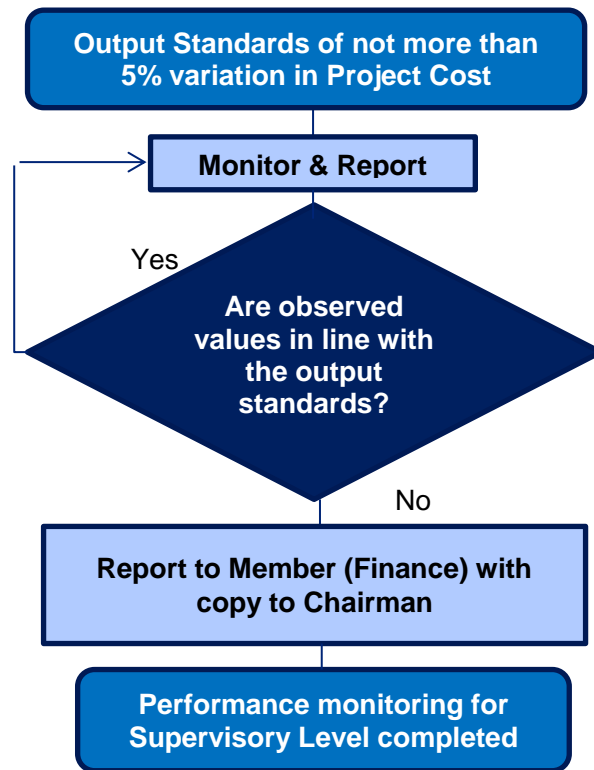
For any project to function smoothly, concessionaires' performance needs to be monitored regularly. As the Concessionaire forms the main party with whom the contract is signed and who holds the major obligations of executing the agreement apart from the Authority, it is important that its performance is tracked on regular basis to spot defaults and situation that might later become a cause of stalling of the project early in the project execution lifecycle. This section presents stage wise analysis of KPIs which can help in evaluating the concessionaires' performance. It also designates the responsibility of monitoring them to an Authority official along with clear guidelines on his/her duties with regards to monitoring it.

As described above, there are majorly four stages in any project execution lifecycle: Development Period Stage, Construction Stage, Operations & Maintenance Stage and Exit Stage. In all these four stages, monitoring the concessionaires' performance against the set standards, calls for a detailed review by the officer- in charge from the Authorities' side. Major parameters to be evaluated from the Authorities' point of view are throughout the lifecycle are:

- ***Time Line – Actual Vs. Targeted Date***
- ***Project Cost***
- ***Quality of Services***
- ***Safety Considerations***
- ***Communication and Responsiveness***
- ***Project and Contract Management***

In each of these parameters, what needs to be taken care of is that the value of concessionaires' performance in a parameter, matches the indicator value of the parameter to a reasonable extent and in the stipulated time. Discrepancies, if any, and beyond the control of the Authority in- charge need to be escalated to the next level on timely basis so that necessary action can be taken on the same. To illustrate this idea, the monitoring and review process of the Performance standard on Project Cost has been described in the below flowchart:

Concessionaires' Performance Monitoring for Project Cost



Details on each of these performance parameters and KPIs can be found in [**Annexure I], Part 1- 1.1., 1.2. & 1.3. , Stage wise KPIs for Concessionaire.**

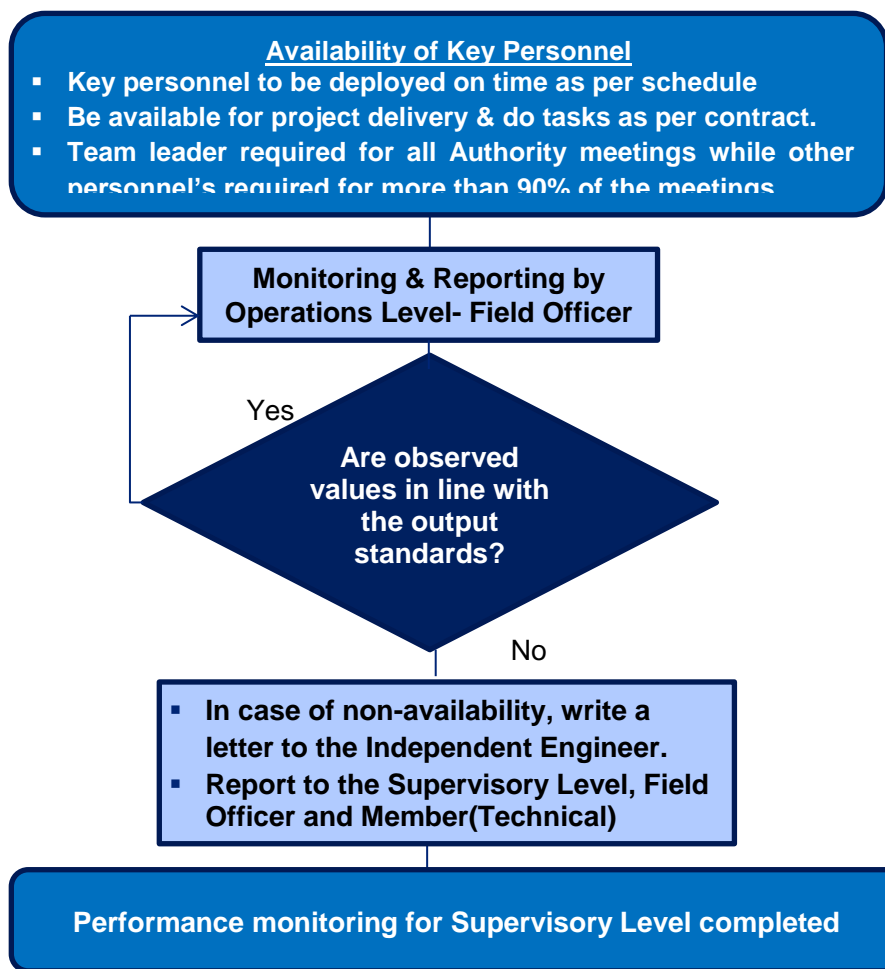
2. Independent Engineer

The Independent Engineer has a major role to play in ensuring that the project progress is in line with the set timelines, the quality of highway developed by the Concessionaire is as per the desired standards and discrepancies/issues, if any, have been flagged and brought to the notice of the Authority officials in a timely manner. All the major responsibilities of the Independent Engineer have been listed in **Annexure M, Appointment & Responsibilities of Other Related Parties**. This section lists those KPIs that help the Authority officials monitor whether the Independent Engineer is working as per the expectations set from it. Major performance parameters to be monitored for reviewing Independent Engineers' performance are:

- **Independent Engineer KPIs throughout the Lifecycle**
- **Time Line – Actual Vs. Targeted Date**
- **Quality of Services**
- **Communication and Responsiveness**
- **Project and Contract Management**

As an example, to demonstrate the monitoring and review procedure of the Performance standard on Project & Contract Management for the Independent Engineer, a flowchart has been developed as shown below:

Independent Engineers' Performance Monitoring for Project & Contract Management



Details on each of these performance parameters and KPIs can be found in [**Annexure I], Part 2, KPIs for Independent Engineer throughout the project lifecycle.**

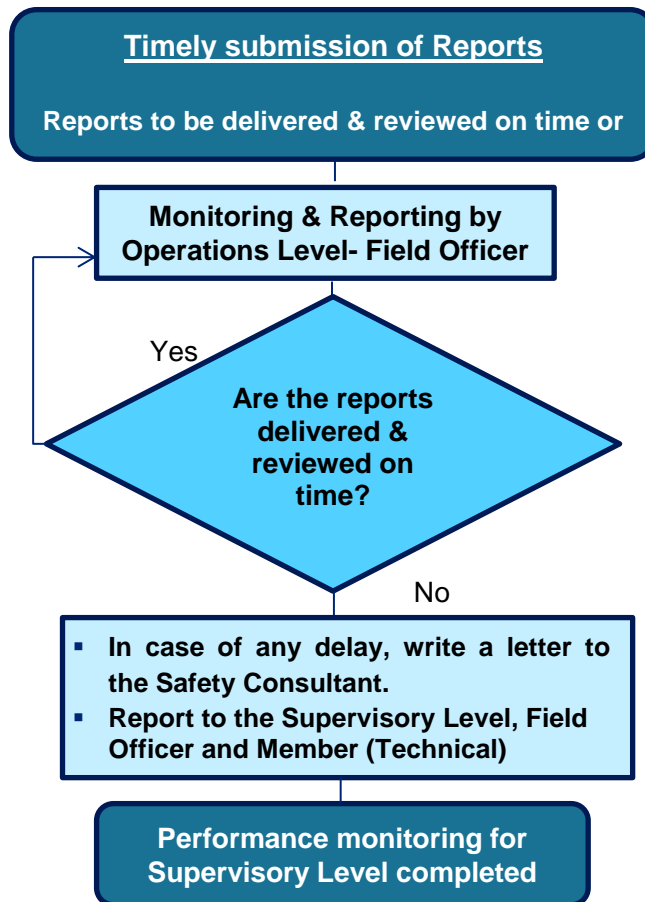
3. Safety Consultant

Safety Consultant is another important related party that is responsible for safeguarding that the quality and safety requirements from a highway project and ensuring that any potential or actual defects observed, are brought to the notice of the Authority officials in timely manner. All the major responsibilities of the Safety Consultant have been listed in **Annexure M, Appointment & Responsibilities of Other Related Parties.** This section enumerates the KPIs for monitoring the Safety Consultant's performance.

- **Time Line – Actual Vs. Targeted Date**
- **Quality of Services**
- **Project and Contract Management**

As an illustration to this idea, the monitoring and review process of the Performance standard on Timeline, Actual v/s Targeted Date has been described in the below flowchart:

**Safety Consultants' Performance Monitoring for
Timeline, Actual v/s Targeted**



Details on each of these performance parameters and KPIs can be found in **[Annexure I], Part 3, KPIs for Safety Consultant throughout the project lifecycle.**

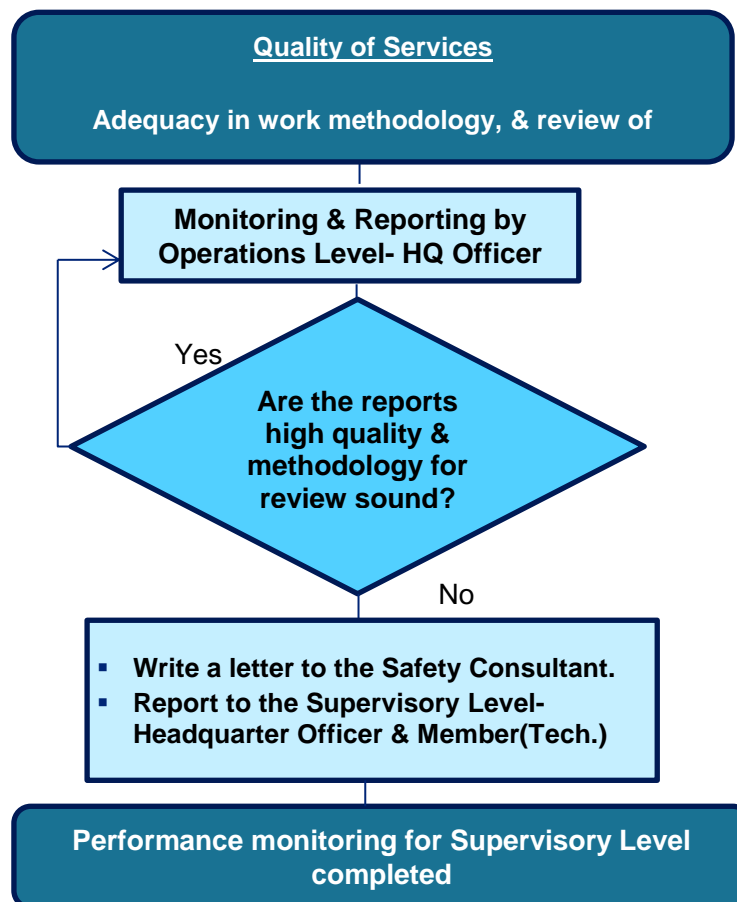
4. Financial Consultant

Financial Consultant has a significant role in reporting and taking care of all financial matters related to a project. They review all the financing documents submitted by the Concessionaire and hence provide verdict on whether the Concessionaire has submitted accurate documents with zero errors. All the major responsibilities of the Financial Consultant have been listed in **Annexure M, Responsibilities of Other Related Parties.** This section enumerates the KPIs for monitoring the Financial Consultant's performance.

- *Time Line – Actual Vs. Targeted Date*
- *Quality of Services*
- *Project and Contract Management*

To state an example, the monitoring and review process of the Performance standard on Quality of Services has been described in the below flowchart:

Financial Consultants' Performance Monitoring for Quality of Services



Details on each of these performance parameters and KPIs can be found in [***Annexure I], Part 4, KPIs for Financial Consultant throughout the project lifecycle.***

IX. Regular Reporting & Escalation Mechanism

In any Highway concession, even if management and monitoring of each project activity is done actively, it has been observed that no such activity is complete without regular and timely reporting of these activities by the Authority officials at higher levels. Moreover, it is critical from the project execution viewpoint that any issue which crops up is escalated in a timely fashion to the higher Authority level for fast, suitable and timely action. This chapter describes how project status reporting, review and escalation activities are to be done within all levels, Operations Level, Supervisory Level and Decision Making Level of the Authority and performance is reported on regular basis to ensure smooth functioning of the concession.

1. Regular Reporting & Review

Regular reporting has to be done on a regular basis to apprise higher levels in Authority of the project status and key issues as well as seek necessary approvals. Also, the supervisory levels must review the information provided to them to provide suggestions and intervene at appropriate times to ensure that the project remains on track.

1.1. Operations Level to Supervisory Level Reporting

The objective of Operations Level to Supervisory Level reporting is to apprise Supervisory Level of the project progress and seek support for key decisions or approvals. The Operations Level to Supervisory Level reporting includes Status reporting, Performance reporting and other reporting. Within each category, the following reports must be prepared at Operations Level and submitted to Supervisory Level for review on a monthly basis. Supervisory Level members should then meet on a monthly basis to review submissions from Operations Level and take appropriate action on the same. The following sections provide templates for generation of the stated reports and illustrations to complete the templates. These templates must be modified appropriately as per respective Concession Agreements and project specifications.

1.1.1. Status Reporting

A. Project Progress

Stage <i>(Illustrative)</i>	Sub-stage <i>(Illustrative)</i>	Completed? <i>(Illustrative)</i>	Remarks <i>(Illustrative)</i>
Development	Land acquisition	Yes	
	Environmental clearances	No	
	Other clearances	Yes	
	Appointment of related parties	Yes	
	Utility shifting	Yes	
	Financial closure	Yes	

Post Award Contract Management Manual for Highway PPP Concessions

	Drawings & designs approval		
	Appointed date declaration	Yes	
Construction			
	Additional land procurement	Yes	
	Commencement of construction	No	
	Completion of construction	No	
	Testing & certification	No	
	Completion of punch list	No	
	Declaration of Commercial Operations Date (COD)	No	
Operations & Maintenance		No	
	Appointment of O&M consultant	No	
	Ongoing Operations & Maintenance	No	
Termination	End of Operations & Maintenance	No	
	Testing & certification	No	
	Major maintenance / asset replacement	No	
	Asset transfer	No	
	Contract termination	No	
	Service continuity	No	

B. Status of Activities which are Authority's Responsibility

Activity <i>(Illustrative)</i>	Status <i>(Illustrative)</i>	Responsible person / team <i>(Illustrative)</i>	Original completion date <i>(Illustrative)</i>	Actual completion date / Target date <i>(Illustrative)</i>	Reason for delay (if any) <i>(Illustrative)</i>	Plan of action to complete activity <i>(Illustrative)</i>	Support needed for Supervisory Level / Decision Making Level (if any) <i>(Illustrative)</i>
Right of Way	Complete	Operations Level	Apr, 2005	May, 2005	Administrative delays	N/A	N/A
Land acquisition	Complete	Operations Level	Apr, 2006	May, 2007	Public claims and disputes	N/A	N/A
Environment clearances	Ongoing	Operations Level	May, 2007	Sep, 2008	Claims and NGO activism	Escalate	Decision Making

Post Award Contract Management Manual for Highway PPP Concessions

							Level intervention with Ministry
Railway approvals	Complete	Operations Level	Sep, 2006	Aug, 2006	N/A	N/A	N/A

C. Status of Activities which are Concessionaire's Responsibility

Activity <i>(Illustrative)</i>	Status <i>(Illustrative)</i>	Responsible person / team <i>(Illustrative)</i>	Original completion date <i>(Illustrative)</i>	Actual completion date / Target date <i>(Illustrative)</i>	Reason for delay (if any) <i>(Illustrative)</i>	Plan of action to complete activity <i>(Illustrative)</i>	Support needed for Supervisory Level / Decision Making Level (if any) <i>(Illustrative)</i>
Performance Security	Complete	Operations Level	Apr, 2005	Apr, 2005	N/A	N/A	N/A
Escrow agreement	Complete	Supervisory Level	Apr, 2005	Apr, 2005	N/A	N/A	N/A
Substitution agreement	Complete	Supervisory Level	Apr, 2005	Apr, 2005	N/A	N/A	N/A
Representations & warranties	Complete	Supervisory Level	Apr, 2005	Apr, 2005	N/A	N/A	N/A
Legal opinion of Concessionaire's authority	Complete	Operations Level	Apr, 2005	Apr, 2005	N/A	N/A	N/A
Shifting of utilities	Complete	Operations Level	Jun, 2006	Jun, 2006	N/A	N/A	N/A
Financial closure	Complete	Supervisory Level	Jan, 2006	Jun, 2006	Financial risks	N/A	N/A
Statutory approvals /clearances	Complete	Operations Level	Jun, 2006	Jun, 2006	N/A	N/A	N/A
Drawings /designs	Complete	Operations Level	Jun, 2006	Jun, 2006	N/A	N/A	N/A
Asset handover	Not started	Operations Level	Jun, 2026	Jun, 2026	N/A	N/A	N/A

D. Status of Action Plan finalized in previous period's report

Action point <i>(Illustrative)</i>	Status <i>(Illustrative)</i>	Responsible person / team <i>(Illustrative)</i>	Original completion date <i>(Illustrative)</i>	Actual completion date / Target date <i>(Illustrative)</i>	Reason for delay (if any) <i>(Illustrative)</i>	Plan of action to complete activity <i>(Illustrative)</i>	Support needed for Supervisory Level / Decision Making Level (if any) <i>(Illustrative)</i>
Escalation of environment issue	Completed	Decision Making Level	Jan, 2008	Jan, 2008	N/A	N/A	N/A

1.1.2. Performance reporting

Apart from Service Performance, regular performance reporting must also include reports on financial health of SPV, risk levels, payment reports and observations of the independent engineer / safety consultant

- Service Performance** – report must be prepared as illustrated in section on Key Performance Indicators
- Receipt & Payment mechanism and escrow account operations** – A periodic receipt - payment report must be generated including the following details:

Date <i>(Illustrative)</i>	Receipt / Payment description <i>(Illustrative)</i>	Amount <i>(Illustrative)</i>	Adjustments <i>(Illustrative)</i>	Adjustment amount <i>(Illustrative)</i>	Responsible person / team <i>(Illustrative)</i>	Further action required (if any) <i>(Illustrative)</i>
May, 2014	Premium	INR 20 crores	N/A	NIL	Operations Level	N/A
June, 2014	Annuity	INR 35 crores	Penalties for service suspension	INR 5 crores	Operations Level	N/A

- Independent Engineer's / Safety Consultant's observations – Based on a review of the Independent Engineer's or Safety Consultant's report, key observations or remarks raised by them which calls for attention from the headquarters must be forwarded by Operations Level to the headquarters at respective higher levels.

1.1.3. Other Reporting

1. **Issues or disputes identified** – Specific issues or disputes that arise in the contract which cannot be resolved at Operations Level must be forwarded to Supervisory Level. Additionally, issues or disputes that are settled at the Operations Level itself but are significant enough to merit Supervisory Level’s attention must also be reported.
2. **Contract Management concerns** – While planning for contract administration or while undertaking an ongoing review of the contract, the Operations Level team may identify concerns which may cause potential time or cost overruns in the future. Such concerns, to the extent identified in advance, must also be reported at Supervisory Level appropriately.

1.2. Supervisory Level to Decision Making Level Reporting

The objective of Supervisory Level to Decision Making Level reporting is to appraise Decision Making Level of key issues/ challenges in contract administration and of activities that require their approval and/ or intervention. Supervisory Level to Decision Making Level reporting also consists of Status reports, Performance reports and other reports. These reports must be submitted at-least on a quarterly basis. Decision Making Level members must then meet each quarter to review the submissions from Supervisory Level and take appropriate action on the same. In case of emergency, the status/ performance must be reported not later than 3 days from the date of its occurrence for immediate action and approvals. The following sections provide templates for generation of the stated reports and illustrations to complete the templates. These templates must be suitably modified as per respective Concession Agreements and project specifications.

1.2.1. Status Reporting

A. Project Status and approvals required

Stage <i>(Illustrative)</i>	Sub-stage <i>(Illustrative)</i>	Decision Making Level Approvals required at this stage <i>(Illustrative)</i>	Deadline approval <i>(Illustrative)</i>	for	Remarks <i>(Illustrative)</i>
Development	Environmental clearances	N/A	N/A		Decision Making Level intervention required with Ministry
Construction	Commencement of construction	N/A	N/A		Not commenced pending environmental clearance

1. **Additional support required from Decision Making Level for Operations Level and Supervisory Level tasks** – Reports should also list type of support required from Decision Making Level, apart from approvals identified above, for completing responsibilities of Operations Level and Supervisory Level.

1.2.1.1. Performance Reporting

- 1. Concessionaire non-performance** – Non-performance on the part of the concessionaire, as identified by KPI reporting, which may cause significant cost or time overruns in the project must be reported. The following is a template to be completed from the KPI report submitted by Operations Level to Supervisory Level.

KPI (Illustrative)	Threshold (Illustrative)	Actual variance (Illustrative)	Reason for non-performance (Illustrative)	Action plan to control performance (Illustrative)	Responsible person / team (Illustrative)
<i>Average number of defects per km</i>	5	7	<i>Use of inferior quality material for few patches</i>	<i>Re-lay defective patches</i>	<i>Operations Level</i>

- 2. Additional concerns** – Based on other performance tracking, payment issues (if applicable), key observations of the independent engineer or safety consultant must be reported to Decision Making Level. The following is a template for the same.

Concern (Illustrative)	Reason for concern (Illustrative)	Action plan to control performance (Illustrative)	Responsible person / team (Illustrative)
<i>Use of defective material</i>	<i>Independent engineer's report highlights defective road patches</i>	<i>Use of alternative material suppliers to source better quality material</i>	<i>Operations Level</i>

1.2.2. Other Reporting

Issues or disputes identified – Specific issues or disputes that arise in the contract which cannot be resolved at Supervisory Level must be communicated to Decision Making Level immediately. Additionally, issues or disputes that are settled at the Operations Level or Supervisory Level itself but are significant enough to merit Decision Making Level's attention must also be reported.

2. Escalation in Cases of Default

In case any of the parties do not fulfil the requirement of Concession Agreement, the same needs to be escalated at the appropriate level within the Authority. The escalation is required in the following conditions:

- Default at the end of the Concessionaire or the other parties such as Independent Engineer, Safety Consultant, Escrow Agent, Senior Lenders etc.
- Default within the Authority

For both these scenarios, the escalation mechanisms are defined as follows:

2.1. Escalation in case of default by concessionaire or other parties:

Initiator / Designated official	Report to	Time line for action
Operations Level - General Manager (Tech)	Supervisory Level - Supervisory Level- Headquarter Officer (T) with copy to Decision Making Level - Member (T) for guidance	Within 5 days of default
Operations Level - Project Director	Supervisory Level - Regional Officer with copy to Member (T) for guidance	Within 5 days of default
Supervisory Level - Chief General Manager (F)	Decision Making Level - Member (F) with copy to Chairman	Within 5 days of default

2.2. Escalation in case of default within the Authority:

Initiator / Designated official	Action to be taken	Time line for action
Operations Level - General Manager (Tech)	Supervisory Level- Headquarter Officer (T) to take the necessary action to expedite the work / activities and report to the Decision Making Level - Member (T)	Within 5 days of default
Operations Level - Project Director	Supervisory Level, Field Officer to take the necessary action to expedite the work / activities and report to the Decision Making Level - Member (T)	Within 5 days of default
Supervisory Level - Chief General Manager (F)	Decision Making Level – Member (F) to take the necessary action to expedite the work / activities and report to the Chairman	Within 5 days of default

It should be noted that at each level of Authority, escalation should be done within the timeline so that the next level of Authority gets sufficient time to review and take appropriate action on the same or escalate it to higher level. In case, the issues are not resolved even at the Decision Making Level Authority, they maybe escalated further up to the PPP PRU as an exception and undergo dispute resolution procedure. A detailed framework on dispute resolution is provided in the next chapter.

X. Managing Issues & Disputes

It has often been observed there are mismatches between the expectations of the Authority and the Concessionaire and other related parties which lead to issues and disputes arising time and again which stall the project progress and may lead to unending delays in the project execution causing great inconvenience to the users and damaging the Authority's and the Government's reputation. Hence, timely resolution of any dispute is imperative to ensure that user interests are protected always and Authority is able to achieve the project milestones in time. This chapter talks about how a well- defined Dispute Resolution Mechanism can be devised by the Highway Authorities for effective tracking and resolution techniques.

1. Managing Issues

The private party must maintain an issues register on a regular basis to identify and track all service delivery issues that arise and the manner in which they are dealt with. The Government Authority is responsible for regular review of the register to ensure that issues are addressed and closed within a reasonable amount of time. The Authority must also provide necessary support to the private party to do so. Operations Level Authority must review the issues register on a monthly basis. Major Service delivery issues must be reported to and reviewed by the Supervisory level and Decision Making Level officers within the Authority. A review report must be maintained by the Operations Level officers to record each of their reviews. A report template is shown hereunder.

Review date <i>(Illustrative)</i>	Reviewed by <i>(Illustrative)</i>	Major issues during the period <i>(Illustrative)</i>	Action taken on the issues <i>(Illustrative)</i>	Status of issues <i>(Illustrative)</i>	Issues to be escalated <i>(Illustrative)</i>
Mar, 2014	Operations Level	<ul style="list-style-type: none"> • Potholes on a portion of road • 2 Toll booths not operational 	Both issues addressed and closed within 10 days	Not pending	N/A
June, 2014	Operations Level	Portion of road caved in	Not resolved till date – traffic being diverted causing significant jams	Pending	To be escalated to L2

2. Dispute Resolution Mechanism as per MCA

Designing a comprehensive dispute resolution mechanism is an uphill task which requires keeping in mind that the interests of all stakeholders are served in the best possible manner and an amicable timely solution is also achieved. The Authority officials should focus on designing the mechanism in a manner such that prior to resorting to any legal action, disputes are solved through mediation or conciliation & closed well in time. It is a common observation that disputes pending in courts take much more time for resolution compared to the ones solved through discussions between the parties. Also, as the intensity of dispute increases, the relationships between the stakeholders are also damaged & long term negative effects can be seen.

As per the provisions of the Concession Agreements / contracts, the settlement of disputes is to be undertaken through conciliation methods first that involve the Independent Engineer,

Post Award Contract Management Manual for Highway PPP Concessions

followed by Dispute Resolution Board (DRB) / Dispute Resolution Expert (DRE) mechanism and finally by Arbitral Tribunals (ATs) as per the Arbitration and Conciliation Act, 1996. Hence, keeping in mind all this, a step by step approach to Dispute resolution has been clearly defined in the Model Concession Agreement (MCA).

Also, the awards of ATs are often challenged before the Courts of Law and the delays in settlement of claims result into huge financial liabilities on the Authority. Thus, recognizing the need for improving the dispute resolution mechanism, the National Highway Authority of India (NHAI) has developed a settlement process in the form of Independent Settlement Advisory Committee (ISAC) that has the following three steps:

Independent Settlement Advisory Committee (ISAC)

- i) Initial negotiation carried out by a Committee of 3 Supervisory Level- Headquarter Officers nominated by the Chairman. Subsequently, the matter is placed before an ISAC consisting of a retired High Court Judge and 2 other Members having sufficient experience in administration / finance and technical field.
- ii) The ISAC can agree with the 3 Supervisory Level- Headquarter Officers Committee or if need be, can call the Concessionaire / contractor for clarifications / negotiations.
- iii) The recommendations of the ISAC to be placed before the NHAI Board for approval. If no negotiable settlement is arrived, the matter shall continue to be pursued legally as per contract.

While the National Authority has already undertaken this encouraging step, the state level authorities also need to take cue from this and develop similar processes for effective and faster dispute resolution mechanisms.

3. Dispute Resolution Tracker for effective management

Along with this, a Dispute Resolution Tracker should also be maintained to track all disputes and ensure that they are resolved as soon as possible. An indicative template for Dispute Resolution Tracker is presented below which must be modified as per the Authority's requirements:

Dispute <i>(Illustrative)</i>	Background of dispute <i>(Illustrative)</i>	Possible consequence <i>(Illustrative)</i>	Responsible person / team <i>(Illustrative)</i>	Dispute resolution procedure adopted <i>(Illustrative)</i>	Deadlines <i>(Illustrative)</i>	Trigger to Escalate dispute to next level <i>(Illustrative)</i>
Change in scope requiring additional structures	Lack of robust technical studies	Delay in construction and increase in project cost	Operations Level	Inter-party discussions	xxx	Dispute not resolved within 3 inter-party meetings

Post Award Contract Management Manual for Highway PPP Concessions

Dispute (Illustrative)	Background of dispute (Illustrative)	Possible consequence (Illustrative)	Responsible person / team (Illustrative)	Dispute resolution procedure adopted (Illustrative)	Deadlines (Illustrative)	Trigger to Escalate dispute to next level (Illustrative)
Need to redo drawings	Inability to acquire certain portion of land	Delay in construction and increase in project cost	Operations Level	Mediation	xxx	Dispute not resolved within 5 mediation meetings

XI. Risk Management

There are many risks a road or highway concession might be prone to during the project lifecycle such as delays in land acquisition, change of scope, risks pertaining to lower traffic than expected etc. Such risks if not mitigated and controlled in a timely manner, may take a grave form or occur very frequently and becomes reasons for disputes as observed often. Hence, risk management forms a critical activity from the contract management perspective and needs special attention by the Authority officials. The Authority needs to develop a comprehensive risk management plan for the project so that proactive as well as active management of risks is done on regular basis. This chapter lists all major risks for a highway project and provides mitigation & monitoring practices for highway PPP concessions. This must be modified as per the requirements of the project and Authority.

1. Risk Mitigation & Monitoring

Risk management is a complex process and post identification of the risks it is necessary that they are actively monitored and mitigated. While, risk mitigation involves assessing the likelihood and consequences of each risk and strategizing alternatives to mitigate the same, risk monitoring requires tracking each risk from time-to-time and readying an action plan in case the risk materializes. Thus while risk mitigation is the art of proactive management of risks, risk monitoring actively manages and controls the existing risks to keeping their values under the threshold.

Hence, for effective risk management, a risk register in the following format should be designed where for all types of risks, their likelihood and their impacts and assessed by the responsible Authority officials and mitigation and control strategies are designed for the same. It must be noted that, in case a particular official is unable to control a materialized risk, the same should be communicated to the next official higher in the Authority.

Category	Risk	Threshold	Likelihood	Impact	Responsible Authority	Frequency of monitoring	Mitigation strategy	Action plan in case risk materializes
Contractually allocated risks	Site risk	Over [2]% of site area is affected	Medium	Time & cost overruns	Operations Level- Field Officer	Fortnightly	Detailed investigative studies through expert technical consultants at the pre-award stage	Plan alternative sites and begin acquisition at the earliest
	Land acquisition risk	Over [2]% cost escalation,	High	Time & cost overruns	Operations Level- Field Officer/	Monthly	Detailed title searches and investigation of land records at the pre-award	Escalate issue, evaluate and execute

Post Award Contract Management Manual for Highway PPP Concessions

Category	Risk	Threshold	Likelihood	Impact	Responsible Authority	Frequency of monitoring	Mitigation strategy	Action plan in case risk materializes
		or delay over 3 months			CALA		stage Greater public involvement and transparency in procedures	alternatives
	Statutory clearances risk	Delay over 1 month	Medium	Time overruns	Supervisory Level- Supervisory Level, Field Officer	Fortnightly	Advanced planning and better coordination between Government entities	Escalate issue and seek higher authority support
	Environmental risks	Delay over 1 month	High	Time & cost overruns Risk premium quoted by Concessionaire	Supervisory Level- Supervisory Level, Field Officer	Fortnightly	Detailed studies into site contamination at the pre-award stage, regular environment audits	Cost-benefit analysis of alternative sites, evaluate option of bearing additional costs
	Traffic risk	2.5% of projected traffic	High	Fall in revenues	Operations Level- Operations Level- Headquarter Officer (Technical)	Monthly	Allocating risk to private party through Toll contracts as opposed to Annuity contracts Developing alternative revenue sources	Increase concession period, provide alternative revenue streams
Residual risks	Design and Engineering risk	Deviation from design and safety	Low	Time overruns Fall in service or safety	Operations Level- Operations Level-	Fortnightly	Stricter inspections by independent engineer, performance guarantees, provisions for penalties	Claim damages, evaluate changing Concessionaire

Post Award Contract Management Manual for Highway PPP Concessions

Category	Risk	Threshold	Likelihood	Impact	Responsible Authority	Frequency of monitoring	Mitigation strategy	Action plan in case risk materializes
		standards by over 5%		standards	Headquarter Officer (Technical)			
	Construction risk	delay over 1 month	Medium	Time overruns Fall in service or safety standards	Operations Level- Field Officer	Monthly	Stricter inspections by independent engineer, performance guarantees, provisions for penalties & liquidated damages	Claim damages, evaluate changing Concessionaire
	Operation & Maintenance risk	delay over 1 month or deviation from safety standards by over 5%	Medium	Time overruns Fall in service or safety standards	Operations Level- Field Officer	Monthly	Stricter inspections by independent engineer, performance guarantees, provisions for penalties & liquidated damages	Claim damages, evaluate changing Concessionaire
	Financial risk	Different for each key ratio	High	Restructuring, refinancing, renegotiation, termination	Supervisory Level- Headquarter Officer (F)	Monthly	Higher eligibility requirements at the time of bidding, financial collaterals, guarantees Hedging through financial products	Claim damages, evaluate changing Concessionaire
	Concessionaire Managerial risk	Change in personnel with substantial decision	High	Restructuring, renegotiation, termination	Supervisory Level- Headquarter Officer (T)	Monthly	Higher eligibility requirements at the time of bidding, lock-in requirements for a certain time period	Evaluate changing Concessionaire

Post Award Contract Management Manual for Highway PPP Concessions

Category	Risk	Threshold	Likelihood	Impact	Responsible Authority	Frequency of monitoring	Mitigation strategy	Action plan in case risk materializes
		making authority						
	Take back risk	Delay beyond pre-fixed Response Timelines by x days (varies depending on type of delay)	Medium	Time overruns, penalties	Supervisory Level-Headquarter Officer (T)	Monthly	Robust processes, competent contract management team and strict adherence to timelines	Train / replace contract management team personnel
Contract variations risks	Change in scope	Different for each factor	Medium	Time & cost overruns Restructuring, renegotiation, termination	Operations Level-Headquarter Officer (Technical)	Quarterly	Detailed market studies at the pre-award stage through expert consultants	Minimize impact through transparency and detailed planning
	Change in law or policy	Potential impact of over 5% cost escalation, over 5% reduction in revenue or delay over 1	High	Time & cost overruns, revenue reduction Additional approvals required	Operations Level-Headquarter Officer (Technical)	Quarterly	Increasing awareness of possible changes and planning ahead for responding to changes, if they occur	Minimize impact through transparency and detailed planning

Post Award Contract Management Manual for Highway PPP Concessions

Category	Risk	Threshold	Likelihood	Impact	Responsible Authority	Frequency of monitoring	Mitigation strategy	Action plan in case risk materializes
		month						
Unidentified or unresolved risks	Force Majeure	N/A	High	Multiple (depending on type of event)	Supervisory Level-Headquarter Officer (T)	Quarterly	Insurance Having disaster recovery and business continuity plans in place	Minimize impact through transparency and detailed planning
	Social risks	Substantially negative user perception	Medium	Time & cost overruns Restructuring, renegotiation, termination	Operations Level-Headquarter Officer (Technical)	Monthly	Wider public communications, greater transparency, more user surveys at the development stage	Deeper engagement with public and community interest groups

Risk identification, mitigation and monitoring practices will vary from project-to-project. Depending on how the Concession Agreement allocates risk between parties and the nature of the project. Hence, the above register must be updated to reflect project specific needs.

XII. Handling Rare Events

As described in the last chapter, there are many risks a project faces pertaining to change in policy, force majeure events such as natural calamities which are unexpected and untimely or premature terminations of project due to unforeseen circumstances. Such events occur rarely, but when they do, they leave a huge impact on the project leaving the progress stalled for a long period and causing huge inconvenience to all stakeholders. This chapter describes all major rare events and how the Authority should manage them to limit the losses out of them.

1. Activities undertaken by Operation Level (Head Quarters or HQ):

During the Construction Period, the Operation Level (HQ) would be responsible for following key activities:

1.1. Change in Law:

Since highway concessions are generally long term in nature ranging from 15- 20 years, there may be situations when a legal amendment or new law is passed after the signing of the contract which might have an impact on the project progress. In such a scenario, the impact of the change in law observed is calculated on the project and the residual payment is made by either the Authority or the Concessionaire to the other one to compensate for it. If the Authority/ Concessionaire, do not wish to provide monetary compensation, a reduction/ extension in concession period may be calculated which will lead to the same Net Present Value (NPV) of the project as was at the time of signing the contract. Some of the key activities undertaken by Operation Level (HQ) in this regard are provided below:

- *To issue a notice to the Concessionaire regarding Change in Law, if any*
- *To review the request submitted by the Concessionaire regarding Change in Law*
- *To arrange a meeting with Concessionaire for mutually agreed arrangement.*
- *To send all related documents to the Financial/ Legal Consultant for review & comments and also to estimate the variation in NPV as per the provision of Concession Agreement.*
- *To process the payment to the Concessionaire against Change in Law as per the provision of the Concession Agreement, if any.*
- *To send a notice to the Concessionaire for recovery of payment against Change in Law as per the provision of the Concession Agreement, if any*
- *Report to the supervisor level (HQ) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 1.i in **Annexure - J**.

1.1.1. Change in Law Checklist:

A checklist to ensure that all the required steps are done by the Authority to nullify the change in law effect has been provided in part 4 in Annexure K

1.1.2. Change in Law Toolkit

An excel toolkit to calculate the effect of change in law is also provided in the part 2 in **Annexure L**.

1.2. Force Majeure

An extraordinary event or circumstance which is beyond the control of either of the parties is referred to as Force Majeure events. Events such as wars, riots, or natural calamities like earthquake, floods, hurricane etc. are beyond the control of either party. Such unavoidable accidents, impact the project under consideration and ability of the parties to meet their obligation under the contract. Some of the key activities undertaken by Operation Level (HQ) in this regard are provided below:

- *To issue a notice to the Concessionaire to report occurrence of Force Majeure, if any*
- *To assess the impact on Concession period and allocation of cost upon occurrence of Force Majeure event*
- *To process for the required adjustment in the Concession Period or any other timeline, as required.*
- *If Force Majeure is for more than 365 days, Operation Level (HQ) may issue a notice to the Concessionaire for termination.*
- *In case Concessionaire issues a notice for termination, Operation Level (HQ) may make a representation on behalf of the Authority to the Concessionaire in this regard.*
- *Report to the supervisor level (HQ) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 1.ii in **Annexure- J, Handling Rare Events**.

1.2.1. Force Majeure Checklist

A checklist to ensure that all the required steps are done by the Authority to nullify the Force Majeure effect has been provided in part 6 in **Annexure K**.

1.3. Compensation for Breach of Agreement:

In endeavor to enforce the clauses of the agreement and implement the contract effectively, both the signing parties of the contract i.e. concessionaire and authority are bound to compensate for any breach as per the contract terms. Compensation to be paid would be arrived at post evaluation of default and corresponding raise of demand from the affected party.

Post Award Contract Management Manual for Highway PPP Concessions

Some of the key activities undertaken by Operation Level (HQ) in this regard are provided below:

- *To review the documents submitted by Concessionaire with respect to the breach of Agreement.*
- *Process for the compensation against the breach of the Agreement*
- *To raise compensation demand for material default, supported by necessary particulars.*
- *Report to the supervisor level (HQ) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 1.iii in **Annexure- J, Handling Rare Events**.

1.4. Assignment & Charge Creation Requests:

Concession agreement signed by the Concessionaire and the Authority, entitle the Concessionaire to assign or subcontract work in selected instances only. If the Concessionaire wants to assign or hire a sub-contractor for tasks not mentioned in the concession agreement, approval from authority is required and requests for the same need to be created. Some of the key activities undertaken by Operation Level (HQ) in this regard are provided below:

- *To review the request submitted by Concessionaire and may decline the consent without assigning any reason, if required*
- *Process to assign and/ or transfer any of its rights and benefits and/or obligations under this Agreement*
- *Report to the supervisor level (HQ) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder/ party, timelines and reporting and escalations, refer part 1.iv. in **Annexure- J, Handling Rare Events**.

1.5. Indemnity Claims:

During the tenure of the concession agreement, various claims could arise due to interaction with numerous stakeholders as part of the project. In lieu to settle the arising claims, consent of both parties to settle arising claims is required whereby a defined process to be followed. Disputes arising in the process are to be settled as per the framework defined in the concession agreement. Some of the key activities undertaken by Operation Level (HQ) in this regard are provided below:

- *In case receives a claim or demand from a third party in respect of which it is entitled to the benefit of an indemnity, Operation Level (HQ) would notify to the Concessionaire.*
- *To process the payment against claim or demand after approval from the Concessionaire*

Post Award Contract Management Manual for Highway PPP Concessions

- *In case the Authority, any notice from the Concessionaire regarding claim or demand from a third party in respect of which it is entitled to the benefit of an indemnity, the Operation Level (HQ) would review such claims or demands.*
- *Report to the supervisor level (HQ) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 1.v. in **Annexure- J, Handling Rare Events.**

1.6. Suspension of Concessionaire's Rights:

In case of Concessionaires' default, the Authority may suspend all rights of the Concessionaire and will collect all fees and revenues on behalf of the Concessionaire. Some of the key activities undertaken by Operation Level (HQ) in this regard are provided below:

- *Issue an notice to the Concessionaire for Suspension of Rights*
- *To suspend the all rights of the Concessionaire and process to exercise such rights by Authority or authorise any other person to exercise or perform the same on behalf of the Authority as per the provision of the Concession Agreement during suspension.*
- *To process to revoke the suspension as per the provision of the Concession Agreement.*
- *Upon occurrence of a Concessionaire Default, Operation Level (HQ) to inform lender about intention to issue termination notice*
- *In case of substitution, to suspend all the rights of the Concessionaire and undertake the operation and maintenance of the Project Highway as per the provision of the Concession Agreement.*
- *In case substitution does not occurs within the specified period, Operation Level (HQ) may process for termination of the Concession Agreement*
- *Report to the supervisor level (HQ) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 1.vi. in **Annexure- J, Handling Rare Events.**

1.7. Termination:

In case of Concessionaires' default, the Authority may suspend all rights of the Concessionaire and will collect all fees and revenues on behalf of the Concessionaire. Some of the key activities undertaken by Operation Level (HQ) in this regard is provided below:

- *To inform the Concessionaire about Authority's intention to issue Termination Notice and request the Concessionaire to make a representation within a specified time.*

Post Award Contract Management Manual for Highway PPP Concessions

- *To inform the Lender's representative about Authority's intention to issue Termination Notice and request the Senior Lenders to make a representation within a specified time.*
- *After receiving the Representation from Concessionaire and the Lender's representative, to take the adequate action as per the provision of the Concession Agreement.*
- *To issue a termination notice, upon occurrence of Concessionaire default.*
- *In case of the Authority default and after receiving an intimation of termination notice from Concessionaire, Operation Level (HQ) would make representation to the Concessionaire.*
- *To process for the termination payment, in case of termination.*
- *After termination of the Project, Operation Level (HQ) would start the process to take possession and control of the Project Highway and all materials and plants about the site as per the provision of the Concession Agreement.*
- *Report to the supervisor level (HQ) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (HQ) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 1.vii. in **Annexure- J, Handling Rare Events**.

1.7.1. Termination Checklist:

A checklist to ensure that the all the required steps are done by the Authority to nullify the Termination effect has been provided in part 7 in **Annexure K**.

1.7.2. Termination Toolkit:

An excel toolkit to calculate the effect of Termination is also provided in the part 2 in **Annexure L**.

2. Activities undertaken by Operation Level (field):

In the process of managing the Rare Events, the Operation Level (field) would be responsible for following key activities:

2.1. Change of Scope

A Change of Scope event occurs when a change is proposed in the scope of activities to be undertaken as a part of the project is proposed by the Authority or the Concessionaire that could not be estimated at the time of contract signing. In such a scenario, the payments for the additional/ reduced scope of work are made by either the Authority or Concessionaire to the other one. Some of the key activities undertaken by Operation Level (field) in this regard are provided below:

2.1.1. Change of Scope- Proposed by Authority

- *To Issue a notice to the Concessionaire to consider Change of Scope, if Authority felt necessary.*
- *To issue a notice to the Concessionaire specifying in reasonable detail the works and services contemplated thereunder*
- *To convey preferred option to the Concessionaire and make efforts to agree upon the time and costs for implementation thereof with assistance of the Independent Engineer.*
- *To execute the Change of Scope Agreement with the Concessionaire*
- *To issue an order requiring the Concessionaire to proceed with the performance thereof.*
- *Report to the supervisor level (field) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 2.i.1 in **Annexure- J, Handling Rare Events.**

2.1.2. Change of Scope- Proposed by Concessionaire

- *May accept the Change of Scope suggested by the Concessionaire or suggest the modification or inform the Concessionaire in writing of its reasons for not accepting Change of Scope.*
- *In case the Authority accepts the Change of Scope, Operation Level (field) would issue a notice to the Concessionaire specifying in reasonable detail the works and services contemplated thereunder.*
- *To convey preferred option to the Concessionaire and make efforts to agree upon the time and costs for implementation thereof with assistance of the Independent Engineer.*
- *To execute the Change of Scope Agreement with the Concessionaire*
- *To issue an order requiring the Concessionaire to proceed with the performance thereof.*
- *Report to the supervisor level (field) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 2.i.2 in **Annexure- J, Handling Rare Events.**

2.1.3. Payment for Change of Scope

- *To start the process to make the advance payment to the Concessionaire as per the provision of the Concession Agreement.*
- *To process for the disbursement of bill as per the provision of the Concession Agreement*
- *Report to the supervisor level (field) & decision making level within one day of default, if any*

For detailed activities to be undertaken by Operation Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 2.i.3 in **Annexure- J, Handling Rare Events**.

2.1.4. Change of Scope Checklist

A checklist to ensure that the all the required steps are done by the Authority to nullify the change in scope effect has been provided in part 3, **Annexure K**.

3. Activities undertaken by Supervisory Level (finance):

In the process of managing the Rare Events, the Supervisory Level (finance) would be responsible for following key activities:

3.1. Financial Restructuring & Novation Requests:

At the time of financial closure, equity and debt holders are defined by the Concessionaire to the Authority, post which any changes in the financial structure should be communicated to the authority. Change in financial structure like change in equity stakes of the members who are part of the SPV or debt refinancing leading to change in bank extending credit and amount of debt raised should be in line with the clauses as specified in the concession agreement. If any changes beyond the scope defined in the agreement are to be made, requests for the same need to be put to the Authority by the Concessionaire. Some of the key activities undertaken by Supervisory Level (finance) in this regard are provided below:

- *To send all Legal document (as submitted by Successful Bidder) to the legal/ financial Consultant for review & comment.*
- *After receiving the opinion from legal/financial consultant, Authority to communicate the same to the Successful Bidder*
- *To issue a letter to the Concessionaire and approved the documents subject to the incorporation of comments in the documents*
- *Report to the decision making level (finance) within one day of default, if any*

For detailed activities to be undertaken by Supervisory Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 3.i in **Annexure- J, Handling Rare Events**.

3.1.1. Financial Restructuring Checklist:

A checklist to ensure that the all the required steps are done by the Authority to nullify the financial restructuring effect has been provided in part 1, **Annexure K**.

3.2. Equity Transfer:

Some of the key activities undertaken by Supervisory Level (finance) in this regard are provided below:

- *To send all Legal document (as submitted by Successful Bidder) to the legal/ financial Consultant for review & comment.*
- *After receiving the opinion from legal/financial consultant, Authority to communicate the same to the Successful Bidder*
- *To issue a letter to the Concessionaire and approved the documents subject to the incorporation of comments in the documents*
- *Report to the decision making level (finance) and decision making level within one day of default, if any*

For detailed activities to be undertaken by Supervisory Level (field) including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 3.ii. in **Annexure- J, Handling Rare Events**.

3.2.1. Equity Transfer Checklist:

A checklist to ensure that the all the required steps are done by the Authority to nullify the equity transfer effect has been provided in part 2, **Annexure K**.

4. Activities undertaken by Supervisory Level (HQ) - Technical:

The Supervisory Level (HQ) - Technical would be responsible for following key activities:

- *To ask for the monthly status reports of the all ongoing projects from the concerned Operation Level (HQ).*
- *To review all the files/documents forwarded by Operation Level (HQ)*
- *To provide the required inputs in the project execution*
- *Report and escalate to the decision making level (Technical) within one day of default, if any*

For detailed activities to be undertaken by Supervisory Level (HQ) Technical including their corresponding stakeholder / party, timelines and reporting and escalations, refer sections 1, i, ii, iii, iv., v. vi & vii, in **Annexure- J, Handling Rare Events**.

5. Activities undertaken by Supervisory Level (field) - Technical:

The Supervisory Level (field) - Technical would be responsible for following key activities:

- *To ask for the monthly status reports of the all ongoing projects from the concerned Operation Level (field).*

- *To review all the files/documents forwarded by Operation Level (field)*
- *To provide the required inputs in the project execution*
- *Escalate the issues within 5 days of default, if any*
- *Report and escalate to the decision making level (Technical) within one day of default, if any*

For detailed activities to be undertaken by Supervisory Level (field) Technical including their corresponding stakeholder / party, timelines and reporting and escalations, refer part 2 in **Annexure- J, Handling Rare Events**.

6. Activities undertaken by Decision making Level (Finance):

The Decision making Level (Finance) would be responsible for following key activities:

- *To ask for the monthly status reports of the all ongoing projects from the concerned Supervisory Level (Finance)*
- *To review all the files/documents forwarded by Supervisory Level (Finance).*
- *To take the required decision as and when required*
- *Report and escalate to the Board / Chairman within 5 days of default, if any*

For detailed activities to be undertaken by Decision Making Level (Finance) including their corresponding stakeholder / party, timelines and reporting and escalations, refer sections parts 3, i & ii in **Annexure- J, Handling Rare Events**.

7. Activities undertaken by Decision making Level (Technical):

The Decision making Level (Technical) would be responsible for following key activities:

- *To ask for the monthly status reports of the all ongoing projects from the concerned Supervisory Level (Technical)*
- *To review all the files/documents forwarded by Supervisory Level (Technical).*
- *To take the required decision as and when required*
- *Report and escalate to the Board / Chairman within 5 days of default, if any*

For detailed activities to be undertaken by Decision Making Level (Technical) including their corresponding stakeholder / party, timelines and reporting and escalations, refer sections parts 3, i & ii in **Annexure- J, Handling Rare Events**.

XIII. Other Important Activities for Post- Award Contract Management

Knowledge Management and Information Dissemination form an important of managing all documented assets of the project which can be used for future reference. This chapter highlights the provisions to be made by the Authority for sound Knowledge Management and Information Dissemination practice.

1. Identification of Training Requirements

The Contract Management team at each level (Operations Level, Supervisory Level and Decision Making Level) needs to be provided appropriate training to ensure they execute their roles with necessary efficiency and effectiveness. it must include a general overview on contract management, trained in general project management skills, specific aspects of contract management as well as nuances of particular industry sectors that they operate in. The table below provides a list of training courses by level.

Type	Course	Contents	Level	Frequency	Pedagogy	Procurement
General	Fundamentals of Contract management	<ul style="list-style-type: none"> • What is Contract Management • Overview of Contract Management Guidelines • Key issues in Contract Management • Policy / Guidance for Contract Management 	Operations Level, Supervisory Level, Decision Making Level	One-time	Lecture / E-learning	Internal
	Project management	<ul style="list-style-type: none"> • General overview of Project Management • Project Management tools and techniques 	Operations Level, Supervisory Level	One-time	Team projects	Internal
	Commercial and financial skills for PPPs	<ul style="list-style-type: none"> • Understanding of PPP contract • Commercial aspects of PPP contracts • Financial modeling • Value-for-money assessment • Public sector comparator 	Operations Level, Supervisory Level, Decision Making Level	One-time	Lecture / E-learning	Internal
	Negotiation skills	<ul style="list-style-type: none"> • General Negotiation skills 	Operations Level, Supervisory Level, Decision Making Level	One-time	Case studies / Team projects	External

Post Award Contract Management Manual for Highway PPP Concessions

Type	Course	Contents	Level	Frequency	Pedagogy	Procurement
Technical	Developing Contract Management Plans	<ul style="list-style-type: none"> • Overview of contents of various plans • How to prepare the plans • How to update plans 	Operations Level, Supervisory Level	One-time	Case studies / Team projects	External
	Performance Monitoring	<ul style="list-style-type: none"> • Information collection and analysis • Helpdesk systems • KPI generation and reporting • Regular reporting and review • Knowledge Management 	Operations Level, Supervisory Level	One-time	Case studies / Team projects	External
	Risk Management	<ul style="list-style-type: none"> • Risk identification • Risk mitigation • Risk monitoring 	Operations Level, Supervisory Level	One-time	Case studies/ Projects	External
	Relationship Management & Dispute Resolution	<ul style="list-style-type: none"> • Type of Stakeholders involved • Partnership protocols • Issue Management & Escalation procedure • Dispute resolution 	Operations Level, Supervisory Level, Decision Making Level	One-time	Case studies / Team projects	Internal
	Change Management & Contingency Planning	<ul style="list-style-type: none"> • Types of changes/ contingencies • Planning for management of changes and contingencies 	Operations Level, Supervisory Level, Decision Making Level	One-time	Case studies / Team projects	Internal
Sector-specific	Issues specific to a particular sector	<ul style="list-style-type: none"> • Sector specific issues / risks / concerns • Sector updates • International sector updates 	Operations Level, Supervisory Level, Decision Making Level	Bi-annual	Seminar	External

Depending upon the skill level of resources on the team, the contract manager must decide who should undergo which training module. Also, certain projects may have added complexity or nuances which may call for additional training courses. The Contract Management Plan must ensure that every person on the contract management team undergoes the courses mandatory for his/her level. A control process to ensure this must be in place.

Apart from identifying type of courses, the contract manager must also finalize the training method (pedagogy). Alternatives can be case studies, team projects, lectures, e-learning or

Post Award Contract Management Manual for Highway PPP Concessions

seminars. Also, the source of training must be decided that is whether an internal resource will impart the training or whether an externally procured trainer shall do so.

2. Establishing regular review forums for relationship management

To ensure a close and cordial relationship between the Government Authority, Concessionaire and other related parties, a formal forum structure must be established at all three levels (to match the Authority's institutional structure) and meetings must be conducted regularly to gain regular updates on project progress as well as discuss ideas and issues pertaining to the project execution. The constitution of each level, roles and responsibilities, and meeting frequencies must be fixed in advance. An illustration of such a formal forum structure is given below.

Level	Authority	Purpose	Constitution	Responsibilities	Meeting frequency
Operations Level	Project Operations Level Forum	Day-to-day coordination with concessionaire	<ol style="list-style-type: none"> 1. Authority Contract Manager (Operations Level- Field Officer) 2. Authority Assistant (Operations Level) 3. Independent Engineer 4. Concessionaire Contract Manager 5. Concessionaire Assistant 	<ul style="list-style-type: none"> • Ensure close coordination between Authority and Concessionaire • Discuss and close issues and small disputes that arise from time-to-time 	Weekly
Supervisory Level	Project Supervisory Level Forum	Middle management coordination with concessionaire	<ol style="list-style-type: none"> 1. Authority Senior Manager (Supervisory Level) 2. Authority Contract Manager (Operations Level) 3. Concessionaire Senior Manager 4. Concessionaire Contract Manager 	<ul style="list-style-type: none"> • To discuss and resolve issues that arise from review of reports by Authority at Supervisory Level • Forum for Concessionaire to voice opinion & discuss any concerns relating to the contract • Plan for contract administration 	Monthly
Decision Making Level	Decision Making Level Forum	Ensure close strategic relationship with concessionaire	<ol style="list-style-type: none"> 1. Authority Director (Decision Making Level) 2. Authority Contract Manager (Operations Level) 3. Concessionaire Director 4. Concessionaire Contract Manager 	<ul style="list-style-type: none"> • To voice strategic concerns that the Authority or Concessionaire may have regarding the contract • To discuss and resolve issues which have substantial impact on the contract 	Quarterly

Through these forums it can be ensured that the relationship between the Authority & the Concessionaire is well maintained and issues, if any are first resolved amicably rather than resorting to formal resolution procedures. As per the project requirements, representatives from highway users can also be included in these forums to seek their opinions on project & solve their grievances, if any.

3. Knowledge Management Plan

As mentioned in the Guidelines, a comprehensive knowledge management and information dissemination plan should be developed as part of increasing efficiency and effectiveness of contract management system. Knowledge management and information dissemination will include:

- Public disclosures
- Online and other IT systems for knowledge management
- Knowledge Management Policy

4. Public disclosures

The authority should mandate the private party involved maintaining a database of important documents available for access to the general public and other stakeholders involved thereby targeting to increase seamless flow of information and transparency. Back-up copies of documents and resources accessible should be maintained enabling multiple accesses to resources and ensuring sturdiness of database. Those documents that must be included in the category of “Specified Documents” include:

- Concession Agreement
- Maintenance Manual
- Maintenance Program
- Maintenance Requirement
- Safety Guidelines

Implementation of a knowledge management system by the private party involved in the agreement would assist the Authority in meeting its own accountability requirements and build a robust transparent system.

To protect interest of the Authority and the private party, access to critical documents should be limited and thereby not disclosed as part of the knowledge system. Such documents are termed as “Protected Documents”. Access to such documents should be routed through a channel developed whereby request to access is monitored and evaluated by the key stakeholders involved in that particular project only. Also, it should be ensured that withholding such documents is in line with the Right to Information Act, 2005. To release any such document on conditional basis, approval must be sought from the Decision Making Level Authority.

5. Online and other IT systems for knowledge management

Technology can be leveraged to a great extent these days to manage all documents. Some of the key applications which must be a part of the knowledge management system within and outside the Authority are:

Within the Authority:

- I. **Performance Review System-** The system should display all KPIs and their current status with respect to a Concessionaire's performance in a particular project. Also, it should be able to generate reports and send the data on fortnightly, monthly and quarterly basis to Operations Level, Supervisory Level and Decision Making Level levels within the Authority where exceptions in KPIs may be highlighted. The access to this system should be at all levels.
- II. **Monthly Management Information system-** It should capture all transactions related to a project on daily basis and generates a report regularly for the review of the Authority officials. This is of major use to the Operations Level and Supervisory Level level field officials on regular basis and for Headquarter level officials to review it.
- III. **File Tracking System (FTS)** – FTS must record physical file movement in Head Quarter and to some extent in Regional Offices also. This system should be accessible by all officials.

Between Authority and other stakeholders:

- I. **Computerized Project Information System (CPIS)** – CPIS is a computerized system to manage and monitor status of Highway Projects and provide an online and real time monitoring facility of report generation for the on-going projects using web based portal of the Authority, if any. The data required to generate these reports is has to be entered online by the respective Project Implementation Units.
- II. **Road Information System (RIS)** – Road Information System (RIS) is an application having data of highway corridors with features of graphical viewing through GIS technology. The application provides the information through different modules on various parameters such as location details of above corridors, wayside amenities, bridge location and details, corridor environment related information, toll plaza location details. Over the GIS interface additional thematic and raster maps are available. This is of special help to Operations Level Authority officials.
- III. **Toll Information System (TIS)** - This application should have a list of all the toll plazas in the country on the internet. An electronic Toll Information system, will allow highway users to get information about all the toll plazas they will have to cross on a particular road trip in the country. A particular toll plaza can be searched using the name or location.
- IV. **PPP Project Information System (PPP PIS):** This system should include all information about current and part PPP Projects, their progress, reports from the Independent Engineer and other stakeholders on the project health. It should provide complete information on a project through project specific websites with a section on those

Post Award Contract Management Manual for Highway PPP Concessions

projects, which have defaulted many times and have created major inconvenience to users.

Other tools like Public Private Partnership (PPP) Monitoring Tool & Correspondence Management System must also be developed where constant projects monitoring can be done.

After the entire knowledge has been retrieved, stored and uploaded in a structured manner, it should be updated at regular intervals so that all the decisions are taken up with latest information on current health of the progress of a project.

6. Knowledge Management Policy

It is essential that all knowledge which is generated in form of communications and documents generated for internal use are preserved in a coherent manner within the Authority. Also, how the flow of information happens within the Authority is also a critical part of Information Dissemination Plan. At all three levels, Operations Level, Supervisory Level & Decision Making Level, information flow should be in accordance with the requirements and mapped to the roles and responsibilities of the officials at that level.

A policy on reviewing all the applications and systems developed as a part of the plan, and escalation within the Authority should be set. This policy should include:

- All protocols within the authority Levels
- All compliance requirements to be met in documentation such as following IFRS accounting principles
- Training and user manuals as appendix to assist users in operation of these systems

This policy should be created by the Contract Manager after consultation with all stakeholders and their respective need and requirement.

Along with all this, a Knowledge Management Register also needs to be maintained where all key details regarding all knowledge databases and systems

Sl. No	Knowledge Source/ Data Application	Brief description on usability	Authorities with access to it	Contact Person in case of issues faced

7. List of registers and reports

The following is a list of registers and reports to be maintained for Contract Management. These registers / reports must be maintained by the Operations Level team and forwarded to Supervisory Level and Decision Making Level officials as required.

Register / Report	Coverage
KPI report	KPIs for each stakeholder

Post Award Contract Management Manual for Highway PPP Concessions

Register / Report	Coverage
Service Performance register	Indicators for Service level obligations of the concessionaire
Status report on Project Stage	Project stage and sub-stage
Status report on Activities which are Authority's responsibility	Status of fulfilment of Authority's obligations
Status report on Activities which are Concessionaire's responsibility	Status of fulfilment of Concessionaire's obligations
Status report on action plan finalized in previous period's report	Status of previous period's action plan
Risk register	Identify and monitor risks
Issue tracker	Track service delivery issues
Dispute tracker	Track status of resolving disputes
Ongoing review register	Track changes / updates
Complaints register	Track public grievances and related action taken

The following registers and reports must be maintained by the Concessionaire and submitted to the Authority from time-to-time. These registers / reports should be reviewed by the appropriate person at the Authority and necessary action must be taken on the same.

Register / Report	Contents	Frequency of submission	Submitted to	Action plan of Authority
Issue register	List service delivery issues and action taken to resolve them	Monthly	Operations Level	Identify major issues, update Issue tracker and escalate issues, if necessary
Complaints register	Track public and related action taken	Monthly	Operations Level	Identify major complaints and escalate if necessary

Annexures

A. Template for Contract Management Plan

Activity	Detailed activities assigned	Primary Responsibility	Reporting Authority	Timelines	Escalation on Default
<i>Stage wise Contract Management Activities</i>					
a) Development Stage- concession Agreement	Signing of				
<i>Performance Management</i>					
a) Concessionaire KPIs					
<i>Rare Event Management</i>					
a) Handling variations					
b) Change in Law					
c) Liquidated Damages					
<i>Handling Issues & Disputes</i>					
Dispute Management					

B. Procedure for Development of Contract Management Plan

Step 1: Need Assessment for Contract Management

The focus of any contract management plan lies in solving the issues faced by the Authority and other stakeholders currently. Thus, a need assessment is essential for effective problem identification and resolution. This approach follows the 'first principle' school of thought, focusing on firstly identifying what is the need that the contract management plan would fulfill or in other words, "why do the stakeholders need a contract management plan". The contract management plan would then be developed focusing on the needs of the stakeholders to give the best experience possible.

Step 2: As- is analysis of Contract management practices

The first part of drafting a contract management plan is to undertake an analysis of best contract management practices followed in the organization and outside. This helps the Authority to identify innovative solutions and best SOPs that can be leveraged to help in the PPP project.

Key focus should be on similar PPP projects sector wise in developing countries, due to strong similarities in the issues being faced. A thorough analysis needs to be done including but not limited to document review, management interviews, site visit and others.

Step 3: Draft the plan

The development of an effective contract management strategy must be carefully planned. The contract manager can begin the planning process by asking the following questions:

- **What contract management tools and processes may be required for the project?** Manager should list the tools and processes relevant to the particular project.
- **What human, financial and technology resources are available?** The available resources may dictate the form taken by contract management tools and processes.
- **What time constraints should be set for the development of the contract management tools and processes?** The time constraints should be matched to both the available resources and the expected project delivery dates and milestones.

Step 4: Develop and implement contract management tools and processes

After obtaining appropriate resources, and collecting and analyzing relevant information, project manager should proceed to develop and implement the necessary contract management tools and processes. The processes and tools developed and implemented for contract management purposes should be collated in a Contract management plan. The Contract management plan and the performance reports produced over the life of the contract are key documents for the project. Few contract management tools include:

More details on each one of them can be found in their respective chapters.

Step 5: Establish a system of ongoing contract management & review

In establishing a system of ongoing contract management and review, the project manager relies on the same tools and processes that have been identified earlier. The project manager should also establish a culture of ongoing contract management which includes the systematic review of the contract management strategy and tools and processes during the lifecycle of the project.

- Risk Register
- KPI Templates
- Issues management review report
- Dispute Resolution Tracker
- Tool to analyze effect of Traffic variations
- Tool to analyze effect of Termination
- Tool to analyze effect of Change in Law

#	Risk Category	Details	Likelihood	Consequences

SAMPLE RISK REGISTER

Dispute	Background of dispute	Possibl conse

SAMPLE DISPUTE TRACKER

Senior management needs to support the culture of effective contract management in the relevant government entity.

As part of establishing an effective contract management culture, contract manager and its team should have undertaken training that provides skills and competencies in the contract management of PPP projects

C. Template for Ongoing Review Plan

Category	Type of Change <i>(Illustrative)</i>	Description of change <i>(Illustrative)</i>	Action plan <i>(Illustrative)</i>	Responsible person / team for tracking and executing change <i>(Illustrative)</i>
Contract Management arrangements	Contract Management Team	Key personnel leaving the organization	Plan to recruit internally / externally, train and onboard the new resource	Operations Level, Supervisory Level, Decision Making Level (as applicable)
	Management team of Concessionaire	Change in key contract management personnel of the Concessionaire	Update risk register, onboard new personnel in the partnership structure	Operations Level, Supervisory Level, Decision Making Level (as applicable)
Performance obligations	Service level obligations	Need to operate fewer toll plazas due to reduction in traffic	Revise service performance register to reflect changed threshold level	Operations Level
Project risks	New insurance products	New products to transfer risks	Evaluate insurance product and update risk mitigation strategy	Operations Level
	New financial market products	Possibility to hedge interest rate or currency risks / possibility to refinance	Evaluate options and update risk mitigation strategy	Operations Level
Rare events	Competing facility	Potential diversion of traffic due to competing facility	Revise Performance KPIs for Concessionaire, Update risk register	Operations Level, Supervisory Level

D. Contract Management Activities in Development Period

1. Activities to be undertaken by Operations Level - HQ Officer

i. Execution of Concession Agreement

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Concession Agreement Signing	Step 1: The Authority to accept the LOA acceptance letter from the Successful Bidder.	Within 7 days of issuance of LOA
		Step 2: The Authority may send reminder letter to the Successful Bidder in case the Successful Bidder does not submit the LOA acceptance letter to the Authority.	Within 15 days of issuance of LOA
		Step 3: The Authority to accept the LOA acceptance letter from the Successful Bidder after the reminder.	Within 7 days of receipt of reminder letter from Authority
		Step 4: The Bid Security shall be forfeited and appropriated by the Authority as mutually agreed genuine pre-estimated compensation and damages payable to the Authority for, inter alia, time, cost and effort of the Authority without prejudice to any other right or remedy that may be available to the Authority hereunder or otherwise in case the Selected Bidder, fails to sign and return the duplicate copy of LOA within the specified time limit.	Within 7 days of issuance of reminder letter
		Step 5: The Authority to review & approve the submitted draft documents for incorporation of an SPV under the Companies Act 1956 (or as per amended versions of the Act) by the Successful Bidder, after submission of the LOA acceptance letter.	Within 15 days of acceptance of LOA
		Step 6: The Authority to send all Legal documents (as submitted by Successful	Within 7 days of receipt

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		Bidder) to the legal/ financial Consultant for review & comments. After receiving the opinion from legal/financial consultant, Authority to communicate the same to the Successful Bidder	of such documents
		Step 7: The Authority to suggest required changes in SPV incorporation documents and further review & approve the revised documents submitted by the Successful bidder.	Within 7 days of receipt of such comments
		Step 8: The Authority to send all revised documents (as submitted by Successful Bidder) to the Legal/ Financial Consultant for further review & comments. After receiving the opinion from legal/financial consultant, Authority to issue an approval letter to the Successful Bidder for Incorporation of SPV.	Within 7 days of receipt of such documents
		Step 9: The Authority to review and approve the following documents for incorporation of SPV under the Companies Act, 1956(or as per amended versions of the Act) and Successful bidder to form the SPV: <ul style="list-style-type: none"> • Board Resolution / Power of Attorney in favour of one of the Director of SPV to execute the Concession Agreement. • Legal opinion and request to the Authority to accept the Concessionaire as the entity which shall undertake and perform the obligations and exercise the rights of the selected bidder/ Consortium under the LOA. 	Within 7 days of receipt of approval of Incorporation of SPV
		Step 10: The Authority to send all documents (as submitted by the Concessionaire) to the legal/ financial Consultant for review & comments. After receiving the opinion from legal/financial consultant, Authority to issue a letter to the Concessionaire and agree to enter in to Concession Agreement with the Concessionaire	Within 7 days of receipt of such documents

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		Step 11: The Authority to accept Concessionaires' mutual consent of signing the Concession Agreement	Within 7 days of receipt of such request
		Step 12: The Authority to issue Concession Agreement Signing Date after receiving consensus from the Concessionaire.	Within 7 days of receipt of such consent from Concessionaire
		Step 13: The Authority & Concessionaire to execute the Concession Agreement.	Within 45 days of Issuance of LOA

ii. Submission of Performance Security

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Submission of Performance Security	Step 1: The Authority to accept the Performance Security in form of Bank Guarantee (BG) from the Concessionaire	Within 90 days of signing of Concession Agreement or on an earlier day acceptable to Authority
		Step 2: The Authority to verify the Bank Guarantee from the respective Bank and issue an acknowledgement to the Concessionaire subsequent to its verification.	Within 7 days of receipts of such document
b)	Submission of Performance Security	Step 1: The Authority to encash the Bid Security and appropriate the proceeds thereof as damages in case the Performance Security is not provided by the Concessionaire within 180 days of signing of CA.	Within 7 days from 180 of Signing of CA
		Step 2: Agreement shall be deemed to have been terminated by mutual	Within 7 days from 180

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		agreement of the Authority & Concessionaire.	of Signing of CA

iii. Written Consent from the Authority

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Written Consent from the Authority	Step 1: The Authority to provide written consent to the Concessionaire for making any amendments in the Financing Agreements.	
		Step 2: The Authority to review the proposal submitted by the Concessionaire and communicate the comments, if any. Authority shall not unreasonably withhold its consent for restructuring or rescheduling of the Debt Due.	Within 7 days of receiving of such request

iv. Covenant

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Covenant	<p>Step 1: The Authority to be provided by the Concessionaire provisions in each of the Project Agreement, that entitle the Authority to step into such agreement, in its sole discretion, in substitution of the Concessionaire in the event of Termination or Suspension (the “Covenant”).</p> <p>In the event of Termination or Suspension, the Authority has right of substitution / step into Agreement within 90 days from Transfer Date. Authority to evaluate the project with respect to the substitution and implement the right of substitution.</p>	Within 90 Days of Transfer Date

v. Maintenance of Project Highway

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Maintenance of Project Highway	<p>(a) The Authority to maintain the Project Highway as compared to its condition 7 days prior to the bid submission date. (OR)</p> <p>(b) Pay to the Concessionaire the cost and expense, as determined by the Independent Engineer</p>	Within 7 days of receiving of such request

vi. Appointment of Safety Consultant

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Appointment of Safety Consultant	<p>The Authority to appoint one or more Safety Consultant within 90 days of signing of Agreement</p> <p>The Authority to invite proposals from various agencies through tendering process and finalise the Safety Consultant based on technical and financial criteria.</p>	Within 90 days of signing of Concession Agreement

2. Activities to be undertaken by Operations Level- Field Officer

i. Condition Precedent (Authority)

i.1. Condition Precedent (Authority) – Handing over of ROW

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Handing over of ROW	<p>Step 1: Upon receipt of notice from the Concessionaire, Authority to make sure the availability of at least 80% Right of Way (ROW) within 30-60 days from issuance of Notice from Concessionaire or within 180 days of signing of Concession Agreement.</p> <p>Coordination with Competent Authority of Land Acquisition (CALA), Revenue Department (State) etc.</p>	Within 180 days of signing of CA

i.2. Condition Precedent (Authority) – Approval of general arrangement drawings (GAD)

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Approval of general arrangement drawings (GAD)	<p>Step 1: a) Upon receipt of notice from Concessionaire, Authority to procure approval of the Railway authorities in the form of a general arrangement drawing to construct road over bridges / under bridges at level crossings on the Project Highway within 30-60 days from issuance of Notice from Concessionaire</p> <p>b) The Authority may by notice extend, for up to an aggregate of 6 months for approval of Over-bridges and applicable permit relating to environmental protection</p> <p>c) The Authority to send the request to the Railway Authority for GAD approval</p>	Within 30-60 days from issuance of Notice from Concessionaire

i.3. Condition Precedent (Authority) – Environmental Clearance

S. No.	Activities	Responsibilities / Action Points	
		Responsible Party	Timeline

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Responsible Party	Timeline
a)	Environmental Clearance	<p>Step 1: Upon receipt of notice from Concessionaire, Authority to procure all Applicable Permits relating to environmental protection and conservation of the Site within 30-60 days from issuance of Notice from Concessionaire or Authority may by notice extend, for up to an aggregate of 6 (six) months.</p> <p>(b) The Authority to send the request to the competent authority for environmental clearance approval</p>	Within 30-60 days from issuance of Notice from Concessionaire

i.4. Condition Precedent (Authority) – Utilities Shifting

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Environmental Clearance	<p>Step 1: Upon receipt of notice from Concessionaire for utility shifting, Authority to make the arrangement for Utility Shifting.</p> <p>The Authority to ask for the financial quotation for utility shifting.</p> <p>To seek necessary financial approvals:</p> <ul style="list-style-type: none"> ▪ If the sanctioned value is less the limit assigned to the RO/ field office, the same is approved by RO/ field office. ▪ However, if the sanctioned value is more than the limit assigned to the RO/ field office the same is approved by Head Quarter. 	Within 7 days of request received from Concessionaire

ii. Utilities, Associated Roads and Trees

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Existing utilities and roads	Step 1: Authority shall, upon written request from the Concessionaire, initiate and undertake at the Concessionaire's cost, legal proceedings for acquisition of any right of way necessary for diversion. The Concessionaire to ensure that the respective entities owning the existing roads, right of way or utilities on, under or above the Site are enabled by it to keep such utilities in continuous satisfactory use, if necessary, by providing suitable temporary or permanent diversions with the authority of the controlling body of that road, right of way or utility.	Within 30 days of receiving of such request
b)	Shifting of obstructing utilities	Step 2: The Authority or the respective owning entity to bear the cost of utility shifting which causes an adverse effect on the construction, operation or maintenance of the Project Highway. The shifting to be undertaken by the Concessionaire and in case of delay, the Concessionaire shall be excused for failure to perform.	Within 7 days of receiving of such documents
c)	New utilities and roads	Step 1: The Authority to direct the Concessionaire, if required, to connect the adjoining road to the Project Highway and the connecting portion falling within the Site.	
d)	New utilities and roads	Step 1: The Concessionaire to connect any adjoining service station, hotel, motel or any other public facility or amenity to the Project Highway, upon advance payment of the cost by the beneficiary entity as assessed by Independent Engineer	
e)	Felling of Trees	Step 1: The Authority to assist the Concessionaire in obtaining the Applicable Permits and bear the cost for felling of trees if these cause material adverse effect on construction, operation or maintenance of the Project Highway. In the event of any delay in felling of trees for reasons beyond the control of the Concessionaire, it shall be excused for failure to perform any of its obligations hereunder if such failure is a direct consequence of delay in the felling of trees.	Within 30 days of receiving of such request

iii. Obligations relating to Project Agreements

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Obligations relating to Project Agreements	<p>Step 1: The Authority to undertake review and provide its comments, if any within 15 days of the receipt of the drafts of all Project Agreements, to the Concessionaire.</p>	Within 15 days of the receipt of the drafts of all Project Agreements.
		<p>Step 2: Within 7 days of execution of any Project Agreement or amendment thereto, the Authority to receive from the Concessionaire a true copy thereof, duly attested by the Director of the Concessionaire, for its record.</p>	Within 7 days of execution of any Project Agreement or amendment thereto

3. Activities to be undertaken by the Supervisory Level- Finance Officer

i. Damage for delay by the Authority

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Damage for delay by the Authority	<p>Step 1: Upon receipt of notice from Concessionaire for damage for delay, on account of Authority's failure to meet any of the Conditions Precedent within the specified timelines, the Authority to pay 0.1% of Performance Security for each day of delay until fulfillment of all such Conditions Precedent, subject to a maximum of 20% of the Performance Security to the Concessionaire as damages. Provided; the delay should not have occurred as a result of breach of this Agreement by the Concessionaire or due to Force Majeure.</p> <p>Authority to review the request received from the Concessionaire and negotiate with the Concessionaire</p>	Within 7 days of request received from Concessionaire

ii. Condition Precedent (Concessionaire)

ii.1 Escrow & Substitution

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Escrow & Substitution Agreement	<p>Step 1: Authority to review and approve the draft version of Escrow & Substitution Agreement submitted to the Authority by the Concessionaire</p>	NA
		<p>Step 2: Authority to send Escrow & Substitution Agreement to the legal/ Financial Consultant for review & comments. After receiving the opinion from legal/financial consultant, Authority to communicate the same to the Concessionaire</p>	Within 7 days of receipt of such document
		<p>Step 3: Authority to suggest required changes in the Escrow & Substitution Agreement to the Concessionaire and further review & approve the revised Escrow & Substitution Agreement.</p>	
		<p>Step 4: Authority to send revised Escrow & Substitution Agreement to the legal/ financial Consultant for further review & comments. After receiving the opinion from legal/financial consultant, Authority to issue a letter to the Concessionaire and agree to execute the Escrow & Substitution Agreement</p>	
		<p>Step 5: Authority to sign the Escrow & Substitution Agreement submitted by the Concessionaire.</p>	

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
b)	Applicable Permits	<p>Step 1: Authority to review the supporting documents submitted by Concessionaire with respect to the following Applicable permits and subsequently issue an acknowledgement letter to the Concessionaire:</p> <p>Concessionaire to procure all Applicable Permits. The Applicable Permits includes:</p> <ul style="list-style-type: none"> a. Permission of the State Government for extraction of boulders from quarry b. Permission of Village Panchayat and Pollution Control Board for installation of crushers c. Licence for use of explosives d. Permission of the State Government for drawing water from river/reservoir e. Licence from Inspector of factories or other competent authority for setting up Batching Plant f. Clearance of Pollution Control Board for setting up Batching Plant g. Clearance of Village Panchayats and Pollution Control Board for Asphalt Plant h. Permission of Village Panchayat and State Government for borrow earth i. Permission of State Government for cutting of trees and j. Any other permits or clearances required under Applicable Laws. 	Within 7 days of receipt of such document

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
c)	Representation & Warranties	<p>Step 1:</p> <p>Authority to review the following representations and warranties submitted by Concessionaire and subsequently issue an acknowledgement letter to the Concessionaire:</p> <p>(a) The selected bidder/ Consortium Members, together with its/ their Associates, shall hold not less than 51% (fifty-one per cent) of its issued and paid up Equity as on the date of this Agreement; and that no member of the Consortium whose technical and financial capacity was evaluated for the purposes of pre-qualification and short-listing in response to the Request for Qualification shall hold less than 26% (twenty six per cent) of such Equity during the Construction Period and two years thereafter</p> <p>(b) The selected bidder/ Consortium Members and its/their Associates shall have the financial standing and resources to fund the required Equity and to raise the debt necessary for undertaking and implementing the Project in accordance with this Agreement</p> <p>The selected bidder/ each Consortium Member shall be duly organised and validly existing under the laws of the jurisdiction of its incorporation, and shall have requested the Authority to enter into this Agreement with the Concessionaire pursuant to the Letter of Award, and shall unconditionally accept the terms and conditions set forth in this Agreement.</p>	Within 7 days of receipts of such document

ii.2 Financial Closure

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Financial	Step 1: Authority to accept three copies of Financing Agreement along with 3	NA

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
	Closure	<p>true copies of the Financial Package and Financial Model (in MS Excel version or any substitute thereof, which is acceptable to the Senior Lenders) submitted by the Concessionaire within 180 days of Concession Agreement signing date or before Appointed Date. All documents should be duly attested by a Director of the Concessionaire. Concessionaire to execute the Financing Agreement also.</p>	
<p>Step 2: Authority to send all Financing Agreement to the legal/ financial Consultant for review & comments.</p> <p>After receiving the opinion from legal/financial consultant, Authority to communicate the same to the Concessionaire</p>		<p>Within 7 days of receipts of such document</p>	
<p>Step 3: Authority to further review and approve the revised Financing Agreements subsequent to its submission by the Concessionaire after incorporating all changes suggested by the Authority.</p>		<p>Within 7 days of receipts of such comments</p>	
<p>Step 4: Authority to send revised Financing Agreement to the legal/ financial Consultant for further review & comments.</p> <p>After receiving the opinion from legal/financial consultant, Authority to issue a letter to the Concessionaire and declare the Financial Closure, if the terms and condition of Financing Agreement are acceptable to the Authority.</p> <p>In case the changes are not appropriate, the Authority to seek further changes and repeat the above process.</p>		<p>Within 7 days of receipts of such document</p>	

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
b)	Delay in Financial Closure	<p>Step 1: On account of delay in Financial closure, Authority to issue notice for damage claim to the Concessionaire. and receive payment at the rate of 0.1% of the Performance Security for each day of delay up to a further period of 120 days.</p> <p>(OR)</p> <p>Or for a further period not exceeding 200 days, subject to receipt of payment of Damages for delay by the Concessionaire</p>	Within 7 days from 180 of Signing of CA
		<p>Step 2: Termination of the Concession Agreement by mutual agreement of the Authority & the Concessionaire in the event of non-occurrence of Financial Close within the specified or extended timelines.</p>	Within 7 days from 180 of Signing of CA
		<p>Step 3: Upon Termination due to failure to achieve Financial Close, the Authority to encash the Bid Security and appropriate the proceeds thereof as Damages</p> <p>(a) If the Bid Security has been substituted by the Performance Security, the Authority shall be entitled to encash therefrom an amount equivalent to the Bid Security.</p> <p>If Financial Close has not occurred solely as a result of the Authority being in default of any of its obligations, upon Termination, the Bid Security along with the Damages due and payable shall be return to the Concessionaire</p>	Within 7 days from 180 of Signing of CA

iii. Condition Precedent

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Condition	Step 1: Authority to receive written updates from the Concessionaire at least	

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
	Precedent Status/ Progress of Condition Precedent	<p>- once a month about the status / progress of the Conditions Precedent entitled to the Concessionaire.</p> <p>Step 2: Authority to inform/ notify in writing to the Concessionaire at least once a month on the status / progress of the Conditions Precedent entitled to the Authority.</p>	Once in a month
b)	Condition Precedent - Concessionaire	<p>Step 1: Authority to</p> <p>(a) Get all Condition Precedent documents verified from Legal / Financial Consultant</p> <p>(b) Declare the Appointed Date</p> <p>(c) If All Condition Precedent are not fulfilled within specified timelines then penalty would be charged from the Concessionaire</p> <p>(d) Penalty payment would be appropriated from performance Security within 30 days.</p> <p>Concessionaire to meet all Conditions Precedent (as specified in the Concession Period) within 180 days from the date of signing of the Concession Agreement or any time decided by both parties.</p>	Within 7 days of receiving of such documents
c)	Appropriation of Performance Security	<p>Step 1: Authority to encash and appropriate relevant amount from the Performance Security upon Concessionaire's default or failure to meet Conditions Precedent. The Authority to appropriate 0.2% of the Performance Security for each day of delay until fulfillment of all such Conditions Precedent, subject to a maximum of 20% of the Performance Security. Provided; the delay should have not occurred as a result of failure to fulfill the obligations specified in this Agreement by the Authority, or due to Force Majeure.</p> <p>Step 2: In case the Concessionaire does not cure its default within Cure Period of</p>	<p>Within 7 days from 180 of Signing of Concession Agreement</p> <p>Within 7 days of expiry</p>

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		90 days, the Authority to encash and appropriate such Performance Security as Damages, and to terminate the Agreement.	of cure period

4. Activities undertaken by the Supervisory Level (HQ) – Technical Officer

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly status reports & review of documents	Step 1: Relevant Authority officer to review and provide inputs on the monthly status reports received from immediate subordinate officer (Operations Level Field Officer in this case) of the all ongoing projects and all files/ documents pertaining to it. Authority officer to report and escalate exceptions to their immediate supervisor (Decision Making Level- Technical Officer).	Within 1 day in case of any default

Escalation:

In case of any default, the issue to be escalated within 1 day of default by the officer.

5. Activities undertaken by Supervisory Level (field) - Technical:

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly status reports & review of documents	Step 1: Authority to review and provide inputs on the monthly status reports of the all ongoing projects and all files/ documents pertaining to it. Reporting & escalation to be done to the immediate supervisor (Decision Making Level- Technical Officer) within 1 day of default.	1 day of default

Escalation:

In case of any default, the issue to be escalated within 1 day of default by the officer.

6. Activities undertaken by Decision making Level (Technical)

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly status reports & review of documents	Step 1: Authority to review and provide inputs on the monthly status reports of the all ongoing projects and all files/ documents pertaining to it. Reporting & escalation to be done to the immediate supervisor (Board/ Chairman) as and when required.	Within 5 days of default

Escalation:

In case of any default, the issue to be escalated to Board/ Chairman within 5 days of default by the officer.

7. Activities undertaken by Decision making Level (Finance):

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly status reports & review of documents	Step 1: Authority to review and provide inputs on the monthly status reports of all ongoing projects and all files/ documents pertaining to it. Reporting & escalation to be done to the immediate supervisor (Board/ Chairman) as and when required.	Within 5 days of default

Escalation:

In case of any default, the issue to be escalated to Board/ Chairman within 5 days of default by the officer.

E. Contract Management Activities in Construction Period

1. Activities to be undertaken by Operations Level- HQ Officer

i. Release of Performance Security

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Release of Performance Security	<p>Step 1: Authority to release the Performance Security one year from Appointed Date or earlier upon the Concessionaire expending at least 20% of TPC. The same shall be processed upon receipt of request from Concessionaire provided it is not in default of the Concession Agreement.</p>	Within 7 days of receiving of such request

ii. Grant

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Grant	<p>Step 2:</p> <p>(a) Authority to scrutinize the request for equity support along with necessary documents (subject to achievement of milestones as per Schedule 'G': Project Completion Schedule by the Concessionaire) and release grant to escrow account within 15 days of receiving the request from the concessionaire.</p> <p>(b) Equity Support is due and payable to the Concessionaire after expending the Equity, and is disbursed proportionately along with the loan funds. Subsequently the balance is disbursed by the Senior Lenders under the Financing Agreements.</p>	Within 15 days of receipt of such request

2. Activities to be undertaken by Operations Level- Field Officer

i. Right of Way

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Handing over of ROW	<p>Step 1: In case the entire ROW has not been provided to the Concessionaire before the Appointed Date, Authority to ensure availability of 100% ROW within 90 days of Appointed Date.</p>	
		<p>Step 2: In case the Authority does not hand over the ROW within 90 days of Appointed Date for any reason other than Force Majeure or breach of this Agreement by Concessionaire, the Authority has to pay the damages to the Concessionaire. The damages are calculated at the rate of Rs. 50 (Rupees fifty) per day for every 1,000 square meter or part thereof, commencing from the 91st day of the Appointed Date and until such Right of Way is procured.</p>	

ii. Milestone

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Milestone	<p>Step 1: The Authority to issue a notice to the Concessionaire to pay the Damage for delay, in case the Concessionaire does not meet the milestone within specified timelines (Unless such failure has occurred due to Force Majeure or for reasons solely attributable to the Authority).</p>	
		<p>Step 2: Authority to receive payment for damages by the Concessionaire calculated at the rate of 0.1% of the amount of Performance Security for delay of each day until such Milestone is achieved.</p>	
		<p>Step 3: In case the project is not completed within 270 days from schedule completion date the Authority shall be entitled to terminate this Agreement, unless the delay is on account of reasons solely attributable to the Authority or due to Force Majeure.</p>	

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
b)	Completion of Construction	Step 1: Authority to receive payment for damages from the Concessionaire equivalent to 3% of the Average Daily Fee per day, if the Concessionaire fails to complete six laning on or before the Scheduled six laning Date. .	

iii. Monitoring of Construction

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly Progress Report	Step 1: The Authority to receive monthly progress reports from the Concessionaire and the Independent Engineer.	Within 7 days of the close of each month during the Construction period.
b)	Inspection	The Authority to receive monthly 'Inspection Report' from the Independent Engineer specifying deficiencies in construction with respect to the Scope of the Project and Specifications and Standards.	Within 7 days of inspection
c)	Test	Step 1: Independent Engineer to request the Concessionaire to carry out tests for quality assurance in accordance with Good Industry Practice. The results of these tests to be furnished to the Independent Engineer by the Concessionaire.	
		Step 2: The Independent Engineer to certify the cost incurred on the test.	
		Step 3: The Authority to reimburse to the Concessionaire – one half of the costs incurred on such tests, and to the extent certified by the Independent Engineer as reasonable.	Within 7 days of receiving of such request
		Step 4: If tests establish any defects or deficiencies, the Independent Engineer has to be furnished with a report on the remedial measures carried out by the Concessionaire for the identified defects and deficiencies.	
c)	Delay During Construction / Suspension	Step 1: The Independent Engineer to notify the Concessionaire, in case the Concessionaire fails to achieve any of the Project Milestones or the Independent Engineer reasonably determines that the rate of progress of Construction Works is	

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
	of unsafe Construction Works	such that the project is not likely to be achieved by the Scheduled Date.	
		Step 2: The Independent Engineer to be notified by the Concessionaire within 15 days of such notice about the steps it proposes to take to expedite progress and the period within which it will achieve the Project Completion Date.	
		Step 1: The Independent Engineer to recommend the Authority about the suspension of the construction work if such works threatens the safety of users and pedestrians.	
		Step 2: Authority by notice may require the Concessionaire to suspend forthwith the whole or any part of the Construction Works based on the recommendation from Independent Engineer	Within 7 days of receipt of such request from Independent Engineer
		Step 3: The Independent Engineer to be notified to inspect remedial measures conducted by the Concessionaire to secure the safety of suspended works and the Users.	
		Step 4: Independent Engineer to inspect such remedial measures forthwith and make a report to the Authority recommending whether or not the suspension hereunder may be revoked.	
		Step 5: (a) Upon receiving the recommendations of the Independent Engineer, the Authority to either revoke such suspension or instruct the Concessionaire to carry out such other and further remedial measures as may be necessary in the reasonable opinion of the Authority. (b) In case further remedial measures taken by Concessionaire are not reasonable in the opinion of the Authority, Authority to repeat the above process until Suspension is revoked.	Within 7 days of receipt of such request from Independent Engineer
	Suspension of unsafe Construction	Step 1: The Independent Engineer to determine the extension of date set forth in the project completion schedule (in case of suspension not attributable to Concessionaire) and subsequently notifies the same to the Authority.	

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
	Works	Step 2: The Authority to extend the project completion schedule and increase the Concession period based on recommendations of the Independent Engineer.	
	Video Recording	The Authority to receive a video recording from the Concessionaire every quarter, covering the status and progress of Construction Works. The first video should be provided within 7 days from the Appointed Date and subsequently every quarter within 15 days from the last date of each quarter.	

iv. Completion Certificate

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Test	Step 1: The Independent Engineer to be notified by the Concessionaire of its intent to subject the Project Highway to Tests at least 30 days prior to the likely completion of the Project Highway.	Notification to be received at least 30 days prior to the likely completion of the Project Highway.
		Step 2: Independent Engineer to determine the date and time of each of the Test in consultation with the Concessionaire and notify the same to the Authority.	
		Step 3: Authority to designate its representative to witness the test	
		Step 4: (a) In case the Concessionaire and the Independent Engineer fails to mutually agree on the date for conducting tests, the Independent Engineer to be notified by the Concessionaire a date providing at least 10 days' of prior notice to the Independent Engineer. (b) The Independent Engineer to be assisted by the Concessionaire for reasonably conducting the Test	

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		<p>Step 5:</p> <p>(a) Independent Engineer to conduct all Tests in accordance with Schedule I and determine compliance of Project Highway with Specifications and standards.</p> <p>(b) The Independent Engineer to direct the Concessionaire to remedy/rectify the defects/deficiencies or suspend/delay such tests, in case the performance of the Project Highway does not conform to required specifications and standards.</p> <p>(c) After the completion of each Test Independent Engineer to provide the copy of all Test data to the Concessionaire and the Authority.</p>	
b)	Completion Certificate	The Independent Engineer to issue a Completion Certificate to the Concessionaire and the Authority, upon completion of Construction Works and successful tests.	
c)	Provisional Certificate	The Independent Engineer to issue a Provisional Certificate if the tests are successful and the Project can be safely commercially operationalized, though certain works or things are outstanding and not yet complete.	
d)	Punch List	<p>Step 1: In case of incomplete/outstanding Items (Punch List) forming part thereof, the provisional Certificate has to be jointly signed by Independent Engineer and Concessionaire appending the list of outstanding items.</p>	
		<p>Step 2: In case the Concessionaire does not complete the Punch List Items within 90 days of the date of issue of the provisional certificate, the Independent Engineer to determine the damages with respect to delay in the completion of Punch List Items.</p>	
		<p>Step 3: Authority to recover damages from the Concessionaire on per day basis, at lower of 0.1% of the Performance Security or 0.2% of the cost of completion of such items as estimated by the Independent Engineer for a period not extending 120 days.</p>	Within 7 days of expiry of date prescribed by Independent Engineer
		<p>Step 4: Independent Engineer to issue the Completion Certificate upon completion of Punch List Items.</p>	
		<p>Step 5: The Authority to terminate the agreement (except reasons due to Force</p>	Within 7 days of expiry

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		Majeure or attributable to the Authority) in case of failure to complete Punch list Items within 120 days of start of Payment of damages.	of date prescribed by Independent Engineer
e)	Withholding of Provisional Certificate	Step 1: Independent Engineer to send report to the Authority and the Concessionaire, in case Independent Engineer determines that the Project Highway or any part thereof does not conform to the provisions of the Agreement	
		Step 2: Upon receipt of report from the Independent Engineer and after conducting its own inspection, the Authority to notify the Concessionaire regarding the defects and deficiencies in the Project Highway and direct the Independent Engineer to withhold issuance of the Provisional Certificate.	Within 7 days of receipt of such notice issued by Independent Engineer
		Step 3: The Independent Engineer to undertake test, subsequent to correction of defects and deficiencies by the Concessionaire.	
		Step 4: If the Independent Engineer certifies to the Authority and the Concessionaire that it is unable to issue the Completion Certificate or Provisional Certificate, as the case may be, because of events or circumstances on account of which the Tests could not be held or had to be suspended, the Concessionaire has to re-schedule the Tests and hold the same as soon as reasonably practicable.	

3. Activities to be undertaken by Independent Engineer

i. Construction of the Project Highway

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Interrupt and Divert the flow of traffic	Step 1: Prior approval of Independent Engineer to be obtained by the Concessionaire – before interrupting and diverting the flow of traffic on existing lanes for the efficient progress of construction works.	
		Step 2: On Concessionaire's request, Independent Engineer to approve the interruption and diversion of the flow of traffic on existing lanes for efficient	

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		progress of construction works. The interruption and diversion shall be conducted at Concessionaire's cost.	
b)	Drawings	Step 2: Independent Engineer to review the drawings provided by the Concessionaire and convey its observations within 15 days of submission.	
		Step 3: If the observations of the Independent Engineer indicates that the Drawings are not in conformity with the Scope of the Project or the Specifications and Standards, the Independent Engineer to be provided with the revised drawings through resubmission by the Concessionaire.	
		Step 4: Independent Engineer to review the revised drawings and convey its observations to the Concessionaire.	Within 7 days of submission of the drawings
		Step 5: The Authority to review and provide comments on the drawings submitted by the Concessionaire relating to alignment of the Project Highway, finished road level, location and layout of the Toll Plaza and general arrangement drawings of major bridges, flyovers and grade separators.	
		Step 6: Authority has the right but not the obligation to undertake such review and provide its comments, if any within 30 days of receipt of such drawings.	Within 30 days of receipt of such drawings
c)	Final Drawings after completion of Construction	Step 1: The Authority and Independent Engineer to be furnished by the Concessionaire with a complete set of as-built Drawings within 90 days of Project completion date. The submission has to be made in 2 hard copies and in micro film form or in such other medium as may be acceptable to the Authority, reflecting the Project Highway as actually designed, engineered and constructed. These drawings should include an as-built survey illustrating the layout of the Project Highway and setback lines, if any, of the buildings and structures forming part of Project Facilities.	

4. Activities to be undertaken by the Supervisory Level (HQ) – Technical Officer

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly status reports & review of documents	Step 1: Relevant Authority officer to review and provide inputs on the monthly status reports received from its immediate subordinates (Operations Level Field Officer in this case) of the all ongoing projects and all files/ documents pertaining to it. Relevant Authority officer to report and escalate exceptions to its immediate supervisor (Decision Making Level- Technical Officer).	Within 1 day of default

Escalation:

In case of any default, the issue to be escalated within 1 day of default by the officer.

5. Activities undertaken by Supervisory Level (field) - Technical:

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly status reports & review of documents	Step 1: Authority to review and provide inputs on the monthly status reports of all ongoing projects and all files/ documents pertaining to it. Reporting to be done to immediate relevant supervisor (Decision Making Level- Technical Officer).	Within 1 day of default

Escalation:

In case of any default, the issue to be escalated within 1 day of default by the officer.

6. Activities undertaken by Decision making Level (Technical)

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly status reports & review of documents	Step 1: Authority to review and provide inputs on the monthly status reports of all ongoing projects and all files/ documents pertaining to it. Reporting and escalation to be done to immediate relevant supervisor (Board/ Chairman) as and when required.	5 days of default

Escalation:

In case of any default, the issue to be escalated to Board/ Chairman within 5 days of default by the officer.

F. Contract Management Activities in Operations & Maintenance Stage

1. Activities to be undertaken by Operation Level- HQ Officer

i. User Fee

S. No.	Activities	Responsibilities/ Action Points	
		Action	Timeline
a)	Collection and appropriation of Fee	<p>Step 1:</p> <p>(a) Authority to request MORTH to issue official fee notification for levy of user fee.</p> <p>(b) Fee Notification to be issued by MoRTH within 90 days of signing of agreement.</p>	Within 7 days of receipt of such request

ii. Revenue Shortfall Loan

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Revenue Shortfall Loan & Repayment	<p>Step 1: Authority to receive a request from the Concessionaire, for Revenue Shortfall Loan along with the particulars thereof including a detailed account of the Indirect Political Event, Political Event or the Authority Default, as the case may be, and its impact on the collection of Fee.</p>	
		<p>Step 2: If the Realizable Fee in any Accounting Year falls short of the Subsistence Revenue as a result of an Indirect Political Event, a Political Event or an Authority Default, the Authority to provide a Revenue Shortfall Loan at 2% above the Bank Rate within 30 days of receiving a valid request from the Concessionaire</p>	Within 30 days of receipt of such request
		<p>Step 3: Authority to receive from the Concessionaire, a sum</p>	Within 90 days of the close of the accounting

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		equivalent to 50% of the 'profit before tax,' to be earmarked for repayment of the Revenue Shortfall Loan and interest.	year
b)	Provisional Revenue Shortfall Loan and its Repayment	Step 1: Authority to evaluate request for Provisional Revenue Shortfall Loan by the Concessionaire and disburse the same within 30 days of receiving a valid request from the Concessionaire (along with the particulars thereof including a detailed account of the Indirect Political Event, Political Event or the Authority Default, as the case may be, and its impact on the collection of Fee).	Within 30 days of receipt of such request

iii. Effect of Variations in Traffic Growth

S.No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Effect of variations in traffic growth	<p>Step 1: To calculate actual average traffic, the Authority to undertake traffic sampling for a continuous period of 7 days at any time within 15 days prior to the following dates.</p> <p>(a) One year prior to the Target Date</p> <p>(b) On the Target Date</p> <p>(c) On the First anniversary of the Target Date</p>	<p>Within 15 days prior to the following dates to calculate actual average traffic.</p> <p>(a) One year prior to the Target Date</p> <p>(b) On the Target Date</p> <p>(c) On the First anniversary of the Target Date</p>
b)	Modification in	Step 1: The Authority to acknowledge the traffic numbers and agree for	

Post Award Contract Management Manual for Highway PPP Concessions

S.No.	Activities	Responsibilities / Action Points	
		Action	Timeline
	Concession Period	determining the modification to the Concession Agreement	
c)	Augmentation of the Project Highway	<p>Step 1:</p> <ul style="list-style-type: none"> • If the average daily traffic of PCUs exceeds the designed capacity of the Project Highway in any accounting year, the Authority at its discretion may source preparation of a DPR for augmenting the capacity of the project highway such that its capacity have increased sufficiently (for carrying the current traffic in accordance with the corresponding provisions of the IRC -64, 1990 or any substitute thereof). • The authority may thereafter, at their sole discretion, issue a notice to the Concessionaire to undertake the augmentation of the project highway as per the DPR. • On refusal or non- acceptance by the Concessionaire to undertake such augmentation, either absolutely or <ul style="list-style-type: none"> • On such extension of concession period as assessed by DPR (OR) • On failure of the Concessionaire to undertake such augmentation on the due date intimated by the Authority <p>An Indirect Political Event shall be deemed to have occurred. The Authority to terminate this Agreement by issuing a Termination Notice and making a Termination Payment.</p> <ul style="list-style-type: none"> • 	

iii.1. Effect of Variations in Traffic Growth Toolkit

A toolkit for calculating the net effect of variation in traffic growth is provided in part 1, **Annexure L**.

iv. Construction of Additional Toll way

S. No.	Activities	Responsibilities/ Action Points
--------	------------	---------------------------------

Post Award Contract Management Manual for Highway PPP Concessions

		Action	Timeline
a)	Restriction on construction of Additional Tollway	<p>Step 1:</p> <p>a) The Authority cannot construct or cause to be constructed, any expressway or other toll road on the project stretch for use by traffic at any time before the [12th] anniversary of the Appointed Date.</p> <p>b) In case, the Concession Period is reduced to 12 years, the Additional Tollway may be opened to traffic at any time after the [8th] anniversary of the Appointed Date.</p> <p>c) In case of a breach, the Concessionaire will be entitled to receive compensation from the Authority.</p>	
		<p>Step 2: In the event, the Authority or any government instrumentality is constructing or causing construction of additional tollway, the Concessionaire shall be entitled to an additional Concession Period equivalent to the period between the opening of the Additional Tollway and the 12th/20th anniversary as applicable.</p>	
b)	Modification in the Concession Period	<p>Step 1: If the Additional Tollway is proposed to be opened to traffic between the 8th and the 12th anniversary of the Appointed Date, the Authority will require the Concessionaire not to undertake Six-Laning and to operate the Four-Lane Project Highway for a Concession Period of 12 years. For this, the Authority needs to send a notice to the Concessionaire before the 8th anniversary of the Appointed Date. Upon delivery of such notice, the Concession Period will become 12 years.</p>	
		<p>Step 2: If the Concession Period is reduced to 12 years and the Additional Tollway is opened to traffic between the 8th and 12th anniversary of the</p>	

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities/ Action Points	
		Action	Timeline
		Appointed Date, the Concessionaire will be entitled to an additional Concession Period equivalent to the duration between the opening of the Additional Tollway and the 12th anniversary. If the Additional Tollway is opened to traffic between the 12th and 20th anniversary of the Appointed Date, the Concessionaire will be entitled to an additional Concession Period equivalent to the duration between the opening of the Additional Tollway and the 20th anniversary.	
c)	Minimum Fee for the Project Highway / Minimum Fee for Additional Tollway	Step 3: Upon commissioning of the Additional Tollway, the Concessionaire can continue to collect the Fee in the same form and manner as it was doing prior to setting of the additional Tollway.	
		Step 4: The Authority agrees that the fee to be levied and collected from any vehicle or class of vehicles using the Additional Tollway shall at no time be less than 25% higher than the Fee levied and collected from similar vehicles using the Project Highway.	

v. Insurance

S.No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Notice to the Authority	Step 1: Authority to receive notice from the Concessionaire, with respect to the insurances that it proposes to effect and maintain.	Within 45 days prior to commencement of the Construction Period or the Operation Period,

Post Award Contract Management Manual for Highway PPP Concessions

S.No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		Step 2: The Authority may require the Concessionaire to effect and maintain any other insurances as may be necessary. In the event of any difference or disagreement relating to any such insurance, the Dispute Resolution Procedure will apply.	Within 30 days of receipt of Concessionaires' notice
b)	Evidence of Insurance Cover / Remedy for failure to insure	Step 3: Authority to receive notarized true copies of the certificate(s) of insurance, copies of insurance policies and premium payment receipts in respect of such insurance. No such insurance shall be cancelled, modified, or allowed to expire or lapse until the expiration of at least 45 days after notice of such proposed cancellation, modification or non-renewal has been delivered by the Concessionaire to the Authority.	Within 15 days of obtaining any insurance cover
		Step 4: If the Concessionaire fails to effect and keep in force all insurances for which it is responsible, the Authority has the option to either keep in force such insurances, pay the premia and recover the costs thereof from the Concessionaire, or in the event of computation of Termination Payment, treat an amount equivalent to the Insurance Cover as deemed to have been received by the Concessionaire.	

2. Activities to be undertaken by Operations Level- Field Officer

i. Replacement of O&M Contractor

S. No.	Activities	Responsibilities/ Action Points	
		Action	Timeline
a)	Replacement of	Step 1: Selection or replacement of an O&M Contractor and execution of the O&M Contract shall be subject to the prior approval of the Authority from	

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities/ Action Points	
		Action	Timeline
	O&M Contractor	national security and public interest perspective.	
		Step 2: Authority to convey its decision expeditiously.	Within 7 days of receipt of such request

ii. Construction of Service Road

S. No.	Activities	Responsibilities/ Action Points	
		Action	Timeline
a)	Construction of Service Lanes	Step 1: The Authority can at any time after the 8th anniversary of the Appointed Date undertake at its cost, construction of service roads on the Project Highway in accordance with the specifications and standards applicable to other district roads (ODRs) in the State. These service roads are to be maintained by the Concessionaire.	

iii. Operation & Maintenance

S. No	Activities	Responsibilities/ Action Points	
		Action	Timelines
a)	Construction Inspection	Independent Engineer to inspect the highway once a month and submit a construction Inspection Report to the Authority.	Within 7 days of inspection
b)	Maintenance Program	Step 1: The Authority to receive the proposed Maintenance Program on or before COD or no later than 45 days prior to beginning of each accounting year.	No later than 45 days prior to beginning of each accounting year.

Post Award Contract Management Manual for Highway PPP Concessions

S. No	Activities	Responsibilities/ Action Points	
		Action	Timelines
		Step 2: Independent Engineer to review the Maintenance Program and convey its comments to the Concessionaire with particular reference to its conformity with the Maintenance Requirements, Maintenance Manual and Safety Requirements.	Within 15 days of receipt of the Maintenance Program
c)	Lane Closure Approval	Step 1: The Authority and the Independent Engineer to approve the Lane Closure which is to be requested by the Concessionaire.	
		Step 2: Independent Engineer to review the request of granting permission and if agreed, send copy of the permission to Authority within three days of receiving the request.	Within three days from receiving request
		Step 3: (a) The Independent Engineer to approve the lane closure for undertaking maintenance or repair works by the Concessionaire. (b) The Authority to receive the damages by the Concessionaire for delay in re-opening such lane at the rate of 0.1% of the Average Daily Fee for every stretch of 250 meters for each day of delay until the lane is reopened.	
d)	O&M Inspection - Defects/ Deficiencies	Step 1: The Authority or Independent Engineer to receive the progress report on repair or rectification of deficiencies. Subsequently the concessionaire should submit the updates through weekly progress report until the works are fully complete.	Within 15 days of receipt of the O&M Inspection report
		Step 2: (a) Independent Engineer to review the report submitted by	

Post Award Contract Management Manual for Highway PPP Concessions

S. No	Activities	Responsibilities/ Action Points	
		Action	Timelines
		<p>Concessionaire.</p> <p>(b) Independent Engineer to estimate the damages in case the Concessionaire fails to repair or rectify any deficiency in the Maintenance Requirements.</p>	
		<p>Step 3: The Authority to receive damages (at higher of 0.5% of Average Daily Fee or 0.1% of the cost of such repair as estimated by the Independent Engineer) in case the Concessionaire fails to repair or rectify any deficiency in the Maintenance Requirements.</p>	
e)	Authority's right to take remedial measures	<p>(a) The Authority to undertake remedial measures, if the Concessionaire fails to commence remedial works within 15 days of receipt of the O&M Inspection Report.</p> <p>(b) And such cost of undertaking remedial measures and an additional sum equivalent to 20% of such cost (as damages) shall be directly deducted from the Escrow Account as O&M expense and paid to the Authority.</p>	Within 7 days of failure of the Concessionaire to meet the remedial measures
f)	Overriding powers of the Authority	<p>Step 1: Authority to take over the performance of any or all the obligations of the Concessionaire in the event of</p> <p>(a) a national emergency, civil commotion or any other act related to Indirect political event and/or</p> <p>(b) If the Concessionaire fails to rectify or remove any hardship or danger within a reasonable period</p>	

Post Award Contract Management Manual for Highway PPP Concessions

S. No	Activities	Responsibilities/ Action Points	
		Action	Timelines
g)	Modification of Project Highway	Step 1: Independent Engineer to review the request of Modification Approval and give its comments to Authority and Concessionaire.	Within 15 days of receiving proposal
h)	Barriers and diversions	Authority to ensure no barriers or diversions are erected or placed except during emergencies, National securities, law and order or collection of interstate taxes.	Within 7 days of completion of such modification

iv. Safety Requirements

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Safety Requirements	Step 1: (d) Authority & Safety Consultant to receive from Concessionaire compiled Safety Data on quarterly basis. (e) Authority to receive from the Concessionaire a detailed listing and analysis of all accidents of the preceding Accounting Year and all the measures taken by the Concessionaire on an annual basis.	
		Step 2: Authority to receive from Safety Consultant, Safety Audit report within 1 month of completion of Safety Audit.	
		Step 3: Upon receipt of the report, Authority to forward one copy each to the Independent Engineer and the Concessionaire	Within 7 days of receipt of such documents
		Step 4: Independent Engineer to review the same along with the Safety Report and, by notice, direct the Concessionaire to carry out any or all modifications required within 15 days of receipt of the comments.	

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
b)	Expenditure on Safety Requirements	Step 1: Costs and expenses on works and services not covered are to be borne from the dedicated Safety Fund, owned and operated by the Authority.	

v. Monitoring of Operation & Maintenance

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly Status Report	Step 1: The Authority & Independent Engineer to receive from Concessionaire a monthly status report stating in reasonable detail the condition of the Project Highway including its compliance with the Maintenance Requirements, Maintenance Manual, Maintenance Programme and Safety Requirements no later than 7 days after the close of each month.	No later than 7 days after the close of each month.
		Step 2: Independent Engineer to review the monthly status report furnished by the Concessionaire and send its comments thereon to the Authority and the Concessionaire within 7 days of receipt of the report.	Within 7 days of receipt of such request
c)	Inspection / Test	<p>Step 1:</p> <p>(a) Independent Engineer to inspect the Project Highway at least once a month and make report of such inspection stating in reasonable detail the defects or deficiencies, if any, with particular reference to the Maintenance Requirements, Manual, the Programme and Safety. The Independent Engineer to send a copy of the same to the Authority and the Concessionaire within 7 days of such inspection.</p> <p>(b) Independent Engineer to direct the Concessionaire to carry out tests</p>	

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		specified by it in accordance with Good Industry Practice.	
		Step 2: Authority to reimburse to the Concessionaire one half of the costs incurred on such tests and to the extent certified by the Independent Engineer as reasonable.	
d)	Remedial Measure	Step 3: (a) The Authority and Independent Engineer to receive, repair/rectification report from the Concessionaire within 15 days of Concessionaire receiving the O&M Inspection Report. (b) In case the repair/rectification would take more than 15 days, the Authority and Independent Engineer are entitled to receive the progress reports once every week until such works are completed by the Concessionaire in conformity with this Agreement.	
		Step 5: Independent Engineer to direct the Concessionaire to repeat the procedure mentioned above until the Project Highway conforms to the Maintenance Requirements.	
		Step 6: The Authority to recover Damages from the Concessionaire (at the higher of 0.5% of Average Daily Fee or 0.1% of the cost of such repair as estimated by the Independent Engineer) in case remedial measures are not completed by the Concessionaire in conformity with the provisions of the Agreement.	Within 7 days of such default
e)	Monthly Fee Statement	The Authority to receive from the Concessionaire a fee statement within 7 days of completion of each month along with other information which the Authority may reasonably require, at specified intervals.	
f)	Reports of Unusual	(a) Prior to the close of each day, Authority and the Independent	

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
	Occurrence	<p>Engineer to receive, by facsimile or e-mail, a report stating accidents and unusual occurrences on the Project Highway relating to the safety and security of the Users and Project Highway.</p> <p>(b) A weekly and monthly summary of such reports shall also be sent within three days of the closing of each week and month, as the case may be.</p>	

vi. Traffic Regulation

S.No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Traffic Regulation	Authority to regulate traffic on the Project Highway in accordance with the Applicable Laws, and subject to the supervision and control of the State authorities or a substitute thereof empowered in this behalf under the Applicable Laws.	
b)	Police Assistance	Authority to assist the Concessionaire in procuring police assistance from the State Police Department or a substitute thereof for regulating the use of Project Highway in accordance with the Applicable Laws and the Agreement.	Within 7 days of receipt of such request

vii. Traffic Census and Sampling

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Traffic survey	Step 1: Authority may require the Concessionaire to conduct, during each year of the Concession Period, a detailed traffic survey (at its own	Every Year

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		cost) at such frequency and on such days as the Authority may specify, provided that the cumulative period of such survey shall not exceed 14 days in a year.	
		Step 2: The Authority to be furnished a detailed report by the Concessionaire within 15days of the completion of each survey.	
b)	Traffic sampling	Step 1: The Authority to inspect the relevant records of the Concessionaire, and may, at its own cost, undertake traffic sampling. The sampling shall be conducted in the manner set forth in Schedule-O at such frequency as it may deem appropriate, but in no case for less than a continuous period of 7 days.	
		Step 2: The Authority shall be provided with all necessary assistance by the Concessionaire required for such traffic sampling.	
c)	Computer systems and network	Step 1: The Authority may specify protocol for Electronic Data Interchange (the “EDI”) required for the purpose of installation, operation and maintenance of the computer system.	

3. Activities to be undertaken by the Supervisory Level (HQ) – Technical Officer

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly status reports & review of documents	Step 1: Relevant Authority officer to review and provide inputs on the monthly status reports received from its immediate subordinate (Operations Level Field Officer in this case) of the all ongoing projects and all files/ documents pertaining to it. Authority to report and escalate to its immediate supervisor (Decision	1day of default

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		Making Level- Technical Officer) within 1 day in case of any default.	

Escalation:

In case of any default, the issue to be escalated within 1 day of default by the officer.

4. Activities undertaken by Supervisory Level (field) - Technical:

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly status reports & review of documents	<p>Step 1: Authority to review and provide inputs on the monthly status reports of all ongoing projects and all files/ documents pertaining to it. Reporting to be done to the immediate relevant supervisor (Decision Making Level- Technical Officer) within 1 day.</p> <p>In case of any default, the issue to be escalated.</p>	1day of default

Escalation:

In case of any default, the issue to be escalated within 1 day of default by the officer.

5. Activities undertaken by Decision making Level (Technical)

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly status reports & review of documents	<p>Step 1: Authority to review and provide inputs on the monthly status reports of all ongoing projects and all files/ documents pertaining to it. Reporting to be done to the immediate relevant supervisor (Board/ Chairman) as and when required.</p>	Within 5 days of default

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		In case of any default, the issue to be escalated.	

Escalation:

In case of any default, the issue to be escalated to Board/ Chairman within 5 days of default by the officer.

G.Contract Management Activities in Exit Stage

1. Activities to be undertaken by Operations Level- HQ Officer

i. Divestment of Rights and Interest

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Divestment Requirements	Step 2: Both parties, the Authority & the Concessionaire shall continue to perform their obligations under this Agreement, notwithstanding the giving of any Termination Notice, until the Termination of this Agreement becomes effective in accordance with its terms.	Within 7 days of receipt of such request
b)	Inspection & cure	Step 1: Not earlier than 90 days prior to Termination and no later than 15 days prior to the effective date of such Termination, Independent Engineer shall verify, after giving due notice to the Concessionaire of the time, date and venue of such verification, compliance by the Concessionaire with the Maintenance Requirements, and if required, cause appropriate tests to be carried out.	
c)	Cooperation and assistance on transfer of Project	Step 1: (a) Both the Parties, the Authority & the Concessionaire shall provide to each other 9 months prior to the Transfer Date in the event of Termination by efflux of time and immediately in the event of either Party conveying to the other Party its intent to issue a Termination Notice, as the case may be, as much information and advice as is reasonably practicable regarding the proposed arrangements for operation of the Project following the Transfer Date (b) Authority, its Concessionaire or agent to receive reasonable advice and assistance from the Concessionaire on operation of the Project until the expiry of 6 months after the Transfer Date.	
		Step 1: (a) Authority shall take all necessary measures, in good faith, to	

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		<p>achieve a smooth transfer of the Project in accordance with the provisions of this Agreement so as to protect the safety of and avoid undue delay or inconvenience to the Users, other members of the public or the lawful occupiers of any part of the Site</p> <p>(b) The Parties shall provide to each other 9 months prior to the Transfer Date in the event of Termination by efflux of time and immediately in the event of either Party conveying to the other Party its intent to issue a Termination Notice, as the case may be, as much information and advice as is reasonably practicable regarding the proposed arrangements for operation of the Project following the Transfer Date</p> <p>(c) The Authority has the option to purchase or hire from the Concessionaire at a fair market value and free from any encumbrance all or any part of the plant and machinery used in connection with the Project but which does not form part of the assets.</p>	
d)	Vesting Certificate	The Authority shall issue a certificate substantially in the form set forth in Schedule-U (the "Vesting Certificate"), Without unreasonable delay, when all of the Divestment Requirements have been fulfilled.	Within 30 days of receipt of such request
e)	Divesting Costs	Authority shall bear all stamp duties payable on any deeds or Documents executed by the Concessionaire in connection with such divestment.	
		Concessionaire shall bear and pay all costs incidental to divestment of all of the rights, title and interest of the Concessionaire in the Project Highway in favour of the Authority upon Termination.	

2. Activities to be undertaken by Operations Level- Field Officer

i. Defects Liability after Termination

S.No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Liability for defects after Termination	Step 1: Concessionaire is responsible for all defects and deficiencies in the Project Highway for a period of 120 days after Termination, and it shall have the obligation to repair or rectify, at its own cost, all defects and deficiencies observed by the Independent Engineer in the Project Highway	
		Step 2: Authority shall be entitled to get the Project Highway repaired or rectified at the Concessionaire's risk in the event that the Concessionaire fails to repair or rectify such defect or deficiency within a period of 15 days from the date of notice issued by the Authority.	Within 15 days from the date of notice issued by the Authority.
		Step 3: Authority to receive all costs incurred by it from the Concessionaire.	Within 15 days of receipt of demand thereof
		Step 4: The Authority shall be entitled to recover the same from the Escrow Account, in the event of default in reimbursing such costs.	Within 7 days of such default
b)	Retention in Escrow Account	Step 1: Independent Engineer shall carry out an inspection of the Project Highway at any time between 180 to 210 days prior to the Termination.	
		Step 2: (a) If Independent Engineer recommends that the status of the Project Highway is such that 5% of the total Realizable Fee for the year immediately preceding the Transfer Date should be retained in the Escrow Account for a period longer than 120 days, the amount recommended by the Independent Engineer shall be retained in the Escrow Account for the period specified by it. (b) Concessionaire may provide a Bank Guarantee to the Authority of the sum and period specified above for the performance of its obligations	
		Step 3: Authority shall be entitled to encash and appropriate the required	Within 7 days of such

Post Award Contract Management Manual for Highway PPP Concessions

S.No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		amounts from the Performance Guarantee for undertaking the repairs or rectification at the Concessionaire's risk and cost.	default

3. Activities to be undertaken by the Supervisory Level (HQ) – Technical Officer

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly status reports & review of documents	<p>Step 1: Relevant Authority officer to review and provide inputs on the monthly status reports received from its immediate subordinate (Operations Level Field Officer in this case) of all ongoing projects and all files/ documents pertaining to it. Authority to report and escalate to be done to the immediate supervisor (Decision Making Level- Technical Officer) within 1 day in case of any default.</p> <p>In case of any default, the issue to be escalated</p>	1 day of default

Escalation:

In case of any default, the issue to be escalated within 1 day of default by the officer.

4. Activities undertaken by Supervisory Level (field) - Technical:

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly status reports & review of documents	<p>Step 1: Authority to review and provide inputs on the monthly status reports of all ongoing projects and all files/ documents pertaining to it. Reporting to be done to the immediate supervisor (Decision Making Level- Technical Officer) within 1 day.</p> <p>In case of any default, the issue to be escalated</p>	1 day of default

Escalation:

In case of any default, the issue to be escalated within 1 day of default by the officer.

5. Activities undertaken by Decision making Level (Technical)

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly status reports & review of documents	<p>Step 1: Authority to review and provide inputs on the monthly status reports of all ongoing projects and all files/ documents pertaining to it. Reporting to be done to the immediate supervisor (Board/ Chairman) as and when required.</p> <p>In case of any default, the issue to be escalated.</p>	Within 5 days of default

Escalation:

In case of any default, the issue to be escalated to Board/ Chairman within 5 days of default by the officer.

H. Contract Management Activities throughout the Project Lifecycle

1. Activities to be undertaken by Operations Level- HQ Officer

i. Independent Engineer

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Appointment of Independent Engineer	Step 1: (a) The Authority shall issue an EOI for selection of Independent Engineer. (b) Authority to finalise the list of 10 firms from the received EOI based on the predetermined criteria. (c) The Authority shall convey the aforesaid list to the Concessionaire for scrutiny and comments if any	
		Step 2: (a) Authority to receive comments from the Concessionaire shall be entitled to scrutinise the relevant records of the Authority to ascertain whether the selection of firms has been undertaken in accordance with the prescribed procedure (b) The Concessionaire shall send its comments, if any, to the Authority within 15 days of receiving the aforesaid list of firms.	Within 15 days from the date of notice issued by the Authority.
		Step 3: (a) The Authority, upon receipt of comments if any from Concessionaire, shall after considering all relevant factors, finalise and constitute a panel of 10 firms and convey its decision to the Concessionaire. (b) From the shortlisted firm authority shall ask for their respective technical and financial offers. (c) Based on the technical and financial score authority shall finalise the Independent Engineer. (d) Report to Supervisory Level- Headquarter Officer & Member	Within 30 days of receipt of comments

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		Step 4: On expiry or termination of the aforesaid period, the Authority may in its discretion renew the appointment, or appoint another firm from a fresh panel as Independent Engineer for a term of 3 years, and such procedure shall be repeated after expiry of each appointment	At least 15 days before the expiry or termination
b)	Duties and functions	Independent Engineer: (a) Shall discharge its duties and functions substantially in accordance with the terms of reference set forth in Schedule-Q (b) Submit regular periodic reports at least once every month to the Authority in respect of its duties and functions set forth in Schedule-Q	
c)	Remuneration	Step 1: Independent Engineer to raise an invoice for the payment	
		Step 2: (a) Authority to pay for the remuneration, cost and expenses of the Independent Engineer subject to the limits set forth in the Concession Agreement. (b) Authority to submit statement of expenditure to the Concessionaire.	
		Step 3: Reimburse one-half of remuneration, cost and expenses of the Independent Engineer to the Authority within 15 days of receiving a statement of expenditure from the Authority	
d)	Termination of Independent Engineer	Step 1: Terminate the appointment of the Independent Engineer at any time, but only after appointment of another Independent Engineer.	
		Step 2: Concessionaire may make a written representation to the Authority and seek termination of the appointment of the Independent Engineer if the Concessionaire has reason to believe that the Independent Engineer is not discharging its duties and functions in a fair, efficient and diligent manner	

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		Step 2: (a) Upon receipt of written representation seeking Termination of the Independent Engineer from Concessionaire, the Authority shall hold a tripartite meeting with the Concessionaire and Independent Engineer for an amicable resolution of the Dispute (b) If no solution is found, then Dispute Resolution mechanism shall apply.	Within 7 days of receipt of such request
e)	Authorized Signatories	Independent Engineer to designate and notify to the Authority and the Concessionaire up to 2 persons employed in its firm to sign for and on behalf of the Independent Engineer and may, by notice in writing, substitute any of the designated persons by any of its employees.	

ii. Disclosure

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Disclosure	Authority shall be entitled to direct the Concessionaire, from time to time, to withhold the disclosure of Protected Documents (the disclosure of which the Authority is entitled to withhold under the provisions of the Right to Information Act, 2005) to any person in pursuance of the aforesaid Clauses.	

iii. Redressal of Public Grievances

S.No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Complaints Register / Redressal of	Step 1: The Authority and the Independent Engineer to receive a true	Within 7 days of the close of each month.

Post Award Contract Management Manual for Highway PPP Concessions

S.No.	Activities	Responsibilities / Action Points	
		Action	Timeline
	Complaints	photocopy of all the pages of the Complaint Register which the Concessionaire has to maintain (a) Concessionaire shall maintain the Complaint Register at the public relations office at each of the Toll Plazas open to public access at all times for recording of complaints by any person.	
		Step 2: The Authority may advise the Concessionaire to take such further action as appropriate for a fair and just redressal of any grievance.	
		Step 3: The Concessionaire shall consider such advice and inform the Authority of its decision thereon.	

2. Activities to be undertaken by Supervisory Level- Finance Officer

i. Accounts and Audit

S.No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Audited Account	Step 1: The Authority shall have the right to inspect the maintained records of books of accounts recording all its receipts. Authority to receive copies of Concessionaires' Balance Sheet, Cash Flow Statement, Profit and Loss Account & Audited Financial Statement within 90 days of the close of the Accounting Year. The copies should be duly certified by the Statutory Auditors, and are to be provided to the Authority for verification of basis of payments. In the event of any discrepancy, the same shall be rectified and such rectified account shall form the basis of payments by either Party under this Agreement.	
b)	Quarterly Unaudited Results	Step 2: Authority to receive from Concessionaire unaudited financial statements in the manner and form prescribed by the SEBI for publication of quarterly results by the companies listed on a stock	

Post Award Contract Management Manual for Highway PPP Concessions

S.No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		exchange.	
c)	Audited Account	<p>On or before the 31-May each Year, Concessionaire to provide to the Authority, for the preceding Accounting Year, a statement duly audited by its Statutory Auditors giving summarized information on</p> <p>(a) the traffic count for each category of vehicles using the Project Highway and liable for payment of Fee</p> <p>(b) Fee charged and received, Realisable Fee and other revenues derived from the Project Highway</p> <p>Such other information as the Authority may reasonably require.</p>	

ii. Appointment of Auditors

S.No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Appointment of Auditors	<p>Step 1:</p> <p>(a) The Authority to invite offers from all reputable firms of Chartered Accountants who fulfill the eligibility criteria.</p> <p>(b) The information furnished by each firm shall be scrutinized and evaluated by the Authority and one point shall be awarded for each annual audit of the companies.</p> <p>(c) The Authority shall prepare a list of all the eligible firms along with the points scored by each such firm and 10 firms scoring the highest points shall be identified and included in the draft Panel of Chartered Accountants</p> <p>(d) The Authority shall convey the aforesaid panel of firms to the Concessionaire for scrutiny and comments, if any</p> <p>Step 2: Authority to receive comments, if any from the Concessionaire who shall be entitled to scrutinize the relevant records of the Authority</p>	

Post Award Contract Management Manual for Highway PPP Concessions

S.No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		to ascertain whether the selection of firms has been undertaken in accordance with the prescribed procedure and it shall send its comments, within 15 days of receiving the aforesaid panel.	
		Step 3: The Authority shall, after considering all relevant factors including the comments, if any, of the Concessionaire, finalize and constitute a panel of ten firms which shall be deemed to be the mutually agreed Panel of Chartered Accountants.	
		Step 4: After completion of every five years from the date of preparing the mutually agreed Panel of Chartered Accountants, or such earlier period as may be agreed between the Authority and the Concessionaire, a new panel shall be prepared.	

3. Activities to be undertaken by the Supervisory Level (HQ) – Technical Officer

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly status reports & review of documents	<p>Step 1: Relevant Authority officer to review and provide inputs on the monthly status reports received from its immediate subordinate (Operations Level Field Officer in this case) of all ongoing projects and all files/ documents pertaining to it. Authority to report and escalate to be done to the immediate supervisor (Decision Making Level- Technical Officer) within 1 day in case of any default.</p> <p>In case of any default, the issue to be escalated</p>	1 day of default

Escalation:

In case of any default, the issue to be escalated within 1 day of default by the officer.

4. Activities undertaken by Decision Making Level - Technical:

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly status reports & review of documents	<p>Step 1: Authority to review and provide inputs on the monthly status reports of all ongoing projects and all files/ documents pertaining to it. Reporting to be done to the immediate supervisor (Board/ Chairman) as and when required.</p> <p>In case of any default, the issue to be escalated.</p>	

Escalation:

In case of any default, the issue to be escalated to Board/ Chairman within 5 days of default by the officer.

5. Activities undertaken by Decision making Level (Finance)

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly status reports & review of documents	<p>Step 1: Authority to review and provide inputs on the monthly status reports of all ongoing projects and all files/ documents pertaining to it. Reporting to be done to the immediate supervisor (Board/ Chairman) as and when required.</p> <p>In case of any default, the issue to be escalated.</p>	

Escalation:

In case of any default, the issue to be escalated to Board/ Chairman within 5 days of default by the officer.

I. Performance Monitoring Key Performance Indicators

1. Stage wise Concessionaire KPIs

i. Concessionaire KPIs during development stage

S No.	Parameter	Description	Source	Stipulated Timeline for Completion	Responsible Official	Action Point	Review/ Escalation Period after stipulated timeline
1. Time Line – Actual Vs. Targeted Date							
a)	Signing of Concession Agreement	Bidder to incorporate an SPV under the Companies Act, 1956(or as per amended versions of the Act) and request the Authority to accept the Concessionaire as the entity which shall undertake and perform the obligations and exercise the rights of the selected bidder/ Consortium under the LOA and execute the Concession Agreement within 180 days of issuance of LOA	Concessionaire	Within 180 days of issuance of LOA	Operations Level-Headquarter Officer (Technical)	To ensure the Concession Agreement has been executed on time In case of any delay, write a letter to the Concessionaire. Report to the Supervisory Level-Headquarter Officer(Technical) and Member(Technical)	Within 15 days (One Time)
b)	Submission of Performance Security	Concessionaire to Submit Performance Security within 90 days of signing of CA or on an earlier day acceptable	Concessionaire	Within 90 days of date of CA	Operations Level-Headquarter	To ensure performance security has submitted on time	Within 7 days from 180 of Signing of CA

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
		to the Authority.			Officer (Technical)	In case of any delay, encash the Bid Security and appropriate the proceeds thereof as Damages. Report to the Supervisory Level-Headquarter Officer and Member	(One Time)
c)	Financial Closure	The Concessionaire to achieve financial closure within targeted timelines of 180 days from the date of the agreement or within the timeline specified in the Concession Agreement as applicable.	Concessionaire	Within 180 days of date of CA	Supervisory Level Supervisory Level-Headquarter Officer (F)	To ensure that Financial Closure has been achieved on time In case of any delay write a letter to the Concessionaire and Collect the damage payment for the further period of 120 days at the rate of 0.1% of the Performance Security for each day of delay or for a further period not	Within 7 days (One Time)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
						<p>exceeding 200 days, subject to payment of Damages for delay by the Concessionaire</p> <p>Report to the Member (F) and Chairman</p>	
d)	Appointment of Independent Engineer	(c) The Concessionaire to scrutinise the relevant records of the Authority to ascertain whether the selection of firms for Independent Engineer has been undertaken in accordance with the prescribed procedure	Concessionaire	Within 15 days of receiving the aforesaid list of firms.	Operations Level-Headquarter Officer (Technical) (Technical)	<p>The Authority to ensure appointment of the Independent Engineer takes place in timely manner.</p> <p>a) The Authority to float a list of shortlisted 10 firms to the Concessionaire based on applications received for EOI.</p> <p>b) The Authority shall after</p>	<p>Within 30 days of receiving comments (One Time)</p>

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
						<p>considering all relevant factors, finalise and constitute a panel of 10 firms and convey its decision to the Concessionaire.</p> <p>c) From the shortlisted firm Authority shall ask for their respective technical and financial offers and finalise one firm based on the overall technical and financial</p>	

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
						scores.	
e)	Fulfilment of conditions precedents	Concessionaire to meet all Condition Precedents as specified in the Concession Period Within 180 days from signing of CA or any time decided by both parties.	Concessionaire	Within 180 days from signing of CA or any time decided by both parties	Supervisory Level-Headquarter Officer (F)	To ensure all Condition Precedents of the Concessionaire have been fulfilled on time In case of any delay, Penalty payment would be appropriated from performance Security within 30 days Report to the Member (F) and Chairman	Within 30 days (One Time)
2. Project Cost							
a)	Variance in project cost	No/least variation in Total Project Cost in the Financing Agreement (at the time of the financial closure) with respect to TPC mentioned in the	Concessionaire	-	Supervisory Level-Headquarter Officer (F)	To ensure that the deviation in Total Project Cost is less than or equal to 5% from the cost approved by the Authority at the time	Within 7 days (One Time)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
		Concession Agreement.				of Financial Closure In case, a variation greater than 5% is observed report to Member (F) with copy to Chairman	
3. Quality of Services							
a)	Quality of finalized drawings/ design incorporating Independent Engineer's review /suggestions	95%-100% of the technical design has been accepted as right first time. Revisions and suggestions given on draft drawings/reports by Independent Engineer have been fully incorporated and submitted on time.	Concessionaire	-	Operations Level Field Officer	To review the drawing/designs submitted by Concessionaire. In case the Concessionaire has not incorporated the suggestions of the Independent Engineer, write a letter to the Concessionaire Report to the Supervisory Level, Field Officer and Member(Technical)	Within 15 days(One Time)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
4. Communication and Responsiveness							
a)	Correspondence with key Authorities and parties	<p>To ensure completeness in design and execution on following aspects:</p> <p>(1) Irrigation Department for design of major water structures,</p> <p>(2) Railway Department for construction of Rail over bridges,</p> <p>(3) Utility Agencies for undertake shifting of any utility including electric lines, water pipes and telephone cables and</p> <p>(4) Police department for setting up of a traffic aid post, and</p> <p>(5) All tripartite agreements for bearings, traffic signals are shared with the Independent Engineer or the Authority.</p>	Concessionaire	-	Operations Level Field Officer	<p>To ensure most of the aspects for completeness of design and execution are in line with the expectation of the Authority</p> <p>If concessionaire does not meet the Authority expectation, Authority to write a letter to the Concessionaire.</p> <p>Report to the Supervisory Level, Field Officer and Member(Technical)</p>	<p>Within 30 days</p> <p>(Recurring-Monthly)</p>

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
5. Project and Contract Management							
a)	Procurement of all applicable permits on time	The Concessionaire to obtain, as required under the Applicable Laws and as per provision in the Concession Agreement, all applicable Permits on or before the Appointed Date. Additionally, the annual renewals of all such permits have been on time.	Concessionaire	Before Appointed Date & Annual Renewal cycle	Operations Level Field Officer	To ensure the Concessionaire has procure all applicable permits on time If concessionaire does not procure all applicable permits on time, Authority to write a letter to the Concessionaire. Report to the Supervisory Level, Field Officer and Member (Technical)	Within 15 days (One Time)
b)	All Insurances maintained and renewed timely	All of the below mentioned insurance aspects to be adhered to by the Concessionaire on time: (1) Disclosure of proposed insurance arrangement 45 days prior to commencement of the operation and the	Concessionaire	At least 45 days prior to commencement of Construction and Operation & 7 days prior to expiry of each term of	Operations Level Operations Level-Headquarter Officer (Technical)	To ensure the Concessionaire has maintained the Insurance and renewed the same on time If concessionaire does not maintained the Insurance and	7 days prior to expiry of each term of insurance (One Time)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible Official	Action Point	Review/ Escalation Period after stipulated timeline
		construction period, (2) Undertaking insurance covers for mitigating risks for maximum sums and renewing the same on or before time.		insurance		renewed the same on time, Authority to write a letter to the Concessionaire. Report to the Supervisory Level-Headquarter Officer and Member (Finance)	

ii. Concessionaire KPIs during the construction stage

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible Official	Action Point	Review/ Escalation Period after stipulated timeline
1. Time Line – Actual Vs. Targeted Date							
a)	Timely submission of monthly progress report of the works and other relevant informatio	All 12 monthly progress reports in a year to be submitted on time to the Independent Engineer/ Authority.	Concessionaire	Monthly	Operations Level Field Officer	To ensure Concessionaire has submitted all monthly progress report and other relevant information on time In case of any delay, write a letter to the	Within 7 days (Recurring-Monthly)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
	n as required by the Independent Engineer.					Concessionaire. Report to the Supervisory Level, Field Officer and Member(Technical)	
b)	Financial Progress status corresponding to Physical Progress	The variation between the financial and the physical progress should not exceed 10% at any stage of project execution.	Independent Engineer	Monthly	Operations Level Field Officer	To ensure the variation between the financial and the physical progress does not exceed 10% at any stage of project execution In case the variation is more than 10%, write a letter to the Concessionaire. Report to the Supervisory Level, Field Officer and Member(Technical)	Within 7 days (Recurring-Monthly)
c)	Achievement of Project Milestones and	The concessionaire to achieve all the project milestones on time and the project to be completed within the scheduled	Independent Engineer	On milestone Date		To ensure the Concessionaire meet all Milestone as per the Schedule of the Concession	Within 7 days (Recurring- On Milestone date)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
	Schedule d Project Completion Date	project completion date as specified in the concession agreement.				Agreement In case of delay in meeting any of the Milestone, write a letter to the Concessionaire. Report to the Supervisory Level, Field Officer and Member(Technical)	
2. Quality of Services							
a)	Quality of Machinery and Equipment used	The equipment's like batch mix plant, hot mix plant, paver, grader used by the concessionaire should be fairly new having latest technology thereby resulting in improved services and maximum one breakdown in a day as reported by the Independent Engineer with no loss of productive hours per day.	Independent Engineer	-	Operations Level Field Officer	To ensure that the Machineries and Equipment used by Concessionaire are having the latest technology If Concessionaire does not use the equipment with new technology, Field Officer may write to the Concessionaire in this regard.	Within 7 days of notice from Independent Engineer (One Time)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
						Report to the Supervisory Level-Headquarter Officer and Member(Technical)	
b)	Quality of Maintenance during Construction Period	<p>All the below mentioned aspects or aspects covered in the CA to be met within the specified timelines and to the satisfaction of Independent Engineer:</p> <p>(1) Traffic worthiness at no time is materially inferior as compared to their condition 7 days prior to the date of the Agreement,</p> <p>(2) Undertook necessary repair and maintenance works for this purpose;</p> <p>(3) Diverted the flow of traffic for the efficient progress of Construction Works,</p> <p>(4) Ensured safe</p>	Independent Engineer	-	Operations Level Field Officer	<p>To ensure that all maintenance obligations has been met within the time line and to the satisfaction of Independent Engineer.</p> <p>In case of any delay or variation from the Independent Engineer expectation, write a letter to the Concessionaire</p> <p>Report to the Supervisory Level, Field Officer and Member(Technical)</p>	<p>Within 7 days of Notice from Independent Engineer (Recurring)</p>

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
		operation of the Project Highway.					
c)	Quality of Construction and extent of defect identified	<p>No major defects or deficiencies to be identified in the Concessionaire's design, construction or implementation, and the concessionaire is to be fully compliant for the quality of constructed items with the specification of the tests prescribed by IRC and/or MORTH. In addition, the concessionaire should achieve the following conditions:</p> <p>(1) The concessionaire's quality control mandatory test results in less than 2% of non-conformity outcomes.</p> <p>(2) Not more than 1 additional test recommended and the test result had no non-</p>	Independent Engineer	-	Operations Level Field Officer	<p>To ensure that the quality of the construction is maintained as per the IRC manual.</p> <p>In case of any variation from IRC manual, write a letter to the Concessionaire</p> <p>Report to the Supervisory Level, Field Officer and Member(Technical)</p>	<p>Within 7 days of Notice from Independent Engineer</p> <p>(Recurring-Monthly)</p>

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
		conformity outcome.					
3. Communication and Responsiveness							
a)	Responsiveness on delivering additional scope of work	<p>The concessionaire to provide timely responses covering the following aspects to the satisfaction of Independent Engineer</p> <p>(1) The concessionaire should provide the likely impact of change of scope on project completion schedule,</p> <p>(2) Options for implementing changed scope of work,</p> <p>(3) Detailed breakdown by work classifications and</p> <p>(4) Details specifying the material and labor cost.</p> <p>Justifications in terms of providing safer and improved services to the users to be explicitly detailed out by the</p>	Independent Engineer		Operations Level Field Officer	<p>To ensure that Concessionaire was able to implement requirement of change of scope, after being directed by the Independent Engineer and the concessionaire provided response on the said aspects to the satisfaction of Independent Engineer on time.</p> <p>In case of any delay in response or not as per the direction of the Independent Engineer, write a letter to the Concessionaire</p> <p>Report to the Supervisory Level, Field Officer and</p>	Recurring Monthly -

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
		concessionaire for such change of scope				Member(Technical)	
b)	Responsiveness to instruction, queries or notice of Authority, Independent Engineer or Safety Consultants – Clarity, Completeness and Timelines	Concessionaire to be responsive to the instructions issued, queries, and cure period notices issued by Authority/Independent Engineer. Concessionaire responds promptly on more than 90% of the occasions to the satisfaction of the Independent Engineer/Authority.	Independent Engineer		Operations Level Field Officer	To ensure that Concessionaire is available and responds to all occasions to the satisfaction of the Independent Engineer/Authority. In case response from the Concessionaire are not satisfactory to Independent Engineer/Authority, write a letter to the Concessionaire Report to the Supervisory Level, Field Officer and Member(Technical)	Recurring Monthly -

iii. Concessionaire KPIs during the Operation and Maintenance stage

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
1. Time Line – Actual Vs. Targeted Date							
a)	Submission and acceptance of maintenance manual and maintenance program	The maintenance manual to be submitted 180 days prior to the Scheduled Completion Date and maintenance program to be submitted within 45 days prior to COD/beginning of each accounting year during the operation period. The maintenance documents to be acceptable to Independent Engineer without any revisions/suggestions. The maintenance manual to be revised every 3 years.	Independent Engineer	At least 180 days prior to the Scheduled Completion Date	Operations Level Field Officer	To ensure that the maintenance manual and maintenance program on time In case of any delay, write a letter to the Concessionaire. Report to the Supervisory Level-Headquarter Officer and Member(Technical)	Within 7 days of Notice from Independent Engineer (One Time)
b)	Meeting target timeline for correction works specified in O&M Inspection	The Concessionaire to repair or rectify the defects or deficiencies, set forth in the O&M Inspection Report within 15 days of receiving the O&M Inspection Report or the test results.	Independent Engineer	Within 15 days of O&M Inspection Report	Operations Level Field Officer	To ensure that the correction works specified in O&M Inspection Report on time In case of any delay, write a letter to the	Within 7 days of Notice from Independent Engineer (One Time)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
	Report	Where the remedying of such defects or deficiencies takes more than 15 days (as agreed by the Independent Engineer) , the Concessionaire to submit progress reports of the repair works once every week until such works are completed in conformity with this Agreement. The concessionaire shall not be penalized for any delay on account of the Authority.				Concessionaire. Report to the Supervisory Level, Field Officer and Member(Technical)	
c)	Submission of Monthly Fee Statement	All 12 monthly fee statements in a year to be submitted on time to the Authority. The concessionaire shall not be penalized for any delay on account of the Authority.	Concessionaire	Monthly	Operations Level Field Officer	To ensure that the Concessionaire has submitted Monthly Fee Statement on time In case of any delay, write a letter to the Concessionaire. Report to the Supervisory Level, Field Officer and	Within 7 days of Notice from Independent Engineer (Recurring-Monthly)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
						Member(Technical)	
d)	Provide audited annual accounts and schedules on time	The Concessionaire, within 30 days of the close of each quarter of an accounting year, to furnish its unaudited financial results in the manner and form prescribed by the SEBI and provide its Balance Sheet, Cash Flow Statement, Profit and Loss Account, and Statutory Auditors report on time, within 90 days of the close of the accounting year.	Concessionaire	Within 30 days of close of each quarter	Operations Level Field Officer	To ensure that the Concessionaire has submitted audited annual accounts and schedules on time In case of any delay, write a letter to the Concessionaire. Report to the Supervisory Level, Field Officer and Member(Finance)	Within 7 days of Notice from Independent Engineer (Recurring-Quarterly)
2. Quality of Services							
a)	Quality of Maintenance during operation period	The concessionaire to conform to the maintenance requirements of the concession agreement. All three of the below mentioned aspects to be achieved as per the required timelines: (1) Concessionaire through its engineer to undertake a	Independent Engineer	-	Operations Level Field Officer	To ensure that the quality of the maintenance is as per the good industry practice and all comments/ notices issued by Independent Engineer has been resolved In case the comments	Within 7 days of Notice from Independent Engineer

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
		<p>daily visual inspection of the Project Highway and maintain a record thereof in a register.</p> <p>(2) Undertake timely and prompt routine maintenance during operation period including prompt repairs of potholes, cracks, joints, drains, embankments, structures, pavement markings, lighting, road signs and other traffic control devices.</p> <p>(3) All adverse comments/notices issued by the Independent Engineer to be implemented and adhered to.</p>				<p>of Independent Engineer has not been resolved, write a letter to the Concessionaire.</p> <p>Report to the Supervisory Level, Field Officer and Member(Technical)</p>	
b)	Curing Timelines for Default Punch list items and Maintenance	Cure period covering timelines for curing breach for Punch List items or on default of maintenance requirements of the project highway to be served	Independent Engineer		Operations Level Field Officer	To ensure that the breach or default for punch list items and maintenance requirements were addressed within the	Within 7 days from expiry of cure period (One Time)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
	Requirements	without any delay.				cure period. In case of any delay, write a letter to the Concessionaire. Report to the Supervisory Level, Field Officer and Member(Technical)	
c)	Periodic Maintenance of Pavement	Riding quality of each lane of the carriageway to be checked with the help of a calibrated bump integrator and whenever the maximum roughness exceeds 2500 mm for each kilometer the Concessionaire to carry out pavement rehabilitation as per the IRC guidelines and the Annual O&M program to be approved by Independent Engineer. The pavement rehabilitation will be carried out within 180 days from the point Roughness value exceeded	Independent Engineer	-	Operations Level Field Officer	To ensure that the Periodic Maintenance of Pavement has been done as per the IRC and the Annual O&M program approved by Independent Engineer In case of any deviation, write a letter to the Concessionaire. Report to the Supervisory Level, Field Officer and Member(Technical)	(Recurring-Monthly)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
		2500 mm/km.					
d)	Authenticity of traffic figures provided during operation period for traffic sampling	On conduct of Traffic sampling by Authority through Independent Engineer/Independent Toll Audit Consultant, less than 2% variation to be noted between the traffic sampling results estimated by Authority and traffic reported by concessionaire. No discrepancies or missing information were to be reported for the concessionaire.	Independent Engineer	Monthly	Operations Level Field Officer	To ensure that the traffic figures provided by Concessionaire are in line with the actual traffic In case of deviation, write a letter to the Concessionaire. Report to the Supervisory Level, Field Officer and Member(Technical)	Within 7 days (Recurring-Monthly)
3. Project and Contract Management							
a)	Escrow account withdrawals during construction and operations period	Monthly escrow account details to be submitted to the Authority on time. All 12 monthly reports to be made on time. Concessionaire to not modify the order of payment specified from the escrow account as per the CA in any manner. No	Escrow Agent	Monthly	Operations Level Field Officer	To ensure that the no escrow default has occurred and withdrawal has been done as per the Concession Agreement In case of any deviation, write a	Within 7 days (One Time)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
		escrow default to occur.				letter to the Concessionaire. Report to the Supervisory Level, Field Officer and Member(Technical)	
b)	Behaviour of staff deployed for Toll operations	As identified in compliant register maintained by concessionaire or reported to the Authority /Independent Engineer through the grievance redressal forum, no incidence of misconduct (of the personnel deployed) to be reported. The personnel deployed should always sport the uniform bearing the name of the agency.	Independent Engineer	-	Operations Level Field Officer	To ensure that the Behaviour of staff deployed for Toll operations is acceptable for users. In case of any deviation, write a letter to the Concessionaire. Report to the Supervisory Level, Field Officer and Member(Technical)	(One Time)
c)	Re-appropriation of excess fee	If traffic in any accounting year exceeds the traffic capacity of 120% of the designed capacity, the Concessionaire to collect	Concessionaire	Within close of the 60 days from the close of the relevant	Operations Level Field Officer	To ensure that the Concessionaire deposit the excess realizable fee in Safety Fund on time	Within 7 days (One Time)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
		and appropriate the excess realizable fee and deposit the same into the Safety Fund within the designated timelines of 60 days from the close of the relevant accounting year.		accounting year.		In case of any delay, write a letter to the Concessionaire. Report to the Supervisory Level, Field Officer and Member(Technical)	
d)	Augmenting the capacity of the project highway	The Concessionaire to respond on time – within a period of 3 months from the date of issuance of notice by the Authority, to undertake the required augmentation (as determined by Authority) within six months of such notice.	Concessionaire	Within 3 months from the date of receipt of notice	Operations Level Field Officer	To ensure that the Concessionaire has responded on time In case of any delay, write a letter to the Concessionaire. Report to the Supervisory Level, Field Officer and Member(Technical)	Within 7 days (One Time)
e)	Payment outstanding to independent Engineer /Sub-Contractors/	No delay to be recorded for the payment made to the Independent Engineer/Statutory Auditor and no adverse notice to be received by the Authority relating to the delay in the	Concessionaire	Monthly	Operations Level Field Officer	To ensure that the Concessionaire has made the payment to the Independent Engineer/SA/ Sub-contractors or other agencies if any on	Within 7 days (One Time)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
	Other Agencies	payment to the sub-contractors.				time In case of any delay, write a letter to the Concessionaire. Report to the Supervisory Level, Field Officer and Member(Finance)	
f)	Problem resolution and customer satisfaction capabilities	The Concessionaire to inspect the complaint register every day. (2) Within 7 days (as per designated timelines) of the close of each month, the Concessionaire to furnish a copy of the complaint register (for that month) to the Authority and Independent Engineer. (3) The Concessionaire to take the lead promptly, providing highly effective solutions in case of problems,	Concessionaire	Every day	Operations Level Field Officer	To ensure that the Concessionaire inspects the complaint register every day and send the copy of the complaint register to Authority and Independent Engineer on time In case of any delay, write a letter to the Concessionaire. Report to the Supervisory Level, Field Officer and Member(Technical)	Within 7 days (One Time)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible Official	Action Point	Review/ Escalation Period after stipulated timeline
4. Safety Considerations							
a)	Submission of monthly summary reports of unusual occurrences	The concessionaire should proactively follow daily reporting and weekly/monthly summary reports to be submitted on time within 3 days of the closing of each week/month as specified in the agreement.	Concessionaire	Weekly Monthly	Operations Level Field Officer	To ensure that the Concessionaire submit the monthly summary reports of unusual occurrence on time In case of any delay, write a letter to the Concessionaire. Report to the Supervisory Level, Field Officer and Member(Technical)	Within 7 days (Recurring-Monthly/ Weekly)
b)	Compliance with the safety measures.	All of the following five aspects to be achieved on time as per the required timelines: (1) The concessionaire to provide the safety consultants with necessary drawings at the development stage and recommendations provided	Independent Engineer	-	Operations Level Field Officer	To ensure that the Concessionaire compliance with all safety measures as per IRC manual In case of any deviation, write a letter to the Concessionaire. Report to the	Within 7 days (One Time)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
		<p>by the safety consultants to be adequately incorporated in the design as per the applicable laws,</p> <p>(2) Concessionaire to make adequate provisions for the safety of workers and road users in the construction zone as per IRC provision during the construction and notify Authority and Independent Engineer about such arrangements,</p> <p>(3) Concessionaire to establish Highway Safety Management Unit (HSMU) to be made functional after COD, keeping annual record of all accidents and FIRs with identification of the location on the project road and listing of the accidents and its analysis for preceding year,</p> <p>(4) All safety reports recommendations during the</p>				Supervisory Level, Field Officer and Member(Technical)	

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
		Construction and operation phase to be applied/acted upon suitably as per IRC provisions and good industry practices, and (5) Concessionaire's work to be never suspended on account of unsafe works/safety reasons.					

2. Independent Engineer

The Independent Engineer has a major role to play in ensuring that the project progress is in line with the set timelines, the quality of highway developed by the Concessionaire is as per the desired standards and discrepancies/issues, if any, have been flagged and brought to the notice of the Authority officials in a timely manner. This section lists those KPIs that help the Authority officials monitor whether the Independent Engineer is working as per the expectations set from it.

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
1. Time Line – Actual Vs. Targeted Date							
a)	Timely Reporting of change in scope and	Timely reporting of change in scope, additional works, variations in cost & quantity and other issues that could	Reports from Independent Engineer	Monthly	Operations Level Field Officer	To ensure that the Independent Engineer is Timely Reporting of change in scope and	Within 7 days (Recurring-Monthly)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
	flagging of expected delays in achieving project milestones	have resulted in delay in achieving project milestones. All such measures to facilitate Authority. in taking timely actions. In the opinion of the Authority, the delay, if any, in achievement of the project timelines is not to be on account of Consultant's default.				flagging of expected delays in achieving project milestones In case of any delay, write a letter to the Independent Engineer. Report to the Supervisory Level, Field Officer and Member(Technical)	
b)	Adherence to timelines for reviews and reporting	All the Inspection Reports and review activities like monthly statements for value of work, change in quantity, valuation of variation items, cash flow statement, recording of management meetings, sub-contracting works to be on time. More than 95% of the inspection reports to be submitted on time	Reports from Independent Engineer	Monthly	Operations Level Field Officer	To ensure that the Independent Engineer is reviewing and reporting all mentioned reports on time In case of any delay, write a letter to the Independent Engineer. Report to the Supervisory Level, Field Officer and	Within 7 days (Recurring-Monthly)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
						Member(Technical)	
c)	Timely curing of Defects by Concessionaire/ Contractor	Curing of defects by the concessionaire/ contractor to be always on time	Reports from Independent Engineer	-	Operations Level Field Officer	To ensure that the Independent Engineer is curing the defects by the Concessionaire on time In case of any delay, write a letter to the Independent Engineer. Report to the Supervisory Level, Field Officer and Member(Technical)	Within 7 days (Recurring-Monthly)
2. Quality of Services							
a)	Accuracy in the review of Design, Document, Drawings and Procedures	The Consultant to be compliant with the Good Industry Practice vis-a-vis Concession Agreement	Reports from Independent Engineer	-	Operations Level Field Officer	To ensure that the accuracy level of the Independent Engineer during the review is high In case of deficiencies in the report or methodology adopted	Within 7 days (One Time)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
						for review, write a letter to the Independent Engineer. Report to the Supervisory Level, Field Officer and Member(Technical)	
b)	Maintenance during Defect Liability/O&M period	Inspection to be carried out at least once in a month (or as per provision of the agreement), or at other times as reasonably requested by Authority with timely reporting. (2) Comprehensive review to be conducted and appropriate comments to be offered on Drawings and Documents like Annual Maintenance Program, O&M Inspection Report and Safety Reports, request to be made for closure of lanes for maintenance works and modifications	Reports from Independent Engineer	-	Operations Level Field Officer	To ensure that the Inspection carried out at least once in a month with timely reporting by the Independent Engineer In case of any delay, write a letter to the Independent Engineer. Report to the Supervisory Level, Field Officer and Member(Technical)	Within 7 days (One Time)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
		<p>suggested to project highway.</p> <p>(3) The defects or deficiencies noted are to be clearly in conformity with Good Industry Practice and maintenance requirements stated in the agreement.</p> <p>(4) Curing of defects by the concessionaire/contractor to be adequately monitored and reviewed and deficiencies by the Concessionaire/ Contractor to be addressed.</p>					
3. Communication and Responsiveness							
a)	Timely reply/addresses of Authority Queries/comments	The consultant to be always available/ responsive during consultancy contracts and bidding stage included post submission during project procurement phase.	Reports from Independent Engineer	-	Operations Level Field Officer	To ensure that the Independent Engineer respond to the Authority queries/comments on time In case of any delay, write a letter to the	Within 7 days (Recurring-Monthly)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
						Independent Engineer. Report to the Supervisory Level, Field Officer and Member (Technical)	
b)	Adequacy of Responses to Authority queries	The responses to the Authority queries to be factual, consistent and the consultant to show considerable ease in discussing project details during the meetings. More than 90% of responses to be acceptable to the Authority.	Reports from Independent Engineer	-	Operations Level Field Officer	To ensure that the respond received from Independent Engineer are factual and consistent In case of any deviation/doubts, write a letter to the Independent Engineer. Report to the Supervisory Level, Field Officer and Member(Authority)	Within 7 days (Recurring-Monthly)
4. Project and Contract Management							
a)	Availability of key	Key personnel to be deployed on time as per	Reports from Independent	-	Operations Level Field	To ensure that the key personnel of	Within 7 days

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible Official	Action Point	Review/ Escalation Period after stipulated timeline
	personnel	schedule and to be available for project delivery and carrying out tasks as per proposed job description in the contract. Team leader to be available for all the meetings with Authority while other key personnel's to be available for more than 90% of the meetings.	Engineer		Officer	Independent Engineer are available in the meetings In case of non-availability of key personnel, write a letter to the Independent Engineer. Report to the Supervisory Level, Field Officer and Member(Technical)	

3. Safety Consultant

Safety Consultant is another important related party that is responsible for safeguarding that the quality and safety requirements from a highway project and ensuring that any potential or actual defects observed, are brought to the notice of the Authority officials in timely manner. This section enumerates the KPIs for monitoring the Safety Consultant's performance.

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible Official	Action Point	Review/ Escalation Period after stipulated timeline
4. Time Line – Actual Vs. Targeted Date							
	Timely	Reports to be delivered and	Reports from	Monthly	Operations	To ensure that Safety	Within 7 days

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible Official	Action Point	Review/ Escalation Period after stipulated timeline
	submission of Reports, review of documents/d esigns provided by concessionaire and submission	review activities to be conducted on time or with less than 5% delay in Business days.	Safety Consultant		Level (Field Officer)	Consultant reviews and conduct the activities on time In case of any delay, write a letter to the Safety Consultant. Report to the Supervisory Level, Field Officer and Member(Technical)	(Recurring-Monthly)
5. Quality of Services							
	Adequacy in work methodology, conduct of safety audits and reporting/ recommendations	The Consultant to be compliant with the Good Industry Practice viz a viz Concession Agreement	Reports from- Consultant		Operations Level Field Officer	To ensure that the accuracy level of Safety Consultant during the review is as per the good industry practice In case of deficiencies in the report or methodology adopted for review, write a letter to the Safety Consultant. Report to the	Within 7 days (Recurring-Monthly)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible for Official	Action Point	Review/ Escalation Period after stipulated timeline
						Supervisory Level, Field Officer and Member(Technical)	
	Recording and analysis of accident records resulting in accident reductions	Timely review of accident records on the Project Highway and remedial measures to be suggested.	Reports from-Safety Consultant		Operations Level Field Officer	To ensure that the Safety Consultant timely review the accident records and suggest the remedial measures. In case of deficiencies or delay, write a letter to the Safety Consultant. Report to the Supervisory Level, Field Officer and Member(Technical)	Within 7 days
6. Project and Contract Management							
	Availability of key personnel	(1) Key personnel to be deployed on time as per schedule and are available for project delivery and carrying out tasks as per proposed job description in	Reports from-Safety Consultant		Operations Level Field Officer	To ensure that the key personnel of Safety Consultant are deployed on time and available for the meetings	Within 7 days (One Time)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Official Completion	Responsible Official	Action Point	Review/ Escalation Period after stipulated timeline
		the contract. (2) Safety Consultant to carry out site inspections as per schedule and to be available for more than 90% of the meetings with Authority and Concessionaire.				In case of non-availability of key personnel or late deployment, write a letter to the Safety Consultant. Report to the Supervisory Level, Field Officer and Member(Technical)	
	Limited change in Key Personnel	No change in key personnel's position.	Reports from-Safety Consultant		Operations Level Field Officer	To ensure that there is no change in approved key personnel of Safety Consultant In case of any change in key personnel, write a letter to the Safety Consultant. Report to the Supervisory Level, Field Officer and Member(Technical)	Within 7 days

4. Financial Consultant

S No.	Parameter	Description	Source	Stipulated Timeline for Completion	Responsible Official	Action Point	Review/ Escalation Period after stipulated timeline
iv. Time Line – Actual Vs. Targeted Date							
	Timely Delivery of Reports	Reports to be delivered and review activities to be conducted on time or with less than 5% delay in Business days.	Reports from Financial Consultant	-	Operations Level- Headquarter Officer (Technical)	To ensure that Financial Consultant reviews and submit the report on time In case of any delay, write a letter to the Financial Consultant. Report to the Supervisory Level- Headquarter Officer and Member(Technical)	Within 7 days
v. Quality of Services							
	Adequacy in work methodology, and review of the Financing documents submitted by Concessionaire	The Consultant to review the documents as per the Concession Agreement viz a viz Guidelines of Govt of India	Reports from Financial Consultant	-	Operations Level- Headquarter Officer (Technical)	To ensure that the accuracy level Financial Consultant during the review is as per the good industry practice In case of deficiencies in the report or methodology adopted	Within 7 days (Recurring-Monthly)

Post Award Contract Management Manual for Highway PPP Concessions

S No.	Parameter	Description	Source	Stipulated Timeline for Completion	Responsible Official	Action Point	Review/ Escalation Period after stipulated timeline
						for review, write a letter to the Safety Consultant. Report to the Supervisory Level-Headquarter Officer and Member(Technical)	
vi. Project and Contract Management							
	Availability of key personnel	Key personnel to be deployed on time as per schedule and need to be available for project delivery and carrying out tasks as per proposed job description in the contract. Team leader to be available for all the meetings with Authority while other key personnel's to be available for more than 90% of the meetings.	Reports from - Financial Consultant		Operations Level Operations Level-Headquarter Officer (Technical)	To ensure that the key personnel of Financial Consultant are available in the meetings In case of non-availability of key personnel, write a letter to the Financial Consultant. Report to the Supervisory Level-Headquarter Officer and Member(Technical)	Within 7 days (Recurring-Monthly)

J. Handling Rare Events (Contingencies)

1. Activities to be undertaken by Operations Level- HQ Officer

i. Change in Law

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Change in Law – Increase in Cost	Step 1: Authority to get notice from Concessionaire in case of change in law resulting in increase of costs or reduction in net after-tax return or other financial burden, the aggregate financial effect of which exceeds the higher of Rs. 1 crore and 0.5% of the Realizable Fee in any Accounting Year.	
		Step 2: Upon notice by the Concessionaire, the Parties shall meet, as soon as reasonably practicable but no later than 30 days from the date of notice, and either agree on amendments to this Agreement or on any other mutually agreed arrangement	Within 30 days of receipt of such Notice
		Step 3: Authority to get paid an amount that would place the Concessionaire in the same financial position that it would have enjoyed had there been no such Change in Law, from Concessionaire in case no agreement is reached within 90 days of Notice	
		Step 4: The Authority shall pay the amount specified therein within 15 days of receipt of such notice, along with particulars thereof.	Within 15 days of receipt of such Notice
b)	Change in Law – Reduction in Cost	Step 1: The Authority to issue notice to the Concessionaire in case of change in law resulting in reduction in costs or increase in net after-tax return or other financial gains, the aggregate financial effect of which exceeds the higher of Rs. 1 crore and 0.5% of the Realizable Fee in any Accounting Year.	Within 30 days of such event
		Step 2: Upon notice by the Authority, the Parties shall meet, as soon as	Within 30 days of such Notice

Post Award Contract Management Manual for Highway PPP Concessions

		reasonably practicable but no later than 30 days from the date of notice, and either agree on amendments to this Agreement or on any other mutually agreed arrangement	
		<p>Step 3: Authority to issue notice to Concessionaire, in case no agreement is reached within 90 days of Notice, to pay an amount that would place the Concessionaire in the same financial position that it would have enjoyed had there been no such Change in Law</p> <p>Authority to receive from the Concessionaire the amount specified therein within 15 days of receipt of such notice, along with particulars thereof.</p>	Within 90 days of such Notice
c)	Protection of NPV	The Parties shall rely on the Financial Model to establish a net present value (the “NPV”) of the net cash flow and make necessary adjustments in costs, revenues, compensation or other relevant parameters, as the case may be, to procure that the NPV of the net cash flow is the same as it would have been if no Change in Law had occurred.	
d)	No claim in the event of recovery from Users	The Authority shall not be liable to reimburse any sums on account of a Change in Law to the Concessionaire, if the same are recoverable from the Users.	

ii. Force Majeure

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Force Majeure Event	<p>Step 1:</p> <p>Affected party shall by notice report occurrence of Force Majeure event to the other party including particulars of:</p> <p>(a) nature and extent of each Force Majeure Event which is the subject of any claim for relief under Article 34 with evidence in support thereof;</p>	Within 7 days of event

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		(b) estimated duration and the effect which such Force Majeure Event is having or will have on the Affected Party's performance of its obligations under the Agreement; (c) the measures which the Affected Party is taking or proposes to take for alleviating the impact of such Force Majeure Event	
		Step 2: Authority to assess the impact on Concession period and allocation of cost upon occurrence of Force Majeure event	Within 7 days of receipt of such request.
		Step 3: (a) Upon the occurrence of any Force Majeure Event prior to the Appointed Date, the period for achieving Financial Close shall be extended by a period equal in length to the duration of the Force Majeure Event. (b) before COD, the Concession Period and the dates set forth in the Project Completion Schedule shall be extended by a period equal in length to the duration for which such Force Majeure Event subsists (c) after COD, whereupon the Concessionaire is unable to collect Fee, the Concession Period shall be extended by a period, equal in length to the period during which the Concessionaire was prevented from collection of Fee on account thereof; (d) provided that in the event of partial collection of Fee where the daily collection is less than 90% (ninety per cent) of the Average Daily Fee, the Government shall extend the Concession Period in proportion to the loss of Fee on a daily basis.	
		Step 3: (a) Upon the occurrence of any Force Majeure Event prior to the Appointed Date, the period for achieving Financial Close shall be extended by a period equal in length to the duration of the Force Majeure Event.	

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		<p>(b) before COD, the Concession Period and the dates set forth in the Project Completion Schedule shall be extended by a period equal in length to the duration for which such Force Majeure Event subsists</p> <p>(c) after COD, whereupon the Concessionaire is unable to collect Fee, the Concession Period shall be extended by a period, equal in length to the period during which the Concessionaire was prevented from collection of Fee on account thereof;</p>	
		Step 4: If the Force Majeure Event subsists for a period of 180 days or more within a continuous period of 365 days, either party can terminate the Agreement	Within 365 days of Event
		<p>Step 5:</p> <p>(a) Initiator to inform other Party of intention to issue termination notice and grant 15 days' time to make a representation</p> <p>(b) May issue notice thereon, irrespective of representation</p>	

iii. Compensation for Breach of Agreement

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Compensation for Breach in Agreement - default by Authority	<p>Step 1: Authority to receive compensation demand for material default, supported by necessary particulars from the Concessionaire</p> <p>Step 2: Authority to pay within 30 days of receipt of the demand</p> <p>(a) The Authority shall in addition to payment of compensation, in case of delay in achieving COD or leads to suspension of or reduction in collection of Fee, extend the Concession Period. Such extension being equal in duration to the period by which COD was delayed or</p>	<p>Within 7 days of event</p> <p>With Within 30 days of receipt of the demand in 7 days of receipt of such request.</p>

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		<p>the collection of Fee remained suspended.</p> <p>(b) The Authority shall pay to the Concessionaire, in the event that an Additional Toll way or a Competing Road is opened to traffic in breach of this Agreement, for each day of breach, compensation in a sum equal to the difference between the average daily Realisable Fee and the projected daily Fee until the breach is cured.</p> <p>Compensation payable shall be in addition to Termination Payment, if any.</p>	
b)	Compensation for Breach in Agreement - default by the Concessionaire	Step 1: Authority to raise compensation demand for material default, supported by necessary particulars	Within 7 days of such default
		Step 2: The Authority to get paid for all direct costs suffered or incurred by Concessionaire as a consequence of such material default within 30 days of receipt of the demand.	

iv. Assignment & Charge Creation Requests

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Restrictions on assignment and charges	Step 1: Authority to give prior consent in writing before Concessionaire assigns the Agreement to any person	
		Step 2: Authority shall be entitled to decline the consent without assigning any reason	Within 15 days of receipt of such request
b)	Restrictions on assignment and charges	Step 1: Authority to give prior consent in writing for Concessionaire to create or permit to subsist any Encumbrance, or otherwise transfer or dispose of all or any of its rights and benefits under this Agreement or any Project	

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		Agreement to which it is a party except (i) Liens arising by operation of law (ii) Mortgages/pledges/hypothecation of goods/ assets other than project assets and their related documents of title, a charge on the escrow account arising or created and as security only for indebtedness to the senior lenders under the financing agreements and/or for working capital arrangements (iii) Assignment of rights, interest and obligations of the concessionaire to or in favour of the lenders' representative as nominee to the extent covered by and in accordance with the substitution agreement as security for financing (iv) Liens or encumbrances required by any applicable law Step 2: Authority shall be entitled to decline the consent without assigning any reason	
c)	Substitution Agreement	The Lenders' Representative, on behalf of Senior Lenders, may exercise the right to substitute the Concessionaire pursuant to the agreement for substitution of the Concessionaire (the "Substitution Agreement")	
d)	Assignment by the Authority	The Authority may, after giving 60 days' notice to the Concessionaire, assign and/ or transfer any of its rights and benefits and/or obligations under this Agreement to an assignee who is, in the reasonable opinion of the Authority, capable of fulfilling all of the Authority's then outstanding obligations under this Agreement.	

v. Indemnity Claims

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Indemnity claims	Step 1: In the event that either Party receives a claim or demand from a third party in respect of which it is entitled to the benefit of an indemnity, it shall	Within 7 days of receipt of such claim

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		notify the other Party (the “Indemnifying Party”) within 15 days of receipt of the claim or demand and shall not settle or pay the claim without the prior approval of the Indemnifying Party.	
		Step 2: In the event that the Indemnifying Party wishes to contest or dispute the claim or demand, it may conduct the proceedings in the name of the Indemnified Party, subject to the Indemnified Party being secured against any costs involved, to its reasonable satisfaction	

vi. Suspension of Concessionaire’s Rights

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Suspension upon Concessionaire Default & Authority to act on behalf of Concessionaire	<p>The Authority shall be entitled to following upon occurrence of a Concessionaire Default</p> <ul style="list-style-type: none"> (i) suspend all rights of the Concessionaire and (ii) exercise such rights itself or authorise any other person to exercise or perform the same on its behalf during suspension. (iii) Suspension will be effective upon issuance of notice by the Authority to the Concessionaire. (iv) During Suspension, the Authority will, on behalf of the Concessionaire, collect all Fee and revenues and deposit the same in the Escrow Account. (v) The Authority can also make withdrawals from the Escrow Account for meeting the costs incurred by it for remedying and rectifying the cause of Suspension 	
b)	Revocation of Suspension	<p>a) In case the Authority shall have rectified or removed the cause of Suspension within a period not exceeding 90 days from the date of Suspension, it shall revoke the Suspension and restore all rights of the Concessionaire under this Agreement. The Authority may revoke the Suspension at any time, whether or not the cause of Suspension has been rectified or removed.</p> <p>b) The Authority shall revoke the Suspension forthwith and restore all rights of the</p>	Within 90 days from the date of Suspension

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		Concessionaire under this Agreement, upon the Concessionaire having cured the Concessionaire Default within a period not exceeding 90 days from the date of Suspension	
c)	Substitution - Concessionaire Default	Step 1: The Authority to inform lender about intention to issue termination notice 15 days prior to Termination Notice upon occurrence of a Concessionaire Default,	15 days prior to the Termination Notice
		Step 2: Authority to receive representation from lender for substitution within 15 days from receiving information from Authority.	
		Step 3: Authority to withhold termination or invoke 180 day suspension, extendable by 90 days on lenders written request, at the discretion of Authority.	
		Step 4: Lender may substitute the Concessionaire by a Nominated Company	
d)	Suspension of Concessionaire rights - Substitution	Step 1: Upon occurrence of a Financial Default, the Lenders' Representative to issue a notice to the Concessionaire or request Authority to terminate	
		Step 2: a) Authority to suspend all the rights of the Concessionaire and undertake the operation and maintenance of the Project Highway. b) Authority shall undertake Suspension under and in accordance with the provisions of the Concession Agreement.	
		Step 3: Lender may substitute the Concessionaire by a Nominated Company within 180 days from the date of suspension	
		Step 4: The Authority may terminate the Concession Agreement forthwith by issuing a Termination Notice, in the event such substitution is not completed within 180 days from the date of Suspension, provided that upon written request from the Lenders' Representative and the Concessionaire, the Authority may extend the aforesaid period of 180 days by a period not exceeding 90 days.	

vii. Termination

S. No.	Activities	Responsibilities / Action Points
--------	------------	----------------------------------

Post Award Contract Management Manual for Highway PPP Concessions

		Action	Timeline
a)	Termination for Concessionaire's Default	Step 1: (a) the Authority shall be entitled to terminate this Agreement by issuing a Termination Notice to the Concessionaire in the event such substitution is not completed within 180 days from the date of Suspension, (b) the Authority shall by a notice inform the Concessionaire of its intention to issue such Termination Notice and grant 15 days to the Concessionaire to make a representation before issuing the Termination Notice	Within 7 days of such default
		Step 2: Authority to get representation from concessionaire within 15 days of intimation of intention by the Authority	
		Step 3: The Authority is also required to send a copy of its notice of intention to issue a Termination Notice to inform the Lenders' Representative and grant 15 days for making a representation on behalf of the Senior Lenders stating the intention to substitute the Concessionaire.	Within 7 days of Termination Notice
		Step 4: The Senior Lenders to submit a representation to the Authority 15 days of intimation of intention to substitute the Concessionaire.	
		Step 5: (a) The Authority in the event receives representation on behalf of Senior Lenders, it shall at its discretion, either withhold Termination or exercise its right of Suspension, for enabling the Lenders' Representative to exercise the right of substitution. If Lenders' Representative procure that the default specified in the notice is cured within 180 days, and upon such curing thereof, the Authority shall withdraw its notice and restore all the rights of the Concessionaire. Upon written request from the Lenders' Representative and the Concessionaire, the Authority shall extend the period of 180 days by period not exceeding 90 days, as the Authority may deem appropriate.	
b)	Termination for Authority Default	Step 1: (a) Authority to receive Termination notice from concessionaire upon occurrence of an Authority Default	

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		(b) Authority to be informed by concessionaire Authority of its intention to issue the Termination Notice and grant 15 days to the Authority to make a representation before issue of the Termination Notice	
		Step 2: Authority to submit a representation to Concessionaire within 15 days of intimation of intention by the Concessionaire	Within 15 days of such intimation
c)	Termination Payment	Step 1: Concessionaire to raise demand notice for Payment due against the Termination.	
		Step 2: Authority to make payment within 15 days of demand notice for payment due by the Concessionaire.	Within 15 days of demand notice
		In the event of any delay, the Authority needs to pay interest at a rate equal to 3% above the Bank Rate. Also, such delay should not exceed 90 days.	
		Step 3: (a) The Authority shall pay to the Concessionaire an amount equal to 90% of the Debt Due less Insurance Cover upon Termination on account of a Concessionaire Default during the Operation Period, (b) Authority not to pay on account of a Concessionaire Default occurring prior to COD. The Authority shall pay to the Concessionaire an amount equal to Debt Due and 150% of the Adjusted Equity upon Termination on account of an Authority Default	
		Step 4: The Authority upon Termination for any reason whatsoever, may (a) take possession and control of the Project Highway and all materials and plants about the site (b) restrain any person claiming through or under the Concessionaire	

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		from entering upon the Site (c) require the Concessionaire to comply with the Divestment Requirements (d) The Authority will not be liable for any dues of the contractor before the date Authority took charge. Such claims shall constitute debt between the Concessionaire and the Contractor If the Authority elects to cure any outstanding defaults, the amount expended by the Authority for this purpose shall be deducted from the Termination Payment.	

2. Activities to be undertaken by Operations Level- Field Officer

i. Change of Scope

i.1 Change of Scope- Proposed by Authority

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Change of Scope – Proposed by Authority	<p>Step 1: Authority may propose Change of Scope if felt necessary, and give notice to Concessionaire to consider Change of Scope.</p> <p>The Concessionaire can reject a change of scope if it exceeds 20% of the Total Project Cost anytime during Concession Period or 5% of the Total Project Cost in any continuous period of 3 years before the Change of Scope Order.</p> <p>Step 2: Authority to issue a notice to the Concessionaire specifying in</p>	<p>Within 7 days of receipt</p>

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
		reasonable detail the works and services contemplated thereunder (the “Change of Scope Notice”)	of such request
		Step 3: Authority will be provided information as is necessary, together with preliminary Documentation by the Concessionaire upon receipt of a Change of Scope Notice	
		Step 4: If the Authority, upon receipt of information, decides to proceed with the Change of Scope, the Authority to convey its preferred option to the Concessionaire and the Parties to thereupon make good faith efforts to agree upon the time and costs for implementation thereof with assistance of the Independent Engineer.	
		Step 5: Independent Engineer to assist the parties in deciding the options and Cost & Timelines required for carrying the Change of scope.	
		Step 6: A Change of Scope Agreement would be executed	Within 7 days of Change of Scope Agreement
		<p>Step 7:</p> <p>(a) The Authority, upon reaching an agreement, to issue an order requiring the Concessionaire to proceed with the performance thereof.</p> <p>Authority may, in the event that the Parties are unable to agree, by issuing a Change of Scope Order, require the Concessionaire to proceed with the performance thereof pending resolution of the Dispute, or carry out the works.</p>	

i.2 Change of Scope – Proposed by Concessionaire

S. No.	Activities	Responsibilities / Action Points
--------	------------	----------------------------------

Post Award Contract Management Manual for Highway PPP Concessions

		Action	Timeline
a)	Change of Scope – Proposed by Concessionaire	Step 1: Authority to receive notice from the Concessionaire at any time for Change of Scope, if felt necessary	
		Step 2: Authority may either accept such Change of Scope with modifications, if any, and initiate proceedings therefor or inform the Concessionaire in writing of its reasons for not accepting such Change of Scope within 15 days of receipt of such notice	Within 15 days of receipt of such request
		Step 3: In case the Authority accepts the proposed change of scope, Authority to issue a notice to the Concessionaire specifying in reasonable detail the works and services contemplated thereunder (the “Change of Scope Notice”)	Within 15 days of receipt of such request
		Step 4: Authority will be provided information as is necessary, together with preliminary Documentation by the Concessionaire upon receipt of a Change of Scope Notice	
		Step 5: If the Authority, upon receipt of information, decides to proceed with the Change of Scope, it will convey its preferred option to the Concessionaire and the Parties to thereupon make good faith efforts to agree upon the time and costs for implementation thereof with assistance of the Independent Engineer.	Within 7 days of receipt of such request
		Step 6: Independent Engineer to assist the parties in deciding the options and Cost & Timelines required for carrying the Change of scope.	
		Step 7: A Change of Scope Agreement would be executed	
		Step 8: a) The Authority, upon reaching an agreement, to issue an order requiring the Concessionaire to proceed with the performance thereof. b) The Authority may, , in the event that the Parties are unable to agree, issue a Change of Scope Order, require the Concessionaire to proceed with the performance thereof pending resolution of the Dispute, or carry out the works.	Within 7 days of Change of Scope Agreement

i.3 Payment for Change in Scope

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Payment for Change in Scope	Step 1: Authority to make an advance payment to the Concessionaire in a sum equal to 20% of the cost of Change of Scope as agreed and in the event of a Dispute, 20% of the cost assessed by the Independent Engineer within 7 days of issuing a Change of Scope Order	Within 30 days of Change of Scope Agreement
		Step 2: Authority to execute payment of bills in respect of the works commenced by Concessionaire, supported by such Documentation as is reasonably sufficient for the Authority to determine the accuracy thereof	
		Step 3: Independent Engineer to certify the Cost and the advance amount against the Change of Scope	
		Step 4: Authority to disburse amounts as certified by the Independent Engineer within 30 days of receipt of bills.	Within 30 days of receipt of bills.
		Step 5: In the event that the total cost arising out of Change of Scope Orders (if any) issued prior to the Project Completion Date is less than 0.25% of the Total Project Cost, the difference thereof shall be credited by the Concessionaire to the Safety Fund within a period of 180 days of the Project Completion Date	
	Reduction in Scope of the Project	Authority to get 80% of the amount saved due to reduction in the scope from Concessionaire	

3. Activities to be undertaken by Supervisory Level- Finance Officer

i. Financial Restructuring & Novation Requests

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Financial Restructuring & Novation	<p>Step 1: Authority to</p> <ul style="list-style-type: none"> • Issue an acknowledgement to Concessionaire. • Get all Legal document (as submitted by Concessionaire) verified from Legal/ Financial Consultant. • Suggest the required changes in the documents, if any or approved the documents <p>Upon submission of proposal for financial restructuring by the Concessionaire along with supporting documents</p>	Within 15 days of receipt of such request

ii. Equity Transfer

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Equity Transfer	<p>Step 1: Authority to</p> <ul style="list-style-type: none"> • Issue an acknowledgement to Concessionaire. • Get all Legal document (as submitted by Concessionaire) verified from Legal/ Financial Consultant. • Suggest the required changes in the documents, if any or approved the documents. <p>Upon submission of proposal for equity transfer by the Concessionaire along with supporting documents</p>	Within 15 days of receipt of such request

4. Activities to be undertaken by the Supervisory Level (HQ) – Technical Officer

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly	Step 1: Relevant Authority officer to review and provide inputs on the monthly	1 day of default

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
	status reports & review of documents	status reports received from level below it (Operations Level Field Officer in this case) of the all ongoing projects and all files/ documents pertaining to it. Authority to report and escalation to be done to the next higher level (Decision Making Level- Technical Officer) within 1 day in case of any default.	

Escalation:

In case of any default, the issue to be escalated within 1 day of default by the officer.

5. Activities undertaken by Supervisory Level (field) - Technical:

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly status reports & review of documents	Step 1: Authority to review and provide inputs on the monthly status reports of the all ongoing projects and all files/ documents pertaining to it. Reporting to be done to the next higher level (Decision Making Level- Technical Officer) within 1 day.	1 day of default

Escalation:

In case of any default, the issue to be escalated within 1 day of default by the officer.

6. Activities undertaken by Decision making Level (Technical)

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly status reports & review of	Step 1: Authority to review and provide inputs on the monthly status reports of the all ongoing projects and all files/ documents pertaining to it. Reporting to be	5 days of default

Post Award Contract Management Manual for Highway PPP Concessions

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
	documents	done to the next higher level (Board/ Chairman) as and when required. In case of any default, the issue to be escalated.	

Escalation:

In case of any default, the issue to be escalated to Board/ Chairman within 5 days of default by the officer.

7. Activities undertaken by Decision making Level (Finance):

S. No.	Activities	Responsibilities / Action Points	
		Action	Timeline
a)	Monthly status reports & review of documents	Step 1: Authority to review and provide inputs on the monthly status reports of the all ongoing projects and all files/ documents pertaining to it. Reporting to be done to the next higher level (Board/ Chairman) as and when required. In case of any default, the issue to be escalated	5 days of default

Escalation:

In case of any default, the issue to be escalated to Board/ Chairman within 5 days of default by the officer.

K. Checklists

1. Financial Restructuring & Novation

#	Checklist Item	Tick (if, yes)	Comments (if any)
1.	Clarity on justification of restructuring / refinancing	<input type="checkbox"/>	
2.	New lender, if any, has agreed to Concession Agreements	<input type="checkbox"/>	
3.	No Objection Certificate (NOC) from existing lenders, if being changed	<input type="checkbox"/>	
4.	Opinion from Financial / Legal Consultant has been taken	<input type="checkbox"/>	
5.	Concurrence from all promoters having more than 26% of equity in the SPV	<input type="checkbox"/>	
6.	All comments of Financial / Legal Consultant or Authority itself is incorporated in the executed documents.	<input type="checkbox"/>	
7.	Is in compliance with Concession Agreement	<input type="checkbox"/>	
8.	Is in compliance with Companies Act, 1956(or as per amended versions of the Act) and other relevant laws and regulations	<input type="checkbox"/>	
9.	Increase / decrease in funded amount, if any, justified	<input type="checkbox"/>	
10.	No increase in Authority's liability in amount and time	<input type="checkbox"/>	
11.	Funds are to be used for project purposes only	<input type="checkbox"/>	
12.	No objection from Authority issued as a necessary condition	<input type="checkbox"/>	
13.	Draft documents reviewed by Authority for checking compliance with Concession Agreements and Authority policy	<input type="checkbox"/>	
14.	Executed version of the Agreements submitted to Authority within 10 days of execution	<input type="checkbox"/>	
15.	The Final Executed documents are already been approved by Level 4 in Authority	<input type="checkbox"/>	

2. Equity Transfer

#	Checklist Item	Tick (if yes)	Comments (if any)
1.	Clarity on justification of equity transfer / buy / sale	<input type="checkbox"/>	
2.	Equity buyer, if new and with more than 26% stake, has agreed to all Concession Agreements	<input type="checkbox"/>	
3.	Opinion from Financial / Legal Consultant has been taken	<input type="checkbox"/>	
4.	No risk on national security and public interest perspective	<input type="checkbox"/>	
5.	Selected bidder/ Consortium Members, together with its/ their Associates is/are holding at least 51% Equity till signing of Concession Agreement.	<input type="checkbox"/>	
6.	All member of the Consortium whose technical and financial capacity was evaluated for shortlisting at RFQ stage is having at least 26% of equity, in case the Equity Transfer is proposed during the Construction period and two years thereafter.	<input type="checkbox"/>	
7.	Concurrence from all promoters having more than 26% of equity in the SPV	<input type="checkbox"/>	
8.	All comments of Financial / Legal Consultant or Authority is resolved.	<input type="checkbox"/>	
9.	No Objection Certificate (NOC) from seller	<input type="checkbox"/>	
10.	Concurrence from all promoters having Equity 26% or above in Private Party	<input type="checkbox"/>	
11.	Is in compliance with Concession Agreement	<input type="checkbox"/>	
12.	Is in compliance with Companies Act, 1956(or as per amended versions of the Act) and other relevant laws and regulations	<input type="checkbox"/>	
13.	No disproportionate rights to any equity investor	<input type="checkbox"/>	
14.	No increase in Authority's liability in amount and time	<input type="checkbox"/>	
15.	No objection from Authority issued as a necessary condition	<input type="checkbox"/>	
16.	Draft documents reviewed by Authority for checking compliance with Concession Agreements and Authority policy	<input type="checkbox"/>	

Post Award Contract Management Manual for Highway PPP Concessions

17.	Executed version of the Agreements submitted to Authority within 10 days of execution	<input type="checkbox"/>	
18.	The Final Executed documents are already been approved by Level 4 in Authority	<input type="checkbox"/>	

3. Change in Scope

#	Checklist Item	Tick (if, yes)	Comments (if any)
1.	Clarity on reason for change of scope	<input type="checkbox"/>	
2.	Interested party has issued a notice to other party regarding change of scope	<input type="checkbox"/>	
3.	Entire information related to Change of Scope is provided by Concessionaire to the Authority	<input type="checkbox"/>	
4.	The Information submitted by Concessionaire was reviewed by the Independent Engineer	<input type="checkbox"/>	
5.	The options, cost and time line was decided by Authority with assistance from the Independent Engineer	<input type="checkbox"/>	
6.	A Change of Scope Agreement has been executed between Concessionaire and Authority	<input type="checkbox"/>	
7.	Check if the particular change of scope is permitted under agreement	<input type="checkbox"/>	
8.	Increase in cost due to change of scope less than 5% annually in any continuous period of 3 years and less than 20% of TPC	<input type="checkbox"/>	
9.	Methodologies for effecting change in scope analyzed and plan of action finalized	<input type="checkbox"/>	
10.	Payment for change in scope agreed upon	<input type="checkbox"/>	
11.	Change of scope formalized in a formal change of scope order	<input type="checkbox"/>	
12.	A Change of Scope Agreement has been executed between Concessionaire and Authority	<input type="checkbox"/>	
13.	Relevant work to start and payment to be made accordingly		

4. Change in Law

#	Checklist item	Tick, if yes	Comments (if any)
1.	Private Party's understanding of the changes in service obligations due to change in law is adequate	<input type="checkbox"/>	
2.	Authority assigned to look after the management of all changes due to change	<input type="checkbox"/>	
3.	Opinion from Financial / Legal Consultant has been taken	<input type="checkbox"/>	
4.	There is variation in financial position by more than Rs. 1 crore and 0.5% of the Realisable Fee in any Accounting Year because of Change in Law	<input type="checkbox"/>	
5.	The Financial position of the Concessionaire is same as it was before the Change in Law	<input type="checkbox"/>	
6.	The Financial Position has been compared in terms of NPV	<input type="checkbox"/>	
7.	The Financial Position has been compared with Financial Model submitted at the time of Financial Closure	<input type="checkbox"/>	
8.	The variation in Financial position is not recoverable from the users	<input type="checkbox"/>	
9.	Information provided to all stakeholders involved	<input type="checkbox"/>	
10.	Meeting called for all parties to discuss and agree on required changes	<input type="checkbox"/>	
11.	Timelines of project redefined to reflect new legal conditions	<input type="checkbox"/>	
12.	New payment rights defined to protect Private Party project NPV	<input type="checkbox"/>	
13.	Payment mechanism redefined to achieve agreed objective	<input type="checkbox"/>	
14.	Is in compliance with the Concession Agreement	<input type="checkbox"/>	

5. Renegotiation

#	Checklist item	Tick, if yes	Comments (if any)
1.	Change proposed is agreed by both parties	<input type="checkbox"/>	

Post Award Contract Management Manual for Highway PPP Concessions

2.	Information provided to all stakeholders involved	<input type="checkbox"/>	
3.	Costing for the renegotiation agreed and understood by both parties	<input type="checkbox"/>	
4.	Contract Management Team considered employing a third party in the renegotiation process	<input type="checkbox"/>	
5.	Opinion from Financial / Legal Consultant has been taken	<input type="checkbox"/>	
6.	Timelines & scope of project redefined	<input type="checkbox"/>	
7.	Increase/ Decrease in funds justified	<input type="checkbox"/>	
8.	Is in compliance with the Concession Agreement	<input type="checkbox"/>	
9.	Payment mechanism and scheduled restructured as per the renegotiated contract	<input type="checkbox"/>	

6. Force Majeure

#	Checklist item	Tick (if yes)	Comments (if any)
1.	Any Political Event, Indirect Political Event or Non-Political Event as defined in the Concession Agreement has occurred in India	<input type="checkbox"/>	
2.	Affected party has issued notice to other party to report happenings	<input type="checkbox"/>	
3.	All information related to Force Majeure event is provided by the Affected party	<input type="checkbox"/>	
4.	Information provided to all stakeholders involved	<input type="checkbox"/>	
5.	Parties meet to discuss and decide on a collective response	<input type="checkbox"/>	
6.	Correct classification of force majeure event as indirect political event, non-political event or political event	<input type="checkbox"/>	
7.	Continuation/Termination of agreement due to force majeure	<input type="checkbox"/>	
8.	Agreement on effect of Force Majeure on Concession period	<input type="checkbox"/>	
9.	Costs arising due to force majeure allocated	<input type="checkbox"/>	

Post Award Contract Management Manual for Highway PPP Concessions

10. Termination payment determined and paid, if required	<input type="checkbox"/>	
11. Formal agreement among all stakeholders regarding proceedings	<input type="checkbox"/>	

7. Termination

#	Checklist item	Tick (if yes)	Comments (if any)
1.	Affected party has issued notice to other party issuing termination	<input type="checkbox"/>	
2.	Information provided to all stakeholders involved	<input type="checkbox"/>	
3.	Parties met to discuss and agree on timelines	<input type="checkbox"/>	
4.	Termination Payment is estimated as per the Concession Agreement	<input type="checkbox"/>	
5.	Opinion from Financial / Legal Consultant has been taken	<input type="checkbox"/>	
6.	Agreement on termination payment to be made between parties	<input type="checkbox"/>	
7.	Authority to take possession and control of project highway/equipment	<input type="checkbox"/>	
8.	Assume control over access rights and personnel of project	<input type="checkbox"/>	
9.	Closure of agreement by completing payment and other formalities	<input type="checkbox"/>	

L. Tools

1. Estimation of Variation in Traffic

This model highlights the scenario of variation observed in estimated and actual traffic. It calculates the revenue sharing percentage or the change in Concession Period to be made. This has been made in line with the Model Concession Agreement for Four- Laning Highway PPPs by Govt. of India. Each model also contains an Instruction Manual for ease of operation.

Project Particulars

Project Particulars

Concession Period (yrs)	30
Construction Period (mnths)	30
Last Capex Payment month	30

First FY Ending	31-Mar-16
FY No.	1
No. of months in first FY	12

Key Dates

Appointed Date	1-Apr-15
Date of Construction Completion	30-Sep-17
COD	1-Oct-17
Termination Date	30-Jun-44

Construction Ending FY	31-Mar-18
FY No.	3
No. of operational months in Construction Ending FY	6

Last FY Ending	31-Mar-45
FY No.	30
No. of months in last FY	3

Traffic Details

Target Date	1-Oct-22
Target PCUs	15000
Actual Traffic on Target Date	15500
Revised Concession Period (yrs)	29.3

% Diff	3%
% Increase / Decrease in CP	-2%
% Incr / Decr (subjected to ceilings)	-2%
Increase / Decrease in CP (yrs)	-0.7

Change in Concession Period/ Revenue Share	CP
Revenue Share Start Date	NA
Revenue Share	NA

Post Award Contract Management Manual for Highway PPP Concessions

2. Termination Payments

This model illustrates how during early termination event, either because of the Concessionaire or the Authority, the payment to be made to the Concessionaire will be calculated. This has been made in line with the Model Concession Agreement for Four- Laning Highway PPPs by Govt. of India.

Dashboard		<i>All amounts in the model are in Rs Cr</i>	
Financial Structuring			
Means of Finance		Adjusted Equity	
Equity Infused	100.00	Base Adjusted Equity at COD	115
Debt Due	200.00	% Reduction per Month	0.28%
Insurance Cover	100.00	No. of months from 4th Anniversary of COD	0
Insurance Claims (not admitted and paid)	50.00	Adjusted Equity	138.00
		VPI details	
		WPI at the Time of Appointed Date	100
		WPI at the Time of Termination	156
		WPI at the Time of COD	130
Project Particulars			
Project Particulars		Key Dates	
Concession Period (yrs)	30	Appointed Date	1-Apr-16
Construction Period (mnts)	30	Date of Construction Completion	30-Sep-17
Last Capex Payment month	30	COD	1-Oct-17
		Termination Date	31-Mar-18
		4th Anniversary from COD	30-Sep-21
		Key Information	
		Termination Period	COD and 4th Anniver
First FY Ending	31-Mar-16	Construction Ending FY	31-Mar-18
FY No.	1	FY No.	3
No. of months in first FY	12	No. of operational months in Construction Ending FY	6
		Last FY Ending	31-Mar-18
		FY No.	3
		No. of months in last FY	12
v			
Termination Payment			
Termination Type	Concessionaire Default	Reason	
Adjusted Equity	0%	% of Debt Due of Adjusted Equity	
Debt Due	90%	Non-political FM Event	90% 0%
Insurance Cover	100.00	Indirect Political FM Event	100% 110%
Insurance Claims	40.00	Political FM Event	100% 150%
Termination Payment	126.00	Authority Default	100% 150%
		Concessionaire Default	90% 0%

3. Change in Law Toolkit

Change in Law Conditions		1-Jun-20	
Change in law year		1-Jun-20	
Reduction in revenue		10%	

Calculations		Indicates Year of Change in																	
No Change in Law Scenario		31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19	31-Mar-20	31-Mar-21	31-Mar-22	31-Mar-23	31-Mar-24	31-Mar-25	31-Mar-26	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	31-Mar-32	31-Mar-33
Year																			
Total Cash flow		-33.3	-33.3	-33.3	14.1	15.5	17.0	18.7	20.6	22.6	24.9	27.4	30.1	33.1	36.5	40.1	44.1	48.5	53.4
Discounted Cash flow		-	-	-	-	-	13.8	13.7	13.6	13.4	13.3	13.2	13.1	13.0	12.8	12.7	12.6	12.5	12.4
NPV at Change in Law Year		310.2																	

Change in Law Scenario		31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19	31-Mar-20	31-Mar-21	31-Mar-22	31-Mar-23	31-Mar-24	31-Mar-25	31-Mar-26	31-Mar-27	31-Mar-28	31-Mar-29	31-Mar-30	31-Mar-31	31-Mar-32	31-Mar-33
Year																			
Total Cash flow		-33.3	-33.3	-33.3	14.1	15.5	15.3	16.8	18.5	20.4	22.4	24.7	27.1	29.8	32.8	36.1	39.7	43.7	48.0
Discounted Cash flow		-	-	-	-	-	12.4	12.3	12.2	12.1	12.0	11.9	11.8	11.7	11.6	11.5	11.3	11.2	11.1
NPV		280.7																	

Compensation/ Change in Concession Period		YES						
Estimated Year		1	2	3	4	5	6	7
Actual Year		31-Mar-46	31-Mar-47	31-Mar-48	31-Mar-49	31-Mar-50	31-Mar-51	31-Mar-52
Total cash flow		100.0	260.9	339.2	441.0	573.3	745.4	969.0
Discounted Cash flow		6.0	14.0	16.4	19.3	22.6	26.4	31.0
Cumulative Discounted Cash Flows		6.0	20.0	36.5	55.7	78.3	104.7	135.7

Difference between the NPVs		29.5
Is Compensation/ Change in Concession Period valid?		YES
Method of Compensation for Change by either Party	Change in Concession	
Change in Concession Period		2.57 Years
Payment to be made by either part	NA	Crores

M. Appointment & Responsibilities of Other Related Parties

Related party	Scope of Work	Appointment Mechanism
Escrow agent	<ul style="list-style-type: none"> ▪ Segregation of funds ▪ Notification of balances ▪ Communications and notices ▪ Regulatory Approvals 	<ul style="list-style-type: none"> ▪ Appointed by the Concessionaire
Independent Engineer	<ul style="list-style-type: none"> ▪ Review of the Drawings and Documents; ▪ Review, inspection & monitoring of Construction Works ▪ Conducting Tests on construction completion & issuing Completion/ Provisional Certificate ▪ Review, inspection and monitoring of O&M ▪ Review, inspection and monitoring of Divestment Requirements determining the costs of any works or services and/or their reasonableness; ▪ Determining, the period or any extension for performing any duty or obligation; ▪ Assisting the Parties in resolution of disputes 	<ul style="list-style-type: none"> ▪ Refer to activity 1.1 under Chapter VII, Activities to be undertaken by Operations Level (HQ)
Safety Consultant	<ul style="list-style-type: none"> ▪ Carry out safety audit of the Project in accordance with the Safety Requirements ▪ Collect, analyze and review data on all fatal accidents which occurred in the Project ▪ Make recommendations to Independent Engineer and Authority on Project design and improvements in the Project from safety perspective 	<ul style="list-style-type: none"> ▪ Refer to activity 1.7 under Chapter III, Activities to be undertaken by Operations Level (HQ)
Senior Lenders	<ul style="list-style-type: none"> ▪ Novation (changes to funding arrangements). ▪ Approve disbursement of loan to Concessionaire ▪ Approve Termination in case of financial default by Concessionaire ▪ Submit project progress report to Govt. body ▪ Provide consent on loan agreement between concessionaire and authority ▪ Refinancing/ restructuring 	<ul style="list-style-type: none"> ▪ As per the provisions of the Model Concession Agreement
Legal Consultants	<ul style="list-style-type: none"> ▪ Preparation of legal documents ▪ Undertake all legal proceedings on behalf of Authority for the project 	<ul style="list-style-type: none"> ▪ Selected in the Pre-Award Stages of PPP Contract
Financial Consultants	<ul style="list-style-type: none"> ▪ Prepare financial documents ▪ Financial feasibility analysis ▪ Transaction Advisor which includes advisory until Financial closure 	<ul style="list-style-type: none"> ▪ Selected in the Pre-Award Stages of Highway PPP Contract

Bibliography

For development of these guidelines a number of external sources of literature and references have been referred to. They can be enlisted as follows:

Model Concession documents

- *MCA for Highways, BOT Toll Projects above Rs. 100 Crores, 2009*

Databases:

- *DEA PPP in India Web Portal*
- *PPIAF PPI Database*
- *DEA Infrastructure Project Database*

PPP guidelines, manuals and toolkits:

Australia

- *Partnership Victoria, Contract Management Policy, 2003*
- *Partnership Victoria, Contract Management Guide, 2003*

South Africa

- *Municipal Service Delivery and PPP Guidelines, 2003*

India

- *Guidelines- Institutional Mechanism for Monitoring of PPP Projects, Government of India*

Risk Management

- *PPP Risk Management, Australian Government, 2003*
- *ADB Handbook for Integrating Risk Analysis in the Economic Analysis of Projects*

Links to Portals of PPP Cells and other PPP supporting agencies

- *India*
- *International*

