



Ref No: TBSG/MONORAIL/001

EXPRESSION OF INTEREST

FOR

JOINT WORKING / PARTNERING WITH BHEL

IN

MMRDA e-Tender MONORS3

FOR

Design, Manufacture, Supply, Testing, & Commissioning of 10 nos. Train sets of 4 cars each and Training of Personnel for Mumbai Monorail Project

Issued by:

**Bharat Heavy Electricals Limited, having registered office at
BHEL House, Siri Fort New Delhi-110049 and
also office at**

**TBSG, Industry Sector, 7th floor, Integrated Office Complex, Lodhi Road,
NEW DELHI-110 003, INDIA**

(hereinafter referred to as 'BHEL')



DISCLAIMER

All information contained in this EOI provided / clarified are in good interest and faith. The information contained in this Expression of Interest document or subsequently provided to Applicant(s), whether verbally or in documentary or any other form, by or on behalf of BHEL, is provided on the terms and conditions set out in this EOI and such other terms and conditions subject to which such information is provided.

The purpose of this EOI is to provide interested parties with information that may be useful to them in the formulation of their application for qualification and subsequent selection pursuant to this EOI. This EOI is not an offer by BHEL to the prospective Applicant(s) or any other person. This EOI is neither intended nor shall it be construed as creating or requiring any ongoing or continuing relationship or commitment with any party or person. This is not an offer or invitation to enter into an agreement of any kind with any party.

Though adequate care has been taken in the preparation of this EOI document, the interested firms shall satisfy themselves that the document is complete in all respects. The information is not intended to be exhaustive. Interested Agencies are required to make their own enquiries and assumptions wherever required. Intimation of discrepancy, if any, should be given to the specified office immediately. If no intimation is received by this office by the date mentioned in the document, it shall be deemed that the EOI document is complete in all respects and firms submitting their interest are satisfied with the EOI document in all respects.

The issue of this EOI does not imply that BHEL is bound to select and shortlist Applicant(s) for next stage or to enter into any agreement(s) with any Applicant(s). BHEL reserves all right to reject any applications submitted in response to this EOI document at any stage without assigning any reasons thereof. BHEL also reserves the right to withhold or withdraw the process at any stage. Neither BHEL nor its employees and associates will have any liability, loss, expense or damage which may arise from or be incurred or suffered in connection with anything contained in this EOI document or any matter deemed to form part of this EOI document, the information and any other information supplied by or on behalf of BHEL. BHEL accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance/use of any statements/information contained in this EOI by the Applicant. BHEL is not making any representation or warranty, express or implied, as to the accuracy or completeness of any information/statements made in this EOI. The Applicant shall bear all its costs associated with or relating to the preparation and submission of its Application including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by BHEL or any other costs incurred in connection with or relating to its Application. All such costs and expenses will remain with the Applicant and BHEL shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an Applicant in preparation or submission of the Application, regardless of the conduct or outcome of the EOI.



1.0 INTRODUCTION

This Expression of Interest (Eoi) seeks response from Original Equipment Manufacturer (OEMs) who are willing to Partner / Work Jointly with BHEL for MMRDA e-tender MONORS3 for Design, Manufacture, Supply, Testing, & Commissioning of 10 nos. Train sets of 4 cars each and Training of Personnel for Mumbai Monorail Project in Mumbai, India.

2.0 ABOUT BHEL

Bharat Heavy Electricals Limited (BHEL) is a Central Public Sector Enterprise, wherein Government of India is holding 63.17% of its equity. One of the largest engineering and manufacturing companies of its kind in India having a turnover of more than USD 3 billion. The company is engaged in the design, engineering, manufacture, construction, testing, commissioning and servicing of a wide range of products and services for the core sectors of the economy, viz. Power, Transmission, Industry, Transportation, Renewable Energy, Oil & Gas and Defense with over 180 product offerings to meet the needs of these sectors.

Since its inception in 1964, BHEL has been the solid bedrock of evolution of India's Heavy Electrical Equipment industry. BHEL has a mammoth 20,000 MW per annum capability for manufacturing of power generation equipment. With a widespread network of 16 manufacturing facilities, 2 repair units, 4 regional offices, 8 service centers, 1 subsidiary, 3 active joint ventures, 15 regional marketing centers, 3 overseas offices and current project execution at more than 150 project sites across India and abroad, BHEL manufactures a wide range of high quality & reliable products adhering to national and international standards.

With key focus on project execution, the worldwide installed base of power generating equipment supplied by BHEL has exceeded 185 GW. BHEL's equipment that account for about 60% of the country's total generation from thermal utility sets (coal based), stand a testimony to its valuable contribution towards nation building. BHEL's global competitiveness has established its footprint in all the inhabited continents with references in 83 countries.

The high level of quality & reliability of BHEL products is a testimony to its adherence to international standards by acquiring and adapting some of the best technologies from leading companies in the world including General Electric, Siemens AG, Mitsubishi Heavy Industries Ltd. etc., together with technologies developed in its own R&D centers. BHEL invests more than 2.5% of turnover on R&D and innovation.

BHEL has been designing and manufacturing rolling stock for rail and urban transportation. BHEL has also been manufacturing Motors, Power electronics and Controllers for various transportation applications at its various factories.

In transportation sector, BHEL is into the manufacture of complete electric and diesel electric locomotives and electrical assemblies/components including traction motors, traction transformers, power & auxiliary converters and controls, gear wheels etc. We are a regular supplier of propulsion equipment of ACEMU/MEMU. India's first air-conditioned ACEMU train operational in Mumbai is equipped with BHEL's electrics and propulsion system.

At our Jhansi plant, we manufacture complete Electric Locomotives upto 6000 HP rating for mainline application of Indian Railways, Diesel Electric Locomotives from 350 HP to 3250 BHP rating. Till date, we have supplied cumulatively more than 725 nos. of main line electric locomotives to Indian Railways and diesel electric locomotives for shunting operations to various industries.

Our Jhansi plant have an installed capacity of 75 nos. locomotives per year. At Jhansi, we have complete state-of-the-art facilities for manufacturing, fabrication and testing of bogies, loco shells, under frames and other mechanical components of locomotives. We have recently



developed India's first state-of-the-art WAG7 Electric Locomotive with regenerative capabilities. We have also developed India's first Traction Motor for 9000HP Electric Locomotives.

Among electrical propulsion equipment, we manufacture and supply traction motors, traction transformers, power converters(IGBT) & controls, auxiliary converters(IGBT) and vehicle control units for electric locomotives, diesel electric locomotives, EMUs, DEMUs & and metros trains of Indian Railways. Our manufacturing range includes complete solution for ACEMU/MEMU, IGBT based 3-phase drive equipment up to 6000HP rating. BHEL has also been in the forefront of providing maintenance and spares/replacement support to Indian Railways for their locomotive fleet. We have full-fledged service department located at major centers in the country.

We are establishing state-of-the-art design, engineering and manufacturing facility at BHEL, which is presently under progress at Bhopal Unit. The upcoming facilities shall be able to cater requirement of Stainless Steel Coaches for EMUs for urban transportation and Trainsets for semi high-speed Rail transportation.

More details about the entire range of BHEL's products and operations can be obtained by visiting our web site www.bhel.com.

3.0 PURPOSE

- 3.1 Mumbai Metropolitan Region Development Authority (MMRDA), is mandated for implementing the Mumbai Monorail project, which is situated in City of Mumbai in India, stretched along the length of 19.54 Km between Chembur and Sant Gadge Maharaj Chowk stations. The project comprises a pair of guideway beams and 17 stations. The project is built in two phases. The Phase-I stretches over the length of 8.26 Kms and includes 7 stations and the Phase-II stretches over the length of 11.24 Kms. and includes 10 Nos of stations. The Monorail System has been in revenue operation from Feb, 2014.
- 3.2 MMRDA tender is for procurement cum long term Maintenance of the rolling stock for Mumbai Monorail Project, which would be passing through one of the most densely populated sections of the Mumbai city. A consortium of L&T (India) & Scomi of Malaysia on a turnkey basis has executed the Project. MMRDA has taken over the project and operations and maintenance of the project from December, 2018. Monorail cars/train must be compatible with the existing structures and the systems, which are already in place in the project.
- 3.3 The intent of this Expression of Interest hereinafter referred to as the "EOI" is to invite applications from interested Party/Parties who are willing to Partner / Work Jointly with BHEL for MMRDA e-tender MONORS3 for Design, Manufacture, Supply, Testing, & Commissioning of 10 nos. Train sets of 4 cars each and Training of Personnel for Mumbai Monorail Project in Mumbai.
- 3.4 Any applicant from a country which shares a land border with India will be eligible to participate in this EOI only if the applicant is registered with the Competent Authority as mentioned in the Office Memorandum of Ministry of Finance(Gol), DoE F No.6/18/2019-PPD dtd 23.07.2020 the extant Government rules and orders.
- 3.5 BHEL shall select party/parties who meet the PQR as per clause 5 of this EOI. Notwithstanding anything to the contrary mentioned in the document, by virtue of submission of the application against this EOI, the applicant is deemed to have perused and fully understood the 'MONORS3' tender document along with addendums / corrigenda and is aware of the site conditions and the existing structure of Mumbai Monorail project.
- 3.6 It is envisaged that BHEL and the selected party/parties shall jointly work towards the submission of bid against this tender and shall jointly execute the works after award of contract.



- 3.7 BHEL shall enter into an MoU (Memorandum of Understanding / BSA (Business Sharing Agreement) with the selected party/parties. Also the selected party/parties, after entering into a mutually exclusive agreement with BHEL, cannot quote directly or enter into any kind of joint arrangement with any other party for the above mentioned Monorail tender.
- 3.8 A broad scope split have been indicated at Annexure-1b. Applicant to furnish the details as per this broad scope split.
- 3.9 The project cash flow sharing, terms of payment, schedule of payments and other financial obligations between BHEL and selected party/parties shall be in line with specific terms of the agreement of BSA to be mutually agreed at a later stage.

4.0 INSTRUCTION TO APPLICANTS:

- 4.1 Reputed business entities may submit their application as per Annexure -1 (along with supporting documents for PQR) by Post / e-mail so as to reach us on or before 17th October'2020 at the following address:

Sr Deputy General Manager, TBSG,
Bharat Heavy Electricals Limited
Industry sector
Integrated Office Complex,
Lodhi Road-New Delhi -
110003, India.
Email: santoshkr@bhel.in; tbsg@bhel.in,
Phone: +91 11 41793134;
Mobile: +91-9910906753

- 4.2 The details submitted by the Applicant(s) shall be complete in all respects and BHEL may seek clarifications/additional information as considered necessary. Such clarifications/additional information must be provided within 2 days of BHEL request.
- 4.3 The EOI process involves seeking willingness of interested party/parties and selecting party/parties amongst all who make an application in response to this EOI.
- 4.4 Any request for further information or clarification on the EOI document may be submitted to above address within 07 days from date of issue of EOI.
- 4.5 Responses to EOI are to be submitted in English only. Supporting documents, as required, should also be in English language. In case of some documents being available in languages other than English, the Applicant shall necessarily provide duly authenticated translated version of the same in English.
- 4.6 Duly authorized representative of the Applicant(s) shall sign on each page of the document. Response to EOI should be prepared in such a way so as to provide a straight forward, concise description of Applicant's capabilities.
- 4.7 Notwithstanding anything contained in this EOI, BHEL reserves the right to accept or reject any Application and to annul the EOI Process in whole or part, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons thereof.
- 4.8 BHEL reserves the right to verify all statements, information and documents submitted by the Applicant in response to the EOI. Any such verification or lack of such verification by BHEL shall not relieve the Applicant of his obligations or liabilities hereunder nor will it affect any rights of BHEL.



- 4.9 The EOI process shall be governed by, and construed in accordance with, the laws of India and the Courts at New Delhi shall have exclusive jurisdiction over all disputes arising under, pursuant to and/ or in connection with the EOI process.
- 4.10 All costs incurred for participation in the EOI shall be borne by the Applicant(s).

5.0 Pre-Qualifying Criteria (PQR):

The prospective party/ respondent must meet the pre-qualification requirement as applicable and tabulated below, supported with relevant documents/ credentials/ certificates for further consideration:

5.1) Technical Criteria: Vehicle Design and Manufacturing Capabilities	
5.1.1	Experience of Design, Manufacturing, Assembly, Supply, Testing and Commissioning of Monorail trains of Stainless Steel / Aluminium anywhere in the world during last 10 years as on date of EOI submission. These Monorail trains should be in satisfactory revenue operations.
5.1.2	The prospective party/ respondent have in-house design, engineering and manufacturing capabilities of Monorail trains
5.1.3	The prospective party/ respondent have experience of vehicle control systems of Monorail trains
5.2) Financial Criteria	
5.2.1	Net current assets {(Current assets + loans & advances) - (current liabilities + provision)} and/or documents including banking reference (Credit Line), should show that the applicant has access to or has available liquid assets, lines of credit and other financial means to meet sufficient cash flow for this contract, net of applicant's commitments for other Contracts.
5.2.2	Minimum average annual turnover shall not be less than INR 100 Crores. calculated as total certified payments received within last five financial years.
5.2.3	The Applicant should have positive Net worth in any three out of last Five financial years. This will be judged from audited financial data of last five financial years or any other documents as per company laws of the respective country including banking reference.
5.3) Other Miscellaneous Criteria	
5.3.1	The Applicant should not be blacklisted/ banned in business dealings by MMRDA/ Indian Railways/ Metro authorities / Central and State Govt in India or anywhere in the world in last 10 years.
5.3.2	No previous contract should be terminated either in full or part due to Applicant's failure in last 10 years.
5.3.3	Applicant should not have suffered insolvency / bankruptcy in last 10 years.



Annexure-1

Information to be submitted by Applicant

1. Name of the Company:
2. Legal status of the Company:
3. Brief description of the Company including details of its business groups/subsidiaries/affiliates:
4. Date of Incorporation:
5. Date of Commencement of Business:
6. Full address including Telephone nos. / Fax nos.:
Registered Office:
Head Office:
Address for communication:
Contact Details:
Office Address in India, if any:
7. Documents to be enclosed:
Filled up Annexure -1a & 1b along with all applicable documents considered relevant to meet PQR and support evaluation criteria indicated in Applicant's response sheet.

(Sign & Company Seal) Authorized signatory

Eligibility Criteria		Applicant's Response	
Criteria		Meeting the criteria Yes / No	Documentary evidence: Enclosed / To be submitted later
1a.1) Technical Criteria: Vehicle Design and Manufacturing Capabilities			
1a.1.1	The prospective party/ respondent have Experience of Design, Manufacturing, Assembly, Supply, Testing and Commissioning of Monorail trains of Stainless Steel / Aluminium anywhere in the world during last 10 years as on date of EOI submission. These Monorail trains should be in satisfactory revenue operations.		
1a.1.2	The prospective party/ respondent have in-house design, engineering and manufacturing capabilities of Monorail Cars		
1a.1.3	The prospective party/ respondent have experience of vehicle control systems of Monorail Trains		
1a.2) Financial Criteria			
1a.2.1	Net current assets {(Current assets + loans & advances) - (current liabilities + provision)} and/or documents including banking reference (Credit Line), should show that the applicant has access to or has available liquid assets, lines of credit and other financial means to meet sufficient cash flow for this contract, net of applicant's commitments for other Contracts.		
1a.2.2	Minimum average annual turnover shall not be less than INR 100 Crores. calculated as total certified payments received within last five financial years.		
1a.2.3	The Applicant should have positive Net worth in any three out of last Five financial years. This will be judged from audited financial data of last five financial years or any other documents as per company laws of the respective country including banking reference.		
1a.3) Other Miscellaneous Criteria			
1a.3.1	The Applicant should not be blacklisted/ banned in business dealings by MMRDA/ Indian Railways/ Metro authorities / Central and State Govt in India or anywhere in the world in last 10 years.		
1a.3.2	No previous contract should be terminated either in full or part due to Applicant's failure in last 10 years.		
1a.3.3	Applicant should not have suffered insolvency / bankruptcy in last 10 years.		

(Sign & Company Seal) Authorized signatory

Indicative Scope of Partnership for MONORS3 Tender of MMRDA

Sl. No.	Scope	Applicant's Response: Yes/No/ (Remarks if any)
1b.1	Associating/Supporting BHEL to design, engineer, manufacture, assemble, quality control, test, supply, install, commission, repair, service and retrofit Monorail Train.	
1b.2	Assisting/Supporting BHEL in system engineering and integration with other subsystems such as Traction Units, Door System, Gangway, Heating Ventilation and Air Conditioning (HVAC), Communication (PA/PIS & CCTV), Couplers, Lighting, Train Radio etc. including Vehicle Management System (VMS) etc.	
1b.3	Assistance in planning & establishing the required manufacturing, testing and assembly facilities & processes/ suitable augmentation at BHEL's existing facilities/processes by way of expert advice in terms of identifying, sizing & selection of equipment / machinery required for manufacturing, their layout and foundation etc. Assistance for commissioning of the manufacturing facilities, design of special tools and dies, jigs & fixtures etc.	
1b.4	During the field trials and regular operation if any modifications/updates are carried out to improve the performance/reliability of the system the same should be transferred to BHEL with complete know-how so that during the operation & maintenance period sufficient support can be given to customer independently by BHEL.	
1b.5	Training of BHEL engineers in the manufacture, assembly, quality control/quality assurance, testing, installation, commissioning, maintenance & operation of the Monorail Trains to be delivered to MMRDA under the subject tender.	

(Sign & Company Seal) Authorized signatory