



## **PREQUALIFICATION DOCUMENTS FOR**

DESIGN AND CONSTRUCTION OF SIGNAL AND TELECOM WORKS FOR DOUBLE LINE RAILWAY INVOLVING TRAIN DETECTION SYSTEM, ELECTRONIC INTERLOCKING IN STATIONS, AUTOMATIC SIGNALLING IN BLOCK SECTIONS, INTERLOCKING OF LEVEL CROSSING GATES, DISPATCH TELEPHONE SYSTEM, FIBER OPTIC COMMUNICATION SYSTEM, GSM(R) SYSTEM, DIGITAL ELECTRONIC EXCHANGE SYSTEM AND MASTER CLOCK SYSTEM FOR JNPT – VADODARA SECTION (APPROX. 422 KM) INCLUDING TESTING AND COMMISSIONING ON DESIGN-BUILD LUMP SUM PRICE BASIS OF WESTERN DEDICATED FREIGHT CORRIDOR (PHASE-2)

### **SIGNALLING AND TELECOMMUNICATION WORKS CONTRACT**

#### **CONTRACT PACKAGE ST P-17**

Issued on: 26-09-2014

Invitation for Prequalification No: 2014/WC/S&T/Ph.II/PQ

ICB No.: ST P-17

Employer:

DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.  
(A GOVERNMENT OF INDIA ENTERPRISE)

MINISTRY OF RAILWAYS

INDIA

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# **PART 1 – Prequalification Procedures**

# Invitation for Prequalification (IFP)

26-09-2014

Country: INDIA

Loan Agreement No. : ID-P229

## **DEDICATED FREIGHT CORRIDOR PROJECT (WESTERN CORRIDOR PHASE-2) Design Build Lump Sum Contract**

**For**

### **Signalling and Telecommunication Works JNPT-Vadodara Section, Package ST P-17**

Invitation for Prequalification No: 2014/WC/S&T/Ph.II/PQ  
ICB No.STP-17

1. The President of India has received a Loan from Japan International Cooperation Agency towards the cost of the **DEDICATED FREIGHT CORRIDOR PROJECT (WESTERN CORRIDOR PHASE-2)**. It is intended that part of the proceeds of this Loan will be applied to eligible payments for which this Invitation for Prequalification is issued. Bidding will be governed by JICA's eligibility rules and procedures.
2. The Dedicated Freight Corridor Corporation of India Ltd. (DFCCIL) (hereinafter referred to as "the Employer") intends to prequalify contractors and/or firms for Signalling and Telecommunication Works (JNPT – Vadodara Section, Approx. 422 Km) under Package 17.

The total length of Phase 2 of Dedicated Freight Corridor (Western) between JNPT- Vadodara is 422km. This will be constructed as double line electrified broad gauge (1676mm) track with 2 x 25 kV AC, 50 Hz, overhead catenary system, capable of operating at a maximum train speed of 100km/h with an initial axle load of 25.0 tonnes. Formation and bridge structures are to be provided for 32.5 tonnes axle load and track structure for 25 tonnes axle load. The line will be suitable for running double stack containers on flat wagons of height 7.1 m above rail level.

Phase 2 section of the Western Corridor of the Dedicated Freight Corridor consists of two sections, namely Southern section and Northern section. Southern section stretches from JNPT to Vadodara (422 km) and Northern section stretches from Rewari to Dadri (128km), for a total length of 550 km.

Civil, Building and Track Works for JNPT-Vadodara Section have been planned as follows,

1. JNPT- Vaitarana (102 km) under Package11
2. Vaitarana-Sachin (186km) under Package12
3. Sachin - Vadodara (134km) under Package13

However, Signalling & Telecommunication Works from JNPT to Vadodara (422km) is intended to be carried out under single package, namely ST P-17.

**JNPT - Vaitarana Section (CT P-11, 102 Km ):**

The stretch for Package 11 (JNPT-Vaitarana) is basically located along JNPT-Panvel-Diva – Vasai Road of IR Central Railway and Vasai Road – Vaitarana Section of IR Western Railway. Detours have been planned at Kundevahal (1.5 km), at Dativali (4.04km) and at Vasai (16.8 km). About 78% of the proposed DFC alignment between JNPT and Vaitarana is passing parallel to the existing IR Central and Western Railways and remaining 22% of the alignment is passing through detours.

08 no. of Special Steel Bridges, 21 no. of Major Bridges, 172 no. of Minor Bridges, 13 no. of ROBs, 28 no. of RUBs and 02 no. of Tunnels (total length about 1 Km in Vasai detour area) are to be constructed within the route of this Package by Civil Contractors.

**Vaitarana - Sachin Section ( Package CT P-12, 186 Km ):**

The stretch of Package 12 is basically located along Vaitarana – Sachin Section of IR Western Railway. Detour has been planned at Dahanu Road (approx. 12.3 km) in this Section. Approximately 93% of the proposed DFC alignment between Vaitarana – Sachin is passing parallel to the existing IR Western Railway and the remaining 7% of the alignment is passing through detour.

50 no. of Important and Major Bridges (already under construction under a separate Civil Contract Package by DFCCIL), 02 no. of Special Steel Bridges, 259 no. of Minor Bridges, 04 no. of ROBs and 49 no. of RUBs are to be constructed within the route of this Package by Civil Contractors.

**Sachin - Vadodara Section (Package CT P-13, 134 Km):**

The stretch of Package 13 is basically located along Sachin – Vadodara Section of IR Western Railway. Detours have been planned between Udhana – Gothangam (approx 17.9km) and between Sanjali – Vadodara (approx 69.3 km). Approximately 35% of the proposed DFC alignment between Sachin - -Vadodara is passing parallel to the existing IR Western Railway and the remaining 65% of the alignment is passing through detours.

04 no. of Important and Major Bridges (already under construction under a separate Civil Contract Package by DFCCIL), 03 no. of Special Steel Bridges, 26 no. of Major Bridges, 03 no. of RFOs, 132 no. of Minor Bridges and 81 no. of RUBs are to be constructed within the route of this Package by Civil Contractors.

The Contractor shall undertake the design, supply, installation, testing and commissioning of the Signalling and Telecommunication Works including and without limitation, the design, construction and removal of any Temporary Works.

**Major Features for Package 17 (ST P-17) with approximate details at present are tabulated below,**

<b>Signalling &amp; Telecommunication Items</b>	<b>Approximate quantity</b>
a) Route length	422 km.
b) Electronic Interlocking at Junction Stations	3
c) Electronic Interlocking at Crossing Stations	9
d) Automatic Block Signalling	Block length 2 kms
e) Track Vacancy Detection system for Stations (Digital Axle counters)	12 Stations
f) Track vacancy Detection system for Block Section (Digital Axle counters)	Block length 2 kms
g) Interlocking of Level Crossing gates	64
h) Point machines	1 lot
i) Train Monitoring and Diagnostic System (TMS)	1 lot
j) EMC/EMI studies to determine induced voltages from IR and DFC Traction systems	1 lot
k) Provision of portable DG sets for temporary power supply during testing & commissioning phase	1 lot
l) Spare parts and tools for Signaling works	1 lot
m) Pre-fabricated structure (Porta huts) for Signalling and Telecommunication equipment	Auto location hut for Signalling – 1 lot, Telecommunication hut – 1 lot
n) Dispatching Telephone System	12 Stations
o) Fixed Communication System	12 Stations + each Maintenance Depot
p) Optic Fiber Communication System	422 route km
q) GSM(R) System	422 route km
r) Digital Electronic Exchange System	12 Stations
s) Spare parts and tools for Signal & Telecom works	1 lot
t) Training of DFCCIL O&M staff	1 lot

3. The expected schedule of the bidding process shall be as under.
  - (a) Invitation of Bids : 28-01-2015
  - (b) Submission of Bids (by Bidders) :30-03-2015
  - (c) Construction period: 208 Weeks
4. Prequalification will be conducted through prequalification procedures specified in the Guidelines for Procurement under Japanese ODA Loans, March 2009. Further eligible nationality for an applicant and all partners constituting the Applicant shall be the following:
  - a) Japan in case of the Prime Contractor ;
  - b) All countries and areas in the case of sub-contractor(s).

Further with regard to the above, in case where the prime contractor is a joint venture, such joint venture will be eligible provided that the nationality of the lead partner is Japan, the nationality of the other partners is Japan and /or India and that the total share of work of Japanese partners in the joint venture is more than fifty percent (50%) of the contract amount.

The percentage of goods to be procured from Japan for the permanent Works under this Contract is approximately 43.94%, a list of such items is given in Section V.

5. Interested eligible Applicants may obtain further information from and inspect the Prequalification Documents from 10:00 to 17:00 hours (Indian Standard Time) on business days only at the address given below from 26-09-2014 to 27-10-2014.
6. A complete set of the Prequalification Documents may be purchased by interested Applicant(s) on the submission of a written application to the address below during 11:00 hours to 17:00 hours on any working day and upon payment of a nonrefundable fee of (Rs.12,000/- or US\$ 200) + 5% VAT in the form of Demand Draft in favour of "Dedicated Freight Corridor Corporation of India Ltd." from any Scheduled Commercial Bank in India, and payable at New Delhi. The Prequalification Documents will be available for sale from 26-09-2014 and up to 12:00 hrs on 12-11-2014.

If the Applicant desires that the Prequalification Documents be sent by post/courier service, then an additional charge of Rs. 1,000 for inland delivery and Rs. 6,000 or US\$ 100 for overseas delivery shall also be paid along with fee stated above. The request for sending the Prequalification Documents by post/courier services must be received at the address below with requisite fee before 27-10-2014.

7. Applications for Prequalification should be submitted in sealed envelopes, delivered to the address below by 12-11-2014 at 15:00 hours (Indian Standard Time), and be clearly marked **"Application to Prequalify for DEDICATED FREIGHT CORRIDOR PROJECT (JNPT – VADODARA SECTION OF WESTERN CORRIDOR PHASE 2), Signalling and Telecommunication Works (Contract Package No. ST P-17).**
8. Pre-qualification Documents in PDF file will be available in Home Page of DFCCIL as shown



below:

<http://dfccil.org>

9. The Applicants who download the Pre-qualification Documents from DFCCIL website will be required to deposit the requisite fee, as specified above, at the address mentioned below towards the cost of Pre-qualification Documents before the submission of their Pre-qualification Application. The Pre-qualification Application(s) if submitted without the requisite fee will not be considered and rejected outright.
10. Interested eligible Applicants who have purchased the prequalification documents are invited to attend a Pre-PQ Conference to be held at the Venue below on 13-10-2014 at the following address:

Venue: Dedicated Freight Corridor Corporation of India Limited, Room No. 416, 4th Floor, Pragati Maidan, Metro Station Building, New Delhi – 110001, INDIA

Time: 11:00 Hours (Indian Standard Time)

Participation to this Pre-PQ Conference is not a mandatory requirement for prequalification.

A questionnaire Form will be delivered to the Applicant's Representatives of participants in the Pre-PQ Conference. Answers will be delivered to all Representatives within seven (7) days after the conference by e-mail. The answers shall also be available in Home page of DFCCIL website as shown above.

Dedicated Freight Corridor Corporation of India Ltd.  
Mr. Ashok Maheshwari  
Position: GM/S&T/WC-II  
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4th Floor, Pragati Maidan, Metro Station Building, New Delhi – 110001, INDIA  
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# **Section I. Instructions to Applicants**

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### A. General

<b>1. Scope of Application</b>	<p>1.1 In connection with the Invitation for Prequalification indicated in Section II, Prequalification Data Sheet (PDS), the Employer, as <b>defined in the PDS</b>, issues these Prequalification Documents (PD) to Applicants interested in bidding for the Works described in Section VI, Scope of Works. The reference identification number of the contract, if any, is <b>provided in the PDS</b>.</p>
<b>2. Source of Funds</b>	<p>2.1 The Borrower <b>indicated in the PDS</b> has received a Japanese ODA Loan from Japan International Cooperation Agency (hereinafter referred to as "JICA"), with the number, in the amount, and on the signed date of the Loan Agreement <b>indicated in the PDS</b>, towards the cost of the project <b>named in the PDS</b>. The Borrower intends to apply a portion of the proceeds of the loan to eligible payments under the contract(s) resulting from the bidding for which this prequalification is conducted.</p> <p>2.2 Disbursement of a Japanese ODA Loan by JICA will be subject, in all respects, to the terms and conditions of the Loan Agreement, including the disbursement procedures and "Guidelines for Procurement under Japanese ODA Loans". No party other than the Borrower shall derive any rights from the Loan Agreement or have any claim to loan proceeds.</p> <p>2.3 The above Loan Agreement will cover only part of the project cost. As for the remaining portion, the Borrower will take appropriate measures for finance.</p>
<b>3. Fraud and Corruption</b>	<p>3.1 It is JICA's policy to require that Bidders and Contractors, as well as Borrowers under contracts funded with Japanese ODA Loans and other Japanese ODA, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, JICA:</p> <ul style="list-style-type: none"> <li>(a) will reject a proposal for award if it determine that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;</li> <li>(b) will recognize a Bidder or Contractor as ineligible, for a period determined by JICA, to be awarded a contract funded with Japanese ODA Loans if it at any time determines that the Bidder or the Contractor has engaged in corrupt or fraudulent practices in competing for, or in executing another contract funded with Japanese ODA Loans or other Japanese ODA.</li> </ul>
<b>4. Eligible Applicants</b>	<p>4.1 An Applicant may be a single entity or any combination of entities in the form of joint venture or association (JVA) with the formal intent, as evidenced by a letter of intent, to enter into an agreement or under an existing agreement. In the case of a JVA,</p> <ul style="list-style-type: none"> <li>(a) <b>unless otherwise specified in the PDS</b>, all partners shall be jointly and severally liable for the execution of the Contract in</li> </ul>

	<p>accordance with the Contract terms, and</p> <p>(b) the JVA shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the partners of the JVA during the prequalification process and, in the event the JVA is prequalified, during the bidding process, and in the event the JVA is awarded the Contract, during contract execution.</p>
	<p>4.2 An Applicant and all partners constituting the Applicant shall be from an eligible source country as listed in Section V, List of Eligible Countries of Japanese ODA Loans.</p>
	<p>4.3 An Applicant shall not have a conflict of interest. All Applicants found to have a conflict of interest shall be disqualified from participating in this prequalification process. An Applicant may be considered to have a conflict of interest with one or more parties in this prequalification process if:</p> <p>(a) an Applicant has been engaged by the Employer to provide consulting services for the preparation related to procurement for or implementation of the project;</p> <p>(b) an Applicant is any of its associates/affiliates (inclusive of parent firms) mentioned in subparagraph (a) above; or</p> <p>(c) an Applicant lends, or temporarily seconds its personnel to firms or organizations which are engaged in consulting services for the preparation related to procurement for or implementation of the project, if the personnel would be involved in any capacity on the same project.</p>
	<p>4.4 An Applicant shall submit only one application in the same Prequalification process, either individually as an Applicant or as a partner of a JVA. An Applicant who submits, or participates in, more than one application will cause all the applications in which the Applicant has participated to be disqualified. No Applicant can be a subcontractor while submitting an application individually or as a partner of a JVA in the same Prequalification process. A subcontractor in any application may participate in more than one application, but only in that capacity.</p>
	<p>4.5 An Applicant, that has been determined to be ineligible by JICA in accordance with ITA 3, shall not be eligible to be awarded a contract.</p>
	<p>4.6 Applicants shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer shall reasonably request.</p>
<p><b>5. Eligible Goods and Related Services</b></p>	<p>5.1 All Goods and related services to be supplied under the Contract to be financed by JICA shall have their origin in any country in accordance with Section V, List of Eligible Countries of Japanese ODA Loans.</p>

	<b>B. Contents of the Prequalification Documents</b>
<b>6. Sections of Prequalification Documents</b>	6.1 The documents for the prequalification of Applicants (hereinafter referred to as "Prequalification Documents") consist of parts 1 and 2 which comprise all the sections indicated below, and should be read in conjunction with any Addendum issued in accordance with ITA 8.
	<p>PART 1 Prequalification Procedures</p> <ul style="list-style-type: none"> <li>• Section I. Instructions to Applicants (ITA)</li> <li>• Section II. Prequalification Data Sheet (PDS)</li> <li>• Section III. Qualification Criteria and Requirements</li> <li>• Section IV. Application Forms</li> <li>• Section V. List of Eligible Countries of Japanese ODA Loans</li> </ul> <p>PART 2 Works Requirements</p> <ul style="list-style-type: none"> <li>• Section VI. Scope of Works</li> </ul>
	6.2 The "Invitation for Prequalification" issued by the Employer is not part of the Prequalification Documents.
	6.3 The Employer accepts no responsibility for the completeness of the Prequalification Documents and its addenda unless they were obtained directly from the Employer.
	6.4 The Applicant is expected to examine all instructions, forms, and terms in the Prequalification Documents and to furnish all information or documentation required by the Prequalification Documents.
	6.5 General information on the climate, hydrology, topography, access to site, transportation and communications facilities, medical facilities, project layout, expected construction period, and other services and facilities to be provided by the Employer is furnished in Section VI, Scope of Works.
<b>7. Clarification of Prequalification Documents</b>	7.1 A prospective Applicant requiring any clarification of the Prequalification Documents shall contact the Employer in writing at the Employer's address <b>indicated in the PDS</b> . The Employer will respond in writing to any request for clarification provided that such request is received no later than fourteen (14) days prior to the deadline for submission of applications. The Employer shall forward copies of its response to all Applicants who have acquired the Prequalification Document directly from the Employer including a description of the inquiry but without identifying its source. Should the Employer deem it necessary to amend the Prequalification Document as a result of a clarification, it shall do so following the procedure under ITA 8 and in accordance with the provisions of ITA 17.2.
<b>8. Amendment of Prequalification</b>	8.1 At any time prior to the deadline for submission of applications, the Employer may amend the Prequalification Documents by issuing

<b>Documents</b>	addenda.
	8.2 Any addendum issued shall be part of the Prequalification Documents and shall be communicated in writing to all who have obtained the Prequalification Documents from the Employer.
	8.3 To give prospective Applicants reasonable time to take an addendum into account in preparing their applications, the Employer may, at its discretion, extend the deadline for the submission of applications.
	<b>C. Preparation of Applications</b>
<b>9. Cost of Applications</b>	9.1 The Applicant shall bear all costs associated with the preparation and submission of its application. The Employer shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the prequalification process.
<b>10. Language of Application</b>	10.1 The application as well as all correspondence and documents relating to the prequalification exchanged by the Applicant and the Employer, shall be written in the language <b>specified in the PDS</b> . Supporting documents and printed literature that are part of the application may be in another language, provided they are accompanied by an accurate translation of the relevant passages in the language <b>specified in the PDS</b> , in which case, for purposes of interpretation of the application, the translation shall govern.
<b>11. Documents Comprising the Application</b>	11.1 The application shall comprise the following: <ul style="list-style-type: none"> <li>(a) Application Submission Form, in accordance with ITA 12;</li> <li>(b) documentary evidence establishing the Applicant's eligibility to prequalify, in accordance with ITA 13;</li> <li>(c) documentary evidence establishing the Applicant's qualifications, in accordance with ITA 14; and</li> <li>(d) any other document required as <b>specified in the PDS</b>.</li> </ul>
<b>12. Application Submission Form</b>	12.1 The Applicant shall prepare an Application Submission Sheet using the form furnished in Section IV, Application Forms. This Form must be completed without any alteration to its format.
<b>13. Documents Establishing the Eligibility of the Applicant</b>	13.1 To establish its eligibility in accordance with ITA 4, the Applicant shall complete the eligibility declarations in the Application Submission Form and Forms ELI (eligibility) 1.1 and 1.2, included in Section IV, Application Forms.
<b>14. Documents Establishing the Qualifications of the</b>	14.1 To establish its qualifications to perform the contract(s) in accordance with Section III, Qualification Criteria and Requirements, the Applicant shall provide the information requested in the corresponding forms included in Section IV, Application Forms.

<b>Applicant</b>	
<b>15. Signing of the Application and Number of Copies</b>	<p>15.1 The Applicant shall prepare one original of the documents comprising the application as described in ITA 11 and clearly mark it "ORIGINAL". The original of the application shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Applicant.</p> <p>15.2 The Applicant shall submit copies of the signed original application, in the number <b>specified in the PDS</b>, and clearly mark them "COPY". In the event of any discrepancy between the original and the copies, the original shall prevail.</p>
	<b>D. Submission of Applications</b>
<b>16. Sealing and Identification of Applications</b>	<p>16.1 The Applicant shall enclose the original and the copies of the application in a sealed envelope that shall:</p> <ul style="list-style-type: none"> <li>(a) bear the name and address of the Applicant;</li> <li>(b) be addressed to the Employer, in accordance with ITA 17.1; and</li> <li>(c) bear the specific reference identification number of this prequalification process, if any, indicated in ITA1.1 (PDS).</li> </ul>
	16.2 The Employer will accept no responsibility for not processing any envelope that was not identified as required.
<b>17. Deadline for Submission of Applications</b>	17.1 Applicants may always submit their applications by mail or by hand. Applications shall be received by the Employer at the address and no later than the deadline <b>indicated in the PDS</b> . A receipt will be given for all applications submitted.
	17.2 The Employer may, at its discretion, extend the deadline for the submission of applications by amending the Prequalification Documents in accordance with ITA 8, in which case all rights and obligations of the Employer and the Applicants subject to the previous deadline shall thereafter be subject to the deadline as extended.
<b>18. Late Applications</b>	18.1 The Employer reserves the right to accept or reject late applications.
<b>19. Opening of Applications</b>	19.1 The Employer shall prepare a record of the opening of applications that shall include, as a minimum, the name of the Applicant. A copy of the record shall be distributed to all Applicants.
	<b>E. Procedures for Evaluation of Applications</b>
<b>20. Confidentiality</b>	20.1 Information relating to the evaluation of applications, and recommendation for prequalification, shall not be disclosed to Applicants or any other persons not officially concerned with such process until the notification of prequalification is made to all



	Applicants.
	20.2 From the deadline for submission of applications to the time of notification of the results of the prequalification in accordance with ITA 28, any Applicant that wishes to contact the Employer on any matter related to the prequalification process, may do so but only in writing.
<b>21. Clarification of Applications</b>	21.1 To assist in the evaluation of applications, the Employer may, at its discretion, ask any Applicant for a clarification of its application which shall be submitted within a stated reasonable period of time. Any request for clarification and all clarifications shall be in writing.
	21.2 If an Applicant does not provide clarifications of the information requested by the date and time set in the Employer's request for clarification, its application may be rejected.
<b>22. Responsiveness of Applications</b>	22.1 The Employer may reject any application which is not responsive to the requirements of the Prequalification Documents.
<b>23. Subcontractors</b>	23.1 Applicants planning to subcontract any of the key activities indicated in Section III, Qualification Criteria and Requirements, shall specify the activity(ies) or parts of the Works to be subcontracted in the Application Submission Form. Applicants shall clearly identify the proposed specialist subcontractor(s) in Forms ELI-1.2 and EXP (experience)-4.2(b) in Section IV, Application Forms. Such proposed specialist subcontractor(s) shall meet the corresponding qualification requirements specified in Section III, Qualification Criteria and Requirements.
	23.2 At this time, the Employer does not intend to execute certain specific parts of the Works by subcontractors selected in advance by the Employer (Nominated Subcontractors) <b>unless otherwise stated in the PDS.</b>
	<b>F. Evaluation of Applications and Prequalification of Applicants</b>
<b>24. Evaluation of Applications</b>	24.1 The Employer shall use the factors, methods, criteria, and requirements defined in Section III, Qualification Criteria and Requirements to evaluate the qualifications of the Applicants. The use of other methods, criteria, or requirements shall not be permitted. The Employer reserves the right to waive minor deviations in the qualification criteria if they do not materially affect the capability of an Applicant to perform the contract.
	24.2 Only the qualifications of subcontractors that have been identified in the application may be considered in the evaluation of an Applicant. However, the general experience and financial resources of subcontractors may not be added to those of the Applicant for purposes of prequalification of the Applicant.

	24.3 <b>Unless otherwise indicated in the PDS</b> , this prequalification shall be for a single contract.
<b>25. Employer's Right to Accept or Reject Applications</b>	25.1 The Employer reserves the right to accept or reject any application, and to annul the prequalification process and reject all applications at any time, without thereby incurring any liability to Applicants.
<b>26. Prequalification of Applicants</b>	26.1 All Applicants, whose applications have been determined to be substantially responsive to the requirements of the Prequalification Documents and who have met or exceeded ("passed") the specified threshold criteria, shall be prequalified by the Employer.
<b>27. Notification of Prequalification</b>	27.1 Once the Employer has completed the evaluation of the applications, it shall notify all Applicants in writing of the names of those Applicants who have been prequalified.
<b>28. Invitation for Bids</b>	28.1 Promptly after the notification of the results of the prequalification, the Employer shall invite bids from all the Applicants that have been prequalified.
	28.2 Bidders may be required to provide a Bid Security acceptable to the Employer in the form and an amount to be specified in the Bidding Documents, and the successful Bidder shall be required to provide a Performance Security to be specified in the Bidding Documents.
<b>29. Changes in Qualifications of Applicants</b>	29.1 Any change in the structure or formation of an Applicant after being prequalified in accordance with ITA 26 and invited to bid shall be subject to a written approval of the Employer prior to the deadline for submission of bids. Any such changes shall be submitted to the Employer not later than fourteen (14) days after the date of the Invitation for Bids. Such approval shall be denied if as a consequence of the change; <ul style="list-style-type: none"> <li>(a) the prequalified Applicant, after the change, no longer substantially meets the qualification criteria set forth in Section III, Qualification Criteria and Requirements; or</li> <li>(b) in the opinion of the Employer, a substantial reduction in competition may result.</li> </ul>

## **Section II. Prequalification Data Sheet**

<b>A. General</b>	
<b>ITA 1.1</b>	The reference identification numbers and names of this Invitation for Prequalification is: ICB No.:STP-17
<b>ITA 1.1</b>	The name of the Employer is: Dedicated Freight Corridor Corporation of India Limited (A Government of India Enterprise)
<b>ITA 1.1</b>	The names, number and identification of the slices/ packages comprising this contract is: <b>Signalling and Telecommunication Works for JNPT – Vadodara Section Package 17 (STP-17)</b> Design, Supply, installation, testing and commissioning of Signalling and Telecommunication Works for Double Line Railway involving station interlocking, automatic block signalling, interlocking of level crossing gates, track vacancy detection system, Power Supply, Point machines, signals, Train Monitoring and Diagnostic System (TMS), Dispatching Telephone System, Fibre Optic Communication System, GSM(R) System, Fixed Communication System, Digital Electronic Exchange System and Master Clock System on Design-Build Lump Sum (LS) Price basis for JNPT –Vadodara section (Approx. 422km.) of Western Dedicated Freight Corridor(Phase -2)
<b>ITA 2.1</b>	The name of the Borrower is: The President of India
<b>ITA 2.1</b>	The number of the Loan Agreement is: ID-P229 The amount of a Japanese ODA Loan is: JPY 136,119 Million The signed date of the Loan Agreement is: 28 March 2013
<b>ITA 2.1</b>	The name of the Project is: Dedicated Freight Corridor Project (Western Corridor Phase-2)
<b>ITA 3</b>	Bidder/Contractor would include the prime contractor, partners in a joint venture or association, sub-contractors and sub consultants.

<b>ITA 4.1</b>	<p>The ITA 4.1 shall be replaced with the following</p> <p>a) For the purpose of this pre-qualification document the following definition shall apply:</p> <ul style="list-style-type: none"> <li>(i) 'Applicant' : Is the collective single entity consisting of 'Prime Contractor' with its 'Sub-contractor(s) &amp; Sub-consultants'</li> <li>(ii) 'Prime Contractor' may be single entity or 'a joint venture or partner in JV' or 'association or its member' excluding Sub Contractor' &amp; Sub Consultants with the formal intent, as evidenced by a letter of intent, to enter into an agreement or under an existing/pre-existing agreement</li> <li>(iii) 'Partners' : Prime Contractor or in case where the Prime Contractor is a joint venture or association , 'Partners' would include all the constituent members of the joint venture or association.</li> <li>(iv) 'Authorised Signatory': For the purpose of this pre-qualification, the Authorised Signatory shall mean the person authorized to sign on behalf of Partner / Sub-contractor/ Sub consultant under a Power of Attorney and supported by a resolution from the respective Board of Directors.</li> </ul> <p>b) In case of joint venture or association, all the constituent members of joint venture or association shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms</p> <p>c) The joint venture or association shall nominate one Representative who shall have the authority to conduct all business for and on behalf of any and all the partners of the joint venture or association during the prequalification process and, in the event the joint venture or association is prequalified, during the bidding process, and in the event the joint venture or association is awarded the Contract, during contract execution. In this regard each of the joint venture or association Partners shall submit the Power of Attorney duly signed by their respective 'Authorised Signatory' along with the Application for Pre-qualification.</p> <p>d) The Power of Attorney, in respect of the 'Authorized Signatory' of the respective Partners duly supported by their respective Board Resolution shall also be submitted along with the Application for pre-qualification.</p> <p>Alternatively a valid and current Power of Attorney to act on behalf of the company duly supported by authenticated evidence establishing the authority of the person issuing the said Power of Attorney is also acceptable. A Board Resolution is one way of validating such authenticity. Other valid &amp; authentic documentation confirming that the person issuing the Power of Attorney has the authority to do so, would also be acceptable.</p>
<b>ITA 4.3</b>	<p>Supplement with the following:</p> <p>As part of the Application for Pre-qualification, the Applicant shall submit an undertaking from each of the proposed Partners and Sub-contractors / Sub-consultants, duly signed by their Authorized Signatories, that they do not have any conflict of interest under the provisions of Clause ITA 4.3 (a), (b) &amp; (c).</p>

<b>ITA 4.4</b>	<p>Replace ITA 4.4 with the following :</p> <p>An applicant shall participate only in one application in the same Prequalification Process either individually as single entity (Prime Contractor) or as a Partner of a joint venture or association. An applicant as a Single entity (a Prime Contractor) or JV/Association Partner who submits, or participates in, more than one application as the Prime Contractor will cause all the applications, in which the entity has participated, to be disqualified. No applicant as a Single entity (a Prime Contractor) or JV/Association Partner can be a Sub-contractor or Sub-consultant while submitting an application under the same Pre-qualification process. A Sub Contractor / Sub consultant in any application may participate in more than one application but only in that capacity.</p>
<b>ITA 4.7</b>	<p>The following clause shall be added after ITA 4.6:</p> <p>The Applicant shall be considered in-eligible if any of its Partners and / or Sub contractors / Sub-consultants included in the Application for Prequalification has been banned for business with Ministry of Railways along with <u>any of its attached and subordinate offices through an order issued by Ministry of Railways as per list available on Web site ( <a href="http://www.indianrailways.gov.in/railwayboard">http://www.indianrailways.gov.in/railwayboard</a> )</u> of Civil Eng. Directorate of Railway Board pertaining to Banning of Business, with the Banning being valid as on the last date of submission the Pre-qualification Application.</p> <p>The Applicant / each partner of the joint venture or association including the proposed Sub-contractors, Sub-consultants shall submit an undertaking to this effect duly signed by their authorized signatory along with the Application for Prequalification.</p>
<b>B. Contents of the Prequalification Documents</b>	
<b>ITA 7.1</b>	<p>For <b><u>clarification purposes</u></b> only, the Employer's address is:</p> <p>Dedicated Freight Corridor Corporation of India Limited  Attention: Mr. Ashok Maheshwari  Position: GM/S&amp;T/WC-II  Room No:400C  4th Floor, Pragati Maidan, Metro Station Building, New Delhi – 110001, INDIA  Tel: +91-11-2337-9891, Fax : +91-11-2345-4932  e-mail: <a href="mailto:stwc2@dfcc.co.in">stwc2@dfcc.co.in</a></p> <p>Any clarification shall be submitted to the above address not later than twenty-one (21) days prior to the deadline of submission of application.</p> <p>A copy of queries, together with the answers of DFCCIL will be issued not later than ten (10) days before the closing date of the Prequalification Application, to all Applicants who have purchased Pre-qualification Documents.</p>
<b>ITA 8.1</b>	<p>Any addendum will be issued not later than ten (10) days before the closing date of the Prequalification Application, to all Applicants who have purchased Pre-qualification Documents.</p>
<b>ITA 8.2</b>	<p>Any addendum to the Prequalification Documents shall also be uploaded on the web site of DFCCIL i.e. <a href="http://www.dfcc.org">www.dfcc.org</a>.</p>

<b>C. Preparation of Applications</b>	
<b>ITA 10.1</b>	The language of the application as well as of all correspondence is: English
<b>ITA 11.1 (d)</b>	<p>The Applicant shall submit with its Application, the following additional documents:</p> <ol style="list-style-type: none"> <li>1. Soft Copy of the Pre-qualification Application on one (1) set of compact disc(s) in a non-editable format. The compact disc shall bear the signature of the Authorized Signatory of the Applicant in indelible ink.</li> <li>2. Submission of Letter of Intent (LOI) or joint venture / association agreement at the Pre-qualification stage , <ol style="list-style-type: none"> <li>(i) LOI needs to specify the following <ol style="list-style-type: none"> <li>(a) Identification of Lead Partner (from Japan) and endorsement about its having maximum financial stake amongst the other Partners.</li> <li>(b) Total share of Japanese Partners being more than 50% of the Contract amount.</li> <li>(c) joint and several liabilities of all the Partners</li> <li>(d) LOI requires to be signed by authorized signatories of all the Partners.</li> </ol> <p style="text-align: center;">A format for LOI is enclosed at Form ELI 1.1 A in Section –IV.</p> </li> <li>(ii) In case of joint venture (JV) or association agreement, it shall clearly bring out the role of each Partner of the joint venture or association in addition to the requirements as specified in the LOI. However, submission of joint venture or association agreement is not a mandatory requirement at Pre-qualification stage and same would be mandatory at the bidding stage.</li> </ol> </li> <li>3. An undertaking from each Sub-contractor / Sub-consultant proposed (as per ITA 23.1) indicating its willingness to associate with the Applicant as a specialist Sub-contractor/ Sub-consultant for the particular key activity against which his credentials have been offered by the Applicant in the application for the Prequalification.</li> </ol>

<b>ITA 14.1</b>	<p>The following para shall be added at the end of clause ITA 14.1</p> <ol style="list-style-type: none"><li>1. The Applicant shall also submit Documentary evidence / Client's Certificates in support of the Applicant's claim of the Experience (General and Specific) in respect of each contract as included in Section IV, Application Forms. In case of the works / financial situations involving foreign currencies, the same shall be converted to USD by first converting it to Japanese Yen and then to USD by applying the foreign exchange rate as specified in Section III : Qualification Criteria and Requirements.</li><li>2. The experience certificate issued by the Engineer acting on behalf of the Client shall also be considered provided the documentary evidence, establishing the appointment of the said Engineer by the Client is also submitted along with the experience certificate issued by the said Engineer. For establishing the identity of such Engineer, alternatively, a self certification duly attested by Notary Public may also be furnished to establish that the said Engineer was appointed by the Client.</li></ol> <p>2.1 As a further alternative, in addition to the above, in case of PPP projects, the Concessionaire can give experience certificate to the Construction Contractor to which the execution work is subsequently awarded by the same Concessionaire. However such certificate will need to be countersigned by :</p> <ol style="list-style-type: none"><li>a) The concerned Public Authority who has granted the concession, clearly indicating the name, designation and official address of the signing authority</li></ol> <p style="text-align: center;">OR</p> <ol style="list-style-type: none"><li>b) Independent Engineer appointed by the concerned Public Authority who has granted the concession clearly indicating the name, designation and official address of the signing authority. The document(s) establishing the appointment of the said Independent Engineer shall also be required.</li></ol> <p style="text-align: center;">OR</p> <p>2.2 Alternatively, the Applicant shall submit a notarized set of documents comprising of</p> <ol style="list-style-type: none"><li>a) A Self certification of the work undertaken, period of execution, quantities and money value</li></ol> <p style="text-align: center;">&amp;</p> <ol style="list-style-type: none"><li>b) Completion Certificate by the Concessionaire / Contractor as the case may be, clearly indicating :</li></ol> <ol style="list-style-type: none"><li>i) The subsequent award of work to the Applicant by Concessionaire / Contractor, as the case may be</li><li>ii) Name, scope of work, period of completion and total cost of work, subsequently awarded to the Applicant</li><li>iii) Period of execution (from date of start of work – date of completion)</li><li>iv) Quantities of individual items in satisfaction of para 4.2 (b) and 4.3 of Section III – Qualification Criteria and Requirements, clearly indicating the monetary equivalent of execution of each of aforementioned items (as mentioned under Para 4.2 (b) and 4.3 of Section III – Qualification Criteria and Requirements)</li></ol>
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	<p>v) Total money paid to / received by the Applicant clearly indicating the revised value of the Contract</p> <p>vi) A clear averment to the effect that whether the work was completed / Taken Over or substantially completed in light of Para 4.2 (a) and 4.3 of Section III - Qualification Criteria and Requirements</p> <p>c) In case the option of Para 2.2 above is exercised by the Applicant, then a documentary evidence establishing the identity of the Concessionaire / Contractor either by the Public Authority or by Independent Engineer engaged by the Public Authority is also required</p> <p><b>Notes :</b></p> <ol style="list-style-type: none"><li>1. The quantities executed by the Applicant during a calendar year / financial year shall be assessed on pro-rata basis for the period from commencement of the project to the date of the Bill.</li><li>2. In case of any Applicant / Sub-contractor claims execution of certain work in order to fulfill eligibility criteria which has also been claimed by some other Applicant / Sub-contractor, that experience of work in question would not be aggregated while evaluating the eligibility of both the involved Applicants.</li><li>3. The Documentation / Information produced / furnished by Applicant / Partners / Sub-contractor / Sub-design Consultant shall be subject to verification by the Employer at any stage during the PQ or the Bidding Process or during the Contract execution. In case of the incorrect certification / information being noticed during such verification, the Applicant shall be disqualified or suitable action taken as per the extent Contractual Provisions, as the case may be.</li></ol>
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<b>ITA 15.1</b>	<p>The ITA 15.1 shall be replaced with the following,</p> <p>The Applicant shall prepare one original of the documents comprising the application as described in ITA 11 and clearly mark it "ORIGINAL". The original of the application shall be typed or written in indelible ink and shall be signed by the Signatory Authorized to sign on behalf of Applicant as defined in ITA 4.1 (a) (iv) provided in PDS.</p> <p>In addition to this, all the documents pertaining to the information and experience, as claimed by the Applicant, shall also be signed by the Authorized Signatory of the respective Partner / specialist Sub-contractor/ specialist Sub-design Consultant to whom the information and the claimed experience actually belongs to.</p>
<b>ITA 15.2</b>	<p>In addition to the original, the number of copies to be submitted with the application is: Three (3)</p>
<b>ITA 15.3</b>	<p>The following clause shall be added as ITA 15.3 after ITA 15.2,</p> <p>The Original and all the copies of Application shall be hard bound. Each page of the Application shall be serially numbered and indexed.</p>
<b>D. Submission of Applications</b>	
<b>ITA 16.3</b>	<p>The Applicant shall clearly specify Contract Package Number on the covering page of the Application Documents as :</p> <p>Signaling and Telecommunication Works Contract Package 17 (ST P-17)</p>
<b>ITA 17.1</b>	<p>For application submission purposes only, the Employer's address is:</p> <p>Dedicated Freight Corridor Corporation of India Limited  Attention: Mr. Ashok Maheshwari  Position: GM/S&amp;TWC-II  Room No:400C  4th Floor, Pragati Maidan, Metro Station Building, New Delhi – 110001, INDIA  Tel: +91-11-2337-9891, Fax : +91-11-2345-4932  e-mail: <a href="mailto:stwc2@dfcc.co.in">stwc2@dfcc.co.in</a></p> <p>The deadline for application submission is:  Date: 12-11-2014  Time: 15:00 hours, Indian Standard Time (IST)</p>
<b>E. Procedures for Evaluation of Applications</b>	
<b>ITA 23.1</b>	<p>The ITA 23.1 shall be replaced with the following</p> <p>Applicants planning to subcontract the key activities as identified in 4.2(b) - (a) to (e) of Section III, Qualification Criteria and Requirements, shall specify the same in the Application Submission Form.</p> <p>Applicants shall clearly identify the proposed specialist Sub-contractor(s) in Forms ELI-1.2 and EXP (experience)-4.2(b) in Section IV: Application Forms. Such proposed specialist Sub-contractor(s) shall meet the corresponding qualification requirements specified in Section III: Qualification Criteria and Requirements.</p> <p>Applicant shall clearly identify the proposed specialist Sub-design Consultant(s) in Form EXP 4.3 in respect of the Design Experience. Such proposed specialist Sub-design Consultant(s) shall meet the corresponding qualification requirements specified in Section III, Qualification Criteria and Requirements.</p>

<b>ITA 23.2</b>	At this time the Employer does not intend to execute certain specific parts of the Works by subcontractors selected in advance (Nominated Subcontractors).
<b>F. Evaluation of Applications and Prequalification of Applicants</b>	
<b>ITA 24.1</b>	<p>The Credentials of Associates, Parent Companies or Sister Companies shall not be considered unless they are part of joint venture / association.</p> <p>Both in case of 100% owned SPVs as well as subsidiaries, with respect to (a) Technology (b) Financials and (c) Intellectual Property Rights, the parent company can aggregate these for the purpose of qualification criteria so long as the parent company prepares a consolidated balance sheet that includes the financials of these subsidiaries and SPVs.</p> <p>However, this will not be permitted in case of clause no. 4.2(b) of Section III i.e. experience in key activities undertaken by subsidiaries (including 100% SPVs) will not qualify as experience of Parent Company unless the subsidiaries (including 100% SPVs) are also part of the Consortiums /Joint Venture/Association.</p> <p><b>Rules for Rounding off Numerical Values :</b><u>While evaluating the quantitative credentials of the Applicant, the decimal values shall be rounded off to the next higher digit e.g. a figure of say 14.1 shall be rounded off to 15 for evaluation purpose.</u></p>
<b>ITA 24.2</b>	<p>The ITA 24.2 shall be replaced with the following</p> <p>“Only the qualifications of subcontractors for the specialized activities as indicated in sub-para 4.2(b), 4.3 of the Qualification Criteria and Requirements (Section III) shall be considered in evaluation of an Applicant. However, the other credentials of the identified specialist Sub-contractor / Sub-design Consultant with regard to the general experience and financial resources shall not be added to those of the Applicant while evaluating the Applicant’s credentials under sub-para 3.1, 3.2 and 4.1 of the Qualification Criteria and Requirements (Section III)”</p>
<b>ITA 24.3</b>	In case of an Applicant who has been awarded the work of ST P-5 of WDFC Phase 1, the Applicant would be required to meet the aggregated eligibility criteria (as per Para 3.2 and 4.2 (b) of Section III) for ST P-5 and ST P-17, as the case may be, at the time of submission of proposal against RFP for this Package.
<b>ITA 29.1</b>	<p>ITA 29.1 to be replaced with the following,</p> <p>Any change in the structure or formation of an Applicant after being prequalified in accordance with ITA 26 and invited to bid shall be subject to a written approval of the Employer prior to the deadline for submission of bids. Any such changes shall be submitted to the Employer not later than Twenty One (21) days prior to submission of bids. Such approval shall be denied if as a consequence of the change:</p> <p>a) the prequalified Applicant, after the change, no longer meets the qualification criteria set forth in Section III, Qualification Criteria and Requirements; or</p> <p>b) in the opinion of the Employer, a substantial reduction in competition may result.</p> <p>The Employer shall not consider prequalification of any Applicant by omitting any ineligible partner / Sub-contractor / Sub-consultant, included in the Application for pre-qualification.</p>

**Section III. Qualification Criteria and Requirements**

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Eligibility and Qualification Criteria		Compliance Requirements			Documentation		
No.	Subject	Requirement	Single Entity	Joint Venture or Association			Submission Requirements
				All Partners Combined	Each Partner	At Least One Partner	
<b>1. Eligibility</b>							
1.1	<b>Nationality</b>	Nationality in accordance with ITA Sub-Clause 4.2	Must meet requirement	Existing or intended joint venture / association must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments
1.2	<b>Conflict of Interest</b>	No conflicts of interest in ITA Sub-Clause 4.3	Must meet requirement	Existing or intended joint venture / association must meet requirement	Must meet requirement	N/A	Application Submission Form
1.3	<b>JICA Ineligibility</b>	Not having been declared ineligible by JICA, as described in ITA Sub-Clause 4.5	Must meet requirement	Existing joint venture / association must meet requirement	Must meet requirement	N/A	Application Submission Form
1.4	<b>Banning of Business with MOR</b>	Not having been banned for business with Ministry of Railways along with any of its attached and subordinate offices. Source: indianrailways.gov.in/railway board, as described in PDS Sub-Clause 4.7	Must meet requirement	Existing or intended JV /Consortium/ Association must meet requirement	Must meet requirement	N / A	Application Submission Form

Eligibility and Qualification Criteria		Compliance Requirements			Documentation		
No.	Subject	Requirement	Single Entity	Joint Venture or Association			Submission Requirements
				All Partners Combined	Each Partner	At Least One Partner	
<b>2. Historical Contract Non-Performance</b>							
2.1	<b>History of Non-Performing Contracts</b>	Non-performance of a contract did not occur within the last <b>two years</b> prior to the deadline for application submission based on all information on fully settled disputes or litigation. A fully settled dispute or litigation is one that has been resolved in accordance with the Dispute Resolution Mechanism under the respective contract and where all appeal instances available to the Applicant have been exhausted.	Must meet requirement by itself or as partner to past or existing joint venture / association	N/A	Must meet requirement by itself or as partner to past or existing joint venture / association	N/A	Form CON-2
2.2	<b>Pending Litigation (including arbitration)</b>	All pending litigation(including arbitration) shall in total not represent more than 50 % of the Applicant's net worth of the latest year and shall be treated as resolved against the Applicant.	Must meet requirement by itself or as a partner to past or existing joint venture / association	N/A	Must meet requirement by itself or as a partner to past or existing joint venture / association	N/A	Form CON – 2



Eligibility and Qualification Criteria		Compliance Requirements			Documentation		
No.	Subject	Requirement	Single Entity	Joint Venture or Association			Submission Requirements
				All Partners Combined	Each Partner	At Least One Partner	
<b>3. Financial Situation</b>							
3.1	<b>Financial Performance</b>	<p>Submission of audited balance sheets or if not required by the law of the Applicant's country, other financial statements acceptable to the Employer, for the last five (5) years to demonstrate the current soundness of the Applicant's financial position and its prospective long term profitability.</p> <p>As the minimum requirement, an Applicant's net worth calculated as the difference between total assets and total liabilities should be positive for total of last five (5) years.</p> <p>(Note that the total liabilities include Long Term and Short Term liabilities.)</p>	Must meet requirement	N/A	Must meet requirement	N/A	Form FIN – 3.1 with attachments
3.2	<b>Average Annual Procurement / Construction Turnover</b>	<p>Minimum average annual procurement construction turnover of US\$ 50 million<sup>1</sup>, calculated as total certified payments received for contracts in progress or completed, within the last five (5) years.</p> <p><b>Note:</b></p> <p>The works pertaining to Railways, Metro Railways, Monorails which include Signalling and/or Telecommunication, shall only be considered.</p>	Must meet requirement	Must meet requirement	Must meet Fifteen percent (15%) of the requirement	Must meet Thirty percent (30%) of the requirement	Form FIN –3.2

Eligibility and Qualification Criteria		Compliance Requirements			Documentation		
No.	Subject	Requirement	Single Entity	Joint Venture or Association			Submission Requirements
				All Partners Combined	Each Partner	At Least One Partner	
<p>Notes:</p> <p><u>3.1 Financial Performance:</u> Bidders will be required at the bidding stage to demonstrate their construction cash flow to verify the soundness and stability of their financial circumstances. The Bidders would be required to demonstrate capacity to meet the initial cash flow requirements for a maximum period of six months.</p> <p><u>3.2: Average Annual Turnover</u></p> <p>1. The foreign exchange rate shall be TTS rate of the Bank of Tokyo Mitsubishi UFJ (BTMU) as on 28 days prior to final submission of PQ Application. The Applicant shall also submit the documentary evidence in respect of the same.</p>							

Eligibility and Qualification Criteria		Compliance Requirements			Documentation		
No.	Subject	Requirement	Single Entity	Joint Venture or Association			Submission Requirements
				All Partners Combined	Each Partner	At Least One Partner	
<b>4. Experience</b>							
4.1	<b>General Construction Experience</b>	Experience under construction contracts in the role of contractor, management contractor <sup>1</sup> , or subcontractor, for at least the last five (5) years prior to the application submission deadline, and with <b>activity in at least nine (9) months in each year.</b>	Must meet requirement	Must meet requirement (For any year, any partner to meet the requirement)	N/A	N/A	Form EXP – 4.1 With project description sheets including major work quantities
4.2 (a)	<b>Specific Design, Supply, Installation, Testing and Commissioning Experience</b>	Experience exclusively in the role of prime contractor or partner in existing or past JV or subcontractor, in <b>at least One Contract</b> within the last ten (10) years prior to the application submission deadline, that have been substantially completed or have received Taking-over Certificate for whole of the Works as the result of being successfully and substantially completed and that are similar to the proposed Works.  The project shall be considered to have been substantially completed if the Applicant has received payment against the work done to the extent of 80% or more of the contract value.  The similarity shall be based on the, complexity, methods/technology or other characteristics as described in	Must meet requirement	Must meet requirement	N/A	N/A	Form EXP – 4.2 (a) With project description sheets including major work quantities

Eligibility and Qualification Criteria			Compliance Requirements			Documentation	
No.	Subject	Requirement	Single Entity	Joint Venture or Association			Submission Requirements
				All Partners Combined	Each Partner	At Least One Partner	
		<p>the Employer's Requirements.</p> <p>The Works pertaining to Railways/Metro Railways/Monorails which include Signalling and/or Telecommunication only shall be considered.</p>					
4.2 (b)	<b>Specific Supply, Installation, Testing and Commissioning Experience in Key Activities</b>	<p>For the above or other contracts executed during the period stipulated in 4.2 (a) above, as a prime contractor, management contractor or sub-contractor should have a minimum supply, installation, testing and commissioning experience, in the following key activities:</p> <p><b>(a) (i)</b> Supply of Electronic Interlocking System to Railways/Metro Railway/ Monorails – 2 Stations in any one year in last ten years</p> <p><b>(a) (ii)</b> Installation, Testing and Commissioning of Electronic Interlocking system to Railways/Metro Railway/ Monorails – 2 stations in any one year in last ten years</p> <p><b>(b)</b> Train Management and Diagnostic System (TMS) or Centralised Traffic Control</p>	<p>Must meet requirements (can be a specialist subcontractor)</p> <p>Must meet requirements (can be a specialist subcontractor)</p> <p>Must meet requirements (can be a</p>	<p>Must meet requirements (can be a specialist subcontractor)</p> <p>Must meet requirements (can be a specialist subcontractor)</p> <p>Must meet requirements (can be a</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p>	<p>Form EXP – 4.2(b)</p> <p>With project description sheets including major work quantities</p>

Eligibility and Qualification Criteria			Compliance Requirements			Documentation	
No.	Subject	Requirement	Single Entity	Joint Venture or Association			Submission Requirements
				All Partners Combined	Each Partner	At Least One Partner	
		System (CTC) to Railways/Metro Railway/Monorails – 1 system in any one year in last ten years.	specialist subcontractor)	specialist subcontractor)			
		(c) Digital Axle Counter to Railways/Metro Railway/Monorails – 9 Route km consisting of block section and station in any one year in last ten years	Must meet requirements (can be a specialist subcontractor)	Must meet requirements(c an be a specialist subcontractor)	N/A	N/A	
		(d) One Complete Fibre Optic Communication System with SDH equipment for Railways/ Metro Railway/Monorailsapplications - 9 Route km in any one year in last ten years.	Must meet requirements (can be a specialist subcontractor)	Must meet requirements(c an be a specialist subcontractor)	N/A	N/A	
		(e) 9 Route km of GSM/R System in any one year in last ten years.	Must meet requirements (can be a specialist subcontractor)	Must meet requirements(c an be a specialist subcontractor)	N/A	N/A	

Eligibility and Qualification Criteria			Compliance Requirements			Documentation	
No.	Subject	Requirement	Single Entity	Joint Venture or Association			Submission Requirements
				All Partners Combined	Each Partner	At Least One Partner	
4.3	<b>Specific Design Experience</b>	<p>Experience exclusively in the role of prime contractor, sub-contractor, design consultant or sub design consultant in works including Design and Build works within the last ten years, that have been substantially completed or have received taking-over Certificate for whole of the Works as the result of successfully and substantially completed and that are similar to the proposed works.</p> <p>The project shall be considered to have been substantially completed if the applicant has received payment against the work done to the extent of 80% or more of the contract value.</p> <p>The similarity shall be based on the complexity, methods/technology or other characteristics as described in Scope of Works.</p> <p>The Design part shall include,</p> <p>(1) Design of Signalling system involving Electronic Interlocking and TMS/CTC in Railways/Metro Railway/Monorails System</p>	<p>Must meet requirement (can be a specialist Design Contractor or</p>	<p>Must meet requirement (can be a specialist Design Contractor or Design</p>	N/A	N/A	<p>Form EXP – 4.3</p> <p>With project description sheets</p>

Eligibility and Qualification Criteria			Compliance Requirements			Documentation	
No.	Subject	Requirement	Single Entity	Joint Venture or Association			Submission Requirements
				All Partners Combined	Each Partner	At Least One Partner	
		(2) Design of Telecom system involving Fibre Optic based Telecommunication network involving SDH, Add/Drop nodes, GSM(R) or GSM in Railways/Metro Railway/Monorailssystem  The requirement can be met subsystem wise.	Design Consultant or Sub Design Consultant  Must meet requirement (can be a specialist Design Contractor or Design Consultant or Sub Design Consultant)	Consultant or Sub Design Consultant  Must meet requirement (can be a specialist Design Contractor or Design Consultant or Sub Design Consultant)	N/A	N/A	

Notes:

4.1& 4.2(b): General Construction Experience& Specific Supply, Installation, Testing and Commissioning Experience in Key Activities

1. A management contractor is a firm which takes on the role of contract management as a “general” contractor of sort could do. It does not normally perform directly the Design, supply, installation, testing and commissioning work(s) associated with the contract. Rather, it manages the work of other (sub) contractors while bearing full responsibility and risk for price, quality, and timely performance of the work contract.

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## Application Submission Form

Date: *[insert day, month, year]*  
Reference ID No.: *[insert number, if any]*

To: *[insert full name of Employer]*

We, the undersigned, apply to be prequalified for the contract of referenced number and declare that:

- (a) We have examined and have no reservations to the Prequalification Documents, including Addendum(s) No(s)., issued in accordance with Instructions to Applicants (ITA) Clause 8:

*[insert the number and issuing date of each addendum].*

- (b) We, including any sub-contractors or suppliers for any part of the contract resulting from this prequalification process, have nationalities from eligible countries of Japanese ODA Loans, in accordance with ITA Sub-Clause 4.2:

*[insert the nationality of the Applicant, including that of all partners in case of a Joint Venture, and the nationality of each already identified subcontractor and supplier of related services, if applicable];*

- (c) We, including any subcontractors or suppliers for any part of the contract resulting from this prequalification, do not have any conflict of interest, in accordance with ITA Sub-Clause 4.3;

- (d) We, including any subcontractors or suppliers for any part of the contract resulting from this prequalification, have not been declared ineligible by JICA, in accordance with ITA Sub-Clause 4.5;

- (e) We, in accordance with ITA Sub-Clause 23.1, plan to subcontract the following key activities and/or parts of the Works:

*[insert any of the key activities identified in Section III- 4.2 (b) which the Applicant intends to subcontract]*

- (f) We understand that you may cancel the prequalification process at any time and that you are neither bound to accept any application that you may receive nor to invite the prequalified Applicants to bid for the contract subject of this prequalification, without incurring any liability to the Applicants, in accordance with ITA Clause 25.

- (g) We are seeking Pre-Qualification for Package ST P-17.

- (h) We are attaching herewith a checklist of various submissions along with reference page numbers required as per PQ document.

*Signed [insert signature(s) of an authorized representative(s) of the Applicant]*

*Name [insert full name of person signing the application]*

*In the capacity of [insert capacity of person signing the application]*

*Duly authorized to sign the application for and on behalf of:*

*Applicant's name [insert full name of Applicant]*

*Address [insert street number/town or city/country address]*

*Dated on [insert day number] day of [insert month], [insert year]*

**CHECK LIST**

<b>Sl. No.</b>	<b>Requirement</b>	<b>Reference Clause No. of PQ Document</b>	<b>Submitted or not</b>	<b>Reference Page No. of PQ Application</b>
1.	Details of the Demand draft of (Rs. 12,000 or US\$ 200) + 5% VAT in favour of DFCCIL towards the purchase of PQ Document	IFP 6 and IFP 9		
2	Letter of Intent to form joint venture or a joint venture / association agreement duly signed by all the partners of the joint venture / association	ITA 4.1(a) (PDS), Form-ELI-1.1A, Section-V		
3	Undertaking from each proposed Sub-contractor / Sub-consultant indicating its willingness to associate with the Applicant	ITA 11.1 (d) (3) (PDS)		
4	Undertaking from each partner of Applicant including their proposed Sub Contractors & Sub-Consultants regarding no conflict of interest	ITA 4.3 (PDS)		
5	An undertaking from the Applicant / each partner of the joint venture / association and proposed specialist sub-contractors for mechanized track laying and sub-design consultant for Design Work / suppliers regarding banning of business by Government of India	ITA 4.7 (PDS)		
6	Power of Attorney to one representative from the Lead Partner duly signed by the authorized representative of all the partners of joint venture / association	ITA 4.1 (a) (PDS)		
7	Power of Attorney in respect of authorized representative of each partner of the joint venture / association	ITA 4.1 (c) (PDS)		
8	Soft Copy of PQ Application on one set of CD	ITA 11.1(d) (PDS)		
9	Original + 3 Copies of PQ Application	ITA 15.2 (PDS)		
10	Original and all Copies of PQ Application are hard bound, all pages serially numbered and indexed	ITA 15.3 (PDS)		
11	PQ Application signed by authorized representative of joint venture / association as well as authorized representative of the respective joint venture / association partner to whom the submitted information / claimed experience actually belongs to	ITA 15.1 (PDS)		

Sl. No.	Requirement	Reference Clause No. of PQ Document	Submitted or not	Reference Page No. of PQ Application
12	Application Information Form	Form ELI-1.1		
13	Article of incorporation of the Applicant/Lead Partner	ITA-4.1, ITA -4.2 & Form ELI-1.1		
14	Applicant's Partner's Information Form	Form ELI-1.2		
15	Article of incorporation of all the partners of the joint venture or association including sub-contractor(s) and design consultant	ITA-4.1, ITA -4.2 & Form ELI-1.2		
16	Historical Contract Non Performance : (1-History of non performing contracts, 2-Pending litigation (including Arbitration)	Form CON-2		
17	Financial Situation (duly certified by independent Public / Chartered Accountant) in respect of each partner of the joint venture / association	Form FIN-3.1		
18	Copies of audited Financial Statements for the last five Financial Years in respect of each partner of the joint venture / association	Form FIN-3.1		
19	Average Annual Construction Turn over (duly certified by independent Public / Chartered Accountant) in respect of each partner of the joint venture / association	Form FIN-3.2		
20	General Construction Experience in respect of each partner of the joint venture / association duly supported by Client / immediate Employer's certificate	Form EXP-4.1		
21	Specific Design, Supply, Installation, Testing and Commissioning Experience in respect of each partner of the joint venture / association duly supported by Client / immediate Employer's certificate	Form EXP-4.2(a)		
22	Specific Supply, Installation, Testing and Commissioning Experience in Key Activities in respect of each partner of the joint venture / association or specialist sub-contractor duly supported by Client / immediate Employer's certificate	Form EXP-4.2(b)		

Sl. No.	Requirement	Reference Clause No. of PQ Document	Submitted or not	Reference Page No. of PQ Application
23	Specific Design Experience (from Applicant or Specialist Sub Design Consultant) duly supported by Client / immediate Employer's certificate	Form EXP-4.3		
24	Summary of claimed experience in respect of : a) General Construction Experience (4.1 of Section-III), b) Specific Design, Supply, Installation, Testing and Commissioning Experience (4.2(a) of Section-III) c) Specific Supply, Installation, Testing and Commissioning Experience in Key Activities (4.2(b) of Section-III) d) Specific Design Experience(4.3 of Section-III)	ITA-14.2 (PDS)		
25	Any Other Document			

## Form ELI -1.1 Applicant Information Form

Date: *[insert day, month, year]*Reference ID No.: *[insert number, if any]*Page *[insert page number]* of *[insert total number]* pages

Applicant's legal name <i>[insert full legal name]</i>
In case of Joint Venture (JV), legal name of each partner: <i>[insert full legal name of each partner in JV]</i>
Applicant's actual or intended country of constitution: <i>[indicate country of Constitution]</i>
Applicant's actual or intended year of constitution: <i>[indicate year of Constitution]</i>
Applicant's legal address in country of constitution: <i>[insert street/ number/ town or city/ country]</i>
Applicant's authorized representative information Name: <i>[insert full legal name]</i> Address: <i>[insert street/ number/ town or city/ country]</i> Telephone/Fax numbers: <i>[insert telephone/fax numbers, including country and city codes]</i> E-mail address: <i>[indicate E-mail address]</i>
Attached are copies of original documents of <ul style="list-style-type: none"> <li><input type="checkbox"/> Articles of incorporation or documents of constitution, and documents of registration of the legal entity named above, in accordance with ITA 4.1(PDS) and 4.2.</li> <li><input type="checkbox"/> In case of JV, letter of intent to form JV or JV agreement, in accordance with ITA 4.1(PDS), and ITA 11.1(d) (PDS) and as per Form ELI 1.1A.</li> </ul>

## Form ELI – 1.1A

### Letter of Intent to Enter into an Agreement

*(To be signed by all the Partners of joint venture or association)*  
*(Reference Clause 4.1 (PDS) and 11.1 (d) (PDS)*

Mr. Ashok Maheshwari  
 Position: GM/S&T/WC-II  
 Room No. 400 C  
 4th Floor, Pragati Maidan,  
 Metro Station Building,  
 New Delhi – 110001, INDIA

Subject : Pre-qualification for “Design and Construction of Signal and Telecom works for Double Line Railway involving Train Detection System, Electronic Interlocking in Stations, Automatic Signalling in Block Sections, Interlocking of Level Crossing Gates, Dispatch Telephone System, Fiber Optic Communication System, GSM(R) System, Digital Electronic Exchange System and Master Clock System for JNPT – Vadodara section (approx. 422 km) including Testing and Commissioning on Design-Build Lump Sum Price Basis of Western Dedicated Freight Corridor (Phase-2)”

Dear Sir,

This is to inform you that :

1. We, the following entities
  - a) ----- (name and address of Lead Partner)
  - b) -----(name and address of Partner)
  - c) -----(name and address of Partner)
  - d) -----

hereby express our intention that we are forming a joint venture / association under the name of ----- (if any), to participate in the Pre- qualification process of the subject work.

2. We nominate ----- as Lead Partner of our joint venture / association.
3. We undertake that the Lead Partner of our joint venture/association ----- (Name of the lead partner) shall have the maximum financial stake amongst the other partners of the joint venture / association.
4. We undertake that total share of the Japanese partners in our joint venture / association shall be more than 50% of the total contract amount.
5. The percentage participation amongst various partners of the joint venture / association for the subject project shall be as under:

Sl. No.	Name of the Partner	Role (Lead Partner/ Partner)	% Participation

6. In accordance with Clause ITA 4.1 (b) (PDS) of Section I, we shall be jointly and severally liable to DFCCIL for the execution of the Contract in accordance with the Contract Terms.
7. In accordance with Clause ITA 4.2 (c) (PDS) of Section I, We shall nominate the following person as our authorized signatory who shall have the authority to conduct the business for and on behalf of our joint venture / association during the prequalification process and , in the event of joint venture /association is prequalified, during the bidding process, and in the event the joint venture/association is awarded the Contract, during Contract execution (Detailed information about authorized signatory)

Name,	Designation,	Address,	Tel/Fax no	E Mail ID
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8. In case we are pre-qualified, we shall be entering in to a detailed Joint Venture / Association Agreement at the time of submission of our Bid

Authorised Signatory  
(Lead Partner)

Authorised Signatory  
(Partner)

-----

-----

Authorised Signatory  
(Partner)

Authorised Signatory  
(Partner)

-----

-----



## Form ELI -1.2

# Applicant Partner Information Form

*[The following form shall be filled in for the Applicant's partners including partner(s) of a joint venture, subcontractors, suppliers and other partners]*

Date: *[insert day, month, year]*

Reference ID No.: *[insert number, if any]*

Page *[insert page number]* of *[insert total number]* pages

JV Applicant legal name: <i>[insert full legal name]</i>
Applicant Partner's legal name: <i>[insert full legal name of Applicant partners]</i>
Applicant Partner's country of registration: <i>[indicate country of registration]</i>
Applicant Partner's year of constitution: <i>[indicate year of constitution]</i>
Applicant Partner's legal address in country of constitution: <i>[insert street/ number/ town or city/ country]</i>
Applicant Partner's authorized representative information Name: <i>[insert full legal name]</i> Address: <i>[insert street/ number/ town or city/ country]</i> Telephone/Fax numbers: <i>[insert telephone/fax numbers, including country and city codes]</i> E-mail address: <i>[indicate E-mail address]</i>
Attached are copies of original documents of <input type="checkbox"/> Articles of incorporation or documents of constitution, and registration documents of the legal entity named above, in accordance with ITA 4.1(PDS) and ITA 4.2.

## Form CON – 2

### Historical Contract Non-Performance

*[The following table shall be filled in for the Applicant and for each partner of a Joint Venture]*

Date: *[insert day, month, year]*  
 Applicant's Legal Name: *[insert full name]*  
 Applicant's Party Legal Name: *[insert full name]*  
 Reference ID No.: *[insert number, if any]*  
 Page *[insert page number]* of *[insert total number]* pages

#### 1. History of Non-Performing Contracts

Non-Performing Contracts			
<input type="checkbox"/> Contract non-performance# did not occur during the <i>[number]</i> years specified in Section III, Qualification Criteria and Requirements, Sub-Factor 2.1.			
<input type="checkbox"/> Contract(s) not performed during the <i>[number]</i> years specified in Section III, Qualification Criteria and Requirements, requirement Sub-Factor 2.1			
Year	Non performed portion of contract	Contract Identification	Total Contract Amount (current value, US\$ equivalent)
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name, number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for nonperformance: <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>

# The Contract non-performance means that the Contractor has not reneged on his contractual obligations against any contract during the last 2 years.

**2. Pending Litigation(Including Arbitration)**

<b>Pending Litigation(Including Arbitration)</b>			
<input type="checkbox"/> No pending litigation(including arbitration)in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 2.2.			
<input type="checkbox"/> Pending litigation(including arbitration) in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 2.2 as indicated below.			
<b>Year</b>	<b>Outcome as Percentage of Net Worth for the latest year</b>	<b>Contract Identification</b>	<b>Total Contract Amount (current value, US\$ equivalent)</b>
<i>[insert year]</i>	<i>[insert percentage]</i>	Contract Identification: <i>[indicate complete contract name, number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Matter in dispute: <i>[indicate main issues in dispute]</i>	<i>[insert amount]</i>

**Note:**

The foreign exchange rate shall be TTS rate of the Bank of Tokyo Mitsubishi UFJ(BTMU) as on 28 days prior to final submission of PQ Application. The Applicant shall also submit the documentary evidence in respect of the same.

## Form FIN – 3.1 Financial Situation

*[The following table shall be filled in for the Applicant and for each partner of a Joint Venture]*

Date: *[insert day, month, year]*  
 Applicant's Legal Name: *[insert full name]*  
 Applicant's Party Legal Name: *[insert full name]*  
 Reference ID No.: *[insert number, if any]*  
 Page *[insert page number]* of *[insert total number]* pages

### 1. Financial data

<b>Historic Information for Previous five (5) years, (US\$ Equivalent)</b>				
Financial Year 1	Financial Year 2	Financial Year 3	Financial Year 4	Financial Year 5

#### Information from Balance Sheet

Total Assets (TA)					
Total Liabilities (TL)					
Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					

#### Information from Income Statement

Total Revenue (TR)					
Profits Before Taxes (PBT)					
Profits After Taxes (PAT)					

#### Note:

1. The foreign exchange rate shall be TTS rate of the Bank of Tokyo Mitsubishi UFJ(BTMU) as on 28 days prior to final submission of PQ Application. The Applicant shall also submit the documentary evidence in respect of the same.
2. The above Form Fin – 3.1 shall be certified by the Independent Public or Chartered Accountant.
3. The Applicant shall also attach the backup calculations in respect of each of the above figures duly referenced to the figures of the Annual Report / Financial Statement or any other relevant document submitted along with his PQ Application.

## 2. Financial documents

The Applicant and its partners shall provide copies of the balance sheets and/or financial statements for five (5) years pursuant to Section III, Qualifications Criteria and Requirements, Sub-factor 3.1. The financial statements shall:

- (a) reflect the financial situation of the Applicant or partner to a JV, and not sister or parent companies.
  - (b) be audited by a certified accountant.
  - (c) be complete, including all notes to the financial statements.
  - (d) correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).
- Attached are copies of financial statements (balance sheets including all related notes, and income statements) for the five (5) financial years, as indicated above, and complying with the requirements.

## Form FIN - 3.2

### Average Annual Procurement/ Construction Turnover

*[The following table shall be filled in for the Applicant and for each partner of a Joint Venture]*

Date: *[insert day, month, year]*

Applicant's Legal Name: *[insert full name]*

Applicant's Party Legal Name: *[insert full name]*

Reference ID No.: *[insert number, if any]*

Page *[insert page number]* of *[insert total number]* pages

Annual Turnover Data			
Financial Year	Amount and Currency	Exchange Rate	US\$ Equivalent
<b>Year 1</b>	<i>[insert amount and indicate currency]</i>	<i>[insert applicable exchange rate]</i>	<i>[insert amount in US\$ equiv.]</i>
<b>Year 2</b>			
<b>Year 3</b>			
<b>Year 4</b>			
<b>Year 5</b>			
<b>Average Annual Turnover *</b>			

\* Average Annual Turnover calculated as total certified payments received for work in progress or completed, divided by the number of years specified in Section III, Qualification Criteria and Requirements, Sub-Factor 3.2.

Note:

1. The foreign exchange rate shall be TTS rate of Bank of Tokyo Mitsubishi UFJ(BTMU) as on 28 days prior to final submission of PQ Application. The Applicant shall also submit the documentary evidence in respect of the same.
2. The above Form Fin – 3.2 shall be certified by the Independent Public or Chartered Accountant.

## Form EXP - 4.1 General Construction Experience

*[The following table shall be filled in for the Applicant and for each partner of a Joint Venture]*

Date: *[insert day, month, year]*

Applicant's Legal Name: *[insert full name]*

Applicant's Party Legal Name: *[insert full name]*

Reference ID No.: *[insert number, if any]*

Page *[insert page number]* of *[insert total number]* pages

*[Identify contracts that demonstrate continuous manufacture/supply, installation, testing and commissioning over the past five (5) years pursuant to Section III, Qualification Criteria and Requirements, Sub-Factor 4.1. List contracts chronologically, according to their commencement (starting) dates.]*

<b>General Design, Supply, Installation, Testing and Commissioning Experience</b>			
<b>Starting Month / Year</b>	<b>Ending Month / Year</b>	<b>Contract Identification</b>	<b>Role of Applicant</b>
<i>[indicate month/ year]</i>	<i>[indicate month/ year]</i>	Contract name: <i>[insert full name]</i> Brief description of the Works performed by the Applicant: <i>[describe Works performed briefly]</i> Name of Employer: <i>[indicate full name]</i> Address: <i>[indicate street/number/town or city/country]</i>	<i>[insert "Contractor" or "Sub-contractor" or "Management Contractor"]</i>

## Form EXP - 4.2(a) Specific Design, Supply, Installation, Testing and Commissioning Experience

*[The following table shall be filled in for contracts performed by the Applicant, each partner of a Joint Venture.]*

Date: *[insert day, month, year]*  
 Applicant's Legal Name: *[insert full name]*  
 Applicant's Party Legal Name: *[insert full name]*  
 Reference ID No.: *[insert number, if any]*  
 Page *[insert page number]* of *[insert total number]* pages

**Fill up one (1) form per contract.**

Contract of Similar Size and Nature	
Similar Contract No. <i>[insert number] of [insert number of similar contracts required]</i>	Information
Contract Identification	<i>[insert contract name and Reference ID number, if</i>
Award Date	<i>[insert day, month, year, i.e., 15 June, 2015]</i>
Completion Date	<i>[insert day, month, year, i.e., 03 October, 2017]</i>
Role in Contract	<b><i>Insert "Prime Contractor "or as a "Partner in a Joint Venture" Only</i></b>
Total Contract Amount	<i>[insert total contract amount in US\$]</i>
If partner in a JV, specify participation in total contract amount	<i>[insert a percentage amount] [insert total contract amount in US\$]</i>
Employer's Name:	<i>[insert full name]</i>
Address:	<i>[indicate street / number / town or city / country]</i>
Telephone/Fax Number:	<i>[insert telephone/fax numbers, including country and city area codes]</i>
E-mail:	<i>[insert E-mail address, if available]</i>



**Form EXP - 4.2(a) (cont.)**  
**Specific Design Supply, Installation, Testing and**  
**Commissioning Experience (cont.)**

Similar Contract No. <i>[insert number] of [insert number of similar contracts required]</i>	Information
Description of the similarity in accordance with Sub-Factor 4.2(a) of Section III:	
1. Amount	<i>[insert amount in US\$]</i>
2. Physical Size	<i>[insert physical size of activities]</i>
3. Complexity	<i>[insert description of complexity]</i>
4. Methods/Technology	<i>[insert specific aspects of the methods/ technology involved in the contract]</i>
5. Other Characteristics	<i>[insert other characteristics as described in Section VI, Scope of Works]</i>

**Note:**

The foreign exchange rate shall be TTS rate of the Bank of Tokyo Mitsubishi UFJ (BTMU) as on 28 days prior to final submission of PQ Application. The Applicant shall also submit the documentary evidence in respect of the same.

## Form EXP - 4.2(b)

### Specific Supply, Installation, Testing and Commissioning Experience in Key Activities

Date: *[insert day, month, year]*  
 Applicant's Legal Name: *[insert full name]*  
 Applicant's Party Legal Name: *[insert full name]*  
 Subcontractor's Legal Name (as per ITA 23.1) *[insert full name]*  
 Reference ID No.: *[insert number, if any]*  
 Page *[insert page number]* of *[insert total number]*  
 pages

**Fill up one (1) form per contract.**

1.Key Activity No. (a) \_\_\_\_\_: *[insert brief description of the Activity, emphasizing its specificity]*

Contract with Similar Key Activities			
Item	Information		
Contract Identification	<i>[insert contract name and number, if applicable]</i>		
Award Date	<i>[insert day, month, year, i.e., 15 June, 2015]</i>		
Completion Date	<i>[insert day, month, year, i.e., 03 October, 2017]</i>		
Role in Contract <i>[check the appropriate box]</i>	Prime Contractor <input type="checkbox"/>	Management Contractor <input type="checkbox"/>	Subcontractor <input type="checkbox"/>
Total Contract Amount	<i>[insert total contract amount in US\$]</i>		
If partner in a JV or subcontractor, specify participation of total contract amount	<i>[insert a percentage amount#]</i>	<i>[insert total contract amount in US\$]</i>	
Employer's Name:	<i>[insert full name]</i>		
Address:	<i>[indicate street / number / town or city / country]</i>		
Telephone/Fax Number:	<i>[insert telephone/fax numbers, including country and city area codes]</i>		
E-mail:	<i>[insert E-mail address, if available]</i>		

**#** *The Applicant shall submit the documentary evidence regarding its Percentage of participation in the JV for the claimed project towards Specific Supply, Installation, Testing & Commissioning Experience.*

2.Key Activity No. (b) \_\_\_\_\_ to Key Activity No. (e)\_\_\_\_\_

## Form EXP - 4.2(b)(contd.) Specific Supply, Installation, Testing and Commissioning Experience in Key Activities

**Information:**

	<b>Description of the Key activities in accordance with Sub-Factor 4.2(b) of Section III:</b>	<b>[insert response to inquiry indicated in left column]</b>
(a)(i)	Supply of Electronic Interlocking system to Railways/ Metro Railway/ Monorails in any one year during the last 10 years Year No. of stations including details Name of the Project(s)	
(a)(ii)	Installation, testing and commissioning of Electronic Interlocking system to Railways/ Metro Railway/ Monorails in any one year during the last 10 years Year No. of stations including details Name of the Project(s)	
(b)	TMS or Centralised Traffic Control system in any one year during the last 10 years Year Nos. of systems with details Name of the Project(s)	
(c)	Digital Axle Counter in any one year during the last 10 years Year No. of DAC sets with details Name of the Project(s)	
(d)	Fibre Optic Communication System in any one year during the last 10 years Year / Period No. of system Name of the Project(s)	
e)	GSM(R) System in any one year during the last 10 years Year / Period No. of Sets with details Name of the Project(s)	

## Form EXP - 4.3 Specific Design Experience

Date: *[insert day, month, year]*

Applicant's Legal Name: *[insert full name]*

Applicant's Party Legal Name: *[insert full name]*

Subcontractor's Legal Name (as per ITA 23.1) *[insert full name]*

Reference ID No.: *[insert number, if any]*

Page *[insert page number]* of *[insert total number]*  
pages

**Fill up one (1) form per contract.**

*[insert brief description of the Experience, emphasizing its specificity]*

S.No.	Description of the Experience in accordance with Sub Factor 4.3 of Section III	[insert respond to inquiry indicated in left column]
1.	<p>(a) Adequate Design capability for design of Signalling Systems involving Indoor and outdoor work of Electronic Interlocking, Track Vacancy Detection system, Automatic Block Signalling, Train Monitoring &amp; Diagnostic System including Power supply arrangement; software availability or access to and experience of using it for above mentioned requirement.</p> <p>(b) Description of Design work carried out.</p> <p>(c) Nature of Project for which Design was carried out comparable to the present project i.e. physical size, complexity and method forms.</p>	
2.	<p>(a) Adequate Design capability for design of Telecom System involving Indoor and outdoor work of Fiber based telecom network involving SDH, Add/Drop Nodes; Software availability or access to and experience of using it for above mentioned requirement.</p> <p>(b) Description of Design work carried out.</p> <p>(c) Nature of Project for which Design was carried out comparable to the present project i.e. physical size, complexity and method forms.</p>	

## Section V. List of Eligible Countries of Japanese ODA Loans

### Eligibility for the Provision of Goods, Works and Services in JICA-Financed Procurement

- (1) The Eligible Nationality of the Supplier(s) / Applicant and all partners constituting the Applicant shall be the following;
  - (i) Japan in the case of the Prime Contractor; and
  - (ii) All countries and areas in case of the sub-contractor(s)
  
- (2) With regard to (1) above, in case where the prime contractor is a joint venture, such joint venture will be eligible provided that the nationality of the lead partner is Japan, that the nationality of the other partners is Japan and/or India and that the total share of work of Japanese partners in the joint venture is more than fifty percent (50%) of the contract amount.
  
- (3) With regard to (1) and (2) mentioned above,
  - (a) For goods and services,
    - (i) the prime contractor or, in the case of a joint venture, the lead partner and other partners regarded as the Japanese partners shall be nationals of Japan or juridical persons incorporated and registered in Japan, and which have their appropriate facilities for producing or providing the goods and services in Japan and actually conduct their business there; and
    - (ii) in the case of a joint venture, the partners except Japanese partners shall be nationals of India or juridical persons incorporated and registered in Japan or India, and which have their appropriate facilities for producing or providing the goods and services in Japan or India and actually conduct their business there.
  
- (4) The percentage of goods to be procured from Japan for the Permanent Works under this Contract is approximately 43.94% and shall include items such as:
  - (i) Electronic Interlocking
  - (ii) Track Vacancy Detection System for Stations
  - (iii) Track Vacancy Detection System for Block Sections
  - (iv) Train Monitoring and Diagnostic System
  
- (5) With regard to the goods procured from the eligible local manufacturing company(ies) (hereinafter referred to as “the Eligible Local Manufacturing Company(ies)”) invested by Japanese companies can be regarded and counted as Japanese origin if such Eligible Local Manufacturing Company(ies) satisfy(ies) the following conditions:
  - (i) Juridical persons incorporated and registered in India, and which have their appropriate facilities for producing or providing the goods and services in India and actually conduct their business there;
  - (ii) Not less than 10 % of shares are held by a Single Japanese Company; and

- (iii) The proportion of the shares held by the Japanese company mentioned in (ii) above (or the company having the largest share among Japanese companies if more than one Japanese company meet the condition stated in (ii) above) is the same as or greater than that of the shares held by any company of a third country.
- (6) With regard to the goods procured from the eligible development partners' manufacturing company(ies) (hereinafter referred to as "the Eligible Development Partners' Manufacturing Company(ies)") invested by Japanese companies can be regarded and counted as Japanese origin if such Eligible Development Partners' Manufacturing Company(ies) satisfy(ies) the following conditions:
- (i) Juridical persons incorporated and registered in a country or area on DAC List of ODA Recipients effective at the time of conclusion of the Loan Agreement and which have their appropriate facilities for producing or providing the goods and services in the country or area and actually conduct their business there;
  - (ii) Not less than one-third of shares are held by a single Japanese Company; and
  - (iii) The proportion of the shares held by the Japanese company mentioned in (ii) above (or the company having the largest share among Japanese companies if more than one Japanese company meet the condition stated in (ii) above) is the same as or greater than that of the shares held by any company of a third country.

## **PART 2 – Works Requirements**

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# Section VI. Scope of Works

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# 1. Description of the Works

## Project Background

With an objective to augment the freight transport capacity and to support the rapid economic growth along the “Golden Quadrilateral” in India linking major urban centers of Mumbai, Delhi, Kolkata and Chennai, the Government of India (hereinafter referred to as “GOI”) has received an ODA (Official Development Assistance) Loan from the Government of Japan (hereinafter referred to as “GOJ”) for the development of the Dedicated Freight Corridor Project (Western Corridor).

In July 2005, GOI officially requested GOJ for the execution of Japan’s technical cooperation to assess the Feasibility Study on the development of Dedicated Freight Corridors for Delhi-Mumbai (Western Corridor) and Ludhiana - Sonnagar (Eastern Corridor) in India (hereinafter referred to as “JICA F/S”). The objective of JICA F/S was to review the Preliminary Engineering cum Traffic Study (hereinafter referred to as PETS) and Final Location Survey (hereinafter referred to as FLS) of DFC that was prepared by the GOI.

Subsequent to the JICA F/S Study completed in 2007, the GOI approached the GOJ for an ODA Loan under Special Terms for Economic Partnership (hereinafter referred to as “STEP”) Scheme. In response, the GOJ, through JICA, extended loan assistance to the GOI by concluding Loan Agreements in October 2009 and March 2010 for engagement of Engineering Service consultants and for implementation of the Phase-1 Project (Western DFC between Rewari & Vadodara), respectively.

Similarly, the GOJ extended loan assistance to the GOI by concluding Loan Agreements in April 2010 and March 2013 for engagement of Engineering Service Consultants and for implementation of the Phase-2 Project (Western DFC from JNPT to Vadodara (422 Km) and from Rewari to Dadri(128 Km) respectively.

The present Pre-qualification for the stretch between JNPT to Vadodara of length 422 Km is a part of Phase -2. Further information related to the Project and DFCCIL is available at their WEB home page (<http://dfccil.org>).

In order to meet STEP obligation under the Loan Agreement, it is considered that the percentage of goods to be procured from Japan for Permanent Works under this Contract shall be approximately 43.94%. A list of such items is given in Section V.

## 1.0 General

### 1.1 The Dedicated Freight Corridor (DFC) Project

- 1.1.1 Ministry of Railways (MOR), Government of India has planned to construct a High Axle Load Dedicated Freight Corridor (DFC) covering about 3330 route kilometers on Eastern and Western Corridors. The coverage of Eastern Corridor is from Ludhiana to Dankuni and Western Corridor is planned from Jawaharlal Nehru Port, Mumbai to Rewari/Tughlakabad/Dadri near Delhi. There will be a linkage between two corridors at Khurja.

- 1.1.2 The project entails construction of mostly double-track electrified railway lines. The bridges and other structures will be designed to allow movement of 32.5 tonne axle load while the track structure will be designed for 25 tonne axle load operating at train speed of up to 100 Kmph. The Eastern Corridor will handle single stack containers whereas Western Corridor is planned to cater to double stack containers. Up gradation of transportation technology, increase in productivity and reduction in unit transportation costs have been taken as guiding principles for formulating the project. Various operating systems, motive powers, signaling and work processes are required to conform to these broad perspectives.

## **2.0 Western Dedicated Freight Corridor Alignment**

- 2.1 Western DFC Route will be approximately 1,500 Km long from Jawaharlal Nehru Port, Mumbai to Rewari/Tughlakabad/Dadri near Delhi via Vasai-Surat-Vadodara-Ahmedabad-Palanpur-Ajmer-Rewari. Proposed alignment of WDFC has been generally kept parallel to existing Indian Railway line except provision of detours at Vadodara, Ahmedabad, Palanpur and Phulera.
- 2.2 The Western Dedicated Freight Corridor (WDFC) alignment passes through five states viz. Maharashtra, Gujarat, Rajasthan, Haryana and Uttar Pradesh. It traverses Thane district in Maharashtra State, Valsad, Navsari, Surat, Bharuch, Vadodara, Anand, Ahmedabad, Gandhinagar, Mehsana, Patan and Palanpur districts in Gujarat, Shirohi, Pali, Ajmer, Jaipur, Sikar, Jhunjhunun and Churu districts in Rajasthan, Mehendragarh and Rewari districts in Haryana, Alwar district in Rajasthan again, and Mewat and Faridabad districts in Haryana, and Guatambudhnagar district in Uttar Pradesh.

## **3.0 Dedicated Freight Corridor Corporation of India Limited**

- 3.1 Dedicated Freight Corridor Corporation of India Ltd. (DFCCIL), a public sector company has been set up under the Indian Companies Act 1956 for implementation of Dedicated Freight Corridor Project. Government of India is the sole shareholder of the DFCCIL.

## **4.0 Funding for the Project**

- 4.1 The entire 1,500 km of Western Dedicated Freight Corridor (WDFC) from JNPT to Dadri is being financed by the Japan International Cooperation Agency (JICA). The route alignment of WDFC indicating the corridor length being funded by JICA is attached as Annexure 2.

## **5.0 Project Phasing**

- 5.1 The implementation of WDFC in the JICA funded portion of the project is planned in a phased manner. In the first phase (Phase 1), 915 km long stretch between Vadodara and Rewari Section is being constructed. The balance stretch of 422 km from JNPT to Vadodara and 128 km from Rewari to Dadri is being constructed in the second phase (Phase 2).

## Project Information of Phase – 2 :JNPT – Vadodara Section

### 6.0 Contract Strategy – Phase 2

6.1 Implementation of Phase 2 of WDFC consists of total 10 (Ten) Design & Build Contract Packages which are described as below,

Package No.	Contract Packages	Selection Method
5A	Train Protection & Warning System (JNPT – Rewari)	Japan-tied (STEP)
11	Civil, Building and Track Works (JNPT – Vaitarana)	Japan-tied (STEP)
12	Civil, Building and Track Works (Vaitarana – Sachin)	Japan-tied (STEP)
13	Civil, Building and Track Works (Sachin – Vadodara)	Japan-tied (STEP)
14	Integrated Package for Civil, E&M, S&T Works (Rewari – Dadri)	Japan-tied (STEP)
15A	Special Steel Bridges in JNPT – Vadodara Section	Japan-tied (STEP)
15B	Special Steel Bridge across Narmada River	Japan-tied (STEP)
15C	Special Steel Bridges in Rewari – Dadri Section	Japan-tied (STEP)
16	Electrical & Mechanical (E&M) Works (JNPT – Vadodara)	Japan-tied (STEP)
17	Signal and Telecommunication (S&T) Works (JNPT – Vadodara)	Japan-tied (STEP)

Packages of PE P-6 (Plant & Equipment Works) and RS P-7(Electrical Locomotives and Maintenance Depot) are to be executed under Phase-1.

6.2 The current Prequalification exercise is to identify suitable Bidders for the Signaling and Telecommunication works(JNPT – Vadodara)designated as Package 17.

### 7.0 Pre-qualification of Bidders – Phase 2

7.1 This Prequalification Document is issued for the Signal and Telecommunication Contract designated as “Contract Package 17” for: “Design, Supply, installation, testing and commissioning of Signal and Telecom works for Double Line Railway involving station interlocking, automatic block Signaling, interlocking of level crossing gates, track vacancy detection system, Power Supply, Point machines, signals, Train Monitoring and Diagnostic System (TMS), Optic Fibre Communication System and GSM(R) System on Design-Build Lump Sum (LS) price basis for JNPT –Vadodara section (Approx. 422 km.) of Western Dedicated Freight Corridor(Phase 2).”

### 8.0 Alignment of JNPT–Vadodara Section

8.1 The stretch for JNPT-Vadodara is basically located along IR Central and Western Railways. Out of total stretch of 422 Km, detours have been planned for a total length of 121.84 Km,

mainly at Kundevahal (1.5km), at Dativali (4.04km), at Vasai (16.8km), at Dahanu Road (12.3km), between Udhna-Gothangam (17.9km) and between Sanjali-Vadodara (69.3km).

About 71% of the proposed DFC alignment between JNPT and Vadodara is passing parallel to the existing IR Central and Western Railways and the remaining 29% of the alignment is passing through detours.

## **9.0 Scope of Works of Phase 2 (JNPT – Vadodara Section)**

### **9.1 General**

- (1) The phase 2 of the western section of the Dedicated Freight Corridor, between JNPT – Vadodara for a length of 422km is being constructed as double line electrified track with 2 x 25 kV AC, 50 Hz, overhead catenary system, capable of operating at a maximum train speed of 100km/h with an initial axle load of 25.0 tonnes. Formation and bridge structure are to be provided for 32.5 tonnes axle load and track structure for 25 tonnes axle load.
- (2) The Contractor shall undertake the design, manufacture, supply, installation, testing and commissioning of the Signalling and Telecom system.
- (3) In addition, the Contractor shall undertake the rectification of defects appearing in the Signalling and Telecom Works in the manner and to the standards within the time stipulated by the Contract.
- (4) In full recognition of these objectives and with full acceptance of the obligations, the Contractor shall execute the Works taking into account all liabilities in accordance with the Contract.
- (5) The system design and its installation is to be carried out through Other Contracts which includes electrification of the line and SCADA control system, supply of Electric Locomotives, and construction of Civil, Building and Track Works.
- (6) The design of all the Works will be operationally compatible with the other Indian Railways (IR) sections connecting to the DFC.
- (7) The Employer may decide to take over the Part of the Works from the Contractor in a phased manner as per the Contract.
- (8) The Signalling and Telecom Works Contractor shall undertake interface coordination with the other Contractors, who shall be carrying out works forming part of this Project. There will be a continuous requirement for coordination with them including provision of line side TPWS equipment, design of cable trenching, masts for overhead electrification, interlocking of points and crossings, construction of facilities for maintenance, other allied structures and subsequently during the installation of signaling and traction power systems.

## 9.2 Permanent Works

The permanent works shall comprise of but not limited to the design, manufacture, supply, installation, testing and commissioning of the following:

- To design, supply, install, test and commission Signalling and Telecom system;
- To supply spare parts and consumables;
- To supply special tools;
- To make operation and maintenance manuals and as-built drawings;
- To train maintenance staff to reach qualified levels;
- To carry out tests on installed systems;
- To prepare test reports.

## 9.3 Training

The Contractor shall train Operation & Maintenance staff of DFCCIL.

## 10.0 Salient Engineering Features/Performance Specifications

The indicative engineering features/performance specifications of the works are as given under:-

### General Data

Nominal gauge	1676 mm
Minimum horizontal curve	2.5 <sup>0</sup> (main line), 4 <sup>0</sup> (siding & connecting lines)
Maximum track super elevation	140 mm
Bogie Type	Co-Co
Wheel diameter (new wheels)	1,140 mm
Wheel diameter (with fully worn wheels)	1,040 mm
Axle Load	25 tonne
Maximum Operating Speed	100 kmph
Steepest gradient	1 in 200
Nominal OHE supply voltage	2 x 25 KV , 50 Hz, Single Phase, AC
Neutral Sections	After 25 to 50 Km.
Normal contact wire height	5.5 m from rail level for link track to Indian Rlys and 7.5 m from rail level for DFC lines.
Dispatch adhesion	40% or more on dry rails.
Continuous adhesion	35% or more on dry rails.

**Major Features of Package 17at present are tabulated below.**

<b>Signaling &amp; Telecommunication Items</b>	<b>Approximate quantity</b>
a) Route length	422 km.
b) Electronic Interlocking at Junction Stations	3
c) Electronic Interlocking at Crossing Stations	9
d) Automatic Block Signalling	Block length 2 kms
e) Track vacancy Detection system for stations (Digital Axle counters)	12 stations
f) Track vacancy Detection system for Block Section (Digital Axle counters)	Block length 2 kms
g) Interlocking of Level Crossing gates	64
h) Point machines	1 lot
i) Train Monitoring and Diagnostic System (TMS)	1 lot
j) EMC/EMI studies to determine induced voltages from IR and DFC Traction systems	1 lot
k) Provision of portable DG sets for temporary power supply during testing & commissioning phase	1 lot
l) Spare parts and tools for Signaling works	1 lot
m) Pre-fabricated structure (Porta huts) for Signalling and Telecommunication equipment	Auto location hut for signaling – 1 lot, Telecommunication hut – 1 lot
n) Dispatching Telephone System	12 stations
o) Fixed Communication System	12 stations + each maintenance depot
p) Optic Fiber Communication System	422 route km
q) GSM(R) System	422 route km
r) Digital Electronic Exchange System	12 stations
s) Spare parts and tools for Signal & Telecom works	1 lot
t) Training of DFCCIL O&M staff	1 lot

Signaling & Telecommunication Items	Approximate quantity
a) Route length	422 km.

## 11.0 Technical Specifications and approved vendors/suppliers

11.1 Research Design and Standards Organizations (RDSO), Lucknow, India, an organization of Ministry of Railways, Government of India has standardized the technical specifications for various components of railway systems in India as Indian Railway Standard (IRS) Specifications which are generally based on international specifications and adapted to Indian conditions. The list of IRS Specifications issued by RDSO is available at the website of RDSO ([www.rdsso.gov.in](http://www.rdsso.gov.in)). The IRS Specifications can be purchased from RDSO.

11.2 The Employer's requirements to be included as part of the bidding document for this work shall generally conform to the IRS/RDSO Specifications.

11.3 As a STEP obligation under the Loan Agreement, some of the Signaling & Telecommunication equipment shall be sourced from Japan, details of which are included in Section V, List of Eligible Countries of Japanese ODA Loans. This equipment shall require approval from RDSO as per their Cross Acceptance procedure.

11.4 RDSO maintains an approved list of suppliers/vendors for various signalling and telecommunications equipment/items/ components to be used in railway systems in India.

Applicants shall note that equipment/items other than those covered in para 11.3 above shall be procured from vendors/suppliers from the approved list of RDSO. If the required item/equipment is not included in the approved list, then from any other reputed source provided the equipment/item meets the technical requirements/acceptance criteria indicated in the Bid Documents.

11.5 The list of suppliers/vendors approved for various items are available at the website of RDSO. Procedures for registration of new suppliers/vendors for railway equipment/items are also available at the website of RDSO. Applicants/Bidders are advised to visit the website of RDSO for further information about the registration of new products.

## 12.0 Utilities

All the existing utilities (charted or uncharted) within the Right of Way shall be removed / relocated by Employer through relevant owners and / or through Other Contractors.

## 13.0 Interfacing with Indian Railways(IR) and Other Contractors

13.1 JNPT - Vadodara Section shall be electrified with 2x25 kV Systems and provided with Automatic Signaling. The Signaling & Telecommunication Contractor (Package 17), appointed through this PQ exercise following the **Single Stage – Two Envelopes** Bidding process, shall be required to interface, coordinate and cooperate with the Civil, Building and Track Works Contractor (Packages 11,12,13 &15A,15B), Signaling & Telecommunication Contractor Phase 1 (Package ST P-5), Train Protection & Warning System Contractor (Package ST P-5A), Electrical & Mechanical Works Contractor (Package

16), Plant & Equipment Contractor (Package 6) and Rolling Stock Contractor – Package 7 of the project, in such a way that complete Railway System is commissioned successfully in a timely manner. The Civil, Building and Track work and other Systems Contractor are expected to complete necessary Works to enable the Contractor to undertake their test running and commissioning for running of electric locomotives. The Civil, Building and Track Works Contractor(s) are expected to provide the Systems Contractors the necessary access on the temporary roads as required and constructed by them for their works, to enable the Systems Contractors to undertake their component of work. Any other costs involved other than the access road, the parties will negotiate cost sharing arrangements amongst themselves. Detailed Interfacing Requirements shall be provided in the Bid Documents.

13.2 Supply of on-board equipment for Telecommunication systems shall be by the Signaling and Telecommunication Contractor.

Supply of on-board as well as line side equipment for TPWS shall be by the Train Protection & Warning System Contractor (Package ST P-5A).

On-board equipment shall be installed by the Package 7 Contractor. Testing of all on-board equipment shall be carried out jointly by the Package 17 Contractor, the Package 5A Contractor and the Package 7 Contractor to a mutually agreed testing programme and to mutually agreed procedures.

Line side TPWS equipment shall be installed by the Package 5A Contractor. Testing of all Line side equipment shall be carried out jointly by the Package 17 Contractor and the Package 5A Contractor to a mutually agreed testing programme and to mutually agreed procedures.

13.3 The Package 17 Scope of Work will include resolution of interfaces between the Signalling and Telecommunications Systems with Indian Railways such as at Junction stations and Level Crossing gates.



## 2. Construction Period

- 2.1 The Design, Procurement and Installation Period will be around 208 weeks (including Design, Supply, Installation, Tests on Completion) from the date of the Commencement. The Design-Build Contractor shall be required to plan the various components of work in such a sequence that the complete work is commissioned in the designated time period from the date of the Commencement. This will be followed by the Defects Notification Period of two years from the date of Taking-over Certificate for whole of the Works.
- 2.2 General Consultant appointed by DFCCIL will be the Engineer for the project and will perform the role as specified in Clause 3 Condition of Contract – Plant & Design Build FIDIC Yellow Book 1999 and as supplemented or amended through Particular Conditions of Contract.
- 2.3 Taking-Over Certificates (TOCs) will be issued for the Works only after successful completion of integrated testing & commissioning of the system.
- 2.4 Defects Liability Period will be two years for each of the Works stipulated in the relevant TOCs.
- 2.5 The Signaling and Telecommunication Works under this contract Package 17 will be financed under a JICA STEP Loan.
- 2.6 As a part of the Bid Documents, the Pre-qualified Bidders will be provided with Employer's Requirements, sketch diagrams of yards and Concept Design for Signaling & Telecommunication systems.
- 2.7 The Site Data provided as a part of the Bid Documents by the Employer is based on the investigation carried out by the Employer. The Bidder shall interpret the Site Data in accordance with Sub-clause 4.10 in the Conditions of Contract – Plant & Design Build FIDIC Yellow Book 1999.
- 2.8 The Employer's Requirements/Specifications provided as part of the Bid Documents specify the procedural requirements for the preparation of the design of the Signaling & Telecommunication Works.
- 2.9 The Contractor shall engage the Designer who will undertake and prepare the Design of the Signaling & Telecom systems. The principal requirements of the Design Phase are the production of the Inception Report (including Preliminary Design), the Technical Design, Technical Drawings, Construction Design, Construction Drawings and As Built Record.
- 2.10 The Technical Design shall incorporate the Contractor's Technical Proposals and shall be the design developed to the stage at which all elements of Signaling & Telecommunication systems are fully defined and specified. During the preparation of the Technical Design, the Contractor shall complete all surveys, investigations and testing necessary to complete the design of the Signaling & Telecommunication Works.
- 2.11 Upon issuance of the approval, or a deficiencies list, by the Engineer in respect of the Technical Design Submission, normally within twenty eight days (28 days), the Contractor shall complete the design in all respects and produce the Technical Drawings, the purpose

of which is to illustrate all the Permanent Works and to be the drawings governing manufacturing and Installation.

## 3. Site and Other Data

### 3.1 Project Area:

The Works will be carried out between JNPT and Vadodara in the states of Maharashtra and Gujarat. The proposed alignment passes through about 25 Km of Soft Ground Area and 86 Km of Black Cotton Soil Area in Maharashtra State and about 190 Km of Black Cotton Soil Area in Gujarat State. Major part (71%) of alignment is passing parallel to IR alignment of Central & Western Railways. Detours have been planned for the remaining part (29%) of alignment.

### 3.2 Environmental Condition: (To take into account for design of the system)

Temperature variation from 50°C (under shade) to minus 5°C

Humidity levels; Very dry conditions to 100% saturation

Rainfall; Very heavy during monsoon season

Wind speed; High in some areas with wind pressure reaching 1,500 Pa

### 3.3 Hydrology:

In JNPT – Vadodara Section, the main rivers ( bridge span more than 100m) encountering the DFC alignment are Ulhas River, Kamvadi River, Vaitarana River (South), Vaitarana River (North), Sanjan River, Tapi River , Kim River and Narmada River.

All these rivers in this stretch flow from East to West and are perennial in nature.

### 3.4 Climate:

3.4.1 The climatic conditions in Mumbai region of Maharashtra State in which about 46 % of the proposed DFC alignment of JNPT-Vadodara Section lies, are described as follows:-

- The city of Mumbai is situated at the mouth of River Ulhas. Mumbai, by and large, observes humidity throughout the year. Since it rests in the tropical zone, moreover close to sea, it enjoys more or less same weather.
- Its climate can be broadly divided into three seasons, namely winters (November-February), summers (March-May) and monsoons (June-September). The months between March and October are characterized by high humidity, while dryness persists from November to February.
- During summers, the temperature rises up to 35°C and the climatic conditions flit around mugginess. Monsoons afflict the residents of Bombay with heavy showers. The temperature comes down to some extent, but extreme clamminess makes the conditions worse. Water-logging is a major problem in the city during this season.
- The Island City receives an annual rainfall of 2,200 millimeters. The months of October and November bring a respite from the heavy rains. However, winters appear at their apex in December and January. The weather remains pleasant during these months, where the temperature goes down to the minimum of 15°C. February too, offers an enjoyable climate.

3.4.2 The climatic conditions in Gujarat State in which balance 54 % of proposed DFC alignment of JNPT-Vadodara Section lies, are described as follows:-

- The climate in Gujarat is moist in the southern areas while dry in the northern region
- The climate of the Gujarat can be divided into three seasons namely summer season (March to May), southwest monsoon season (June to September), winter season (November to February), and the intervening month of October
- The summer season from March to May is the hottest season with temperature ranging from 29 °C to 46 °C
- The Monsoon season extends from June to September, temperature drops, but humidity increases. The southern parts of Gujarat receive average rainfall hovering between 76 and 152 cms. In the northern parts of Gujarat, average rainfall ranges between 51 to 102 cms
- The winter season extends from November to February. Gujarat experiences mild, pleasant and dry winters, with average daytime temperatures ranging around 29 °C and night temperatures around 12 °C

3.4.3 Annual temperature and rainfall in cities of Mumbai, Surat and Vadodara is recorded as follows:-

(Source: World Weather through Internet)

(Month)	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	(Year)
<b>Mumbai</b>													
Mean High Temp. (°C)	31	31	33	33	34	32	30	30	31	33	34	32	
Mean Low Temp. (°C)	17	18	21	24	27	27	26	25	25	24	21	19	
Precipitation (mm)	1	0	6	7	27	495	736	531	348	91	5	10	2,257
<b>Surat</b>													
Mean High Temp. (°C)	30	32	35	36	36	34	31	31	32	35	34	32	
Mean Low Temp. (°C)	15	17	21	24	27	27	26	26	25	23	20	17	
Precipitation (mm)	2	4	1	10	5	240	433	283	144	33	5	1	1,161
<b>Vadodara</b>													
Mean High Temp. (°C)	28	31	36	40	42	38	33	32	34	36	33	30	
Mean Low Temp. (°C)	12	14	19	24	27	27	26	25	25	21	17	13	
Precipitation (mm)	8	1	1	1	9	110	297	277	125	10	3	4	846

### 3.5 Access to Site

For JNPT – Vaitarana Section, the main access to the site areas from JNPT to Panvel is available from National Highway No. 4B. After Panvel, the access to site areas is available from National Highway No. 4, Mumbai Pune Expressway, National Highway No. 3, National Highway No. 222, National Highway No. 8 (Ajmer Road), Virar Kaner Road etc.

For Vaitarana-Sachin Section, the access to site areas from Vaitarna to Bhilad is available from Saphale Road, Palghar Road, Mahim Manor Highway, Boisar Road, Chinchani Vangaon Road, Dahanu Road, Umbergaon Station Road, National Highway No. 8 (Ajmer Road) etc. From Bhilad to Sachin, the access to site areas is available from National Highway No. 8 (Ajmer Road), Surat Nasik Highway, National Highway No. 228 (Dandi-Sabarmati Heritage Road), Navsari Station Road, Kansad-Lajpore-Taraj Road, Kanakpur Main Road, Sachin Station Road etc.

For Sachin-Vadodara Section, the access to site areas from Sachin to Vadodara is available from National Highway No. 6, Bhanodra Eklara Road, Bhestan-Sania-Kande Road, Udhana Palsana Highway, Bypass Road, Chalthan Niyal Road, Surat Nagpur Kolkata Highway, National Highway No. 8 (Ajmer Road), Surat Ahmedabad Highway, Sayan Kathor Road, Kim Mandvi State Highway, MotiNaroli Road, Moti Pardi Road, Kosamba Shiylaj Road, Ankleshwar Hashot Road, Bharuch Dahej Road, State Highway 64, Dabhoi Karjan Road etc.

### **3.6 Transportation and Communications Facilities**

Transportation and communication facilities are well developed in India. Those facilities along WDFC's alignment are described below,

- (1) Track transportation by road is well developed in Western Area of India.
- (2) Railway transportation is also well developed in this area.
- (3) Cargos can be transported from Mumbai seaport.
- (4) Nearest Airport for Package 11 is located at Mumbai. Nearest Airports for Packages 12 & 13 are located at Mumbai, Surat & Vadodara
- (5) Public telephone facilities are well developed on the whole stretch of the WDFC alignment.
- (6) Mobile phone facilities are also well developed on the whole stretch of WDFC alignment.
- (7) Internet access is available in the whole country of India with wire or wireless. Connection speed is depending on the service providers.

### **3.7 Medical Facilities:**

- (1) General hospitals are available in Major cities such as Mumbai, Surat & Vadodara etc.
- (2) Other hospitals are also available in every city area.
- (3) Clinics are also available in villages along with WDFC alignment.
- (4) Injections are all disposal type in order to prevent from transfer of any type of diseases.

## ANNEXURE 1

### EVALUATION CRITERIA

#### 1.00 GENERAL EVALUATION RULES

##### 1.01 Generally

- (a) Evaluation of the Applications will be undertaken by DFCCIL with the assistance of the Consultant based upon the information submitted by the Applicants in response to this Invitation for Prequalification.
- (b) All Application Forms contained in this Document must be fully and properly completed and all must be returned, as they will be reviewed exactly as submitted and errors or omissions will be counted against the Applicant.
- (c) At their own option, DFCCIL may request further clarification or confirmation of any aspects which they feel will assist in the evaluation process.
- (d) DFCCIL reserves the right to waive minor deviations or omissions in any Application if, in their opinion, they do not materially affect the capability of an Applicant to perform the Contract.
- (e) Any Applicant who is found out to have intentionally submitted false or inaccurate statements/information shall be disqualified from the Bidding process, and may also be disqualified from all future projects of DFCCIL.

##### 1.02 Basic Method of Evaluation

- (a) Evaluation of the Prequalification Applications shall be made successively in two (2) Stages, on the following basis:

###### **Stage 1: Preliminary Screening**

Administrative Evaluation with eligibility - **Pass or Fail Basis.**

###### **Stage 2: Minimum Requirements Evaluation**

Annual Turnover, Previous Experience, Financial Position, Litigation History - **Pass or Fail Basis.**

- (b) Minimum qualification criteria have been established for each item in each Stage.
- (c) Applications failing to reach such minimum criteria in any Stage will be deemed to have failed the evaluation process at that Stage.

**2.00 STAGE 1 PRELIMINARY SCREENING (ADMINISTRATIVE EVALUATION)****2.01 General**

- (a) Under this Stage, Applications will be reviewed to check general compliance with the submission requirements of this Prequalification Document.
- (b) Evaluation will be made on a Pass or Fail Basis.
- (c) If, following this Stage 1 review, an Applicant has failed to comply with any item, the Application will fail the evaluation at this Stage.
- (d) The following aspects will be reviewed at this Stage:
  - (i) Completeness of submission, correct legal authority of the Applicant's official representative, letter of intent to enter into a Joint Venture (in case of JVA), correct signing and initialling of pages and general compliance with all of the submission requirements of this Prequalification Document;
  - (ii) Lack of submission of any of the official Application Forms without obvious reason;
  - (iii) Lack of signature by the Applicant's Official Representative on any of the official Application Forms;
  - (iv) Lack of Power of Attorney or Notarial Certificates for the Applicant's Official Representative on Form ELI 1.1;
  - (v) Lack of Signature by an Independent Public or Chartered Accountant on Form FIN-3.1 and Form FIN-3.2;
  - (vi) In the case of joint ventures, lack of signature of all partners or lack of Power of Attorney on Form ELI-1.2.

### **3.00 STAGE 2 MINIMUM REQUIREMENTS EVALUATION (ANNUAL TURNOVER, PREVIOUS EXPERIENCE)**

#### **3.01 Generally**

- (a) Applications which have passed the Stage 1 Evaluation will be reviewed to ascertain whether the Applicant has complied with the Minimum Prequalification Requirements as stipulated in the Qualification Criteria and Requirements (Section III).
- (b) Evaluation will be made on a Pass or Fail Basis.
- (c) If, following this Stage 2 review, an Applicant has failed to comply with any item, the Application will fail the evaluation at this Stage.
- (d) The various aspects listed in the following Paragraphs will be reviewed at this Stage:

#### **3.02 Eligibility**

- (a) Applications will be checked for compliance with Qualification Criteria and Requirements Para1.1 to 1.4 (Section III).
- (b) In the case of joint ventures, the summary of relevant data on net worth for each of the partners will be checked to ensure the correct addition for the joint venture's total collective ability.

#### **3.03 Historical Contract Non-Performance**

- (a) Applications will be checked for compliance with Qualification Criteria and Requirements Para2.1 and 2.2(Section III), considering the year, the number and the nature of any disputes.
- (b) Applicants, or each Partner of a Joint Venture and each Principal Named Sub-contractor and specialist Sub-design Consultant, will be evaluated separately.
- (c) Non-performance of a contract did not occur within the last number of years specified in the Prequalification Documents, prior to the deadline for application submission based on all information on fully settled disputes or litigation.
- (d) All pending litigation shall in total not represent more than the percentage, specified in the Prequalification Documents, of the applicant's net worth for the latest year and shall be treated as resolved against the applicant.

#### **3.04 Net Worth**

- (a) Applications will be checked for compliance with Qualification Criteria and Requirements Para3.1(Section III).
- (b) In the case of joint ventures, the summary of relevant data on net worth for each of



the partners shall be met individually by each partner of the joint venture in accordance with Qualification Criteria and Requirement Para3.1(Section III).

### **3.05 Average Annual Turnover**

- (a) Applications will be checked for compliance with Qualification Criteria and Requirements Para3.2(Section III).
- (b) In the case of joint ventures, the summary of relevant data on annual turnover for each of the partners will be checked to ensure meeting the specified requirements in respect of each partner as well as the correct addition for the joint venture's total collective ability.

### **3.06 Previous Experience**

- (a) Applications will be checked for compliance with Qualification Criteria and Requirements of Para 4.1, 4.2 (a), 4.2(b) and 4.3 (Section III).
- (b) The Applicant must meet all of the particular requirements of the Instructions to Applicants and Qualification Criteria and Requirements (Section III) in order to pass this stage of the Evaluation.

### **3.07 SELECTION AND PREQUALIFICATION OF APPLICANTS**



- (a) The result of Prequalification shall be subject to the approval of DFCCIL and the review and concurrence of JICA.
- (b) Applicants who pass all stages of the evaluation as reviewed and approved by DFCCIL and concurred by JICA, will be deemed to have passed the Prequalification process, and then they will be invited to bid for the succeeding Tender to be called by DFCCIL.

## ANNEXURE 2 GENERAL LOCATION MAP



**ANNEXURE 3****List of stations****JS:** Junction Station**CS:** Crossing (Wayside) Station

## Phase 2 List of Stations (Junction Stations shown in Bold)

		Inter Station distance (Kms)	
<b>JS1</b>	<b>JNPT</b>	0	P11 (102 kms) JNPT-Vaitarna
CS1	Nilje	38	
<b>JS2</b>	<b>Kharbao</b>	34	
CS2	Safale	34	P12 (186 kms) Vaitarna-Sachin
CS3	Palghar	34	
CS4	Gholvad	40	
CS5	Pardi	40	
CS6	Ancheli	38	
<b>JS3</b>	<b>New Udhna</b>	40	P13 (134 kms) Sachin-Makarpura
CS7	Gothangam	17	
CS8	Sanjali	39	
CS9	Varedia	28	
<b>Total JNPT-Vadodara</b>			<b>422 kms</b>
			 <b>Phase 1</b> 
CS10	Dharuhera	14	P14 (128 kms) Rewari - Dadri
CS11	Mewat	32	
<b>JS4</b>	<b>Pirthala</b>	34	
CS12	Faridabad	33	
<b>JS5</b>	<b>Dadri</b>	13	

**TOTAL Phase 2****550 Kms.**

**ANNEXURE 4**

**SITE PHOTOS**

IndianRailways





IR line atMakarpura Station



LevelCrossingatMakarpura Station



Existing IR Line and Signaling



Level Crossing at Ajmer



Existing IR Line and Signaling