MINISTRY OF WORKS
Kingdom of Bahrain

International Competitive Bidding
Expression of Interest (EOI)

INVITATION FOR PREQUALIFICATION

TENDER NO.: PQ-CED/03/2011

FEASIBILITY STUDIES FOR BAHRAIN INTEGRATED
TRANSIT LINES

June, 2011

ROADS PLANNING & DESIGN DIRECTORATE
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Expression of Interest – Notice

International Competitive Bidding
Expression of Interest (EOI)

Tender No.: PQ-CED/03/11
Invitation for Prequalification - Feasibility Studies for Bahrain Integrated Transit Lines

In an effort towards tackling rising congestion, achieve sustainability in transport infrastructure development and to realize the aspirations of the National Economic Strategy-2030 for ensuring high quality urban transit infrastructure, Government of Bahrain is committed to implement an accessible, affordable, reliable, safe and sustainable public transport system. Integrated Transport Strategy Study recommended a public transport master plan with six transit lines, 184km length, to implement in a phased manner by 2030.

Ministry of Works (MoW) seeks responses from suitably qualified, internationally experienced consultancy firms/joint ventures to undertake feasibility studies for integrated transit lines and assist the government in taking forward the transit initiatives for successful implementation. Through this invitation, MoW also intends to prepare a separate short-list of suitable firms/joint ventures that have the capability to mobilize expert staff as ‘consultant secondees’ (full time) for providing in-house advisory services, as per the requirements, in relevant specializations of rail transit planning, engineering design and implementation.

EOI document (with salient features of the project and its options, eligibility criteria, prequalification questionnaire, scope of work and prescribed formats for submission of EoI) can be accessed in the ‘Prequalification Category’ section of MoW website: www.works.gov.bh and also on Tender Board’s website: www.tenderboard.gov.bh Interested Firms/Joint Ventures are requested to submit their EoIs at the address mentioned below by 1330Hrs on 20th July, 2011.

Technical queries can be addressed to Mr. Kadhim A. Latif, Chief, Traffic Planning & Studies Section at Tel: +973 1754 5878; Fax +973 1753 0989 and Email: kadhim@works.gov.bh

Submission Address for EoI applications:
Tender Board’s Office
7th Floor, Almoayyed Tower, PO Box No.18686,
Seef District, Kingdom of Bahrain
1.0 Introduction

1.1 Kingdom of Bahrain is experiencing congestion along majority of the transport arteries with increasing economic activity, rapid population growth, expanding urban landscape, high vehicular ownership trends (average 2 vehicles per Household) and low public transport ridership levels (less than 5% of total person trips per day). Several road network improvement/capacity augmentation measures are being undertaken to cater to the rising traffic demands. However, there has been a growing concern to achieve sustainability in transport infrastructure development and protect the quality of environment.

1.2 National Economic Strategy-2030 envision providing high quality urban transit infrastructure in the pursuit of ensuring sustainability, promote competitiveness and fairness and offer higher quality of life for all the residents and citizens of the Kingdom. Government of Bahrain is committed to implement an accessible, affordable, reliable, safe and sustainable public transport system.

1.3 Ministry of Works (MoW) concluded a comprehensive study to develop an Integrated Transport Strategy (ITS) for the Kingdom of Bahrain. At the heart of the vision for 2030 is a comprehensive public transport network comprising six transit lines with four types of transit technologies (viz. Light Rail Transit, Mono Rail, Tramway and Bus Rapid Transit) supported by an efficient feeder services system, for implementation in a phased manner by 2030. ITS strategy received approval from the cabinet, chaired by HRH The Prime Minister, in September, 2008 with a directive to implement Phase-1 of public transport master plan.

1.4 Government of Bahrain is also assisting the Gulf Cooperative Council (GCC) initiative to plan and implement regional rail (for passengers goods movements) connecting all the six GCC states and the rest of Middle East. Bahrain will have rail connectivity to both Qatar and Saudi Arabia, in a phased manner, to further connect with the rest of GCC states. Government of Bahrain aims to ensure direct rail connectivity to its key traffic generators i.e. Port, Airport and the Industrial Areas of the Kingdom for efficient freight and passenger dispersal.

1.5 MoW, herewith, seeks responses from suitably qualified, internationally experienced consultancy firms/joint ventures to undertake feasibility studies for the transit lines and assist the government in successfully taking forward these initiatives towards implementation. The above rail initiatives of MoW prompt the need for augmenting in-house expertise of MoW in rail transit planning, engineering design and implementation. Hence, through this invitation, MoW also intends to short list firms for providing consultant staff secondees (full time) for in-house advisory services to the MoW management in railway projects.

1.6 MoW proposes to offer two independent options, as stated below, to the consultant firms/joint ventures responding to this invitation. Broad scope of
work, deliverables/requirements for each of the two options is defined in subsequent sections of this document.

(a) **Option-A:** Feasibility Studies for Bahrain Integrated Transit Lines  
(b) **Option-B:** Consultant Staff Secondees for Rail Transit Projects

1.7 MoW adopted two stage process in selection of firms for each of the two options of this project. EoI applications will be evaluated and firms will be prequalified in the first stage based on the prescribed eligibility criteria. Prequalified firms will only be issued Request for Proposals (RFP) as part of second stage (referred as Bid stage) of selection process. Please note that selection process for consulting firms will be taken up independently, as per the availability of budget, for each option. Consultancy firms/joint ventures should clearly specify, in the submission letter, their intent to apply for either one or both the options of this project. MoW will accordingly review the applications and prepare separate short-lists for each option, as an outcome of this invitation.

1.8 Applicants must read carefully the directions concerning the requirements for submittal of applications for each of the two options either as a single entity (firm) or by a group of companies/ firms in the form of Joint ventures.

Prequalification submissions must include all the requisite information (completed forms or questionnaire) as prescribed in **clause 5.2 and as per the enclosed formats in this invitation.** MoW will provide soft copy of the prequalification questionnaire, if required, to facilitate the consultants willing to submit the application. EoI documents have to be submitted in sets of one original hard copy and one soft copy (pdf format).

1.9 MoW shall receive applications (through Tender Board) pursuant to this invitation for prequalification in accordance with the terms set forth herein as modified, altered, amended and clarified from time to time by MoW. All applications shall be prepared and submitted in accordance with such terms on or before the application due date and at the address, as specified in **Clause 1.15.**

1.10 Applicants may obtain clarification on any aspect of this EoI document at the following address:-

Mr. Kadhim A. Latif,  
Chief, Traffic Planning & Studies Section  
Roads Planning & Design Directorate  
Ministry of Works  
PO Box No.5, Manama, Kingdom of Bahrain  
Tel: +973 1754 5660; Fax: +973 1753 0989  
Email: kadhim@works.gov.bh

1.11 MoW reserves the right, without any obligation or liability, to accept or reject any or all the EoIs at any stage of the process, to cancel or modify the process or any part thereof or to vary any term or condition at any time, without assigning...
any reason whatsoever. Amendments/ Addendums to this EoI document, if any, will be posted in the prequalification category of MoW website (www.works.gov.bh).

1.12 Please note that the applicants will not be considered if they make misleading or false representations in statements, attachments, pre-qualification questionnaire as well as the documents submitted as proof of the qualification requirements.

1.13 All documents are required to be submitted in the English Language.

1.14 This Expression of Interest document consists of the following sections:
1. Introduction
2. Instructions to Consultants
3. Project Information
4. Broad Scope of Services
5. Preparation and Submission of EoI
6. Annexure-1 to 5: Prequalification Questionnaire, standard formats for letter of submission, letter of endorsement of joint venture partners, project sheets, indicative list of key professionals etc

1.15 Interested Firms/Joint Ventures are requested to submit their applications, in the prescribed format, separately for each of the options either in person, through government mail/ courier at the following address, by 1330Hrs on Wednesday 20th July, 2011:

Tender Board’s Office
7th Floor, Al Moayyed Tower
PO Box: 18686
Seef District, Kingdom of Bahrain
Tel-(+973)17566666; Fax- (+973) 17587855
2.0 Instructions to Consultants

2.1 MoW intends to invite Expression of Interest applications for short listing consultants, separately for each of the following two options of this project:
- **Option-A**: Feasibility Studies for Bahrain Integrated Transit Lines
- **Option-B**: Consultant Staff Secondees for Rail Transit Projects

2.2 In February-2009, MoW sought applications for prequalification for conducting detailed feasibility studies for Phase-1 transit lines and shortlisted 10 firms that suits the Terms of References defined for the project. Several overseas consultants/embassies from across the world, subsequently, approached MoW for expanding the list of prequalified consultants. With the revised of scope of work, delayed budgetary allocations for this project, to accommodate potential changes in the continued interest of consultancy firms/joint ventures (after 2009) and to provide opportunity for the new applicants, it is decided to invite EoI applications afresh for this project. All the firms/joint ventures successful in the previous round also need to apply afresh for prequalification along with the new applicants in the form and manner set out in this EoI document.

2.3 MoW seeks responses from suitably qualified, internationally experienced consultants/joint ventures to undertake requisite tasks as per the broad scope of services defined in subsequent sections of this invitation or to provide requisite experts as staff secondees (fulltime) for providing in-house advisory services to MoW. Only responses from companies that demonstrates availability of expertise and experience in all the relevant sectors of this assignment, as defined below, and with a firm financial foundation to consider for inviting full tender submission during the Bid Stage:

2.3.1 Rail transit master planning (including transit-oriented planning, multimodal/urban integration), traffic modelling for transit lines (using VISUM/VISSIM), bus routes restructuring/rationalization, techno-commercial feasibility/viability studies including financial modelling (public private partnership) for transit alignments (elevated/at-grade/underground), preliminary/ detailed engineering design and project management for delivery of the urban transit (LRT, Tramway, Bus Rapid Transit/ Monorail) and regional railway (heavy passenger and goods) systems;

2.3.2 Demonstration of availability of diversified /multi-sectoral expertise and experience relevant to this study, with the consultant firms will have weightage in the evaluation of applications;

2.3.3 Availability of experienced key personnel with the firm/joint venture and their capability to mobilize expert staff as staff seconded (full time) in all the relevant sectors as defined above;

2.3.4 Capability to manage and undertake the requisite tasks in a manner to a quality commensurate with the international best practices;

2.3.5 Availability of requisite software tools/equipment and financial resources;

2.3.6 Capability to operate a quality control programme on deliverables.
Pre-qualification/ Eligibility Criteria for the Applicant- General

2.4.1 Firms are eligible to submit the application for prequalification either individually (a legal entity) or as a Lead Member of a Joint Venture.

2.4.2 In case of Joint Venture, Letters of Endorsement each member confirming their willingness to be a member of the proposed joint venture and to agree to be jointly and severally liable to MoW under any contract which may be subsequently awarded to the joint venture.

2.4.3 The Applicant Company (if application is submitted individually) or all the members of a joint venture including the Lead Member (if application is submitted as Joint Venture) should submit an undertaking for each of the following:
- The Company / Firm should not have suffered bankruptcy / insolvency in the last five years;
- The Company / Firm should not have been blacklisted by any Government/ Public Sector Organization;
- The Company/Firm should not have abandoned projects/contract works in-complete;
- The Company/ firm should have Quality Assurance Programme in place.

2.4.4 Applicant should clearly specify in the submission letter (Annexure-1) their intent to be prequalified either one or both the options of this project. MoW will accordingly evaluate the applications and prepare separate shortlists for each of the option.

Pre – qualification / Eligibility criteria for the applicants - Technical & Financial Strengths

The below stated prequalification eligibility criteria is applicable for both the options (as defined in clause 2.1) of this project.

2.5.1 Individual firm or the lead partner of a joint venture should have undertaken (or) successfully completed, in last 10 years, at least 3 projects of similar nature i.e. conducting comprehensive feasibility studies, preliminary/detailed design and project management for implementation (either independently or as a lead partner of Joint Venture) of:
- At least 2 similar projects of urban transit corridors (Light Rail Transit, Monorail, Tramway, Bus Rapid Transit systems).
- At least 1 similar project of regional heavy rail (passenger and freight) corridors.

2.5.2 Average annual turnover of the company/firm (individual or lead member of the Joint Venture) must exceed USD 20 Million in the past 3 years.
2.6 **General Assessment of Applicants**

Assessment of submissions will be undertaken by an assessment panel comprising senior ministry staff. Applications will be assessed on the following general parameters in addition to the above defined minimum eligibility criteria. Hence, it is preferable that the firm (in case of individual applicant) and/or all the members of the joint venture (JV) individually (in case application is submitted by JV) should provide a brief write-up on the following parameters, supported by necessary documents/brochures etc:

- Company Profile, track record, organizational/management structure, general reputation for work competence and client focus. Firms/Joint Ventures will be expected to have high standard of project management capabilities to adopt with the Ministry’s project management framework;
- Recent relevant experience in similar projects (with regard to nature of work, scale and size). Overall experience of the firm in each stage of rail transit planning, design, implementation and project management will also be taken into consideration. **Client certificates for at least 3 major projects (for recently implemented works) that satisfy the eligibility criteria need to be attached.**
- Financial strength (Average Annual Turnover for last 3 years).
- Details of software’s and equipments.
- Involvement in similar projects in Gulf/Middle East or in ‘successfully implemented’ similar projects elsewhere across the world.
- Availability of experienced key professionals in all the relevant sectors of this assignment and capability to mobilize expert staff as Secondees (full time) on call basis for MoW.
- Ability to define and comply with the Quality Assurance Plans/Quality Management System and clarity on the assignment and deliverables.

2.7 **Contractual Matters:**

2.7.1 Detailed techno-commercial proposals (i.e. Bids) for awarding of the work for each option of this project will be invited from those consultants prequalified by MoW (as separate shortlists for each option) through this EoI invitation.

2.7.2 Applicants should note that this EoI document is intended to provide the applicants/ prospective respondents with preliminary information only. The information contained herein shall not in any way be considered as binding on MoW.

2.7.3 MoW in its sole discretion and without incurring any obligation or liability, reserves the right, at any stage without assigning any reasons whatsoever, to:

- Suspend and / or cancel the bidding process and / or amend and / or supplement the bidding process or modify the date, scope of services or other terms and conditions relating thereto;
✓ Consult with any applicant in order to receive clarifications or further information;
✓ Independently verify and disqualify any/or all the submissions, other information and/or evidence submitted by or on behalf of any applicant.

2.7.4 No binding legal relationship will exist between any of the respondents and the Ministry of Works as a consequence of this Expression of Interest and short listing process.

2.7.5 All costs and expenses incurred by respondents in any way associated with the preparation of the submission will be borne by respondents only.

2.7.6 It should be noted that each firm is eligible to make only one application either independently or as part of a joint venture. Applicants should not have conflict of interest that affects the bidding process. Any applicant found to have a conflict of interest shall be disqualified. The applicant may be considered to have conflict of interest that affects the bidding process, if:
✓ A constituent of applicant is also a constituent of another applicant
✓ Applicant or any associate thereof has participated as a consultant to MoW in the preparation of any documents, design or technical specifications of this project.

In case of conflict of interest as defined herewith, MoW reserves the right to reject all such applications with overlapping partners.

2.7.7 To be eligible for pre-qualification, an applicant must fulfil the general assessment criteria and minimum eligibility criteria as mentioned in clauses 2.4 and 2.5 of this invitation.

2.7.8 Applicants shall enclose with their application, the following:
✓ Certificates from its statutory auditors or the concerned client(s) stating the similar/eligible works commissioned (for at least 3 major projects), as the case may be, during the past 10 years in respect of the projects as defined in Section-3.0 and to meet with the minimum eligibility criteria as defined in clauses 2.4 and 2.5 above. In case of a particular project that has been jointly executed by the applicant, the firms should further support their claim for the share of work done for that particular project by producing a certificate from its statutory auditor or the client.
✓ Audited financial reports for the past 3 years along with certificates from statutory auditors to support the evaluation of financial strength of the firm/joint venture.

2.7.9 Each applicant must enclose a forwarding letter (Annexure-1) either as individual firm or as a lead member of a joint venture, expressing
their intent to associate with MoW for either one or both of the options (as defined in clause 2.1) of this project, with a commitment to deliver the requisite tasks to meet with the expectations of client. In case of a joint venture, the application must comply with following additional requirements:

- Members of Joint Venture shall nominate one member as the lead member
- Application should include a brief description of the roles and responsibilities of each individual firm of the joint venture;
- Letters of Endorsement (as per the format enclosed in Annexure-2) from each member of the JV (in case of joint venture) designating the lead member, authorizing the contact point etc.
- An individual applicant of the joint venture cannot be at the same time being a member of another joint venture applicant for prequalification.
- Except as provided under this EoI application and the bidding documents, there shall not be any amendment to the joint venture partners without the prior consent of MoW.
- Please note that change of joint venture partners or addition of new joint venture partner to the individual firm (or) joint venture at the bidding stage (i.e. second stage of selection process) is usually not accepted by the Tender Board and MoW.

2.7.10 Applicants are encouraged to submit their respective applications after visiting the project site and ascertaining for themselves on the site conditions, traffic, location, surroundings, climate, availability of power and other utilities for construction, access to site, applicable laws and regulations and any other matter considered relevant by them.

2.7.11 Applicants shall be responsible for all the costs associated with preparation of their application, site visit and their participation in either the EoI stage or Bid Stage. MoW will not be responsible or in any way liable for such costs, regardless of the conduct or outcome of bidding process.

2.7.12 The bidding process shall be governed by, and construed in accordance with, the laws of Kingdom of Bahrain and the courts at Bahrain shall have exclusive jurisdiction over all disputes arising under, pursuant to and / or in connection with this bidding process.

2.7.13 Although adequate care has been taken in preparation of this EoI document, each respondent must make and rely on its own investigations to satisfy itself in relation to all aspects of the proposed project. MoW will not be liable for any incorrect or misleading information or omission to disclose information.
2.7.14 Applicants and their respective officers, employees, agents and advisors shall observe the highest standard of ethics during the bidding process. Notwithstanding anything to the contrary contained herein, MoW shall reject an application without being liable in any manner whatsoever to the applicant if it determines that the applicant has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the bidding process.

2.7.15 MoW and their employees will have no liability to any prospective Firm/Joint Venture or any other person under the law of contract, tort, the principles of restitution or unjust enrichment or otherwise for any loss, expense or damage which may arise from or be incurred or suffered in connection with anything contained in this EoI document, any matter deemed to form part of this EoI document, the award of the assignment, the information and any other information supplied by or on behalf of MoW or their employees, any agents or otherwise arising in any way from the selection process for the Assignment.

2.7.16 Applicants will be deemed to have understood and agreed by submitting the application that they have:
- Made a complete and careful examination of the EoI (or) Prequalification Invitation;
- Received all relevant information requested from MoW;
- Acknowledged and accepted the risk of inadequacy, error or mistake in the information provided in this EoI or furnished by MoW relating to any relevant matters of this project;
- No explanation or justification of any aspect of the pre-qualification process will be given and that MoW short listing decisions are without any right for appeal whatsoever;
- Agreed to be bound by the undertakings provided by it.

2.7.17 All the documents and other information supplied by MoW or the information / documents submitted by an applicant shall remain or become the property of MoW. Applicants are to treat all information as strictly confidential. MoW will not return any pre-qualification submission.

2.7.18 Following conditions shall be adhered to while submitting an application:
- Applicants should attach clearly marked and referenced continuation sheets in the event the space provided in the prescribed forms in the Annexure is insufficient. Alternatively, applicants may format the prescribed forms to make due provision for incorporating the requested information.
- In responding to the pre-qualification submissions, applicants (either individually or in Joint Venture) should substantially demonstrate their capabilities in accordance with clauses 2.3 to 2.5 above.
All the requisite documents and information to be attached as per the prescribed details or formats in the clause 5.2.

2.7.19 During the evaluation of application:
- If MoW finds that the information furnished by the applicant is incomplete or not as per the formats enclosed, MoW, in its sole discretion, may exclude the relevant information from computation for eligibility for qualification.
- In the event that the applicant claims credit for an eligible project, and such claim is determined by MoW as incorrect or erroneous, MoW will exclude the same from computation for eligibility for qualification. Where any information is found to be patently false or amounting to a material mis-representation, MoW reserves the right to reject the application.

2.7.20 MoW will notify all the successful and unsuccessful applicants of the result of their pre-qualification separately for each option of this project. However pre-qualification of an applicant does not make binding on MoW to assign them any further work.

2.7.21 Unsuccessful applicants can seek reasons for disqualification or file an appeal for re-evaluation. Such an appeal should be filed either with MoW or Tender Board and within 2 weeks from the date of announcement of the results. MoW will set up a committee of senior representatives to carefully review such appeals and issue response within 2 weeks. Decision of the MoW committee shall be final.

2.7.22 If a contract is awarded to a Joint Venture, each member of the group thereof will be severally and jointly liable for the whole performance of the contract obligations.

2.7.23 Clarifications:
- Applicants requiring clarification on this invitation for prequalification / EoI may notify MoW in writing or by fax and email in accordance with clause 1.10. They should send in their queries two weeks prior to the last date of submission as stated in clause 1.15. MoW will send responses by Fax/ Email.
- MoW may also on its own initiative, if deemed necessary, issue interpretations/ clarifications/ addendums prior to the deadline for submission of application and these will be posted under the ‘Prequalification Category’ section of MoW website (www.works.gov.bh).
2.8 **Methodology for Selection of Firm/Joint Venture**

MoW proposes two independent options, as stated in **clause 2.1**, to the consultant firms/joint ventures responding to this invitation. Selection process for consulting firms for each option will be taken up independently, as per the availability of budget for each option. Consultancy firms/joint ventures should clearly specify, in the submission letter (annexure-1), their intent to apply for either one or both the options. MoW will prepare separate short-lists for each option. In **final selection of firms** for each option, MoW will consider ‘conflict-of-interest’ issues with the selected consultant (and their associates, if any) for the other option of this invitation.

MoW has adopted a two-stage process for selection of the firms/joint ventures for each option of this project:

i. The first stage (the “Expression of Interest/ EoI Stage”) i.e. the current stage of the process involves pre-qualification of the interested firms/joint ventures for each option who make an application in accordance with the provisions of this invitation for prequalification. At the end of this stage, MoW will prepare separate short-lists of consultants/joint ventures for each option and advise the applicants about the result of their applications.

ii. Successful (i.e. pre-qualified) applicants during the first stage shall be eligible for participation in the second stage of bidding process (the “Bid Stage”) comprising tender documents (the “Request for Proposals” or “RFP”) wherein detailed techno-commercial proposals would be sought from the short-listed applicants of each option.

MoW will provide detailed information about the methods for selection of Firms/Joint Ventures during the second stage (i.e. the Bid stage) in the Request for Proposal document for Option-A.

For Option-B, MoW will issue separate RFP (as per the requirements and based on the progress of this project) to the shortlisted firms/joint ventures requesting detailed techno-commercial proposals with specific details on the staff requirements for required positions, their qualifications, number of years of experience, their expertise in key sectors of the project etc and lump sum price quote per man-month (full time) for each seconded staff.

Please note that MoW will not consider the experience or qualifications of an associate firm, if Letter of Endorsement from such an associate firm is not attached with the application. Primary intent of this prequalification process is to shortlist lead consultants (independent/joint venture) separately for each option. In case an associate firm has provided Letters of Endorsements to more than one applicant (individual/joint venture), MoW reserves the right to ignore qualifications/experience of such associate firm in evaluation.
2.9  *Timelines for selection process*

Following tentative timelines are envisaged for selection of firms/joint ventures for Option-A works. These timelines will be revised, if required, in the second stage of selection process:

- Last date for receipt of Expression of Interest (EoI) applications – as specified in the *clause 1.15* above.
- Evaluation of pre-qualification applications and short listing firms, receipt of Tender Board approval on the list of prequalified consultants, finalization and issue of Request for Proposal (RFP) documents to the prequalified Firms/Joint Ventures for the selected option, within 8 weeks from the last date for submission of EoI.
- Receipt of completed RFPs/Bids from the applicants, within 8 weeks from the date of issue of RFP.
  - Pre-Bid Conference will be scheduled, if necessary, for the pre-qualified applicants within 4 weeks from the date of issue of RFP.
- Evaluation of RFPs, selection and appointment of firms/joint ventures, within 8 weeks from the last date for receipt of completed RFPs.
  - Consultants may be asked to give presentations to the evaluation committee, if required.

It is expected that a time frame of 8 to 10 weeks may be sufficient for Option-B to invite bids, evaluation and appointment of staff seconded as per the requirements for the project and availability of budget with MoW.
3.0 Project Information

Ministry of Works undertook a comprehensive study in 2007 to develop Integrated Transport Strategy for the Kingdom. Salient features of the study and its recommendations, GCC Railway alignment and on-going NPDS Study (National Planning & Development Strategy-2030) are as follows:

**Existing Public Transport System (CARS Bus System)**

Bus is the only significant public transport mode. ‘CARS Transportation’, a contract agency under Ministry of Transportation, is operating buses on 12 different routes covering various regions of the Kingdom. These routes have limited coverage and lacks connectivity to offices, retail outlets and leisure facilities and do not comply with the standard norms of public transport accessibility to the people. With the average headway of 40 minutes, waiting times are excessively high. Extreme weather conditions, unfriendly design of bus stops, absence of comfortable seating arrangements on-board are some of the other factors strongly limiting the use of public transport facilities in the Kingdom.

Approximately 5% of the total trips are currently undertaken by scheduled public transport system. In order to tackle with rising congestion and improve environment quality, Government of Bahrain intends to promote public transport system and attract people (all income groups) by improving connectivity, accessibility, reliability and service offering off and on-board (terminals/stations, stops, condition/quality of buses).

These initiatives are proposed to be implemented at the earliest as phase-1 implementation of transit master plan involves a gestation period of at least 5 years (to complete feasibility studies, detailed design, construction and operationalization) and to provide necessary feedback on ridership levels for the success of transit lines. With implementation of each phase of transit system, rationalization of bus routes would also be required to develop an efficient feeder bus system for transit lines. This task of the project will require close coordination with Ministry of Transportation, to avail their approvals/consensus.

**Existing Bus Routes**

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<th>Length (km)</th>
<th>Average Daily passengers</th>
<th>Headway (min)</th>
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<td>1873</td>
<td>20</td>
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<td>17</td>
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<td>12</td>
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<td>3</td>
<td>Mina Sulman - Central Market</td>
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<td>Riffa - Jiddhafs - Manama</td>
<td>30</td>
<td>1041</td>
<td>25</td>
</tr>
</tbody>
</table>
**Vision for Public Transport System**

Integrated Transport Strategy Study for the Kingdom of Bahrain had put forth following visionary framework to promote public transport system and achieve at least 25% mode shift from private vehicles by 2030 in the Kingdom:

- Ensure safe, reliable and high frequency service
- Provide air conditioning throughout
- Make available separate section for women and executives
- Offer efficient feeder service system
- Remain cost-effective and affordable
- Encourage transit-oriented/ mix-use development, multimodal integration and harmonization with adjoining land use/activities
- Promote economic development (as per the National Economic Vision-2030)
**Overview of Integrated Transport Strategy (Bahrain Transit)**

At the heart of the vision for 2030 consists of a comprehensive public transport network comprising six transit lines with four types of transit technologies (viz. Light Rail Transit, Mono Rail, Tramway and Bus Rapid Transit) with a comprehensive system of feeder buses.

Different technologies for each transit line are selected on the basis of prospective ridership, cost and practical considerations. Brief description of each of the six transit lines is as follows:

<table>
<thead>
<tr>
<th>LINE</th>
<th>TYPE</th>
<th>LENGTH (KM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Line</td>
<td>LRT</td>
<td>32.7</td>
</tr>
<tr>
<td>Green Line</td>
<td>Tram</td>
<td>21</td>
</tr>
<tr>
<td>Brown Line</td>
<td>LRT</td>
<td>32</td>
</tr>
<tr>
<td>Blue Line</td>
<td>Monorail</td>
<td>29</td>
</tr>
<tr>
<td>Orange Line</td>
<td>BRT</td>
<td>33</td>
</tr>
<tr>
<td>Purple Line</td>
<td>BRT</td>
<td>36.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>184.2</td>
</tr>
</tbody>
</table>

### Red Line Characteristics
- **Total Length:** 32.7 km
- **Number of stations:** 18
- **Interchange stations:** 8
- **Commercial Speed:** 40kmph
- **Ridership:** 6000 passengers per peak hour per direction
- **Average station spacing:** 1.9 km
- **Principal areas served:** Bahrain Airport, Muharraq, Manama, Bahrain Mall, Jidhafs, Isa Town, East Riffa and Qatar Causeway.

i. **Red Line:**

The Red Line (with Light Rail Transit technology) will connect Bahrain International Airport with the multimodal transport hub at the future Bahrain-Qatar causeway while passing through major urban centres in the central and eastern parts of the Kingdom. It offers the potential to extend this line to the extreme south of the Kingdom to connect with Durrat Al Bahrain (DAB) development. Red Line offers at least one connection with each of the other five transit lines.
ii. **Brown Line:**

The Brown Line (with Light Rail Transit technology) will connect Manama, the major urban centre with the Bahrain International (F-1) Circuit while passing through south western part of the Kingdom covering residential areas such as Jidhafs, Salmabad, Hamad Town and University of Bahrain-Sakhair. Brown Line will have, at least, one connection with all the other lines, except with Blue Line and Orange Line.

<table>
<thead>
<tr>
<th>Brown Line Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length:</strong> 32 km</td>
</tr>
<tr>
<td><strong>Number of stations:</strong> 17</td>
</tr>
<tr>
<td><strong>Interchange stations:</strong> 7</td>
</tr>
<tr>
<td><strong>Commercial Speed:</strong> 40kmph</td>
</tr>
<tr>
<td><strong>Ridership:</strong> 5000 passengers per peak hour per direction</td>
</tr>
<tr>
<td><strong>Average station spacing:</strong> 2 km</td>
</tr>
<tr>
<td><strong>Principal areas served:</strong> Manama, Jidhafs, Salmabad, Hamad Town, University of Bahrain-Sakhair and Bahrain International Circuit</td>
</tr>
</tbody>
</table>

iii. **Blue Line:**

The Blue Line (with Monorail technology) will connect Budaiyah (north western region) with Juffair (towards east of Bahrain Island) while passing through all the future northern islands of the Kingdom. There is a possibility of extending the line from Juffair region to further east to connect with to Hidd Town, located in the Muharraq Island, through Sh. Khalifa Bin Salman Causeway. Blue Line will have a connection with all the other transit lines except the Brown Line.

<table>
<thead>
<tr>
<th>Blue Line Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length:</strong> 29 km</td>
</tr>
<tr>
<td><strong>Number of stations:</strong> 23</td>
</tr>
<tr>
<td><strong>Interchange stations:</strong> 5</td>
</tr>
<tr>
<td><strong>Commercial Speed:</strong> 35kmph</td>
</tr>
<tr>
<td><strong>Ridership:</strong> 4500 passengers per peak hour per direction</td>
</tr>
<tr>
<td><strong>Average station spacing:</strong> 1.3 km</td>
</tr>
<tr>
<td><strong>Principal areas served:</strong> Budaiyah, Northern Islands, Shk Isa Bin Salman Causeway, Shk Hamad Causeway and Juffair Area</td>
</tr>
</tbody>
</table>

iv. **Green Line:**

The Green Line (with Tramway technology) will also connect east (Juffair area) with west (Budaiyah) while passing through Manama, Seef and Bahrain Mall. Passing through the busy commercial areas of Bahrain, tramway is expected to offer urban regeneration prospects especially in Manama region. Green Line will have at least one connection with the other transit lines, except for Orange Line.

<table>
<thead>
<tr>
<th>Green Line Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length:</strong> 21 km</td>
</tr>
<tr>
<td><strong>Number of stations:</strong> 23</td>
</tr>
<tr>
<td><strong>Interchange stations:</strong> 8</td>
</tr>
<tr>
<td><strong>Commercial Speed:</strong> 25kmph</td>
</tr>
<tr>
<td><strong>Ridership:</strong> 3000 passengers per peak hour per direction</td>
</tr>
<tr>
<td><strong>Average station spacing:</strong> 950 m</td>
</tr>
<tr>
<td><strong>Principal areas served:</strong> Juffair, Manama Centre, Zinj, Pearl Rbt, Bahrain City Centre, Seef, Bahrain Mall, Jidhafs &amp; Budaiya</td>
</tr>
</tbody>
</table>
v. **Purple Line:**

The Purple Line (with Bus Rapid Transit technology) will connect Juffair region with University of Bahrain-Sakhir while passing through Nabi Saleh Island, Sitra, Riffa and Hamad Town. There is a possibility of extending this line to further north to create connection with Red and Orange Line at the Bahrain Financial Harbour Interchange Station. Purple Line will have six connections with all the lines except the Orange one.

<table>
<thead>
<tr>
<th>Purple Line Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length:</strong> 36.5 km</td>
</tr>
<tr>
<td><strong>Number of stations:</strong> 33</td>
</tr>
<tr>
<td><strong>Interchange stations:</strong> 6</td>
</tr>
<tr>
<td><strong>Commercial Speed:</strong> 25kmph</td>
</tr>
<tr>
<td><strong>Ridership:</strong> 2500 passengers per peak hour per direction</td>
</tr>
<tr>
<td><strong>Average station spacing:</strong> 1,1 km</td>
</tr>
<tr>
<td><strong>Principal areas served:</strong> Juffair Area, Nabi Saleh Island, Sitra, Riffa, Hamad Town and University of Bahrain – Sakhir.</td>
</tr>
</tbody>
</table>

vi. **Orange Line:**

The Orange Line (with Bus Rapid Transit technology) will connect Hidd Town with north eastern part of Manama, near the Shk. Isa Bin Salman Causeway while offering connectivity with Bahrain International Airport and Muharraq region. Orange Line will have one connection with Red and Green Lines at the Bahrain Mall interchange station.

<table>
<thead>
<tr>
<th>Orange Line Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length:</strong> 33 km</td>
</tr>
<tr>
<td><strong>Number of stations:</strong> 26</td>
</tr>
<tr>
<td><strong>Interchange stations:</strong> 2</td>
</tr>
<tr>
<td><strong>Commercial Speed:</strong> 25kmph</td>
</tr>
<tr>
<td><strong>Ridership:</strong> 4000 passengers per peak hour per direction</td>
</tr>
<tr>
<td><strong>Average station spacing:</strong> 1.3km</td>
</tr>
<tr>
<td><strong>Principal areas served:</strong> Shk Isa Bin Salman Causeway, Bahrain International Airport, Future Airport Expansion, Muharraq and Hidd Town.</td>
</tr>
</tbody>
</table>

**Phasing Plans**

Integrated Transport Strategy envisages implementation of the 184.2km long transit line network in three phases. Each phase will consist of mix of different transit technologies. The total capital cost is estimated to be BD 3060 Million, representing approximately 1.4% of Gross Domestic Product of the Kingdom of Bahrain.

**Table-1: Phasing Plans**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Duration</th>
<th>Total Length of Transit Network (KM)</th>
<th>Transit Technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase-1</td>
<td>2009-2016</td>
<td>24</td>
<td>LRT &amp; Tram</td>
</tr>
<tr>
<td>Phase-2</td>
<td>2016-2021</td>
<td>72.7</td>
<td>LRT, Monorail &amp; BRT</td>
</tr>
<tr>
<td>Phase-3</td>
<td>2022-2030</td>
<td>87</td>
<td>LRT, Monorail, Tram and BRT</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>184.2</strong></td>
<td></td>
</tr>
</tbody>
</table>

*1 BHD ~2.66USD
Details of Phase-1 Network

Phase-1 network of the Master Plan comprises of about 24km long public transport network as:
- Bahrain International Airport-Bahrain Mall in Seef District (Red Line, LRT)
- Juffair to Bahrain Mall in Seef District (Green Line, Tramway)

Brief overview - Alignment of GCC Railway in Bahrain

Feasibility study conducted by Gulf Cooperation Council (in 2008) supports construction of railway (GCC Railway) that would run from Kuwait City in the State of Kuwait along the Gulf to Muscat in the Sultanate of Oman, also serving the Kingdoms of Saudi Arabia and Bahrain, the State of Qatar and the United Arab Emirates. The total length of the GCC Railway is about 1940 kilometers and about 180km of feeder rail links to major traffic generators (quarries, industrial areas and population centres).

As part of Phase-1 (base case option), rail connectivity to Bahrain will be provided from Qatar via Bahrain-Qatar Causeway that will also make provision for addition of double track railway in addition to the multi-lane highway. In this option, a passenger station and container (intermodal) yard is proposed to be constructed in the Alba industrial area located near the end of causeway, together with industrial lines to the nearby aluminium smelter and cement works. In Phase-2, Bahrain will be rail connected to Saudi Arabia by constructing a new causeway parallel to the existing King Fahd Causeway. It is decided to undertake detailed engineering design for phase-2 in parallel with the detailed design for
Phase-1, so as to ensure a design that facilitates future connectivity to Saudi Arabia and to have detailed estimates for improving King Fahd causeway in future.

Following are the salient features of the preferred alignment for GCC Railway (Qatar-Bahrain-Saudi Arabia) within the limits of Bahrain:

- Length of preferred alignment of GCC Railway (within Bahrain) - 33km
- Length of Feeder Rail Links to the Traffic Generators (Cement Factory and Alba Aluminium Smelter) - 3km
- Proposed Stations and facilities:
  - Manama Station, for Passengers (at the junction of GCC Rail with Red Line)
  - Intermodal & Marshalling yard near Alba Aluminium Smelter

**Concerns with the preferred alignment for GCC Rail (within Bahrain):**

- Existing gas pipeline (for Saudi Arabia) along Al Riffa Avenue will be retained. Hence, absence of additional corridor (right of way) along this road to accommodate the preferred alignment for GCC Rail.
- Preferred alignment of GCC Rail does not offer connectivity to the other key traffic generators of the Kingdom especially Sh. Khalifa Bin Salman Port, Bahrain International Airport and other industrial areas (Al Hidd & East Muharraq).

These concerns have prompted the need to review alternative alignments for GCC Rail that enables provision of rail connectivity to the other key traffic generators, minimizes impacts on existing developments, utilities and services and complies with the updated national land use master plan.
Hence the deliverables of the consultant, being selected through this invitation, shall include review of alternatives and recommend the best suitable alignments for GCC Rail (Qatar-Bahrain-Saudi Arabia) and for its feeder rail links to the traffic generators, identify locations for passenger stations, container yards/multimodal integration facilities etc.

GCC Railway Coordination Committee of Bahrain, lead by Ministry of Transportation, liaises with the office of GCC Secretariat General on the railway studies. Ministry of Works is part of this committee and is authorized to make suitable recommendations on GCC Railway, for further consideration and approval of the committee.

**Brief overview- National Planning & Development Strategy 2030**

As part of phase-2 implementation of National Planning & Development Strategy (NPDS)-2030, Ministry of Municipalities Affairs & Urban Planning (MMAUP) is currently updating the land use master plan of the Kingdom to meet with the aspirations of National Economic Strategy-2030. This study will reflect the latest trends in land use development and recommend new growth areas to accommodate future development of residential, commercial and industrial activities. Deliverables of this project, amongst others, involve population forecasts and preparation of land use-transport model using VISUM to test alternative land use-transport scenarios to recommend the best suitable scenario for 2030. Outcomes/recommendations of the NPDS study will have to be taken into consideration in conducting the feasibility studies for integrated transit lines, finalizing the alignments for GCC rail links.
4.0 Scope of Services

Following is a brief description of scope of activities expected from the firms/joint ventures to be appointed separately for each of the two options of this project:

(a) **Option-A**: Feasibility Studies for Bahrain Integrated Transit Lines. It involves following tasks:
   i. Detailed feasibility studies for phase-1 of Red & Green Lines
   ii. Preliminary feasibility studies for phase-2 and 3 transit lines
   iii. Alignment feasibility studies for GCC Railway (within Bahrain) and its links to Port, Airport and Industrial Areas
   iv. Development of an efficient and high quality bus service (City Transit) system for Bahrain

It is expected that multiple expert teams have to be mobilized, in parallel, to carry out the requisite tasks as defined herewith for Option-A.

(b) **Option-B**: Consultant Staff Secondees for Rail Transit Projects.
   - To provide expert staff as Consultant Secondees (full time) for rail transit planning, engineering design and implementation management services of MoW

Applicants should note that scope of services, as defined below, for each of the tasks of Option-A is indicative only and subjected to revision during the tendering stage (i.e. Bid Stage).

4.1 Scope of Services for Option-A (i) – Detailed Feasibility Studies for Phase-1 of Red & Green Lines

**Objective of the task:**

Objective of the task study is to undertake detailed techno-economic feasibility studies for viable implementation of phase-1 transit system (Red and Green Lines) through an integrated development approach to:

- ensure safe, reliable, accessible and affordable public transport system
- encourage public transport rider ship
- enable efficient use of existing and planned road network
- promote private sector participation in implementation, operation and efficient management of public transport network

**Scope of Services:**

1. Take note of existing reports on strategic roads master plan, integrated transport strategy, revised land use master plan (National Planning and Development Strategy, NPDS-2030), updated population and employment densities, proposed major developments that are to be served by transit system and other relevant studies to understand and identify role of this project within the overall transport plan of Bahrain.
2. Define the catchment area for transit lines and its stations and conduct ridership estimates for the horizon years (opening year and 2030) of phase-1 transit lines based on the updated project parameters. It requires undertaking necessary updates to the latest available traffic model (VISUM Model being developed as part of NPDS study, 2010-11) to ensure that model output (highway volumes and transit ridership) is robust and representative of local traffic conditions, travel pattern whilst considering existing and planned transport infrastructure and land use development.

3. Liaise with relevant stakeholders, authorities and real estate developers, as deemed necessary, in conducting the study, identify joint development opportunities to analyze optimum locations of transit lines, stations and other facilities.

4. Evaluation of alternative insertion options for each transit line of phase-1 (in terms of alignment, profile, facilities and location for stations/ multimodal integrated facilities), review the adequacy with revised land use/transport network master plans and conformity with revised ridership forecasts and identify associated issues and concerns for each transit line, if any.
   a. Consultant should consider and evaluate alternative vertical profile alignment options (at-grade, elevated and underground) for each of the transit lines, review advantages/disadvantages, preliminary assessment of feasibility/viability (techno-economical) of suitable options to recommend the best option for phase-1 transit lines.

5. Prepare plans for horizontal (1:2000) and vertical alignments (1:2000/1:200) of each alternative and other plans/layouts, as stated below, to the level of details as necessary for comparative evaluation of alternatives and to assist in decision making.
   o Cross sections shall be provided at characteristic points of the alignment (scale 1:100 or 1:200).
   o Critical areas and/or elements shall be developed to the level of details necessary to support the comparative evaluation of alternatives and facilitate the decision making process.
   o Prepare functional layouts for stations, depots/ maintenance facilities, park & ride zones, and operation control centre etc.

6. Undertake multi criteria assessment (social, environmental, technical and financial, integration/intermodal transfer opportunities, accessibility and encouraging transit ridership etc) for alternative alignment options to identify the best suitable alignment for each transit line, stations/depots and other facilities. In order to assist the process of multi-criteria evaluation of alignment alternatives of the transit lines:
   a. Consultant should review advantages and disadvantages of adopting one single transit system technology (Light Rail Transit or Monorail or Tramway/ Bus Rapid Transit) for all the six transit lines of the three phases to recommend the best suitable option for each transit line. Although, this issue was deliberated during the master planning stage, another perspective to this concept of using multiple system technologies is desirable at this stage of conducting feasibility reviews for transit lines.
b. Consultant should note that the key issue for Bahrain is restricted availability of adequate right-of-way to accommodate both the transit and rail line (integrated transit line say Light Rail Transit and GCC Railway feeder line) proposals along some of the highways/roadways. Hence, in such scenario and where feasible, consultant may review and consider opportunities in selecting the transit system technology for the affected line that enables shared use of the track/alignment by both the integrated transit lines and the GCC Railway.

c. Consultant should accordingly define basic technical parameters and prepare operation plan for phase-1 transit lines, at a level and detail as necessary for this stage of assessment, to assess the cost and right of requirements.

d. Prepare broad cost estimates for each alternative of phase-1 transit lines at a sufficient level of detail, in order to be taken into account for comparative evaluation of alternative alignments.

7. For the preferred/selected alignment options of each transit line:
   a. Consultant shall refine the traffic forecasts/ridership estimates for the selected options, estimate sectional and station loads.
   b. Consultant shall refine main principles of the line service and document the operational principles of the service for each transit line:
      i. Consultant shall develop the details for all the requisite technical parameters for each transit line which, inter alia, shall include:
         ▪ Track structure and configuration (elevated/at-surface/underground), gauge selection for transit lines;
         ▪ Power supply and traction system (capacity, potential locations of sub stations, power feeder to the train and connection to power main, auxiliary supply arrangements, energy saving measures);
         ▪ Depots and maintenance facilities (sizing, location, functional layout);
         ▪ Rolling stock (capacity, speed, length, width, mode of operation, classes of passengers), driving modes and level of automation;
         ▪ Station program (services and facilities in stations etc), park and ride or multimodal integration facilities, signalling and communication system, automatic fare collection system etc;
         ▪ Signage and signal cycle staging requirements for Tramways (Green Line) and transit priority measures as required.

      ii. Preparing transit operational plans (viz. headway, commercial speed, fare strategies, number of trains, services in stations, operation and maintenance company, downgraded operation modes provisions etc)
      iii. Recommend operational plans for track works, signal/communication facilities, stations/interchanges, depots/maintenance facilities and park and ride zones.
      iv. Identify suitable location for setting up Operating Control Centre (OCC), recommending a functional layout and identifying facility requirements for establishing the same.
v. Integration of transit lines with Intelligent Transport System (ITS) technologies, proposed for implementation by MoW.

c. Refine the station insertion study, including detailed review of urban placement concepts, urban design aspects, landscaping and integration with surrounding developments.

d. Operational evaluation for transit lines (LRT and Tramway, in particular) using VISSIM to assess the impacts with loss of lanes and modification of junctions (to accommodate transit lines) on highway/roadway performance and impact on affected junctions, and to identify suitable transit priority measures (signals cycle stages at select junctions).

e. Prepare concept design drawings, 3D / 2D images of transit alignments and a 2 minute animation as required for presentation to higher authorities and to the general public.

8. Assessment of environment and social impacts including utilities and services to implement the selected alignment alternatives of both the transit lines, at a level and detail sufficient for this stage of assessment:

a. Environment issues: Consultant shall propose the basis and agree with MoW to identify relevant parameters for environmental evaluation of transit schemes. It would require:
   o Compilation of environment baseline data
   o Analysing positive and negative environmental Impacts
   o Preparation of preliminary environment management plans

b. Social Aspects including impacts on Utilities and Services:
   i. Assess the detailed corridor (or) land requirements for accommodating selected alignments of transit lines, identified stations/other facilities and prepare detailed corridor plans for selected alignments of each transit lines, stations and other facilities.
   ii. Analyze impact on road geometry, parking supply, traffic operations/diversion requirements, effect on signal control system, support facilities, utilities and services, pedestrian movements, visibility and accessibility issues for adjoining properties and with the proposed entry/exit locations for stations, depots/ maintenance facilities.
   iii. Analysis of transit lines impacts on major utilities/services and existing structures, land acquisition requirements and corridor width (right of way) for the selected alignments of each transit line and its facilities (stations/intermodal integration areas).
      ▪ Data collection and review of impacts on utilities/services alignments through desk studies of cadastral information, plans provided by various agencies supported by requisite primary surveys (site visits, inventory of utilities as required);
      ▪ Prepare schematic diversion plans for the affected major utilities, for further consideration of concerned agencies.
9. Preliminary Engineering Analysis and Design for selected alignments of transit lines, to enable estimation of costs and for tendering purposes:

   a. Deliverables as part of preliminary engineering analysis and design shall include preparation of drawings for standardized civil structures, standardized bridge/tunnel design, conceptual architectural design drawings for stations/depots/maintenance facilities, technical drawings and sketches, bill of quantities for:
      - Civil works/ alignment/track works, at-grade/ grade-separated structures, buildings/ station facilities, stations/interchange facilities, depots and maintenance facilities, signalling, communication, rolling stock etc.
      - For stations, at least three station design concepts shall be developed to depict different architectural styles (viz. modern/ futuristic, traditional, green/ecological and corresponding finishes, materials) including for a typical station 3D rendering at appropriate scale to provide a good understanding of the style, finishes and volumes

   b. To enable preliminary design of civil works, consultant may conduct requisite geotechnical, initial environmental screening, and noise and vibration issues. These studies shall be carried out at a level to identify main issues that needs further detailed investigations during detailed engineering design.

   c. Risk assessment framework and value engineering issues to be considered in the preliminary engineering design of civil works, consideration of alignment alternatives, evaluation of stations/ other facilities and for the rolling stock.

10. Cost Estimates: For the selected alignments of each transit line, consultant shall prepare cost estimates (capital, operation and maintenance) in terms of:

   a. Civil engineering works, stations/depots/other facilities, miscellaneous other works, traction and power supply, signalling and communication works, automatic fare collection, rolling stock, environmental protection, contingency charges etc;

   b. Prepare broad cost estimates for land acquisition, road geometry re-arrangement and for relocation of utilities and services etc

11. Financial Analysis and Fare Structure

   a. Recommend optimal fare structure for each transit line (Red and Green)

   b. Revenue estimations with transit line operation (fare box revenues) and supportive/ transit oriented developments.

   c. Take note of financial/funding resources available for the project, in consultation with concerned agencies of Government of Bahrain, investigate the requirements for public sector funding/ affordability gap, funding through joint development opportunities with the developers of major mixed use/transit-oriented developments and other funding sources, if any.

   d. Prepare a comprehensive financial model to enable evaluate alternative financing options for implementation, operation and maintenance of transit lines and to assist in selection of viable option (based on the funding sources available from public sector). This model should be capable performing
sensitivity analysis based on changes to the assumptions and risk components over the project term (viz. Duration, construction cost, operating cost, fare box revenues, financing terms, inflation rates, scale of government support). Provision needs to be ensured in the financial model for reviewing financing options (at a macro level) for implementation of Phase-2 and 3 transit lines.

e. Risk assessment for fare box revenues, sensitivity analyses and estimating the resulting Financial Internal Rate of Return (FIRR), Net Present Value for different scenarios.

f. Recommend the best suitable financing plan (including Public Private Partnership options) based on estimated revenues and appropriate allocation of risks etc
   ▪ Consultants would need to review examples of public transport projects either completed or being successfully implemented through public private partnership formats across the world to devise best suitable financing scheme for implementation and management of transit lines in Kingdom of Bahrain.

12. Economic Analysis
   a. Estimation of economic costs and benefits with implementation of Phase-1 Transit Lines in terms of relevant parameters (mode shift, savings in capital and operation cost of buses, reduction in traffic congestion, reduction in fuel consumption, decongestion, passenger time savings, accident reductions/safety, reduced air pollution, savings in road infrastructure development cost etc).
   
   b. Economic Analysis (estimating Economic Internal Rate of Return) with sensitivity analyses for the envisaged investment on implementation of Transit Lines.

13. Transit Supportive Development Measures
   a. Outline an appropriate mix and size of transit supportive development initiatives (including Transit Oriented Developments at Stations/Interchanges etc) to optimize estimated investments on transit facilities, increase ridership and promote integrated development.
   
   b. Suggest transit-supportive measures (for review and consideration of the planning authorities) to promote transit-oriented developments, enhance transit ridership through integration and transport demand management interventions for existing and proposed major traffic generators within the catchment areas of transit lines.
   
   c. Identify and recommend other suitable measures for promoting phase-1 transit lines (viz. GPS enabled buses, time schedule display at stops, transit priority measures at signals, intelligent transportation system solutions, and smart cards), park and ride facilities at select locations etc.

14. Construction Methods and Procurement Strategies
   a. Suggest suitable construction methods for transit lines for various at-grade and grade-separated structures (viz. viaducts/ tunnels), other track works, stations/depots etc.
b. Development of a comprehensive procurement strategy for each transit line based on the selected implementation strategy (or) financing options for implementation of each component of phase-1 transit lines (civil works, track/alignment works, viaducts/structures, signalling and communication, rolling stock, stations/depots/ maintenance facilities) and based on risk analysis review for each procurement strategy (EPC, Design-Build and other PPP options as Design-Build-Finance-Operate. Build-Own-Operate etc).

c. Devise suitable contracting packages and recommend suitable procurement methods based on detailed review of alternative approaches for contracting.

15. **Institutional Framework and Implementation Plan**
   a. Recommend an institutional arrangement for implementation, operation, maintenance, management and regulation of transit lines (regulatory agency formulation and its organization structure).
   b. Define roles and responsibilities of various stakeholders, government agencies and private sector developers/contractors and operators.
   c. Suggest an implementation programme outlining milestones and schedules to achieve successful commercial operation of phase-1 transit lines in the target time frame.

16. **Marketing Strategy and Business Plan**
   a. Recommend a marketing and communication strategy to successfully implement transit lines and to encourage transit ridership
   b. Suggest a Business Plan to arrange finances and promote private sector participation in construction, operation, maintenance and management of transit lines in Bahrain.

4.1.1 **Tendering Services for Phase-1 Transit Lines**

1. Based on the approved concept/preliminary design for the each of the transit lines of phase-1, consultant shall prepare performance and functional specifications for the general buildings/ stations, track works, electro-mechanical systems (escalators, HVAC etc), rolling stock and railway systems (traction/power supply, signalling, telecom, operation control centre, depot and workshop maintenance equipment, automatic fare collection system and platform screen doors (to protect passengers from high temperatures). Consultant shall also prepare material and finishes schedule for the buildings and structures based on the selected style and concept.

   a. For the purposes of financial quotation for this project, applicants can assume Design-Build format as an appropriate option for implementation of phase-1 transit lines and specify alternative prices (over and above the base assumption) for other procurement options.

2. Consultant shall subsequently prepare tender documents required to issue design-build tenders for the transit lines:
a. **Contractual:** Invitation for Prequalification and Expression of Interest (EoI) notice for International Competitive Bidding, Invitation to Tender, Instructions to Tenderers, Tender appendices, Form of Agreement, General Conditions of Contract, Particular Conditions of Contract, (on the basis of FIDIC Silver or Yellow book).

b. **Technical:** Description of Works, General Specifications, Particular Specifications

c. Other requisite formats for tender documentation.

3. Assist MoW during and after the tender and evaluation of bids, selection of preferred bidder, negotiations and contract signing.

   a. Evaluation of technical proposals and preparation of technical evaluation report;
   b. Evaluation of financial and contractual proposals and preparation of financial evaluation report;
   c. Assist MoW in conducting contract negotiations with the preferred bidders and preparation of contract agreements for appointment of contractors.

### 4.1.2 Organize a Study Tour

Consultant need to organize a study tour for the client to visit up to 3 countries with state of the art mass transit system and to meet with the system operators/clients. Consultant, based on their experience, can suggest suitable locations for the consideration of Client.

### 4.2 Scope of Services for Option-A (ii) – Preliminary Feasibility Studies for Phase-2 & 3 Transit Lines

**Objective of the task:**

Objective of the task study is to undertake prefeasibility assessment for phase-2 and 3 transit networks to determine technical parameters finalize route alignment identify suitable locations for stations/facilities and assess the corridor requirements so as to reserve the right of way/corridor and enable future integration with land use developments proposed on the land parcels/activities abutting transit alignments.

**Scope of Services:**

1. Take note of existing reports on strategic roads master plan, integrated transport strategy, revised land use master plan, updated population and employment densities, proposed new developments that are to be served by transit system and other relevant studies to understand and identify role of this project within overall transport plan of Bahrain.

2. Define the catchment area for transit lines and its stations and conduct ridership estimates for the horizon years (opening year and 2030) of phases 2 and 3 of six transit lines, based on the updated project parameters. It requires undertaking
necessary updates to the latest available traffic model (VISUM Model of NPDS study, 2010-11) to ensure that model output (highway volumes and transit ridership) is robust and representative of local traffic conditions, travel pattern taking into consideration existing and planned transport infrastructure and land use development.

3. Liaise with relevant stakeholders, authorities and real estate developers, as deemed necessary, in conducting the study, identify joint development opportunities and to analyze optimum locations of transit lines, stations and other facilities.

4. Evaluation of alternative insertion options for each transit line (in terms of alignment, profile), facilities and location for stations/ multimodal integrated facilities, review the adequacy with revised land use and transport network master plans, conformity with revised ridership forecasts and identify associated issues and concerns for each transit line, if any. Prepare plans for each horizontal and vertical alignment of each alternative, including cross sections at characteristic locations. Functional layouts also need to be prepared for station areas/park and ride facilities/depots/maintenance facilities, to the level of details as necessary for comparative evaluation of alternatives and to assist in decision making.
   a. Consultant should consider and evaluate alternative vertical profile alignment options (at-grade, elevated and underground) for each of the transit lines of phases 2 & 3, review advantages/disadvantages, preliminary assessment of feasibility/viability (techno-economical) of suitable options to recommend the best option for each transit line.

5. Undertake multi criteria assessment (social, environmental, technical and financial, integration/intermodal transfer opportunities, accessibility and encouraging transit ridership etc) for alternative alignment options and identify the best suitable alignment for each transit line.

6. Consultant, as required, can recommend revised phasing plan for development of each of the transit lines, based on the revised assessment of ridership demand, to adequately cater to planned future developments and avoid congested traffic scenario along strategic road corridors.

7. Assess the corridor/ land requirements for accommodating the selected alignments of transit lines, identified stations/other facilities and prepare detailed corridor plans for selected alignments of each transit lines, stations and other facilities.

8. Preliminary analysis of impacts of transit lines on major utilities and existing structures, land acquisition requirements and corridor width (right of way) for the selected alignments of each transit line and its facilities (stations/intermodal integration areas). Prepare schematic diversion plans for the affected major utilities, for further consideration of concerned agencies.

9. Define technical parameters (track gauge and profile, power supply/ traction system, signalling and communication system, rolling stock) and prepare preliminary operation plan for the phase-2 and 3 transit lines at a level and detail necessary for this stage of assessment.
10. Prepare preliminary cost estimates for the phase 2 & 3 transit lines, identify the funding sources available and opportunities for involving private sector participation in implementation and management of select components of the project. A macro level financial assessment shall be undertaken for the phase-2 & 3 transit lines, with the financial model that would be prepared as part of Option-A (i) task.

4.3 Scope of Services for Option-A (iii) –Feasibility Studies for GCC Railway (within Bahrain) and its links to Port, Airport and Industrial Areas

Objective of the task:
The objective of the task is to identify suitable alignments and carryout prefeasibility assessment for GCC Railway and its connections to the key traffic generators of the Kingdom.

As per the discussion notes (dated May-2010) of GCC-Secretariat General (GCC-SG) and world bank, each member state should carryout detailed engineering design and construction of their component of the GCC Railway by adopting the standards and specifications (as agreed by all member states) laid down for the project. Responsibilities of GCC-SG will be limited to ensure coordination with each member state to follow the same standards/specifications, to abide with the implementation time schedule and to ensure that GCC Railway achieves integration and interoperability. Hence, consultant deliverables under this task should enable Government of Bahrain conduct detailed engineering design tasks, at a later date, and as per the standards and specifications defined for the GCC Railway.

Scope of Services:
1. Take note of GCC Railway Feasibility Study recommendations for rail alignment within Bahrain, its connectivity to Qatar/Saudi Arabia, proposed feeder rail links to select industries, location of stations/container yards, development phasing, freight/passenger demands and operational parameters for Bahrain.

2. Assess the potential passenger and freight traffic demand at the Port, Airport and at international borders (from/to KSA, Qatar/ GCC member states) for progressive development of heavy rail network. It requires that consultant should take note of:
   - Expansion plans for the key traffic generators of the Kingdom that would include Sh. Khalifa Bin Salman Port, Bahrain Logistics Zone, Industrial Areas and the on-going expansion plans for International Airport (with cargo village).
   - Existing, on-going and proposed land use and road network development initiatives in Bahrain.

3. Take note of alternative options identified till date by various agencies for the alignment of GCC Railway in Bahrain, associated issues and concerns, advantages/disadvantages with each of the alignment option in consultation with all concerned stakeholders.
4. Identify alternative alignments for GCC Railway and its connections to Port, Airport and Industrial Areas. Available information on updated land use master plan, road network and public transport master plans, available information on corridor width, utilities/services need to be considered.

5. Undertake multi-criteria analysis for alternative alignments (social, environmental, operational, technical, and financial) and recommend preferred alignment options for GCC Railway and its links to the key traffic generators.

6. Elaboration of preliminary alignment and profiles for preferred alignment options (maximum 3 alternatives) and identify suitable locations for stations/intermodal integration facilities/container yards, as required. Prepare horizontal and vertical alignment plans for alternatives and cross sections at critical points, at a detail to support comparative evaluation and decision making process.

7. Prepare concept designs for track and alignment profile, standardized structures (tunnels/bridges), and for other civil works, as required. Functional layouts also need to be prepared for depots/ maintenance facilities/ stations/ logistics facilities/intermodal integration areas including the requirements for customs and immigration facilities, to the level of details as necessary for comparative evaluation of alternatives and to assist in decision making.

8. Assess the corridor/ land requirements for accommodating the selected GCC railway alignments, identified stations/other facilities and prepare detailed corridor plans and cross sections for selected alignments and stations and other facilities.

9. Preliminary environmental screening and analysis of impacts of selected alignments on major utilities/existing structures, identify land acquisition requirements for track alignment and various facilities of GCC Railway. Prepare indicative/schematic diversion plans for the affected utilities/services, for further consideration of concerned agencies.

10. Define technical parameters for the GCC Railway alignments in Bahrain, to a sufficient level of details as necessary for this stage. Government of Bahrain desires that these details need to be compatible with the standard specifications / technical parameters being finalized for overall GCC Railway. It requires the consultant to prepare a preliminary operation plan for the railway system to adequately address the above requirements:
   - Track structure and profile.
   - Traction system and Power Supply to Stations/ Terminals.
   - Stations/Terminals, Workshops/ Maintenance Depots (sizing, location, facilities) including facilities for freight and passenger handling, customs/immigration facilities for international passengers etc
   - Rolling Stock, signalling and communication system.

11. Prepare preliminary cost estimates for each alternative at sufficient level of details for comparative evaluation and selection of suitable alignment for GCC Railway and its connections to Port, Airport and Industrial Area.

12. Develop procurement strategy and implementation plan for GCC Rail Alignment and its links. Identify the requirements for setting up an institutional framework for GCC Railway in Bahrain and to coordinate with GCC-SG.
13. Identify funding sources for implementation and management of the railway lines and suggest a suitable financing plan. Consultant should also explore the opportunities for mobilizing private sector funding.

4.4 Scope of Services for Option-A (iv) - Development of an efficient and high quality bus service (City Transit) system for Bahrain

Objective of the task:
Objective of the task is to review the existing public transport system, identify deficiencies and recommend suitable strategies for developing an efficient and high quality city transit system for Bahrain.

Scope of Services:
1. Review existing bus routes, connectivity, accessibility, service frequency, reliability, service quality and other parameters vis-a-vis the international best practices for a city level bus transport system.
2. Conduct requisite surveys, assess existing ridership pattern along each route, boarding/alighting pattern at major stops/stations and review the performance and utilization parameters.
3. Identify deficiencies, issues and concerns, opportunities/potentials for promoting public transport system in Bahrain.
4. Recommend relevant strategies to improve the existing bus transportation system, achieve better system efficiency, service and performance parameters, attract all income groups including aged/physically disabled, and to encourage public transport ridership. It involves identification of new routes (or) augmenting existing routes, stops/stations/terminals, schedules/frequencies, fleet modernization, bus priority measures, park and ride facilities for serving leisure, retail/office areas and other service quality improvement measures. It would require adopting a two-fold approach:
   a. Identify and recommend improvements required in next five years to develop a high quality city transit system. Advantages/opportunities for developing dedicated bus services between selected origins/destinations or running bus services along the identified transit alignment routes could be considered in evaluation of alternative options and to recommend the best approach.
   b. Identify requirements for rationalization/restructuring of bus routes to enable multimodal integration needs and to develop an efficient feeder bus service system with implementation of each phase of transit lines.
5. Identify and fix the responsibilities of each concerned organization/agency to achieve the envisaged goals for improving the bus transportation system.
6. Recommend phasing strategy for the identified improvement measures.
7. Prepare approximate cost estimates for each phase of implementation.
8. Recommend potential opportunities/modalities/frameworks for encouraging private sector participation in implementation, funding, operation and management of City Transit System.
5.0 Preparation and submission of EoI

5.1 Submission of EoI Application

5.1.1 Applicants for expression of interest are required to submit all the details along with support documents and other requisite information, as indicated in the Clause 5.2. Applicants should attach clearly marked and referenced continuation sheets in the event that the space provided in the Questionnaire and annexure is insufficient. MoW will provide soft copy of the prequalification questionnaire, if required, to facilitate the consultants willing to submit the application.

5.1.2 Applicant should clearly specify in their submission letter (as per the prescribed format enclosed with this document as annexure-1), their intent to apply for either one or both the options of this project. MoW will accordingly review the applications to prepare separate short-lists for each option.

5.1.3 Submissions must be enclosed in a single outer envelope, comprising of one original and one soft copy (pdf format) of the EoI application.

The sealed outer envelope should have the clear marking of project title as “EoI – Feasibility Studies for Bahrain Integrated Transit Lines” along with the applicant’s name and address.

5.1.4 EoI Applications must be submitted either in person or through Government mail / courier to reach the address, as stated below, and by the last date, as specified in clause 1.15.

Tender Board’s Office
7th Floor, Al Moayyed Tower
PO Box 18686, Seef District
Kingdom of Bahrain

5.1.5 EoI application can be submitted by an Individual Consultancy Company/Firm/Joint Venture. In case of Joint Venture, the applicants should submit requisite documents as stated clause 5.2.

5.1.6 Applications submitted by Fax/Telex or Email shall not be entertained.

5.1.7 Each page of the submittal, contents of sections and all documents submitted with the application shall be initialled by the authorized signatory of the applicant.
5.2 Documents/ Information to be submitted as part of EoI

5.2.1 Letter of Application (as per the format enclosed in Annexure-1) from the company/firm/ lead member of the joint venture, expressing their intent to be prequalified for either one or both the options of this project and commitment to associate with MoW to deliver the requisite tasks of this project. The letter of application must contain full contact details of authorized contact point for the firm or joint venture.

5.2.2 Letters of Endorsement (as per the format enclosed in Annexure-2) from each member of the joint venture (in case of submission as joint venture) expressing their intent and commitment to associate as part of the proposed joint venture and to agree to be jointly and severally liable to MoW under any contract which may be subsequently awarded to the joint venture.

5.2.3 Completed Questionnaire (Annexure-5) along with observations/ suggestions on the assignment (Clause 17 of Annexure-5) and support documents clearly demonstrating their track record, capabilities, experience in similar projects (detailed project sheets, as per the annexure-3), client certificates for 3 major similar projects, key staff resources and their brief CVs (for key professionals, as detailed in annexure-4), financial strength (audited financial reports for the last 3 years) etc, to assist in general assessment of applicants and to review the compliance with the eligibility criteria, as specified in clauses 2.3 to 2.6.

5.2.4 Any other information (brochures/firm profiles, organization structure, project management capabilities of the firm, international recognition/awards etc), details of available software tools and equipments, Quality Assurance System/ Quality Management Plans, and other details as deemed relevant by the applicant.

5.2.5 All documents submitted by applicants shall be in English Language.
Annexure 1  Format of letter of application

(On company / firm’s letter head or on the letter of lead partner, in case of JV)

The Director
Roads Planning & Design Directorate
Ministry of Works
PO Box No.5
Manama, Kingdom of Bahrain

Date:
Reference:

Application for Expression of Interest
Feasibility Studies for Bahrain Integrated Transit Lines

Dear Madam,

We hereby make application for expression of interest for consultancy services for the subject project.

In support, we submit all the necessary information and relevant documents (one original and one soft copy) for our selection in participation in the procedure for selection of consultant offered under consultancy services.

The application is made by us, on behalf of …………………………………in the capacity of ………………………………duly authorized to submit the expression of interest.

(In case of a joint venture / consortium, following paragraph should be added)

This application is submitted on behalf of the proposed joint venture / consortium comprising …………………, ………………., and ………………. (Applicant to state the name of each member) of which ……………….. (Applicant to insert name of lead member of joint venture / consortium) has agreed to act as lead member.

We hereby submit our willingness to get pre-qualified for (please tick mark, as applicable):

☐ Option-A: Feasibility Studies for Bahrain Integrated Transit Lines

☐ Option-B: Consultant Staff Secondees for Rail Transit Projects
We understand that MoW reserves the right to reject the application, without assigning any reason.

Yours faithfully,

Signature of Applicant:
Name of signatory:
Designation:
Name and address of firm:
Contact number:
Fax:
Email:

(Should be signed by representative of lead company / firm in case of joint venture / consortium)

Enclosures:
1
2
3
4
5
Annexure 2 ‘Letter of Endorsement’ Format for JV Partners

(To be submitted by each Joint Venture Partner, on each company/ firm’s letter head)

The Director
Roads Planning & Design Directorate
Ministry of Works
PO Box No.5
Manama, Kingdom of Bahrain

Date:
Reference:

Application for Expression of Interest

Feasibility Studies for Bahrain Integrated Transit Lines

Dear Madam,

We wish to confirm that our company / firm has formed / intends to form a joint venture with .............................................................. and ...................................................(members to insert names of all other members of the group) for purposes associated with getting pre-qualified for the subject project.

The joint venture / consortium will be led by (name of the lead member) whom we hereby authorize to act on our behalf for the purpose of applying for expression of interest. In the event of our group being invited to submit bid against the Request for Proposal issued by MoW for the subject work, we agree to be jointly and severely liable to MoW, its successors and assigners for all obligations, duties and responsibilities arising or imposed by any contract subsequently entered into between MoW and our group.

Yours faithfully

Signature of Applicant:
Name of signatory:
Designation:
Name and address of firm:
Contact number:
Fax:
Email:
## Annexure 3  Project Sheets-Consultant’s Experience

<table>
<thead>
<tr>
<th>Assignment name:</th>
<th>Approx. value of the contract (in current US$):</th>
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<tbody>
<tr>
<td>Country:</td>
<td>Duration of assignment (months):</td>
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<tr>
<td>Location within country:</td>
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<tr>
<td>Name of Client:</td>
<td>Total No. of staff-months of the assignment:</td>
</tr>
<tr>
<td>Address:</td>
<td>Approx. value of the services provided by your firm under the contract (in current US$):</td>
</tr>
<tr>
<td>Start date (month/year):</td>
<td>No. of professional staff-months provided by associated Consultants:</td>
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<tr>
<td>Completion date (month/year):</td>
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<tr>
<td>Name of associated Consultants, if any:</td>
<td>Name of senior professional staff of your firm involved and functions performed (indicate most significant profiles such as Project Director/Manager/Coordinator, Team Leader, Specialist etc):</td>
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<td>Narrative description of Project:</td>
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<tr>
<td>Description of actual services provided by your staff within the assignment:</td>
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</table>

Firm’s Name:
Annexure 4 Key Professionals and their CVs

Individual applicant or each constituent member of Joint Venture thereof should attach brief CVs of key professional staff nominated for the assignment.

Consultants may suggest the field of specializations as per their experience. The indicative fields of specialization of key staff are:

Public transport planning/ design expert, traffic and transport specialist (urban and transport planning), expert traffic modeller (VISUM/VISSIM), architect & urban design specialist, track & alignment design specialist, civil works specialist, railway engineering specialist for regional heavy rail (passenger and freight), utilities/services specialist, environment expert, traction/power specialist, signal control & communications specialist, rolling stock/transit System specialist (incl. operation & maintenance for transit lines), structural design (bridges/viaducts/tunnel) specialist, financial analyst/PPP specialist, transport economist (or) socio-economic expert, public transport policy/strategy specialist, costing & procurement strategy specialist, project manager

Note:
The above field of specialization is indicative.

One page CV of key expert shall be furnished
### Annexure 5 Prequalification Questionnaire

<table>
<thead>
<tr>
<th>1. Project Name:</th>
<th>Feasibility Studies for Bahrain Integrated Transit Lines</th>
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<tbody>
<tr>
<td>2. Study Area</td>
<td>Various areas in Bahrain</td>
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<tr>
<td>3. Name of Firm or Joint Venture</td>
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<tr>
<td>4. Address of main office where this work will be performed</td>
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<tr>
<td>5. Name, Designation, Telephone, Fax &amp; Email Id of main contact person</td>
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<td>6. Number of years principle firm has practiced in the field related to this project</td>
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<td>7. If application is submitted by Joint Venture, list participating firms and outline specific areas of responsibility (including administrative and technical) for each firm</td>
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<tr>
<th>Name of Participating Firm</th>
<th>Specific area of responsibility</th>
<th>Has this Joint Venture previously worked with you?</th>
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8. If respondent is not a Joint Venture, list outside key Sub-Contractors anticipated for this project:

<table>
<thead>
<tr>
<th>Name &amp; Address</th>
<th>Specialty</th>
<th>Has this Sub-Contractor previously worked with you?</th>
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9. Recent **COMPLETED** work by the Firm or Joint Venture members which best illustrates current qualifications relevant to this assignment (not more than 10 projects). Projects executed within last 10 years (2000-2010) should only be specified.

Please substantiate information for the below referenced projects, in separate project sheets (as per the format enclosed in Annexure-3). Client certificates also need to be submitted for the 3 major projects recently completed.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Project Name &amp; Location</th>
<th>Client and Country</th>
<th>Short Description of Work executed by the Firm</th>
<th>Work done Independently or in Joint Venture (if JV, state whether lead consultant or JV partner)</th>
<th>Value of Consultancy (in US $)</th>
<th>Project Start Date</th>
<th>Project End Date</th>
<th>Stipulated Time for project completion</th>
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</table>

Urban Transit Projects (Light Rail Transit, Monorail, Tramway, Bus Rapid Transit) including studies, if any, on city level bus transport system:

| 1) | 2) | 3) |


**Regional Railway (Passenger and Freight) Projects:**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Project Name &amp; Location</th>
<th>Client and Country</th>
<th>Short Description of Work Executed by the Firm</th>
<th>Work being done Independently or in Joint Venture (if JV, state whether lead consultant or JV partner)</th>
<th>Value of Consultancy (in US $)</th>
<th>Project Start Date</th>
<th>Percentage Completed</th>
<th>Anticipated Date for Completion</th>
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10. All on-going work CURRENTLY being performed by Firm or Joint Venture members

Please substantiate information for the below referenced projects, in separate project sheets (as per the format enclosed in Annexure-3)

Urban Transit Projects (Light Rail Transit, Monorail, Tramway, Bus Rapid Transit) including studies, if any, on city level bus transport system:

<table>
<thead>
<tr>
<th>S.No</th>
<th>Project Name &amp; Location</th>
<th>Client and Country</th>
<th>Short Description of Work Executed by the Firm</th>
<th>Work being done Independently or in Joint Venture (if JV, state whether lead consultant or JV partner)</th>
<th>Value of Consultancy (in US $)</th>
<th>Project Start Date</th>
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Regional Railway (Passenger and Freight) Projects:

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<th>Client and Country</th>
<th>Short Description of Work Executed by the Firm</th>
<th>Work being done Independently or in Joint Venture (if JV, state whether lead consultant or JV partner)</th>
<th>Value of Consultancy (in US $)</th>
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11. **Key Staff**

Provide brief resumes of key staff proposed (Must include detailed CVs of all the proposed key staff for the assignment)

Please include short CVs of for all the available key professionals (as briefly outlined in Annexure-4) and for other experts as deemed relevant

<table>
<thead>
<tr>
<th>a. Name &amp; Title:</th>
<th>a. Name &amp; Title:</th>
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</thead>
<tbody>
<tr>
<td>b. Project Assignment (Designated Role for the assignment)</td>
<td>b. Project Assignment (Designated role for the assignment)</td>
</tr>
<tr>
<td>c. Name of Firm with which associated:</td>
<td>c. Name of Firm with which associated:</td>
</tr>
<tr>
<td>d. Number of Years of experience: Total no. of years ……</td>
<td>d. Number of Years of experience: Total no. of years ……</td>
</tr>
<tr>
<td>With this firm …….</td>
<td>With this firm …….</td>
</tr>
<tr>
<td>With other firms ……..</td>
<td>With other firms ……..</td>
</tr>
<tr>
<td>GCC/Middle East …….</td>
<td>GCC/Middle East …….</td>
</tr>
<tr>
<td>Elsewhere ……..</td>
<td>Elsewhere ……..</td>
</tr>
<tr>
<td>e. Education: Degree(s) /Year /Specialisation</td>
<td>e. Education: Degree(s) /Year /Specialisation</td>
</tr>
<tr>
<td>f. Active Registration: Year first Registered /Discipline (Professional Membership)</td>
<td>f. Active Registration: Year first Registered /Discipline (Professional Membership)</td>
</tr>
<tr>
<td>g. Other Experience and Qualification relevant to the proposed project</td>
<td>g. Other Experience and Qualification relevant to the proposed project</td>
</tr>
<tr>
<td>h. Number of Expert professionals (permanent staff) available with the firm for this designated position:</td>
<td>h. Number of Expert professionals (permanent staff) available with the firm for this designated position:</td>
</tr>
<tr>
<td>&gt;15 Years experience ………….</td>
<td>&gt;15 Years experience ………….</td>
</tr>
<tr>
<td>10-15 Years experience ………….</td>
<td>10-15 Years experience ………….</td>
</tr>
</tbody>
</table>
12. Use this space to provide any additional information or description of resources (including any specialist skills and capability) to support your firm’s qualifications for the proposed project.

Under this space, please also provide the list of relevant software (VISUM/VISSIM/AutoCAD/3D Modelling / GIS/TRANSYT/SYNCHRO/TRANSPLAN etc) available with the firm, international awards/recognition achieved by the firm in similar projects

13. Please provide details of any quality assurance certification that your company holds e.g. ISO 9000 or equivalent standard. Please include a copy of any certificate.

14. If not, Please provide details of any quality assurance certification for which you have applied

15. A statement on organization’s annual turnover for the last 3 years (Individual firm or for each firm of the joint venture)

<table>
<thead>
<tr>
<th>Year</th>
<th>Turnover (in million USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
</tr>
</tbody>
</table>

Attach proof of turnover statement certified by auditor
### Invitation for Prequalification

Feasibility Studies for Bahrain Integrated Transit Lines

<table>
<thead>
<tr>
<th>16. Provide details of Registration of Foreign Consultancy Firms operating in Bahrain</th>
<th>Note: Applicants should note that it is mandatory for a firm to have registration with CoEPP, to award the project. In case the applicant is currently not registered with CoEPP, an undertaking is to be provided by the applicant stating that ‘should the firm/ joint venture be successfully qualified in the EoI stage for this project, applicant will take all necessary steps to register with CoEPP’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proof of registration with CoEPP (Committee for Organizing Engineering Professional Practice) is to be attached.</td>
<td></td>
</tr>
</tbody>
</table>

17. Use this space to provide your Observations/ Suggestions on the Scope of Work and on any clauses of this EoI (Your inputs are valuable and would enable the directorate to further improve, revise and streamline various aspects while seeking detailed proposals during the Bid Stage)

<table>
<thead>
<tr>
<th>18. Have you abandoned any work in last five years (Please support with undertaking)</th>
<th>Yes/ No</th>
</tr>
</thead>
<tbody>
<tr>
<td>19. Have you company / firm suffered bankruptcy / insolvency in the last five years</td>
<td>Yes/ No</td>
</tr>
<tr>
<td>20. Has your company / firm blacklisted by any government / funding agencies (World Bank, ADB, JBIC, DFID, etc.) / Public Sector Organization</td>
<td>Yes/ No</td>
</tr>
</tbody>
</table>

21. Declaration:

*The foregoing is a statement of facts.*

**Signature:**

Name: ____________________________________________ Date ________________________________

**Title:**

We are fully aware that, in the case of a joint venture, the composition of the joint venture cannot be modified in the course of the tender procedure. We are also aware that the joint venture members would have joint and several liability towards the Contracting Authority concerning participation in both the above tender procedure and any contract awarded to us as a result of it.