

**Section 6: Terms of Reference (ToR)  
for Transaction Advisor of  
Dhaka Outer Circular Road PPP Project**

## **1 Project Description and Background of the Assignment**

Dhaka, the mega city of rapid rising population, becomes paragon of traffic congestion because of inadequate roadway compared to current traffic as well as number of roads in north-south direction compare to East-west. During the tenure of present government easing the traffic congestion in Dhaka city is a leading objective of different projects named as Mayor Hanif Flyover, Kuril Flyover, Banani rail overpass, Late President JillurRahman Flyover etc. Moreover, some mega project like Metro rail, BRT, Elevated Expressway etc. are under implementation while the attempts of these constructions are not well enough to cope with the rapid rising population and development of this mega city.

Traffic congestion is a major problem in Dhaka. The population of Dhaka is about 17 million and population density is around 7,950/km. Total length of road network is around 1,256 km with the road density of 9.01%, whereas the standard road density in a metropolitan city should be 20 to 25%. The open space in Dhaka City is about 3.09%, it is almost impossible to increase the road density to 25% using only surface area. The capacity of total traffic volume of the existing road network is around 3 lacs, which is absolutely much less than the existing registered vehicles (around 9 lacs, according to Bangladesh Road Transport Authority). It is obvious that the present transportation system of the city is incapable of satisfying the current demand, which emphasizes the needs of construction of circular road around Dhaka city. To facilitate the future traffic needs of the capital city there is no other alternative to develop the peripheral connectivity as the development of internal road way will create massive destruction of existing establishment.

To mitigate the up-growing congestion present govt. has already taken a project to construct an inner circular road along the periphery of Dhaka city encircled by four rivers named Turag, Buriganga, Sitalakkha and Balu which leads to propose 87.00 kilometer road along Termukh – Abdullahpur – Dhour – Gabtoli – Babubazar – Sadarghat – Postogola – Chasara – Signboard – Demra – Termukh. The feasibility study and detail design of the inner circular road is on-going.

It is revealed in a study that yearly loss due to the traffic congestion in Dhaka is about 53 thousand crore Taka (7.05 Billion USD). The mobility of the people is becoming limited due to the traffic congestions, which in consequence hampering the growth of the economy. However to achieve the Vision-2021 target and to convert into a developed country by 2031 the construction of outer circular route around the greater Dhaka is must. Construction of Middle Ring Road has also been included in the Revised STP (Annexure-C).

It is possible to move from east to west or north to south part of the country bypassing the greater Dhaka which consequently will reduce the traffic congestion; as a major part of the passenger will travel through the middle circular road for its convenience and time savings. Middle circular road can be elevated over the surface of existing roads.

Considering the present traffic congestion and facilitating the quick movement around the city, following three (3) routes for Southern part of Middle Circular Route has been initially proposed to connect Dhaka-Aricha (N-5) Highway with Dhaka-Mawa (N-8) Highway and Dhaka-Mawa (N-8) highway with Dhaka-Chittagong Highway (N-1).

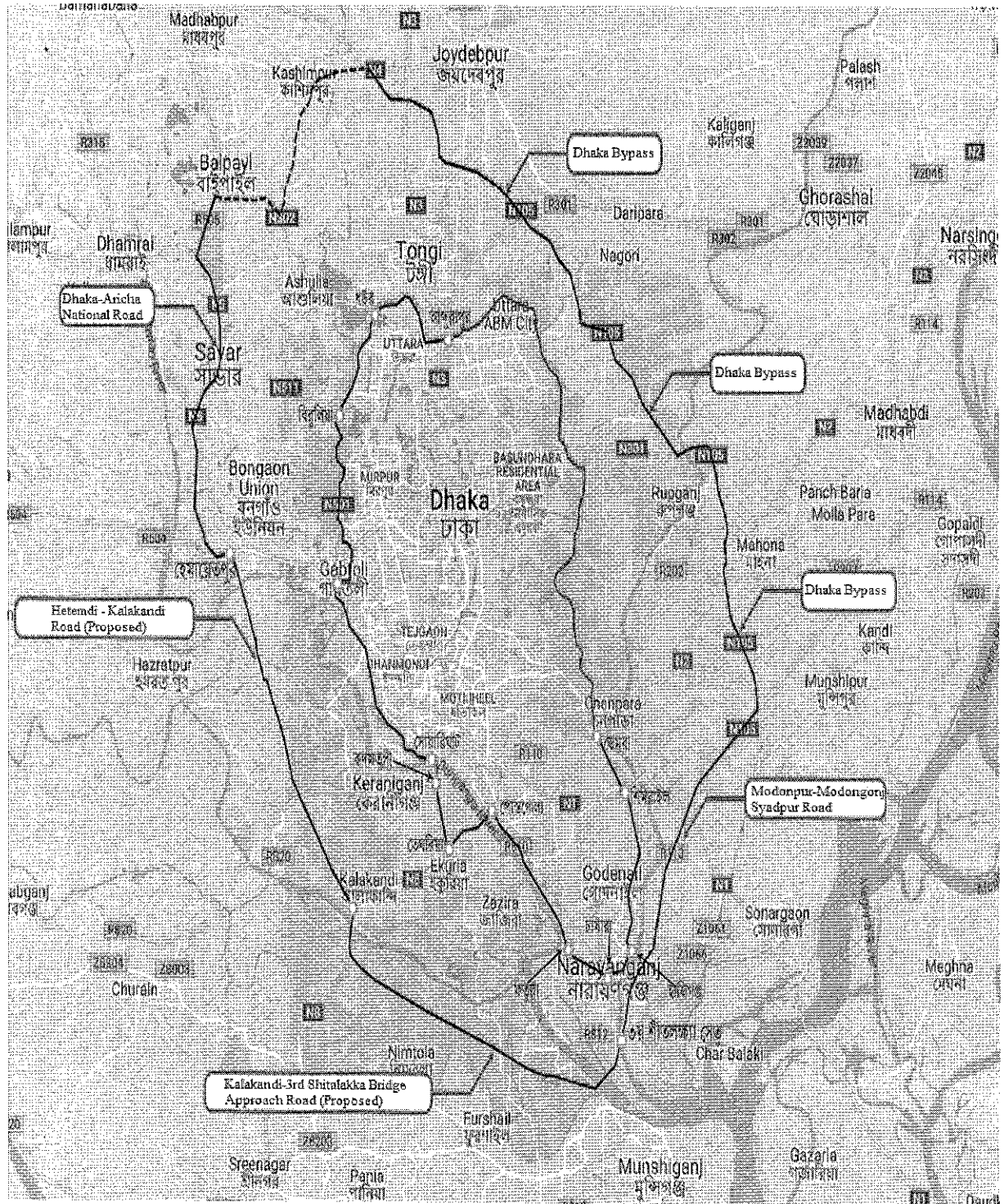
### **1.1 Project Route Alignment**

Considering the present traffic congestion and facilitating the quick movement around the city, following three (3) routes for Southern part of Middle Ring Road has been initially proposed to connect Dhaka-Aricha (N-5) Highway with Dhaka-Mawa (N-8) Highway and Dhaka-Mawa (N-8) highway with Dhaka-Chittagong Highway (N-1).

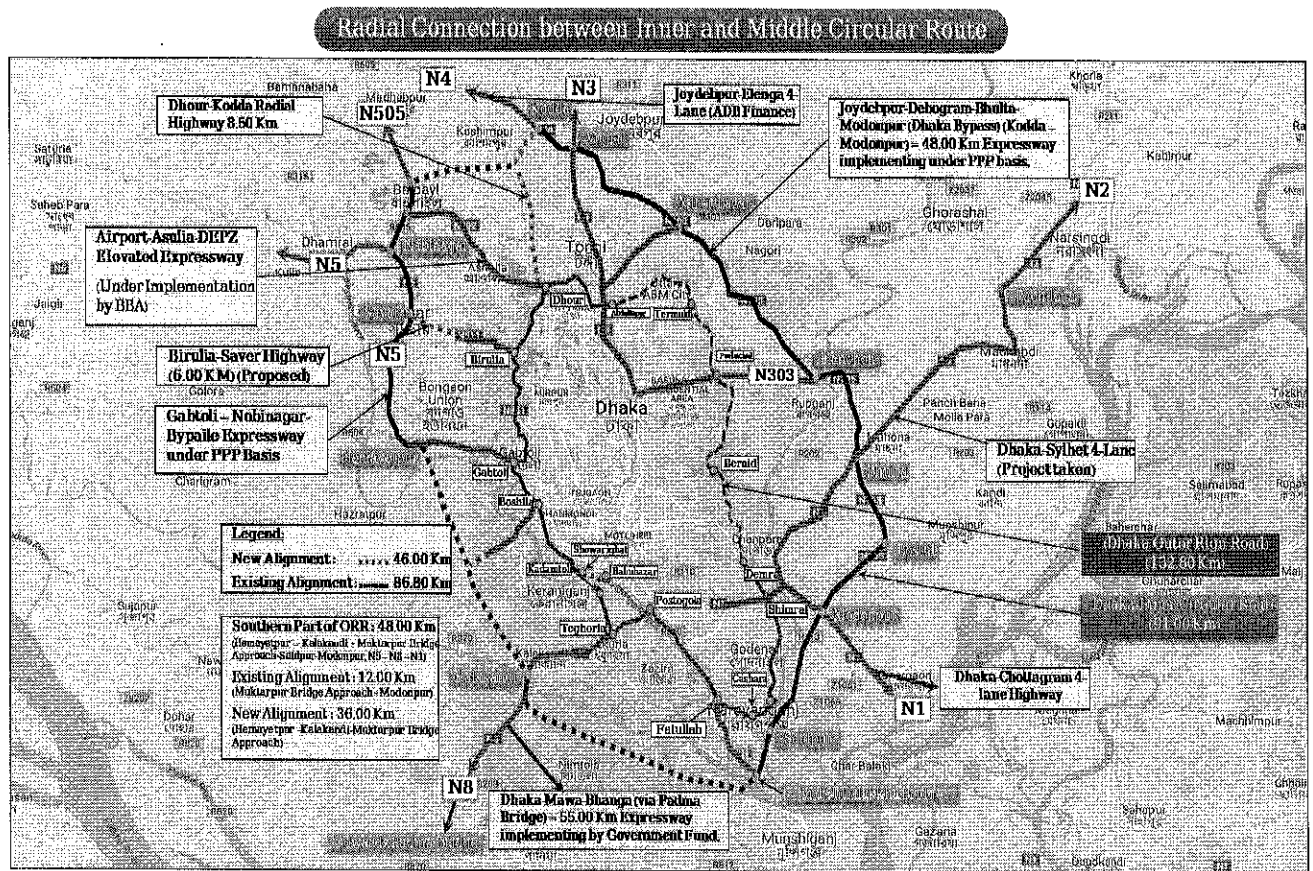


Route 1: Hemayetpur (Dhaka-Aricha Highway) to Kalakandi (Dhaka-Mawa Highway), Approx. length = 18.00 km

### 1.2 Location of the Project



### 1.3 Radial Connection of the Route



### 1.4 Feasibility Study

A consultant has already been engaged to carry out the detailed economic and engineering investigation to examine economic viability and technical feasibility for construction of the Outer Circular Road which in turns will:

- (a) reduce through traffic and disperse incoming and outgoing traffic;
- (b) eradicate congestion with the rational use of road;
- (c) ease the transportation as radial connection;
- (d) increase the use of multi-modal transportation; and
- (e) Support the development of an optimal urban environment by creating independent urban spheres through the connection of core centers.

The feasibility study assignment includes the following tasks:

- (1) Optimization of length, location and alignment of the Southern part of Middle Ring Road;
- (2) Determination of the appropriate construction method, configuration and technology;
- (3) Detailed geotechnical investigations, geological mapping, hydrographic survey;
- (4) Traffic survey with analysis and traffic forecast;

- (5) IEE (Initial Environmental Examination) and Environmental Impact Assessment (EIA) including management and mitigation plan;
- (6) Resettlement study;
- (7) Preliminary engineering design and cost estimation;
- (8) Preparation of Land Acquisition Plan;
- (9) Socio Economic study, survey and Analysis
- (10) Economic and financial evaluation determining EIRR, NPV, BCR, FIRR along with sensitivity analysis for different scenarios;
- (11) Study on existing pavement and structures and propose preventive measures (if required);
- (12) Risk Assessment; and
- (13) Transfer of Knowledge.

The outputs of the above study will be: (i) a Feasibility Study Report; (ii) Financial Model; (iii) IEE and ESIA Report; (iv) Risk matrix; (v) Preliminary Engineering Design; and (vi) others as stated above.

### **1.5 Modality of Engagement of Investor**

The Consultant should note that this project will be implemented through PPP basis with the support of the Government of Japan. There would not be any competitive bidding or selection of shortlisted bidders from the wide market through competition. The Government of Japan will nominate a bidder to participate in the project implementation. However, the Government of Bangladesh will develop a standard bidding package including Concession Contract for the bidder to prepare the bid for the project and negotiate the Concession Contract with the selected bidder and finalize the Concession Contract.

## **2 Objective of this Assignment**

The main objective of this assignment is to help Roads and Highways Department in engaging an investor through public private partnership to develop the Dhaka Outer Circular Road into [four/six]<sup>1</sup> lanes on build operate and transfer (BOT) basis.

## **3 Scope of Services**

The scope of services of the Consultant is described below in task basis. Any activity which is missing here but very much analogous to the engagement of an investor in PPP Project will be carried out without any variation of cost. The Client of the Contract is Public Private Partnership Authority (“PPPA”) and Roads and Highways Department (“RHD”) is the beneficiary of the assignment.

### **Task 1: PPP Transaction Structure**

The Consultant will carry out the following activities:

- (1) Review of the feasibility study report of the project including other relevant reports and/or documents, drawings, etc. as necessary.
- (2) Developing at least three best alternative PPP structures [BOT with tolling, BOT with tolling plus VGF, BOT with tolling plus VGF plus minimum payment guarantee] based on the information of the feasibility study report.
- (3) Developing a detail risk matrix (accommodating the risk inputs from the feasibility study report) and allocation of risks to parties based on cost-effective mitigation measures.

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<sup>1</sup> Depending on the outcome of the feasibility study



- (4) Review and updating of capital costs(both hard costs and soft costs) and operating costs of the project (as in the feasibility study report) based on various alternative PPP structures.
- (5) Developing a Financial Model to fit into the various PPP structures and determine the best viable structure for implementation including analysis of capital costs, operating costs, financing costs, traffic volumes, revenue streams, requirement of viability gap funding (if any) and/or any other government supports in monetary terms, risk based approach, and other various inputs to the model.
- (6) Review the existing toll policy, recommendation of changes in the toll policy including toll rates and determination of toll revenues from the project.
- (7) Assessment of commercial viability and market attractiveness (including level of attractiveness) of the project with or without government monetary supports and (if required) the level of government support. The level of government supports should identify the fiscal incentives (apart from the fiscal incentives already available), special fiscal incentives for this project, monetary support in the form of viability gap funding during construction and operations (NOT more than 5 years) and minimum revenue guarantee.
- (8) Developing a payment mechanism for the project.
- (9) Developing value for money mechanism in PPP structuring.
- (10) Identification of various tax liabilities (income tax, VAT, import duties, etc.) of the project during construction and operation and determination of the amount of tax liabilities of the project.

Deliverable 1: Detail Analysis Report of Task 1 including Transaction Structure and Risks Matrix

Deliverable 2: Financial Model in MS Excel (Not beyond 2016 version) for windows (including all assumptions and outputs)

### **Task 2: Developing Commercial Terms and Conditions**

The Consultant will carry out the following activities:

- (1) Developing key commercial terms and conditions for the bidding and the Concession Contract.
- (2) Developing bidding parameters and evaluation criteria (as this is a government to government project).
- (3) Developing major roles, responsibilities, duties, warranties and representations of the parties.
- (4) Developing termination events, termination amounts and payment mechanism.
- (5) Developing appealing dispute resolution mechanism for both parties.
- (6) Developing key performance parameters, indicators and service standards during operation and maintenance phase.
- (7) Developing asset handback mechanism after the concession period or termination.
- (8) Several presentations of key contractual terms and conditions of Concession Contract to the Client and the Public Private Partnership Authority (the "PPPA") for their concurrence and acceptance.

Deliverable 3: Major terms and conditions for the Concession Contract and Bidding

### **Task 3: Procurement Plan and Preparation of Procurement Documents**

The Consultant will carry out the following activities:

- (1) Developing a detail procurement plan and procurement strategy for execution of the procurement process.
- (2) Proposing a governance arrangement for ensuring efficient and effective project oversight and delivery as part of procurement strategy.



- (3) Developing a project information memorandum giving detail information of the project to the potential investors for their better understanding about the project.
- (4) Preparing a request for proposals (RFP) document including instructions to the bidders, evaluation methodology and criteria, forms and/or templates including standard form for letter of award (LoA) for the bidders to provide their proposals including data, information and/ or document, etc.
- (5) Developing a detailed Concession Contract that delineates all the contractual terms and conditions between the parties including schedules and annexures as necessary of a standard contract following agreement with the Client and RHD.
- (6) Identifying a list of consents, permits, approvals, clearances etc. required for the project from the government organizations, bodies, authorities, departments, divisions, local bodies, etc. as part of the Concession Contract.

Deliverable 4: Procurement Plan and Procurement Strategy

Deliverable 5: RFP Document

Deliverable 6: Draft Concession Contract

*\*Note: The Consultant shall prepare the above documents in accordance with the Procurement Guidelines for PPP Projects, 2018 and the Public Private Partnership Act, 2015 and other international best practices and in consultation with the Client, RHD and the previous Concession Contract used in other PPP Projects of RHD.*

#### **Task 4: Procurement Support**

The Consultant will carry out the following activities:

- (1) **Pre-bid Meeting:** Preparing responses to the queries of the Bidder including minutes of the said meeting and addenda of the Bidding Document and/or draft Concession Contract.
- (2) **Opening of Bid:** Attending the opening session of the Bids and preparing opening minutes of the Committee.
- (3) **Evaluation of Bid:** Evaluating Bids of potential bidder including preparing queries on Bids and preparing evaluation report(s) and attending the meetings of the Evaluation Committee.
- (4) **Negotiation and Updating of Concession Contract:** Conducting negotiation with the private partner to finalize the Concession Contract after incorporating the bid/proposal information and data, preparing minutes of the negotiation meetings for approval of RHD and private partner and updating the Concession Contract based on negotiation, Proposals and vetting comments of the Ministry of Law, Justice and Parliamentary Affairs and other government department/ division/ ministry including any comments by the Cabinet Committee on Economic Affairs (CCEA).
- (5) **Other Supports:** Preparing any other reports as required in the procurement stage up to contract signing.

Deliverable 7: Responses to queries of potential Bidder during bidding stage including minutes of the meeting with the potential Bidder and addendum of Bidding document and draft Concession Contract

Deliverable 8: Evaluation Report of Bids

Deliverable 9: Updated Concession Contract

Deliverable 10: Updated Letter of Award for issuance to the private partner

*\*Note: The Consultant shall adjust their roles, responsibilities and duties depending upon the types of bidding process adopted by the Client as per the Procurement Guidelines for PPP Projects, 2018.*

#### **Task 5: Updating of Financial Model and Risks Matrix**

The Consultant will carry out the following activities:



- (1) Updating the Financial Model based on the financial proposal of the private partner.
- (2) Making comparison of key financial parameters (such BCR, NPV, IRR, gearing ratio, debt service capability, revenue projection, tax obligations, VGF requirement, minimum payment guarantee, operations sustainability, etc.) as on feasibility and as of bidding.
- (3) Determining the revenue projection, income statement, balance sheets, and cash flow statements projection over the life of the project.
- (4) Calculation of termination payments at various scenarios (both time and events) and determination of contingent liability of the Contracting Authority or the Government.
- (5) Updating the risks matrix based on the negotiated contract.

Deliverable 11: Updated Financial Model

Deliverable 12: Updated Risks Matrix

Deliverable 13: Financial Assessment and Project Assessment Report

#### **Task 6: Support during Financial Closing**

The Consultant will carry out the following activities:

- (1) Supporting RHD during financial closing.
- (2) Supporting RHD in preparing various technical, commercial and legal reports between contract signing and financial closing.
- (3) Preparing the assignment closing report including lessons' learned from the project.

Deliverable 14: Reports and/or Documents based on above task as and when required.

Deliverable 15: Assignment Closing Report

## **4 Duration of the Assignment**

The assignment is expected to continue over a period of twenty-four(24)months from the date of commencement.

## **5 Implementation Arrangement and Staffing**

The assignment shall be implemented by a consulting firm or a joint venture of consulting firms with one or more sub-consultants (either firm or individual). It is anticipated that about 24 staff-months of input by international Key and 28 person-months by national Key personnel. The Consultant will have the following key experts to carry out the assignment.

**Table 1: Staffing Requirements**

SN	Position	No. of Staff	Total Staff Months
<b>*International Key Expert:</b>			
1.	Team Leader	1	6
2.	PPP Commercial Expert	1	4
3.	Financial Modelling Expert	1	2
4.	Legal Expert	1	3
5.	Technical Expert-1	1	4
	Sub-total International Experts =	5	19
<b>National Key Expert:</b>			
1.	Technical Expert-2	1	6



SN	Position	No. of Staff	Total Staff Months
2.	Procurement Expert	1	4
3.	Legal Expert	1	5
	Sub-total National Experts =	3	15
	**Other Experts (as and when required)		6
	Grand Total=	8	40

*\*An International Key Expert must have PPP working experience in at least two countries. An expert having only one country experience in PPP will not be considered in evaluation.*

*\*\*The Consultant may use the staff months for national experts (if required and does not cover the existing skills and expertise of the team) required for the assignment subject to prior agreement with the Client. The budget for other experts is BDT 2,400,000.00 inclusive of all taxes and VAT and the Consultant is not required to include this price in its financial proposal.*

SN	Position	Qualification and Experience	Project Specific Experience
<b>International Key Experts:</b>			
1.	Team Leader	(i) At least master degree in any discipline of engineering, business administration (finance or management), economics, or law;  (ii) Minimum 20 years of professional experience.	(a) Minimum 8 years' PPP transaction experience in road development projects; (b) Completed minimum 4 PPP road transaction assignments up to contract signing; (c) Completed minimum 2 PPP road transaction assignments as team leader; (d) Worked on lenders' side in at least 1 PPP road project; and (e) Completed at least 1 PPP road transaction assignment in SAR region.
2.	PPP Commercial Expert	(i) At least master degree in any discipline of engineering, business administration (finance or management), economics or law;  (ii) Minimum 15 years of professional experience.	(a) Minimum 5 years' PPP transaction experience in road development projects; (b) Involved in designing commercial terms and conditions of at least 3 access controlled highway/ expressway implemented on BOT basis; (c) Worked on lenders' side in at least 1 PPP road project; and (d) Completed at least 1 PPP road transaction assignment in SAR region.
3.	Financial Modelling Expert	(i) At least master degree in finance, business administration (finance), economics, professional chartered accountant or chartered financial analyst;  (ii) Minimum 15 years of professional experience.	(a) Minimum 7 years' experience in financial analysis in green-field investment projects, merger and acquisition and buyout; (b) Completed minimum 2 PPP road transaction assignments as Financial Modeler; (c) Worked on investor's side in at least 1 PPP road project as Financial Modeler; and (d) Completed at least 1 PPP transaction assignment in SAR region.



4.	Legal Expert	(i) At least master degree in law with commercial practices; (ii) Minimum 15 years of professional experience.	(a) Minimum 10 years' PPP transaction experience of which 5 years in PPP road development projects; (b) Completed at least 3 PPP road transaction assignments from preparation of Concession Contract up to contract negotiation and signing; (c) Worked on lenders' side in at least 1 PPP road project; (d) Worked as a member of a dispute resolution board, a member of arbitration panel or a defence lawyer to the arbitration tribunal for at least 1 case; and (e) Completed at least 1 PPP transaction assignment in SAR region.
5.	Technical Expert-1	(i) At least master degree in any discipline of civil engineering; (ii) Minimum 20 years of professional experience.	(a) Minimum 5 years' PPP transaction experience in road development projects; (b) Involved in the preparation of Request for Proposals document and draft Concession Contract for at least 3 PPP road development projects; and (c) Worked on lenders' side in at least 1 PPP road project.
<b>National Key Experts:</b>			
1.	Technical Expert-2	(i) At least bachelor degree in any discipline of civil engineering; (ii) Minimum 20 years of professional experience.	(a) Minimum 10 years' experience in highway/ expressway design and construction supervision ; (b) Involved in bridge design of at least 3 bridges of 0.5km or more; and (c) Involved in design or construction supervision of at least 2 flyovers.
2.	Procurement Expert	(i) At least bachelor degree in any discipline of engineering or master degree in business administration (finance or management), economics, procurement and supply management, or law or equivalent; (ii) Minimum 15 years of professional experience.	(a) Minimum 10 years' experience in public procurement of which at least 5 years in infrastructure project procurement ; (b) Involved in preparation of bidding document of at least 2PPP projects; and (c) Involved in evaluation of proposals of at least 1PPP project.
3.	Legal Expert	(i) At least [bachelor/ master] degree in law; (ii) Minimum 15 years of professional experience.	(a) Minimum 7 years' experience as commercial lawyer; (b) Completed legal due diligence for at least 2 PPP projects in Bangladesh; and (c) Drafting experience of PPP or lease contract of at least 1 PPP project.

4.	Environment Expert	(i) At least master degree in environmental engineering, environmental science or economics; (ii) Minimum 10 years of professional experience.	(a) Minimum 5 years' experience in environmental impact assessment and environmental monitoring in road development projects; (b) Minimum 10 years' experience in environmental impact assessment and environmental monitoring in infrastructure development projects (i.e. road, electricity, energy, ports, etc.); and (c) Completed at least 2 road construction supervision assignments as Environment Expert.
5.	Social Expert	(i) At least master degree in any discipline of social sciences; (ii) Minimum 15 years of professional experience.	(a) Minimum 5 years' experience in social impact assessment and social development in road sector development projects; and (b) Completed at least 2 road construction supervision assignments as Social Expert.

## 6 Reporting Requirements

The Consultant will deliver the following reports and documents:

SN	Outputs/Deliverables/ Reports	Submission Deadline	No. of copies
1.	Inception Report	Within 15 days of CS	10
2.	Deliverables 1-2	Within 1 month of CS	~
3.	Deliverable 3	Within 3 months of CS	~
4.	Deliverables 4-6	Within 5 months of CS	~
5.	Deliverable 7	As and when required	~
6.	Deliverable 8	Within 10 months of CS	~
7.	Deliverable 9	Between 10-14 months of CS	~
8.	Deliverable 10	As and when required	~
9.	Deliverables 11-13	Within 15 months of CS	~
10.	Deliverable 14	As and when required	~
11.	Deliverable 15	After Financial Close or within 24 months of CS	15 copies

*Note: In case of reports, the number of copies is 10. In other cases, the number of copies will be as per requirements of the Client depending on the outputs.*

## 7 Payments Schedule

The payments will be made to the Consultant as per the schedule below:

- (1) 10% of the Contract Price upon submission of Inception Report.
- (2) 10% of the Contract Price upon submission of Deliverables 1-3.
- (3) 20% of the Contract Price upon submission of Deliverables 4-6.
- (4) 20% of the Contract Price upon submission of Deliverables 7- 8.

(5) 20% of the Contract Price upon submission of Deliverables 9-10.

(6) 20% of the Contract Price upon submission of Deliverables 11-15.

## **8 Facilities to be provided by the Client**

RHD will provide the Consultant with all available studies/reports and data relevant to the services. The Client and/ RHD (where necessary) shall provide assistance where the Consultant, for the purpose of executing these services, needs to coordinate with other Government agencies, and non-government agencies. RHD will also provide meeting rooms as and when required by the Consultant for this assignment purpose including pre-bid conference. The Consultant will not get any office space for its staff within the Client's office for doing normal business and transport facilities for local movement.

