Request for Expression of Interest

Government of Nepal (GoN)

Name of Employer: Office of the Investment Board (OIBN)
Date: 06-11-2022 00:00
Name of Project: Feasibility Study (FS) for the Development, Operation and Management of Electric Bus Rapid Transit (eBRT) in Ring Road (NH39)

1. Government of Nepal (GoN) has allocated fund toward the cost of Feasibility Study (FS) for the Development, Operation and Management of Electric Bus Rapid Transit (eBRT) in Ring Road (NH39) and intend to apply portion of this fund to eligible payments under the Contract for which this Expression of Interest is invited for International consulting service
2. The Office of the Investment Board (OIBN) now invites Expression of Interest (EOI) from eligible consulting firms ("consultant") to provide the following consulting services: Feasibility Study (FS) for the Development, Operation and Management of Electric Bus Rapid Transit (eBRT) in Ring Road (NH39)
3. Interested eligible consultants may obtain further information and EOI document free of cost at the address Office of the Investment Board (OIBN),ICC Complex, New Baneshwor, Kathmandu, Bagmati Province, Nepal during office hours on or before 12-12-2022 12:00 or visit e-GP system www.bolpatra.gov.np/egp or visit the client's website https://ibn.gov.np
4. Consultants may associate with other consultants to enhance their qualifications.
5. Expressions of interest shall be delivered online through e-GP system www.bolpatra.gov.np/egp e-GP System: www.bolpatra.gov.np/egp on or before 12-12-2022 12:00
6. In case the last date of obtaining and submission of the EOI documents happens to be a holiday, the next working day will be deemed as the due date but the time will be the same as stipulated.
7. EOI will be assessed based on Qualification 40.0 %, Experience 50.0 %, and Capacity 10.0 % of consulting firm and key personnel. Based on evaluation of EOI, only shortlisted firms will be invited to submit technical and financial proposal through a request for proposal.
8. Minimum score to pass the EOI is 60

EXPRESSION OF INTEREST
(EOI)

Title of Consulting Service: Feasibility Study (FS) for the Development, Operation and Management of Electric Bus Rapid Transit (eBRT) in Ring Road (NH39)

Method of Consulting Service: International

Project Name : Feasibility Study (FS) for the Development, Operation and Management of Electric Bus Rapid Transit (eBRT) in Ring Road (NH39)

EOI : 02/CS/ICB/OIBN/2079/80

Office Name: Office of the Investment Board (OIBN)

Office Address: ICC Complex, New Baneshwor Kathmandu

Funding agency : Government Budget

Abbreviations

CV	-	Curriculum Vitae
DO	-	Development Partner
EA	-	Executive Agency
EOI	-	Expression of Interest
GON	-	Government of Nepal
PAN	-	Permanent Account Number
PPA	-	Public Procurement Act
PPR	-	Public Procurement Regulation
TOR	-	Terms of Reference
VAT	-	Value Added Tax

Table of Contents

A. Request for Expression of Interest

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B. Instructions for Submission of Expression of

Instructions for Submission of Expression of Interest

1. Expression of Interest may be submitted by a sole firm or a joint venture of consulting firms.
2. Interested consultants must provide information indicating that they are qualified to perform the services (descriptions, organization and employee and of the firm or company, description of assignments of similar nature completed in the last 7 years and their location, experience in similar conditions, general qualifications and the key personnel to be involved in the proposed assignment).
3. This expression of interest is open to all eligible consulting firm.
4. In case, the applicant is individual consultant, details of similar assignment experience, their location in the previous 4 years and audited balance sheet and bio data shall be considered for evaluation.
5. The assignment has been scheduled for a period of 18 months. Expected date of commencement of the assignment is 01-03-2023.
6. A Consultant will be selected in accordance with the QCBS method.
7. Expression of Interest should contain following information:

   (i) A covering letter addressed to the representative of the client on the official letter head of company duly signed by authorized signatory.

   (ii) Applicants shall provide the following information in the respective formats given in the EOI document:

   - EOI Form: Letter of Application (Form 1)
   - EOI Form: Applicant’s Information (Form 2)
   - EOI Form: Work Experience Details (Form 3(A), 3(B) & 3(C))
   - EOI Form: Capacity Details (Form 4)
   - EOI Form: Key Experts List (form 5).

8. Applicants may submit additional information with their application but shortlisting will be based on the evaluation of information requested and included in the formats provided in the EOI document.
9. The Expression of Interest (EOI) document must be duly completed and submitted in sealed envelope and should be clearly marked as “EOI Application for Short-listing for the Feasibility Study (FS) for the Development, Operation and Management of Electric Bus Rapid Transit (eBRT) in Ring Road (NH39).The Envelope should also clearly indicate the name and address of the Applicant. Alternatively, applicants can submit their EOI application through e-GP system by using the forms and instructions provided by the system.
10. The completed EOI document must be submitted on or before the date and address mentioned in the “Request for Expression of Interest”. In case the submission falls on public holiday the submission can be made on the next working day. Any EOI Document received after the closing time for submission of proposals shall not be considered for evaluation.

C. Objective of Consultancy Services or Brief TOR

Government of Nepal
Office of the Investment Board

New Baneshwor, Kathmandu, Nepal

Phone: 977-1-4475277, 4475278, 4475280

Fax: 977-1-4475281

TERMS OF REFERENCE (TOR)

For

FEASIBILITY STUDY (FS) FOR THE DEVELOPMENT, OPERATION AND MANAGEMENT OF ELECTRIC BUS RAPID TRANSIT (eBRT) IN RING ROAD (NH39)

1 Background

The Investment Board Nepal (IBN), established in 2011, is a high-level government body chaired by the Right Honorable Prime Minister. IBN functions as a central fast-track government agency established to facilitate economic development in Nepal by creating an investment-friendly environment, mobilizing, and managing domestic as well as foreign investments.

IBN serves as a "one window facility" for domestic and foreign investors pursuing large scale projects. It selects proposals for investment, facilitates investment, coordinates between various ministries, and monitors the progress of approved projects. As a private face for the government, it leads the promotion of investment, supports investors, signs fair and bankable contractual agreements with developers, and cooperates with Government in facilitating the execution of these agreements.

Public Private Partnership and Investment Act, 2019 gives the Office of the Investment Board of Nepal (OIBN) a broad mandate to fulfill the role of a Public Private Partnership ("PPP"), Private Investment as well as an Investment Promotion agency.

OIBN has been playing a role of an investment approval agency as well as facilitator especially for mega projects. Public Private Partnership and Investment Act, 2019 section 4 (d) and section 32 states that any PPP projects having the costs estimate of above six billion rupees except hydro power including energy projects or hydro power including energy projects having the capacity above 200 MW and private investment project having the cost estimate of above six billion rupees respectively falls under IBN's mandate.

In these regards, the OIBN is seeking a consulting firm to conduct a Feasibility Study (FS) for the development, operation, and management of Electrified Bus Rapid Transit System in Kathmandu Ring Road.

2 Objectives

The objective of the proposed feasibility study is to examine the technical, economic, financial, social and environmental viability of the proposed electric BRT System in Kathmandu Ring Road. The specific objectives are as following:

- Carryout a feasibility study for the BRT corridor along Kathmandu Ring Road, including service and operations plan, physical and operational design of the BRT system, traffic engineering improvements, application of ITS technologies, fare collection mechanisms, etc.,
- Estimate the scale of environmental benefit while adopting electric BRT System
- Evaluate the PPP investment modality about the feasibility of BRT System and recommend the appropriate modality that makes the project attractive and feasible to the investors.

3 Scope of Work

Consultant shall prepare the feasibility study for the development and operation of the BRT System clearly spelling out the feasible engineering, technological and management solutions. The Consultant should keep in mind that the systems are safe, efficient and convenient to the users as well as public living adjacent to the road.

The scope of consulting services for the Feasibility Study shall include, but not necessarily limited to the following:

1. Collect and review previous study reports, manuals, standards, guidelines, legislations, policies & plans, maps, drawing, case studies of BRT in cities etc.
2. Conduct desk study and field reconnaissance survey, analyze the available data and identify data gap of previous study & recommend the further studies needed with justification.
3. Prepare preliminary project layout and configuration of project components in inception report to assist further field survey and investigation.
4. Analyze the existing travel characteristics of the city with major focus on the collection of primary data including road inventory survey, traffic volume count, speed and delay study, intersection directional count, passenger patronage study.
5. Based on the trend pattern and status quo analysis of traffic demand, forecast the value for design year.
6. Prepare and establish design criteria for the design of all major project components and associated structures as per recognized best practices and applicable standard.

7. Prepare conceptual layout & design considering alternative configuration of project component and conduct optimization of the components & associated structures of the project for the best option and optimum use of resources. The final preliminary components and designs to be considered for feasibility study shall be finalized through discussion.
8. Prepare quantity and cost estimates derived from latest schedule of rates and/or international best practices.
9. Access the social and environmental impact associated with the project and prepare the scoping and ToR required for EIA/IEE.
10. Carry out economic and financial analysis of the project and perform the sensitivity analysis of the project, including cost allocation and cost sharing among project components.
11. Prepare feasibility study report with full documentation on the actual design including all design principal criteria, parameters and standards to which the project has been designed; all major calculations and analysis including all the layout and drawings prepared are to be handover to OIBN in the form of hard and soft copies along with working format.

The scope is further elaborated in the headings below:

3.1 Review of Existing Studies and Baseline Survey

The consultant shall review and validate existing data and preliminary technical studies by assessing their completeness, quality and relevance; shall identify inconsistencies and/or gaps; and the data needs for a subsequent project structuring phase. It shall include, but not necessarily limited to the following:

The consultant shall conduct an exhaustive **literature review** on the past studies and findings on transport sector and urban development in Kathmandu Valley and in Nepal. The review shall include international best practices in BRT and eBRT development and operation. A **detailed case study report** of an operating e/BRT System should also be prepared.

Vehicle Growth and Composition: This should focus on the growth of motorized transport, private (two-wheeled and four wheeled) and public, the age and size of the bus fleet (including

mini-buses and vans/para transit), the change in public transport passengers and the changes in operating speeds (which directly and proportionately affect public transport fleet capacity).

Road Network Characteristics: The main corridors and arterials including any land use and/or expected/planned urban development changes should be mapped and analyzed for their impact on the traffic.

Transportation Nodes: This should cover proposed railway stations, airport, intercity bus terminals and urban bus terminals. Also Include status and scenario related to NMT infrastructure and last mile connectivity to nearby trip generation/attraction centers.

Markets: Popular markets and business centers are often large traffic attractors. These should be indicated using maps and tables, giving their main activities and their size.

Urban Public Transportation System: This should include a description of the fleet, its size, types of units in operation, status, and trends in terms of service, overall route plan, fare levels, passengers carried per average workday, financial performance of the existing operators and institutional framework. The following information should be collected (as far as possible) for each organization or company operating on the corridor (with or without legal formalization):

- Association type
- Administrative structure
- Operational structure
- Participation by type of service and vehicle in the total corridor demand
- Coverage (by route or area)
- Fare collection and distribution
- Operational costs
- Maintenance costs

Traffic Characteristics: Information on traffic volumes, composition, speed and delays, pedestrian and NMV crossings should be collected and studied. Restrictions on pedestrian crossings may be a critical factor in the design and operation of BRT; hence any existing experience with median barriers or other channelization methods should be highlighted.

Transport Safety: The issue of traffic safety along the major transport corridors should be studied. The conflict between pedestrian and motorized vehicles, crashes at all controlled or

uncontrolled intersections, and black spot sites along the proposed BRT corridor should be studied.

Other On-Going Studies and Projects: There should be a brief description of other on-going transportation projects in the study area, including the provision of new infrastructure (roads, widening, intersection improvement, mass transit projects and their status, completed projects and available data etc.)

Details of Traffic and Transportation Studies Undertaken for the City: Past studies on traffic and transport in the study areas including traffic volume and composition data, parking studies, NMT network and walkability, transport master plan, mobility plan, traffic model, land use plan, zoning, public transport, etc. should be studied.

Traffic Surveys: Apart from the secondary information and data, the consultant shall carry out road inventory and land use survey along with detailed assessment of all the major nodes within the project site. Primary survey should include (but not limited to) classified traffic count study; origin-destination characteristics; intersection volume count at all major intersections, passenger ridership survey; speed and delay study and current public transport perception survey.

The **turning movement** should be studied for minimum of twelve (12) intersections with seven major intersections along the Ring Road (Koteshwor, Saatdobato, Balkhu, Kalanki, Maharajgunj, Chahabihil, Gausala) and other five inside the Ring Road. Additionally, the study should also comprise of fifteen number of link volume study along and inside Ring Road. The additional locations for the volume study shall be proposed by the consultant and finalized during initial discussions.

A **public opinion survey** of a valid sample of the total passenger demand (workday) on the corridor should be carried out to identify the basic socio-economic groups and their views. This opinion survey should show users' perception towards services in terms of general quality of service, waiting times, physical state of the vehicles and treatment by drivers and others, expected improvements in service quality and acceptance of BRT/eBRT. The traffic volume count along links and intersections should also be associated with speed and delay studies.

A **case study visit** of an operating BRT system shall be done to sensitize the team on the features and operation modalities of e/BRT. The visit should help understand possible issues and their potential solution as practiced abroad and contextualized for Kathmandu, and thus be a part of the preliminary design and implementation plan for the eBRT in Kathmandu.

3.2 Transport Demand Modeling

The Consultant shall prepare a travel demand model that is responsive to the plans and policies in Nepal/Kathmandu and can provide estimates of future travel forecasts in a simple manner. The model should integrate household activities, land use patterns, urban growth, social/tourist/ industrial demands as warranted, traffic flow, and regional demographics. The core of the proposed model system can be a household activity simulator that determines the locations and travel patterns of household member's daily activities by trip purpose. The model should estimate travel behavior regarding longer term choices of residential and employment location and, land use and adaptive behavior in response to transportation system changes including fare and pricing policy.

Through use of any suitable software namely Trans CAD, SATURN, CUBE, VISSIM or any other related to public transport, the following analysis need to be done:

- Model mode split, including walk, public transport modes (public bus, taxis, etc.) and private transport (motorcycle, car, etc.).
- Demand that e-BRT could attract upon construction considering different probable scenarios also responding to traffic demand management measures such as parking fees, road user charges and congestion pricing as well as the staggering of working hours, flexi hours and multiple shift work.
- Prepare a multi-modal transport integration plan for the transport in the ring road with e-BRT system operating on it. The study needs to include major arterial roads and traffic on them, connecting to or passing through the ring road.

Travel demand analysis for eBRT for the horizon year: The consultant shall develop a travel demand forecast model for eBRT for the proposed horizon year. The model should provide good estimates for the diverted and generated demand for the proposed eBRT system. The demand forecast model should make traffic demand estimates and establish possible traffic growth rate scenarios based on (i) trend growth, and (ii) demand elasticity methods in respect of all categories of passengers. Consultant shall also make estimates of generated traffic (due to development of the influence area of the BRT). The choice of the traffic projection models, the inputs to the models and the assumptions made shall be clearly stated with justification. The traffic demand estimates shall be done for the period of 30 years and provide an annual estimation over that period.

The consultant needs to analyze the possibility of other mass transit systems and comparatively justify the eBRT.

3.3 BRT Project Design

The consultant shall review and develop preliminary project design providing an assessment of the BRT system elements that are needed at feasibility stage. The project preliminary design must consider the physical and operational feasibility reflecting right-of-way configuration, junctions, stations, terminals, location of the dedicated bus lanes, areas along in which the buses will operate in mixed traffic, among others. The preliminary design should detail the following aspects:

i. Consider demand forecasts to inform the BRT design, ensuring that the design provides optimal capacity, avoiding infrastructure that is overly expensive and consumes too much right-of way that may be otherwise used for footpaths, bike lanes, or private vehicles, but also avoiding a design that will lead to overcrowded stations and low bus speeds.

ii. Assess alternative right of way for the various sections with the objective of minimizing, to the greatest extent possible, social impacts and expropriation costs due to road widening.

iii. Assess the needs for any additional bridge, tunnel, overpass, underpass, or elevated busway support along the route and provide preliminary design and drawings for the same. Necessary investigations and studies (primary/secondary) will have to be done to justify the design and parameters considered.

iv. Determine the adequacy of the engineering designs, pavement design, drainage, road signaling and others (both to address road safety aspects for vehicles and pedestrians and to allow for enforcement of bus-only lane operations).

v. Assess alternatives for BRT configuration, including median alignment and curbside alignment, as well as off-board or on-board fare collection, considering comfort and safety criteria. Aspects to be considered in this assessment include bus boarding and alighting volumes at stops, curbside activity, and road width. Availability of land for different components and features should also be assessed.

vi. Determine the potential to use renewable energy sources as a source of electricity for BRT stations, including lightning, ticketing, surveillance, and other ITS

elements. Consider the use of greenery and landscaping in stations and planting along BRT routes, for example, as a divider between the BRT system and other traffic lanes.

vii. Life cycle analysis of BRT system with and without electrification and recommend the suitability of Electric BRT System.

viii. Details of power supply options (battery-based charging station, intermittent charging at bus stop or others), signaling, information and ticketing systems.

ix. Passenger Dispersal, transfer, and integration facilities with other modes of public transport.

x. Technical investigations of park and ride and other commercial entities that could boost BRT ridership.

xi. Study of various modern signaling and telecommunication systems and description of salient design features, broad outline of specifications of the equipment and power supply system etc. of the recommended system.

xii. Ticket management system, including technology, sales points/kiosks, monitoring, integrating other services (if deemed suitable), clearinghouse, and back-office support.

3.3.1 Network And Roadway

Conceptual Design: The conceptual design relates ideas of how the BRT system will work, where it will operate/run, who will benefit from the implementation, how it will be operated and what other road works or urban design improvements need to be incorporated in the project.

Based on the basic elements involved, estimates need to be made on how much the infrastructure will cost, how many bus units will be needed and what will be the operating cost. From this data, an estimate can also be made of the level of fares needed to cover operating costs, or the level of subsidy required to provide for the intended demand.

It is also important that the suitability of BRT for a particular metropolitan area should be carefully examined with phased introduction of the system proposed if necessary to reflect physical, institutional, and regulatory constraints. BRT in Ring Road could be a part of a broader mass transit network (BRT, MRT & Others). Options available for such cases include:

- Exclusive corridors or corridors with mixed traffic
- 'Open' or 'closed' systems
- Single operator or multiple operators (with or without common ticketing)
- Bus technology and capacity

Demand Estimation: The overall demand for different modes should be estimated based on O-D data collected along the ring road and other routes passing along or through it. The corridor demand can also be verified through traffic count and projection along the corridor.

Geometric Design of the Corridor: The information on infrastructure would be collected by homogeneous section, which should be defined at the Conceptual Stage.

- Length of the road
- Geometry of the section: number and width of lanes; sidewalks
- Physical state of the pavements
- Traffic circulation
- Location of traffic lights and their phases
- Bus stops and infrastructure
- Geometry of intersections

This preliminary design should also consider the designs for NMVs and pedestrians, including alternative cross-sections including NMVs tracks, pedestrian facilities, plan/profile for typical sections. The study team must explore options for effective movement along entire Ring Road, including section with reduced right of way such as Gausala – Chahabihil; Koteshwor – Tinkune and others (if any).

Pavement design: Consideration of design period and traffic, sub-grade strength design, drainage arrangement, and preliminary pavement design needs to be carried out. The pavement should be reinforced concrete (40cm) at junction and stations to support the repeated loads during braking and accelerating. If the busway is a completely new pavement, then a rigid concrete option is recommended; where an existing highway is being adapted, the most cost-effective solution may involve conserving the lower-loaded running sections of the flexible pavement.

Traffic Management: Traffic management measures along the planned BRT corridor and adjacent routes/intersections should be considered. This should cover motorized traffic, 2-wheeled vehicles, cycle users and pedestrians.

- Traffic management on roads where the BRT will operate,
- Traffic management on main roads and/or secondary roads that influence the operation of the new routes,
- Traffic flow management at conflicting intersections including traffic signals with priority to BRT,
- Measures for bicycles and signage,
- Measures for pedestrians and safety, and
- One-way arrangement parallel to the BRT corridor (if necessary).

Propose BRT Station: A set of sample designs for the proposed BRT stations should be made, based on local demand, and international standards and practices for different alternatives of dedicated bus lane configuration and ticketing system. The design of the station should consider at level boarding, ticket/card scanning system and flow of passengers to and from the station.

Network integration & expansion: The planned stations and their layout should consider integration with the existing network of public transport/routes that passes along or through the Ring Road. The layout should also consider possible expansion and integration with other mass transit proposed for major routes/corridors by this study or other past studies. Options where additional BRT routes would make the project more viable should also be studied.

3.3.2 Public Transport Corridor Data

Initial Data on Supply of Public Transport Services: The data needed to characterize the routes operating in the area of influence of the corridor are:

- Routes by length, frequency / headway at each critical section of the route and by direction, peak and off-peak,
- Number of daily trips,

- Journey times (peak and off-peak) for the whole corridor,
- Delays, indicating times and causes,
- Stopping times, and
- Average passenger waiting times at stops.

Fleet Data: This includes:

- Number of vehicles in operation on each route, classified by type and nominal capacity,
- Age of each vehicle, and
- Seat layouts, doors, circulation, ticket collecting mechanism, handrails, noise levels (internal and external), emissions, etc.
- Type of engine (electric, otherwise)

Public Transport Demand: The data presented should cover:

- Daily demand for each route on the corridor,
- Daily demand on each section of the corridor,
- Demand per route in peak and off-peak periods,
- Average distance and trip time for each user type (by gender if required),
- Average walking distance for each user type,
- Turnover indexes,
- Transfers (if 2 units are needed to make the trip or if a major transfer facility is involved),
- Areas of trip origin on the corridor, and
- Areas of trip destinations on the corridor.

These data and information will be required to be collected, managed and analyzed.

Operational Design of Busway and General Traffic: The operational design of the traffic in the corridor consists in showing how this will be part of the functional design, including signals/phasing, specifications of traffic management measures and materials.

3.3.3 Vehicles, Services and Operations

It should include but not limited to the following:

Bus Type Choice and Performance Specification: It should cover the following specification:

- Capacity and other vehicular dimensions,
- Specification of environmental contamination with reference to EPA or similar standards,
- Corridor circulation,
- Special access mechanism,
- Fare collection mechanism (if used), and
- Useful (working) life of the vehicle.

Fleet Requirements: This should include a description of the following items:

- Relationship between the operational design and the corridor demand,
- Method used to calculate maximum and minimum frequencies, journey cycle times per route, operational speed and nominal capacity of the vehicles,
- Analysis of peak and off-peak periods, and
- Level of service offered to users during different periods of the day.

The result should be the total fleet size, per type, as allocated by route during the peak hour, with an estimated daily run-out mileage for each unit type. This can then be used to estimate overall operating cost. It Should recommend how current buses & bus operators need to be managed/addressed.

Along with the future assessment of the BRT buses; it should also recommend how the current bus operator can be integrated or managed on board with the proposed BRT system.

3.3.4 Terminals

The consultant will also be required to provide details of planning, design, costing and mode of operation of the BRT stations terminals, parking facilities, and maintenance and long-term charging facilities for the BRT System. The stations and transfer terminals should include facilities for special needs, parking for bicycles and/or private vehicles. It should also cover the operational aspects of stations and terminals (areas of passenger accumulation, layout of platforms and mechanisms of operational control). Terminal should have bus parking, charging/fueling area, employee vehicle parking area, admin block and canteen, washing, inspection and maintenance area.

3.4 Environmental Assessment

The environmental assessment should be carried out as per EPA 2076, EPR 2077 and other pertinent laws of Nepal. The scoping and ToR document need to be submitted at the end of the project. The environmental impacts of the proposed works on the corridor will require a plan of environmental mitigation, as well as monitoring to identify future possible negative impacts. The assessment should include the road safety aspects for all users, specifically pedestrians, cyclists, 2-wheeled vehicle users, passengers and other road users along the corridor.

It should include the following:

- Evaluation of the direct environmental impacts caused in the construction stage, as well as those during the operation of the corridors.
- Development of mitigation measures for impacts on pedestrians, drivers, passengers and neighboring properties in the area of influence.
- Recommendations concerning engineering projects from the environmental point of view.
- Preliminary estimate of costs of these measures and designation of the responsible body for their execution.
- Identification of the type and characteristics of the organizations that would be displaced by the introduction of the new services in the corridors, defining: (i) displaced workers (drivers and other); (ii) small proprietor-operators (person-vehicle); (iii) informal workers (without formal labor relationship or legal protection); and (iv) large operators.

The study will provide scoping and terms of reference associated with Environmental Impact Assessment of the project.

3.5 Assessment of Electric Mobility

As a part of electric mobility assessment, the consultant needs to carry out the following analysis:

- GHG emissions profile of the vehicles along the corridor.
- Greenhouse gas emission analysis to be carried out in relation to emission reduction potential of replacing/converting current fleet.
- Life Cycle cost analysis of electric (all forms of electric vehicles ranging from battery based/ direct electricity based/ hydrogen fuel/ hybrid based) and fossil fuel vehicle.
- Emission modeling.
- Assess the requirement of charging infrastructure and extent of specification for charging infrastructure, and location of charging infrastructure within Kathmandu valley.
- The impact on the local and national grid should be assessed, which will determine long term charging locations, schedule, and technology.
- Access the management and disposability issues associated with the battery of electric buses.

3.6 Financial and Economic Analysis

The consultant shall estimate the preliminary capital costs of project delivery, covering all infrastructure, equipment, right of way, systems, and the operating costs of service provision based on the projected level of service. The analysis should be prepared under different sets of cost assumptions covering a sensitivity range from optimistic to very conservative, not limiting the analysis to existing standardized public price tables produced by official bodies but by using real life benchmarks for similar regions. An operating and maintenance cost model should be developed for the BRT based on accepted international practices, required labor and other resources, with costs that are representative for the region.

Thus, the cost estimates of the following items should be included:

- Cost of infrastructure for the corridor – based on unit costs as far as possible

- Cost of maintenance of the infrastructure (per annum)
- Cost of facilities – stations and terminals
- Maintenance cost and operation of the facilities – stations and terminals (per annum)
- Fleet investment (public and private)
- Cost to mitigate social and environmental impacts
- Additional cost
- Subsidy system if warranted

The financial and economic analysis should cover the following:

Estimation of Revenues by Source

Revenues from each source should be estimated for each phase and different fare structures need to be identified. The revenue items may include:

- Fare revenue
- Advertising
- Route bidding etc.
- Property development etc.

Financial and Economic Parameter

It requires a cost-benefit analysis, comparing – in economic terms – the situation implementing the project with the "do-nothing" case. The costs considered above should be evaluated against benefits, excluding items such as taxes, and using market prices as far as possible. The results would normally be expressed in terms of:

- Internal rate of return
- Net present value
- Cost-benefit ratio
- Sensitivity of project viability to cost overrun/revenue reduction

Details should be given of all assumptions made in the analysis.

Along with such financial and economic analysis, qualitative and quantitative **Value for Money (VfM) Assessment** will also be required.

A value for money analysis compares different approaches to deliver a project to see which one is most likely to achieve the project's needs and goals at the lowest cost during its lifecycle. This assists the public owner in determining the most appropriate delivery mode and gaining an in-depth understanding of the whole project life cycle costs early in the project's life cycle.

Qualitative VfM analysis usually takes the form of a questionnaire that assesses many components of a project. It assesses project characteristics that aren't measurable, as well as financial and other factors that will be used in the quantitative analysis. It is done in the form of a multiple-choice or open-ended questionnaire. It highlights challenges that may affect the project in order to identify the potential of VFM areas. Because this is an innovative subject, questions may be added, changed, or adjusted to account for project-specific concerns. Some of the factors that are examined by a qualitative analysis include the following: PPP project viability; desirability; interest; cash flow analysis and flexibility.

The quantitative VFM analysis should compare the expected costs of public and private sector delivery models in order to determine the least expensive procurement option. In this process, the value for money of a proposed PPP is compared to a "Public Sector Comparator" in a quantitative VFM study (PSC).

The study should explore support required from government if any based on above calculation.

3.7 Development Modality and Implementation Plan

The consultant shall investigate, analyze, and recommend the most viable development modality of the project and its components making it attractive for private sector to develop and operate under specific PPP modality. The consultant shall present a comparative chart of benefits and drawbacks of specific potential modalities under PPP and others and suggest the best modality. The consultant shall also develop and assess the scheduled implementation plan for the project and develop a phasing strategy for the implementation based on the operation modality. Consultant should also provide the institutional set up for the operation of the project.

Regulations relevant for the implementation of the project should be summarized. The process and schedule of implementing these regulatory changes must be worked out in detail. It should also provide details of implementing organization and its structure, role, functions and interaction of the agencies involved and their hierarchy. The institutional arrangement for operation and maintenance should be described in detail.

Develop an implementation plan for the proposed BRT project, providing a general timeline for implementation activities at a high-level. It should also cover project implementation plans, traffic operations, management and maintenance plan, hazard rescue plan, etc.

The Service Plan shall detail all BRT service components, including fare collection, ITS, and institutional structure. The service plan shall include (but not limited to) the following components:

- BRT services
- Bus fleet requirements
- Fare system
- ITS
- Management information system
- Institutional model
- Service contracts

The study should recommend an infrastructure plan suitable for operation and maintenance of electric vehicles (Bus) and other mass transit system and charging station for BRT. The implementation schedule of the detailed project task should also be provided.

3.8 Legal Assessment

Legal analysis in relation to the development, operation, maintenance and management of the project needs to be carried out based on available acts, laws, regulations and relevant government policies. Recommendation can be made to highlight the need for new provisions or further explanations required in the existing acts and laws to facilitate better understanding and implementation of the project without any possible conflicts.

3.9 Risk Assessment

The Consultant shall carry out risk assessment of the project and present the risk management plan by first identifying potential risks, analyzing those risks, recommending tools and methods for the management and mitigation of those risks, and monitoring mechanism.

4 Deliverables

The Draft Detailed Report and Final Detailed Report shall be submitted along with a soft copy of preliminary design, and drawings including copy of Auto-CAD, cost estimate, financial and economic analysis. The major deliverables include:

a. A set of drawings of topographic map of the major intersection and proposed station. showing all the existing features within the ROW with the proposed improvements marked hereon (e.g., new subways/underpasses/grade separators, arrangements for merging/diverging, traffic circulation, additional road furniture, relocation of utilities, etc.).

b. Traffic circulation plan indicating the location of proposed underpasses, bridges, flyovers and other structures, intersecting roads, and access roads.

c. A strip plan showing all the existing and proposed features.

d. Junction improvement plan for major and minor intersections

e. Plan for bus stops and related amenities

f. Layout and preliminary drawings of the bus parks

g. Traffic circulation plan indicating the location of proposed bus stops and other amenities.

h. Existing and proposed drainage system

i. Associated changes to the road infrastructure to accommodate bus stops, crossings etc.

j. Preliminary design of structures like underpasses, flyovers, pedestrian under passes, indicating the approximate sections and General Arrangement Drawings (GAD) required for the project.

k. Preliminary design for improvement of junctions.

l. Propose locations of bus depots, maintenance yards, parking areas, and long-term charging locations.

m. Implementation strategy and project implementation plans

n. Multi-modal transport integration plan

o. Preparation of Report of Quality Assurance Plan

p. Design of mitigation measures on Environmental and Social issues and preparation of reports.

5 Knowledge Transfer

The consultant shall carry out the various tasks in close coordination with the OIBN. The consultant shall propose appropriate methodologies to achieve effective transfer of knowledge and capacity building of the relevant counterparts in all stages of the project study in addition to the presentation and discussion on the milestone submissions. The consultant shall prepare a plan of activities to orient and sensitize the OIBN team on transport demand modeling, BRT system design, economic and financial analysis, PPP development modalities, and others through workshop and training sessions.

6 Project Timeline

The timeline for the accomplishment of various activities will be as follows:

S.N.	Report	Timeline	No. of copies
1	Inception Report that includes detailed work/activity plan and manning schedule; methods and tools with field sheets for data collection; literature review and detailed methodology for analysis and output in the final report.	30 Days	3
2	Revised Inception Report incorporating comments	60 Days	3
3	Field Report that includes preliminary summary of field works and data collection.	5 Months	3
4	Draft Report	9 months	3
5	Draft Report incorporating comments	10 months	3
6	Submission of Scoping and ToR Documents for EIA	12 months	6
7	Draft Final Report along with Final Scoping & ToR Documents	13 months	3
8	Final Report (Technical report apart from with revised Final Scoping & ToR Documents)	14 months	6

9	Approved Scoping and ToR Documents for EIA	18 months	3 Along with softcopy of the approved document.

**Monthly progress report needs to be submitted to OIBN every month*

Client will not be liable for any claim against any delay in approval of scoping and ToR documents.

7 Formation of Technical Advisory Group

IBN will form an evaluation team comprising members from all relevant agencies including experts to evaluate the report and provide comments and feedback to the consultant on each milestone submissions from the consultant.

8 Human Resource Requirement

The qualifications of the core team members shall be as follows:

S.N.	Particular	Minimum Experience (years)	Required no.	Indicative Man-Month	Minimum requirement
International Experts					
1	Team Leader/Mass Rapid Transit Expert	15	1	10	Must have a master's degree in transport or related field with experience in preparation of feasibility study report and detail design of BRT. Must have worked as team leader in similar projects
2	Transport Economist	10	1	6	Must have a CA/CFA/MBA(Finance) degree with experience in preparation of financial and economic models for feasibility or DPR of transport projects.
3	Traffic & Transport Modeler	10	1	3	Must have a master's degree in transport or related field with experience in preparation of traffic models for demand and supply and should have worked in feasibility study and detailed design of mass transport projects.
4	PPP Expert	10	1	2	Must have a master's degree in related field and worked as PPP

S.N.	Particular	Minimum Experience (years)	Required no.	Indicative Man-Month	Minimum requirement
					expert in transport related projects.
5	e-BRT System and Operation Expert	10	1	3	Must have a master's degree in transport or related field with experience in preparation of system and operation plan.
National Key Experts					
1	Traffic and Transport Planner (D.T.L)	15	1	15	Must have a master's degree in transport or related field with experience in preparation transport network assessment and feasibility study & DPR of public transport projects.
2	Traffic Engineer	10	1	12	Must have a master's degree in transport or related field with experience as traffic engineer and worked in feasibility or detailed study of public transport projects.
3	Urban Planning expert	10	1	2	Must have a master's degree in urban planning with experience in transport network & corridor planning.
4	Finance Expert	10	1	7	Must have a master's degree in economics/finance or related field with experience in preparation of financial models and VfM analysis of transport and other infrastructure projects.
5	Signaling and Communication Engineer	10	1	3	Must have a bachelor's degree in electronics and communication or related field with experience in signaling and telecommunication systems and must have prepared real time data and information sharing system.
6	Mechanical/Emission Modeler	10	1	4	Must have a bachelor's degree in mechanical engineering or related field with experience in designing mechanical components of large infrastructure projects and must have prepared emission/pollution models for large infrastructure projects.
7	Electrical Engineer	10	1	4	Must have a bachelor's degree in electrical engineering or related field with experience in

S.N.	Particular	Minimum Experience (years)	Required no.	Indicative Man-Month	Minimum requirement
					designing electro-mechanical components of mass transit system or relevant works and must have prepared emission/pollution models for large infrastructure projects.
8	Legal and Institutional Expert	10	1	4	Must have a bachelor's degree in related field with experience in preparing legal and institutional requirements of major infrastructure or transport system.
National Non - Key Experts					
1	GIS Expert	7	1	3	Must have a bachelor's degree in geography/remote sensing or related field with experience in preparing GIS based maps, analysis and database of transport network and/or urban development projects.
2	Civil Engineer	7	2	15	Must have a bachelor's degree in civil engineering or related field with experience in transport/public transport and urban development works.
3	Structural Engineer	7	1	2	Must have a master's degree in Structure or related field with experience in structural design of components of bus park, terminals, bridges and large-scale buildings.
4	Geotechnical Engineer	7	1	2	Must have a master's degree in geology/geotechnical engineering or related field with experience in geotechnical and seismic assessment of roads and/or bus terminals.
5	Social Expert	10	1	7	Must have a master's degree in sociology or related field with experience in social safeguard works of road and transport projects; must have prepared ESMF and ESMP of transport projects.
6	Environmental Expert	10	1	7	Must have a master's degree in environment or related field with experience in environment safeguard works of road and transport projects; must have prepared ESMF and ESMP along with scoping documents

S.N.	Particular	Minimum Experience (years)	Required no.	Indicative Man-Month	Minimum requirement
					and TOR of environmental impacts of transport projects.

Supporting Staffs				
S.N.	Particular	Experience (years)	Required no.	Indicative Man-month
1	Auto cad engineer	3	1	8
2	Surveyor	3	10	6
3	Draf Person	3	4	6
4	Office Manager	3	2	15
5	Support Staffs	3	2	15

Note: The CVs of all the proposed staff is required to be submitted but only the CV of international experts, Traffic and Transport Planner (D.T.L), Traffic Engineer, Finance Expert, Civil Engineers, Social Expert and Environmental Expert will be evaluated.

8.1 Role of experts

International Experts

Team Leader/Mass Rapid Transit Expert: He/she shall take the overall responsibility of conducting and delivering all the scope and output of the project from the initial stage to submission of the final report. He should work on technical aspects of the project also including risk assessment, market assessment (demand and supply) associated with project.

Transport Economist: He/she shall serve as an economic expert and will be responsible for data collection and relevant analyses pertaining to economic performance of the project and envisioned scenarios. He/she shall be responsible to prepare value for money assessment and develop financial models for the implementation of the project.

Traffic & Transport Modeler: He/she will be responsible to collect relevant data required for modeling various scenarios of transport demand and prepare estimates of the demand for horizon and project period. He should guide the national traffic engineer and deputy team leader on what sort of data need to be collected as well as must perform modeling associated with the demand projection part.

PPP Expert: He/she will be responsible to identify and evaluate various PPP modalities and recommend most suitable PPP modality that makes the project attractive and feasible to the investors for the implementation of the project. He should explore risk associated with such recommended modality and also carried out VFM assessment.

e-BRT System and Operation Expert: He/she will be responsible to study the system and operations of BRT and prepare a detailed plan service and operation of e-BRT and physical and operational design of e-BRT system. This should also include the issues on handling system and operational characteristics, charging requirements, etc.

National Key Experts

Traffic and Transport Planner (DTL): He/she shall support the TL in overall project administration and reporting. He/she will be responsible for overall planning and administration of the surveys and data collection for desired analysis and outputs. He should lead the national experts and guide then in achieving the main objectives of the task. He should lead the coordination tasks with relevant stakeholders.

Traffic Engineer: He/she will be responsible for supporting the TL & DTL and other international experts in conducting traffic surveys, and operational characteristic of various modes, transport safety, etc. and conduct analysis and prepare respective reports. He should assist international experts (team leader and transport modeler) in collecting data and assessment of movement tools.

Urban Planning Expert: He/she will be responsible for conducting studies related to the urban development and agglomeration of demography and land uses along and adjacent to the project influence area. He/she shall also be responsible for landscaping of the terminal, access roads to the bus stops and bus stop area ensuring accessibility for all.

Finance Expert: He/she will be responsible for conducting necessary study and collect financial data relevant to the project, conduct analysis and prepare financial models, and prepare reports of the same. He should carry out quantitative parameter required for VFM analysis along with assessment of various financial parameters.

Signaling and Communication Engineer: He/she will be responsible for studying various modern signaling and telecommunication systems required for the proposed project including ITS and real time data and information sharing systems.

Mechanical/Emission Modeler: He/she will be responsible for studying the mechanical aspects of the proposed alternative BRT system. He/she shall also prepare an emission model of the alternative BRT systems.

Electrical Engineer: He/she will be responsible for studying and preparing plans and estimates for the electricity supply system to the electric/hybrid buses. Shall work with

mechanical/emission modeler to prepare detailed plans of the electro-mechanical components of the project. He/she shall also prepare layouts for the electricity supply to the bus stops and terminal area.

Legal and Institutional Expert: He/she shall carry out necessary tasks related to the legal and institutional aspects and requirements for the further study and implementation of the project, including operations and maintenance. He/she shall assess the current policies, rules and regulations, and institutional aspects, and proposed required changes required.

National Non-Key Experts

GIS Expert: He/she shall be responsible for preparing GIS based maps and database of all the spatial data collected during the project study. He/she shall also conduct the required analysis based on the spatial data and prepare relevant maps and reports.

Civil Engineer: He/she shall be responsible for mobilizing and conduct the field surveys incl. traffic, engineering, social and environmental surveys. He/she will supervise data entry and management, analysis, mapping and CAD drawings.

Structural Engineer: He/she will be responsible for establishing design criteria of structural design of various components required for the implementation of the project including flyover, underpasses, administrative building and others.

Geotechnical Engineer: He/she will be responsible for conducting necessary geotechnical studies and field tests and propose necessary requirements for the project considering the soil type distribution and seismic vulnerability of the project area.

Social Expert: He/she will be responsible for the assessment of the social aspects associated with the project and propose necessary impact management and mitigation plans that will be required to be prepared. He/she shall also support the Environmental Expert in preparing scoping documents and TOR of environmental impacts.

Environmental Expert: He/she will be responsible for carrying out necessary assessment as per the relevant acts and regulation and prepare plan for mitigation measures and their estimated costs. He/she shall also prepare scoping document and ToR related to the environmental impact assessment of the project.

9 *Logistic Arrangements*

All the logistic arrangement in relation to this study and preparation of the FS shall be arranged by the consultants themselves.

10 Remuneration and Mode of Payments

The fee shall be payable in four installments as following:

- 10% of the total bid amount after inception report. (SN 2)
- 20% of the total bid amount after field report (SN 3)
- 25% of the total bid amount after the submission of Revised Draft Report incorporating comments from OIBN concerns on the submitted First Draft Report. (SN 5)
- 40% of the total bid amount after the submission of Final Report incorporating OIBN's comments. (SN 8)
- 5% of the total amount after the acceptance of Scoping and ToR Documents. (SN 9)

11 Project Duration

Total duration of this study will be fourteen months whereby the consultant is required to submit the final document to OIBN. The ToR and scoping documents are expected to be approved within 18 months.

12 *Taxation*

The consultancy firm is fully responsible to pay all taxes as imposed by the relevant laws of GoN.

13 Copyright of the Report

The consultant shall submit all the reports (Docx & PDF), working design files of models, design, CAD drawings, etc. The copyright of the reports will remain with IBN. The consulting firm is not authorized to publish any part or full report of this study without prior approval of IBN.

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Acronyms and Abbreviations

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(Addition of any other chapter based on terms of reference and scope of works)

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References

Annexes:

Performance specifications

Stakeholder and public consultations

Field studies and site investigation data/ reports

Demand surveys and forecast model sheets

Tariff studies

Site and geotechnical studies (given Nepal's vulnerability to seismic events this is important)

Design and conceptual plans

Economic calculations/ spreadsheets

Financial model / spreadsheets

Legal DD report

E&S surveys/ reports (should include gender and inclusivity aspects, as well as community benefit sharing)

Case Study/Visit Report

Any others

D. Evaluation of Consultant’s EOI Application

Evaluation of Consultant's EOI Application

Consultant's EOI application which meets the eligibility criteria will be ranked on the basis of the Ranking Criteria.

i) Eligibility & Completeness Test

Sl. No.	Criteria Title	Compliance
1	Corporate Registration	
2	Tax Clearance/Tax Return Submission	
3	VAT/PAN Registration	
4	EOI Form 1: Letter of Application	
5	EOI Form 2: Applicantâ€™s Information Form	
6	EOI Form 3: Experience (3(A) and 3(B))	
7	EOI Form 4: Capacity	
8	EOI Form 5: Qualification of Key Experts	
9	In case of a natural person or firm/institution/company which is already declared blacklisted and ineligible by the GoN, any other new or existing firm/institution/company owned partially or fully by such Natural person or Owner or Board of director of blacklisted firm/institution/company; shall not be eligible consultant.	
10	If the corruption case is being filed to Court against the Natural Person or Board of Director of the firm/institution /company or any partner of JV, such Natural Person or Board of Director of the firm/institution /company or any partner of JV shall not be eligible to participate in procurement process till the concerned Court has not issued the decision of clearance against the Corruption Charges.	
11	Net worth of the Firm or each of the Firms in JV should be positive for the last 3 consecutive years.	

ii) EOI Evaluation Criteria

A. Qualification

Sl. No.	Criteria	Minimum Requirement
1	Qualification of Key Experts	As per TOR
2	Experience of Key Experts	As per TOR

Score: 40.0

B. Experience

Sl. No.	Criteria	Minimum Requirement
1	General Experience of consulting firm	Completed Civil Engineering Services related to Transport Sector of not less than US$800,000 each in the last 7 years.
2	Specific experience of consulting firm within last 7 years. In case of person, specific experience of the person within last 4 years.	Work experiences of the firm in Feasibility Study, Detailed Design/DPR, Detailed Architecture and Engineering Design or Equvalent of BRT or Mass Rapid Transit in the last 7 years with Project Cost not less than US$800,000 each.
3	Worked in similar economy (cities of developing nation)	Experiences in Feasibility Study, Detailed Design/DPR, Detailed Architecture and Engineering Design or Equvalent of public transport services in South Asia or other developing contries in last 7 years with project cost not less than US$800,000 each.

Score: 50.0

C. Capacity

Sl. No.	Criteria	Minimum Requirement
1	Financial Capacity.[Average turnover required shall not exceed 150% of cost estimate]	Average annual turnover in million best of 3 years of last 7 fiscal years >= US$1.8 million In case of JV, the cumulative of average annual turn over of JV will be considered for evaluation and the lead firm must have at least 40% of the average turnover.

Score: 10.0

Minimum score to pass the EOI is: 60

Note : If the corruption case is being filed to Court against the Natural Person or Board of Director of the firm/institution /company or any partner of JV, such Natural Person or Board of Director of the firm/institution /company or any partner of JV such consultant's proposal shall be excluded during the evaluation.

E. EOI Forms & Formats

E. EOI Forms & Formats

Form 1. Letter of Application

Form 2. Applicant’s information

Form 3.Experience *(General, Specific and Geographical)*

Form 4. Capacity

Form 5. Qualification of Key Experts

1. Letter of Application

(Letterhead paper of the Applicant or partner responsible for a joint venture, including full postal address, telephone no., fax and email address)

Date: .....

To,

Full Name of Client: _____

Full Address of Client: _____

Telephone No.: _____

Fax No.: _____

Email Address: _____

Sir/Madam,

1. Being duly authorized to represent and act on behalf of (hereinafter "the Applicant"), and having reviewed and fully understood all the short-listing information provided, the undersigned hereby apply to be short-listed by ***[Insert name** of Client)* as Consultant for ***{Insert brief description** of Work/Services}.*

2. Attached to this letter are photocopies of original documents defining:

    a) the Applicant's legal status;

    b) the principal place of business;

3. ***[Insert name of Client]*** and its authorized representatives are hereby authorized to verify the statements, documents, and information submitted in connection with this application. This Letter of Application will also serve as authorization to any individual or authorized representative of any institution referred to in the supporting information, to provide such information deemed necessary and requested by yourselves to verify statements and information provided in this application, or with regard to the resources, experience, and competence of the Applicant.

4. ***[Insert name** of Client)* and its authorized representatives are authorized to contact any of the signatories to this letter for any further information.[1]

5. All further communication concerning this Application should be addressed to the following person,

    [Person]

    [Company]

    [Address]

    [Phone, Fax, Email]

6. We declare that, we have no conflict of interest in the proposed procurement proceedings and we have not been punished for an offense relating to the concerned profession or

[1] Applications by joint ventures should provide on a separate sheet, relevant information for each party to the Application.

business and our Company/firm has not been declared ineligible.

7. We further confirm that, if any of our experts is engaged to prepare the TOR for any ensuing assignment resulting from our work product under this assignment, our firm, JV member or sub-consultant, and the expert(s) will be disqualified from short-listing and participation in the assignment.

8. The undersigned declares that the statements made and the information provided in the duly completed application are complete, true and correct in every detail.

Signed **:**

Name **:**

For and on behalf of (name of Applicant or partner of a joint venture):

2. Applicant's Information Form

(In case of joint venture of two or more firms to be filled separately for each constituent member)

1. Name of Firm/Company:

2. Type of Constitution (*Partnership/ Pvt. Ltd/Public Ltd/ Public Sector/ NGO)*

3. Date of Registration / Commencement of Business *(Please specify):*

4. Country of Registration:

5. Registered Office/Place of Business:

6. Telephone No; Fax No; E-Mail Address

7. Name of Authorized Contact Person / Designation/ Address/Telephone:

8. Name of Authorized Local Agent /Address/Telephone:

9. Consultant's Organization:

10. Total number of staff:

11. Number of regular professional staff:

(Provide Company Profile with description of the background and organization of the Consultant and, if applicable, for each joint venture partner for this assignment.)

3. Experience

3(A). General Work Experience

(Details of assignments undertaken. Each consultant or member of a JV must fill in this form.)

S. N.	Name of assignment	Location	Value of Contract	Year Completed	Client	Description of work carried *out*
1.						
2.						
3.						
4.						
5.						
6.						
7.						

3(B). Specific Experience

Details of similar assignments undertaken in the previous seven years
(In case of joint venture of two or more firms to be filled separately for each constituent member)

Assignment name:	Approx. value of the contract (in current NRs; US$ or Euro)[2]:
Country: Location within country:	Duration of assignment (months):
Name of Client:	Total No. of person-months of the assignment:
Address:	Approx. value of the services provided by your firm under the contract (in current NRs; US$ or Euro):
Start date (month/year): Completion date (month/year):	No. of professional person-months provided by the joint venture partners or the Sub-Consultants:
Name of joint venture partner or sub-Consultants, if any:	Narrative description of Project:
Description of actual services provided in the assignment: **Note: Provide highlight on similar services provided by the consultant as required by the EOI assignment.**	

Firm's Name: _____

[2] Consultant should state value in the currency as mentioned in the contract

3(C). Geographic Experience

Experience of working in similar geographic region or country

(In case of joint venture of two or more firms to be filled separately for each constituent member)

No	***Name of the Project***	***Location (Country/ Region)***	***Execution Year and Duration***
1.			
2.			
3.			
4.			
5.			
6.			
7.			

4. Capacity

4(A). Financial Capacity

(In case of joint venture of two or more firms to be filled separately for each constituent member)

Annual Turnover	
Year	**Amount Currency**

- **Average Annual Turnover**

(Note: Supporting documents for Average Turnover should be submitted for the above.)

4(B). Infrastructure/equipment related to the proposed assignment[3]

No	Infrastructure/equipment Required	Requirements Description
1.		
2.		
3.		
4.		
5.		

[3] *Delete this table if infrastructure/equipment for the proposed assignment is not required.*

5. Key Experts *(Include details of Key Experts only)*

(In case of joint venture of two or more firms to be filled separately for each constituent member)

SN	Name	Position	Highest Qualification	Work Experience (in year)	Specific Work Experience (in year)	Nationality
1						
2						
3						
4						
5						

(Please insert more rows as necessary)