



Bharat Heavy Electricals Limited

Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

Ref. BHEL/AA/JV_MA/EOI/2021/01

Date: 13.04.2021

Extension of Eoi Due Date & Minor modifications in Eoi document

Subject: Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

This has reference to the Expression of Interest (Eoi) published on BHEL's website (on 25th March 2021) www.bhel.com for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

The due date for receiving the proposals against the Eoi has now been extended up to **April 26, 2021 (Monday)**.

The interested prospective collaborators shall ensure that their response along with all duly signed annexures as mentioned in the Eoi are received by BHEL through hard copy / soft copy by e-mail on or before **April 26, 2021 (Monday)**.

Further, the following modifications to Eoi document (attached) may be noted:

Page	Earlier Text	Revised Text
14	4.4.4. Currency conversion prevailing rates (as per <u>RBI</u>)	4.4.4. Currency conversion prevailing rates (as per <u>SBI</u>)
20 published by <u>Reserve</u> Bank of India as on..... published by <u>State</u> Bank of India as on.....
24	2.6 prospective JV Partner (preceding 5 years)	2.6 prospective JV Partner (<u>Average</u> of preceding 5 years)

In case any further information is needed, kindly feel free to contact us.

The respondent shall submit their offer with all annexures duly signed to the following address:

Manager
Corporate Technology Management,
Bharat Heavy Electricals Limited (BHEL),
BHEL House, Siri Fort, New Delhi -110 049
India
Tel: +91-11-66337220
E-Mail: jveoi@bhel.in

BHARAT HEAVY ELECTRICALS LIMITED
(A Government of India Undertaking)
New Delhi – 110049
INDIA

NOTICE FOR INVITING
Expression of Interest (Eoi) for Selection of
Joint Venture partner
for Propulsion Systems and its services,
digitalisation business in rail transportation

EOI REFERENCE NUMBER:

BHEL/AA/JV_MA/EOI/2021/01



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

LETTER OF INVITATION

Bharat Heavy Electricals Limited (BHEL) seeks response from companies meeting the requirements of this Eoi and are willing to be associated with BHEL through a Joint Venture (route on long term basis in formation of a Joint Venture (JV) to pursue business opportunities for Propulsion Systems and its services, digitalisation business in rail transportation in India and abroad.

The proposed Joint Venture Company (JVC) should be in a position to pursue the business of Propulsion Systems and its services, digitalisation business in rail transportation. The detailed terms and conditions and other definitive documents including the JV Agreement, the Memorandum and Articles of Association and the long-term Business Plan for such a JV shall be mutually agreed upon.

The proposed JVC will be a separate legal entity formed & registered in line with provisions of Indian Companies Act, 2013 and subsequent issued amendments with an independent Board and certain proportion of BHEL's shareholding and board representation as agreed with the prospective JV partner.

The proposed JV partner shall be willing to transfer/ license technology to the proposed JVC and the JVC be provided with exclusivity to market and manufacture in India.

BHEL current portfolio of railways Propulsion Systems shall remain outside the ambit of the proposed JVC and as per requirement, BHEL's capacities/ facilities may be considered for sharing with the JVC at appropriate commercial considerations.

The prospective JV partner shall submit confirmation for participation in the Eoi process as per Section-5.



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

INDEX

Sl. No.	DESCRIPTION
1	SECTION - 1: DISCLAIMER
2	SECTION – 2: SCHEDULE OF Eoi PROCESS & CONTACT DETAILS
3	SECTION – 3: DETAILS OF Eoi
4	SECTION – 4: PRE-QUALIFICATION CRITERIA
5	SECTION – 5:DOCUMENTS TO BE SUBMITTED ALONG WITH Eoi



Expression of Interest (Eol) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

SECTION-1

DISCLAIMER

1. The information contained in this Expression of Interest (Eol) document provided to the prospective JV partner, by or on behalf of BHEL or any of its employees or advisors, is provided to the prospective JV partner on the terms and conditions set out in this Eol document and all other terms and conditions subject to which such information is provided.
2. The purpose of this Eol document is to provide the prospective JV partner with information to assist the formulation of their Proposal. This Eol document does not purport to contain all the information each prospective JV partner may require. This Eol document may not be appropriate for all persons, and it is not possible for BHEL, its employees or advisors to consider the business/investment objectives, financial situation and particular needs of each prospective JV partner who reads or uses this Eol document. Each prospective JV partner should conduct his own investigations and analysis and should check the accuracy, reliability and completeness of the information in this Eol document and where necessary obtain independent advice from appropriate sources.
3. BHEL, its employees and/or advisors make no representation or warranty and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of the Eol document.
4. BHEL may, in its absolute discretion, but without being under any obligation to do so, modify, amend or supplement the information in this Eol document.
5. The issue of this Eol does not imply that BHEL is bound to select and shortlist any or all the prospective JV partners. Even after selection of suitable prospective JV partner BHEL is not bound to proceed ahead with the prospective JV partner and in no case be responsible or liable for any commercial and consequential liabilities in any manner whatsoever.
6. The prospective JV partner shall bear all costs associated with the preparation, technical discussion/presentation and submission of Eol. BHEL shall in no case be responsible or liable for these costs regardless of the conduct or outcome of the Eol process.
7. Canvassing in any form by the prospective JV partner or by any other agency on their behalf shall lead to disqualification of their Eol.



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

SECTION-2

SCHEDULE OF Eoi PROCESS & CONTACT DETAILS

A. SCHEDULE OF Eoi PROCESS

The schedule of activities during the Eoi Process shall be as follows -

Sl. No.	Description	Date
1	Issue of Eoi document	25.03.2021
2	Last date of Submission of Eoi response	26.04.2021

B. CONTACT DETAILS:

All the correspondence shall be marked to the following:

Manager
Corporate Technology Management,
Bharat Heavy Electricals Limited (BHEL),
BHEL House, Siri Fort, New Delhi -110 049
India

Tel: +91-11-66337220
E-Mail: jveoi@bhel.in



Expression of Interest (EoI) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

SECTION – 3

DETAILS OF EXPRESSION OF INTEREST (EoI)

3.1 ABOUT BHEL

Established in 1964, BHEL has been one of the earliest and strongest contributors towards a strong and Aatmanirbhar India. BHEL is India's largest engineering and manufacturing enterprise in the energy and infrastructure sectors and a leading power equipment manufacturer globally. BHEL serves its customers with a comprehensive portfolio of products, systems and services in the areas of power-thermal, hydro, gas, nuclear & solar PV, transmission, transportation, defence & aerospace, oil & gas, and water. BHEL's commitment to attaining the vision of a self-reliant India manifests in many ways- in its contribution to the country's installed power generation capacity; bringing the latest state of the art technology to the country; consistent highest expenditure of more than 2.5% of its turnover on R&D and innovation in the Indian engineering segment; pan-India presence; establishment of world-class assets, and creating sustainable business solutions and contribution to the society at large through initiatives in skilling youth, health & hygiene, education, cleanliness and environment protection, among others. The force behind driving the outcomes at BHEL and ensuring success is BHEL's resilient workforce, supported ably by efficient processes and innovative enablers. A team of around 33,500 empowered employees stands strong, focused on driving the businesses of today as well as the future.

The company's pan-India presence includes a network of 16 manufacturing facilities, 2 repair units, 4 regional offices, 8 service centres, 1 subsidiary, 3 active joint ventures, 15 regional marketing centres, 4 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. The worldwide installed base of power generating equipment supplied by BHEL exceeds 190 GW, making it the undisputed leader amongst Indian power plant equipment manufacturers. Having installed more than 1000 thermal, hydro, nuclear, gas and solar PV based power generating sets in the country, BHEL is now building strong foundations for cleaner and greener energy usage in future. BHEL has a widespread footprint in all the inhabited continents of the world with references in 84 countries including the neighbouring countries of Bangladesh, Afghanistan, Bhutan, and Nepal, Indonesia, Oman, Iraq, Sudan, Afghanistan, United States and New Zealand. Till date, BHEL has installed around 11 GW power generating capacity in overseas markets. An additional 6 GW is under execution, including the 2x660 MW Maitree Super thermal power project in Bangladesh and 4x225 MW Arun-3 Hydroelectric project in Nepal. BHEL is also a name to reckon with in various sectors of the industry. More than half of the traction equipment in locomotives & EMUs of Indian Railways has been supplied by BHEL. BHEL has commissioned 200+ electric substations and 5 major HVDC projects in the country. BHEL's solar portfolio of more than 1.2 GW, spread across the country includes ground mounted, rooftop, canal top and floating PV plants. BHEL is also one of the largest manufacturers and suppliers of power transformers and electrical AC machines in the country. BHEL has been a major reliable supplier of critical equipment and services in defence & aerospace sector for over three decades. Most of the satellites launched by ISRO



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

are powered by BHEL manufactured solar panels and lithium ion batteries. BHEL is a trusted supplier of naval guns to Indian navy for their warships.

BHEL is leveraging on its technology capabilities and committed workforce to transform itself. Asserting leadership in core business, diversifying the business mix, efficiency optimisation & innovative technological solutions are the major enablers driving company's competitiveness in its businesses. Resolute focus and persistent efforts are directed towards building a new future.

3.2 BHEL Thrust on Atmanirbhar Bharat Mission:

Global economic growth, which has been subdued for the past three years, is expected to contract further in FY 2020-21. High frequency indicators of Indian economy also indicate a decline in industrial production activity and consumption demand. The Government has taken a number of steps to revive the economy and these are expected to provide traction in the coming quarters. Our Hon'ble Prime Minister's call for 'Aatmanirbhar Bharat' mission will provide further momentum to the Make in India initiative and spur domestic manufacturing. National Infrastructure Pipeline 2019 envisages an investment of about 111 lakh Crore till 2024-25, which is expected to provide opportunities to engineering and manufacturing companies like BHEL. Power sector specific reforms such as liquidity infusion to DISCOMS, proposed amendment to Electricity Act 2003, etc., will provide the much-needed impetus for the long-term growth of the sector. Although ordering for new coal-based power generation equipment remains weak, demand for emission control business is strong and growing. Indian Railways continues to move ahead with initiatives to decarbonize its operations, and upgrade & modernize infrastructure. Thrust on indigenization in defence & aerospace sectors will also continue to present new opportunities.

Moving ahead resolutely and in line with Prime Minister's 'Atmanirbhar Bharat' mission, a number of initiatives were taken by the company in new business areas like transportation, defence & aerospace, energy storage business, among others, which are expected to improve the performance in years to come along with declaration of 2020 as the Year of transformation. Focused and all-out efforts are being made by the management in the areas of non-power business such as railways transportation, defence & aerospace, EPC in downstream oil & gas, industry 4.0 solutions and contract manufacturing in high technology areas.

Aiming at ensuring alignment of the company with the demands of the country under recent initiative of 'Aatmanirbhar Bharat' and improving capacity utilisation across the company, BHEL is looking forward to developing and manufacturing Propulsion Systems for Railway transportation by leveraging its facilities to global OEMs capabilities to set up manufacturing base for the same in India.

3.3 BHEL CURRENT PORTFOLIO OF RAILWAY TRANSPORTATION BUSINESS

BHEL is a leading supplier of locomotives and propulsion electrics to Indian Railways for the last 50 years. Around 50% of the rolling stock of Indian Railways is equipped with BHEL



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

manufactured electrics. 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. At BHEL's Jhansi plant, complete Electric Locomotives up to 6000 HP rating for mainline application of Indian Railways, Diesel Electric Locomotives from 350 HP to 2600 HP rating are manufactured. Till date, more than 370 nos. of main line electric locomotives to Indian Railways and more than 250 nos. of diesel electric locomotives for shunting operations to different industries have been supplied. BHEL Jhansi plant with an installed capacity of 75 nos. locomotives per year, have state-of-the art facilities for manufacturing and fabrication of bogies, loco shells, under frames and other mechanical components of locomotives. BHEL has recently developed India's first state-of-the-art WAG7/ 9000 HP Electric Locomotive with regenerative capability.

Among electrical propulsion equipment, BHEL manufactures and supplies traction motors, traction transformers, power converters (IGBT) & controls, auxiliary converters (IGBT) and vehicle control units for electric locomotives, diesel electric locomotives and EMUs.

Manufacturing range includes conventional DC drive, IGBT based 3-phase drive equipment for various ratings for Locomotives, EMUs and MEMUs. BHEL has also been in the forefront of providing maintenance and spares/replacement support to Indian Railways for their locomotive fleet. BHEL have full-fledged service department located at major centres in the country.

3.4 INDICATIVE SCOPE OF ASSOCIATION:

- 3.4.1. BHEL is seeking response from companies/ OEM's willing to invest and form equity JVC with BHEL to pursue business opportunities for Propulsion Systems and its services, digitalisation business in rail transportation.
- 3.4.2. Prospective JV partner shall have a substantial stake in the proposed JV company. The exact shareholding structure shall be as mutually agreed between BHEL and JV Partner.
- 3.4.3. The proposed JVC will be a separate legal entity formed & registered in line with provisions of Indian Companies Act, 2013 with an independent Board comprising of representatives from BHEL and JV Partner.
- 3.4.4. The purpose of JVC shall be to capture market and develop engineering & manufacturing capabilities through localization of proven Propulsion Systems.
- 3.4.5. The Proposed JV shall establish a full-fledged marketing and manufacturing setup in India along with an office comprising project manager, Engineering manager for addressing customers technical and after sales support requirements
- 3.4.6. JVC will pursue business opportunities of Propulsion Systems (including its services and digitalisation business) in the rail transportation business for RRTS, Metrorail, Metrolite, Metro Neo, Monorail, High Speed Rail.
- 3.4.7. 'Propulsion Systems' shall include Traction Converter-Inverter, Traction-Inverter, Auxiliary Converter-Inverter including auxiliary supply modules and TCMS with complete system integration.



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

- 3.4.8. The prospective JV partner shall transfer/ license technology to the proposed JVC and the JVC be provided with exclusivity to manufacture and supply at least in India.
- 3.4.9. BHEL current technology portfolio of railways Propulsion Systems shall remain outside the ambit of the proposed JVC
- 3.4.10. As per requirement, BHEL's capacities/ facilities may be considered for sharing with the JVC at appropriate commercial considerations to be ascertained separately through mutual agreement.
- 3.4.11. Duly registered companies as per the laws of their countries can participate in the Eoi.
- 3.4.12. The prospective JV partner must possess capability in respect of Design, Engineering, Manufacturing of Rail Propulsion Systems and its services, digitalisation.
- 3.4.13. The technology possessed by prospective JV partner must be non-infringing and it must be clear from third-party IP infringement claims.
- 3.4.14. Prospective JV partner must be technically competent to keep pace with advancement in rail Propulsion Systems.
- 3.4.15. To ensure sustained and profitable growth of the JVC, the JVC may venture into other adjacent / synergistic areas in future, with the approval of its parents- the shareholders.

Interested companies meeting the Pre-Qualification Requirements (PQR) as given in Section-4 and willing to associate with BHEL as per broad scope/ expectations given above are invited to submit their offer in response to this Eoi.

Upon receipt of responses against this Eoi, BHEL will review the responses to ascertain suitability of the offer and shortlist prospective JV partner for further discussions.

The evaluation criteria to shortlist the prospective JV partner(s) for detailed techno-commercial negotiations is given at Annexure-6.

Discussions on commercial and other terms and conditions to finalize the JV Agreement and other definitive documents shall be held with shortlisted prospective JV partner(s). The terms and conditions for agreement shall be mutually agreed upon.

3.5 INSTRUCTIONS

- 3.5.1 **Language:** All correspondences and documents related to the Eoi response shall be in English language, provided that any printed literature furnished by the prospective JV partner may be written in another language, as long as such literature is accompanied by a translation of its pertinent passages in English language in which case, for purposes of interpretation of the bid, the English translation shall govern.
- 3.5.2 The prospective JV partner shall abide by the terms & conditions, as applicable, of the Eoi.
- 3.5.3 All pages of the Eoi shall be duly signed by the authorised signatory.
- 3.5.4 Multiple proposals from the same prospective JV partner should not be submitted.
- 3.5.5 BHEL at their discretion shall inspect the prospective JV partner works/office/reference site premises for the purpose of evaluation, as deemed necessary before selection of JV partner. BHEL decision in this regard shall be final.
- 3.5.6 Any prospective JV partner who has been debarred/blacklisted by Central/State Governments or by any entity controlled by Central/State Governments of India from



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

participating in any of their project, as on date of submission of Eoi, shall not be eligible to submit the Eoi.

3.6 CONFLICT OF INTEREST

Prospective JV partner shall not have a conflict of interest. Any/All prospective JV partner(s) found to have a conflict of interest shall be disqualified. A prospective JV partner may be considered to have a conflict of interest, if:

- (a) Prospective JV partner has been engaged by BHEL to provide consultancy services for the document preparation related to this Eoi;
- (b) Prospective JV partner is an associates/affiliates (inclusive of parent firms) of a firm or an organization mentioned in subparagraph (a) above; or
- (c) Prospective JV partner lends, or temporarily seconds its personnel to or utilizes services of personnel of firms or organizations which are engaged by BHEL in consultancy services for preparation of this Eoi document.

3.7 PROCESS TO BE CONFIDENTIAL:

Information relating to the examination, clarification, evaluation and comparison of responses and recommendations etc. shall not be disclosed to prospective JV partner. Any effort by prospective JV partner to influence BHEL processing of Eoi or selection decisions may result in the rejection of the offer.

3.8 MISCELLANEOUS:

3.8.1 Right to accept or reject any or all Applications:

- i. Notwithstanding anything contained in this Eoi, BHEL reserves the right to accept or reject any application and to annul the Eoi process and reject all applications, at any time without any liability or any obligation for such acceptance, rejection or annulment and without assigning any reasons, thereof. In the event that BHEL rejects or annuls all the applications, it may at its discretion, invite all eligible prospective JV partners to submit fresh applications.
- ii. BHEL reserves the right to disqualify any applicant during or after completion of Eoi process, if it is found there was a material misrepresentation by any such applicant or the applicant fails to provide within the specified time, supplemental information sought by BHEL.
- iii. 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.

3.8.2 Governing Laws & Jurisdiction:

The Eoi process shall be governed by, and construed in accordance with, the laws of India and the Courts at New Delhi (India) shall have exclusive jurisdiction over all disputes arising under, pursuant to and / or in connection with the Eoi process.



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

3.9 BRIEF DESCRIPTION OF Eoi PROCESS:

The interested prospective JV partner shall ensure that their response along with below stated annexures is received by BHEL on or before 15. 04. 2021:

- i. Annexure-1- General Information.
- ii. Annexure-2- Technical Criterion.
- iii. Annexure-3- Financial Information.
- iv. Annexure-4- Business / Strategic Criterion.
- v. Annexure-5- Reference list and details of existing business in the field of rail transportation sector- Propulsion Systems and its services, digitalisation business of prospective JV partner to be provided along with list of customers where the technology is under use and from how many years.
- vi. Annexure-6- Evaluation Criteria for shortlisting prospective JV Partner

The response shall necessarily be accompanied with details on company background, product profile, technical capabilities, reference list of customers, existing business in the field of Propulsion Systems and its services, digitalisation business in rail transportation using the technology of prospective JV partner, relevant certificates and latest five years annual audited financial statements including auditor's report.

In case any amendment/corrigendum issued to this Eoi, it shall be notified only at www.bhel.com .



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

SECTION– 4

PRE-QUALIFICATION CRITERIA

Prospective JV Partner will be considered an eligible partner with BHEL for the formation of JVC based on the technical capabilities, experience and past performance. BHEL shall examine documentary evidence of the prospective JV partner's credentials as well as such other information, as deemed necessary and appropriate. The prospective JV partner willing to associate with BHEL for JV formation should meet the following Pre-Qualification Criteria:

4.1 TECHNICAL CRITERION:

- 4.1.1 The prospective partner should have experience of minimum ten (10) years in design and manufacturing of composite traction converter-inverter of a 3-Phase Propulsion System for metro rolling stock,
AND

such system supplied by the prospective partner should be in satisfactory revenue operation for at least four (4) years in minimum 300 cars comprising of both powered and non-powered cars, supplied against minimum three (3) different contracts in the Metros (i.e. MRT, Metrolite, LRT, LRV, Tramway, Suburban Railways, EMU, high speed railways).

AND

- 4.1.2 The above 300 cars, EMU based train sets should have design/operating speed of 180/160 kmph or more in minimum aggregate 250 cars (comprising of powered and non-powered cars) which are in satisfactory revenue operation for at least three years. The above cars should have been supplied either in India or in a country other than the country of origin of manufacturer.

AND

- 4.1.3 The Prospective JV Partner should have the capability of system Design and Integration of various sub systems of rolling stock. The proposed system Train Control and Monitoring System (TCMS) shall be in satisfactory revenue operation for at least three years in GOA4 trains, in a country other than the country of origin of manufacturer or in India.



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

4.2 FINANCIAL CRITERION:

Prospective JV Partner is also required to meet certain financial parameters as per following:

- 4.2.1 Net worth {to be obtained from audited balance sheet} should be positive at end of last Financial Year.
- 4.2.2 Profitability (Earnings or Profit before tax but after interest) shall be positive in at least two financial years out of last five financial years.
- 4.2.3 Liquidity >1800 million INR.

Note: Net current assets {(Current assets + loans & advances) – (current liabilities + provision)} or documents including banking reference, should show that the Prospective JV Partner has access to or has available liquid assets, lines of credit and other financial means to meet cash flow INR 1800 million (~USD 25 million). Banking reference should contain in clear terms the amount that bank will be in a position to lend for this work. In case the Net Current Assets (as seen from the Balance Sheets) are negative, only the Banking references will be considered. Otherwise the aggregate of the Net Current Assets and submitted Banking references will be considered for working out the Liquidity.

- 4.2.4 The Average Annual Turnover for the last five financial years > 3500 million INR (~USD 50 million) in the business of Railway Transportation.

4.3 BUSINESS / STRATEGIC CRITERION:

- 4.3.1 Prospective JV partner must be a duly registered company as per the applicable laws.
- 4.3.2 Prospective JV partner should be ready to invest for at least equal stake along with BHEL in the JV company.
- 4.3.3 The prospective JV partner needs to provide to the JVC, state of art technology for engineering, manufacturing, testing, services along with modifications/ upgradations for the Propulsion Systems.
- 4.3.4 The prospective JV Partner should provide exclusivity rights at least in India to the JVC for engineering, marketing, manufacturing, commissioning and servicing in the business of Propulsion Systems.
- 4.3.5 The prospective JV Partner should accept that BHEL current portfolio of railways Propulsion Systems i.e. traction motors, traction transformers, power converters (IGBT) & controls, auxiliary converters (IGBT) and vehicle control units for electric locomotives, diesel electric locomotives and on-board Propulsion Systems for MEMUs, DEMUs shall remain outside the ambit of the proposed JVC.

4.4 GENERAL REQUIREMENTS:

- 4.4.1 Prospective JV partner should meet above criterion stipulated in clause 4.1, 4.2 and 4.3. The respondent shall share suitable supporting documents to the satisfaction of BHEL.



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

- 4.4.2 If the prospective JV partner does not possess the credentials as identified in 4.1, 4.2 & 4.3 but its parent company or group company meets the requisite credentials and is willing to support the prospective JV partner, appropriate undertaking/ certificate/ comfort letters to the satisfaction of BHEL needs to be submitted.
- 4.4.3 In case, the prospective JV partner as such does not own the technology and the IPRs related to targeted business of the JVC, but its parent company or group company owns such technologies and IPRs, the prospective JV partner shall obtain rights to sublicense the technology and use of IPRs to the proposed JVC. Relevant certificate/document from the parent company or group company to be submitted to the satisfaction of BHEL.
- 4.4.4 Currency conversion in to INR for determining credentials with respect to financial criterion will be as per the relevant prevailing rates (as per SBI) as on floating date of Eoi. On BHEL's request the prospective JV partner needs to submit appropriate certification from an independent practising-chartered accountant / auditor to certify the financial criteria credentials.
- 4.4.5 **The prospective JV partner who secure(s) minimum 60 marks (out of 100 marks) in the evaluation criteria of shortlisting prospective JV partner(s) given at Annexure-6 of this Eoi document will be eligible for next round of techno-commercial negotiations for formation of JVC.**



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

SECTION– 5

Documents to be submitted along with Eoi

5.1.1 Submission of Eoi: - List of documents to be submitted as part of Eoi:

Prospective JV partner should submit following documents along with their Proposal.

Sl.	Document Description	Filled in Formats to be Submitted with Proposal	Remarks
1.	Covering Letter		As per attached format
2.	General Information	Annexure-1	
3.	Technical Criterion	Annexure-2	
4.	Financial Information	Annexure-3	
5.	Business / Strategic Criterion	Annexure-4	
6.	Reference list and details of existing business of Propulsion Systems and its services, digitalisation business in rail transportation along with list of customers where the technology is under use and from how many years	Annexure-5	
7.	Evaluation Criteria for shortlisting JV Partner	Annexure-6	



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

Eoi FORMS



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion
Systems and its services, digitalisation business in rail transportation

Format for Covering Letter

[On the Letterhead of the Prospective JV Partner]

To,

Manager (JV, M&A)

Corporate Technology Management,
Bharat Heavy Electricals Limited (BHEL),
BHEL House, Siri Fort,
New Delhi – 110 049
India
E-Mail: jveoi@bhel.in

Ref: Submission of Expression of Interest (Eoi) : Ref.BHEL/AA/JV_MA/Eoi/2021/01
Dt.25th March 2021

Sir,

Being duly authorized to represent and act on behalf of..... (Hereinafter Referred to as “the Applicant”), and having reviewed and fully understood the evaluation criteria and information provided, the undersigned hereby applies in response to the Eoi document.

We would like to associate as JV partner with BHEL to pursue the proposed business of Propulsion Systems and its services, digitalisation business in rail transportation through JV route. We understand that you are not bound to accept the Eoi proposal.

I am enclosing the Eoi proposal with the details as per the requirements of the Eoi document, for your evaluation.

I hereby declare that the details furnished in this Eoi proposal are true and correct to the best of my knowledge and belief. In case any of the information is found to be false or untrue or misleading or misrepresenting, I am aware that I will be held liable for it and BHEL is free to take any legal / commercial action not limited to barring / blacklisting.

Yours faithfully,

(Signature & Seal of Authorised Signatory)

Name:

Designation:

Date:

Address:



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

Annexure-1

General Information to be submitted by Applicant along with cover letter

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 (Also refer Clause 4.4):
 - a) Technical Credentials – Relevant Product/System catalogues, Experience /Reference List, Copies of Customer Certificates, R&D/ Design/Engineering/ Manufacturing strengths, quality accreditations, etc.
 - b) Financial Credentials – Copies of Annual Audited Financial statements including Auditors Report) for latest 5 years.
 - c) Other documents considered relevant.

Signature & Seal:
Authorised Signatory of the Party



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion
Systems and its services, digitalisation business in rail transportation

Annexure-2

Technical Criterion

Date: [insert day, month, year]

Legal Name: *[insert full name]*

Sl. No.	Description	Response (YES/NO) and remarks if any.
1.	Whether prospective JV partner has credentials as in 4.1.1	Y/N
2.	Whether prospective JV partner has credentials as in 4.1.2	Y/N
3.	Whether prospective JV partner has credentials as in 4.1.3	Y/N

(Signature & Seal)

Authorised Signatory of the Party



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

Annexure 3

Financial Information

Date: [insert day, month, year]

Legal Name: *[insert full name]*

1. Financial Data

Financial information in (INR equivalent)	Information for previous five years (INR. Millions) <i>[Insert amount in INR equiv.] *</i>				
	FY16	FY17	FY18	FY19	FY20
Information from Balance Sheet					
Total Assets (TA)					
Total Liabilities (TL)					
Net Worth (NW) (TA-TL)					
Current Assets (CA)					
Current Liabilities (CL)					
Information from Income Statement					
Total Revenue (TR)					
Profits Before Taxes (PBT)					

* Exchange rate for conversion to INR shall be as published by State Bank of India as on date of floating Eoi.

2. Financial documents

The prospective JV partner shall provide copies of the financial statements including balance sheets all notes and related income statements for latest 5 years

The financial statements shall:

- a) Reflect the financial situation of the prospective JV partner submitting Eoi
 - Be audited by a certified accountant.
 - Be complete, including all notes to the financial statements.
- b) Correspond to accounting periods already completed and audited (no statements for partial periods shall be accepted).

(Signature & Seal)

Authorised Signatory of the Party



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

Annexure-4

Business / Strategic Criterion

Sl. No.	Description	Response (YES/NO) and remarks if any.
1.	Whether prospective JV partner is duly registered company as per relevant laws	Y/N
2.	Whether prospective JV partner is willing to invest for at least equal stake along with BHEL in the JV company.	Y/N
3.	Whether prospective JV Partner is ready to provide to the JVC, state of art technology for engineering, manufacturing, testing, services along with modifications/ upgradations for the Propulsion Systems.	Y/N
4.	Whether the prospective JV partner is ready to provide exclusivity rights at least in India to the JVC for engineering, marketing, manufacturing, servicing in the business of Propulsion Systems.	Y/N
5.	Whether the prospective JV partner accepts that BHEL current portfolio of railways Propulsion Systems i.e. traction motors, traction transformers, power converters (IGBT) & controls, auxiliary converters (IGBT) and vehicle control units for electric locomotives, diesel electric locomotives and on-board Propulsion Systems for MEMUs, DEMUs shall remain outside the ambit of the proposed JVC	Y/N

Signature & Seal:
Authorised Signatory of the Party



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

Annexure-5

Reference list and details of existing business of Propulsion Systems and its services, digitalisation in rail transportation along with list of customers



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

Annexure-6

Evaluation Criteria for Selection of Prospective JV Partner

The prospective JV partner(s) who secure(s) minimum 60 marks (out of 100 marks) will be eligible for next round of techno-commercial negotiations for formation of JVC. The detailed terms and conditions of the JV Agreement and other definitive documents shall be mutually agreed upon.

1.0 Response of prospective JV partner(s) who do not meet the Pre-Qualification Requirement as per clause 4.1 AND 4.2 AND 4.3 AND 4.4 shall not be considered for evaluation.

2.0 Following evaluation methodology shall be adopted for shortlisting of Prospective JV Partner (s) who score minimum 60 marks out of 100 marks will be shortlisted for techno-commercial negotiations for formation of JVC. Suitable supporting documents to be submitted to substantiate claims (wherever necessitated) to satisfaction of BHEL.

Sl. No.	Parameters	Maximum Marks	Prospective JV Partner's Claim/Response								
2.1	Meeting all Prequalification Requirements as per clause 4.1 AND 4.2 AND 4.3 AND 4.4	Must Meet Requirement- No Marks									
2.2	Global market share of the prospective JV partner in the area of Rail Propulsion Systems Documents required: Report/ Document/ Certification from a suitable 3 rd party	<table><tr><td colspan="2">Global market share – Propulsion Systems</td></tr><tr><td>> 8%</td><td>12 Marks</td></tr><tr><td>>5% & <8%</td><td>7 Marks</td></tr><tr><td><5%</td><td>0 Marks</td></tr></table>	Global market share – Propulsion Systems		> 8%	12 Marks	>5% & <8%	7 Marks	<5%	0 Marks	
Global market share – Propulsion Systems											
> 8%	12 Marks										
>5% & <8%	7 Marks										
<5%	0 Marks										
2.3	Willingness to contribute equity for the proposed JVC in accordance to the business plan as arrived after mutual discussion.	<table><tr><td colspan="2">Equity contribution by the prospective JV Partner</td></tr><tr><td>>/= 50%</td><td>10 Marks</td></tr><tr><td><50%</td><td>0 Marks</td></tr></table>	Equity contribution by the prospective JV Partner		>/= 50%	10 Marks	<50%	0 Marks			
Equity contribution by the prospective JV Partner											
>/= 50%	10 Marks										
<50%	0 Marks										
2.4	Market participation and supply of Propulsion Systems products by the prospective JV Partner Documents required: POs placed for Propulsion Systems products as defined in 3.4.7 in any business segment mentioned in 3.4.6 where	<table><tr><td colspan="2">Propulsion Systems products supplied</td></tr><tr><td>All 4 Propulsion Systems products as mentioned in 3.4.7</td><td>10 Marks</td></tr><tr><td>At least 3 amongst</td><td>6 Marks</td></tr></table>	Propulsion Systems products supplied		All 4 Propulsion Systems products as mentioned in 3.4.7	10 Marks	At least 3 amongst	6 Marks			
Propulsion Systems products supplied											
All 4 Propulsion Systems products as mentioned in 3.4.7	10 Marks										
At least 3 amongst	6 Marks										



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

Sl. No.	Parameters	Maximum Marks		Prospective JV Partner's Claim/Response
	prospective JV partner has supplied Propulsion Systems products in last 5 years	Propulsion Systems products as mentioned in 3.4.7		
		<3 Propulsion Systems products as mentioned in 3.4.7	0 Marks	
2.5	Business Portfolio w.r.t. following segments: i. Metrorail ii. Mono Rail iii. Metrolite or Tramway iv. Sub-Urban Railways v. Semi High Speed (160 - 180 Kmph) vi. High Speed Rail>180 Kmph Documents required: Purchase Order / Customer certificate, Any other document to the satisfaction of BHEL.	Presence across No. of Business Segments Listed All 6 >= 4 < 4	 6 Marks 3 Marks 0 Marks	
2.6	Technology Upgradation preparedness of the prospective JV partner Documents required: Certification/Report/Document from 3 rd party Or Any other suitable document to the satisfaction of BHEL	R&D Expenditure on Propulsion Systems as a % of Propulsion Systems Revenue of prospective JV Partner (Average of preceding 5 Years) >2.5% >1 % & </=2.5% </=1%	 10Marks 6 Marks 0 Marks	
2.7	Willingness to grant exclusive rights to proposed JVC for certain Overseas Territories in Asia as listed below: 1. Vietnam 2. Bangladesh	Exclusive rights for any >/=3 of the listed overseas territories	6Marks	



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

Sl. No.	Parameters	Maximum Marks		Prospective JV Partner's Claim/Response
	3. Sri Lanka 4. Philippines 5. Indonesia 6. Thailand 7. Malaysia	Exclusive rights for any ≥ 2 of the listed overseas territories	4 Marks	
		Exclusive rights for any < 2 of the listed overseas territories	0 Marks	
2.8	Willingness to grant exclusive rights to JVC for Government-to-Government contracts and Government of India-Line of credit orders across the World	Yes	3 Marks	
		No	0 Marks	
2.9	Willingness to grant non-exclusive rights to proposed JVC for sale and services in certain overseas territories (to be mutually agreed upon)	Yes	3 Marks	
		No	0 Marks	
2.10	Willingness of prospective JV partner to source from JVC for its global requirements	$\geq 10\%$ of JVC's Turnover	10 Marks	
		$> 5\% \text{ \& } < 10\%$ of JVC's Turnover	3 Marks	
		$< 5\%$	0 Marks	
2.11	Business volume sharing with the proposed JVC (Proposed volume of procurement by JVC from prospective JV Partner)	Business volume sharing for First 5 Years (% of JVCs Turnover)		
		$< 20\%$	10Marks	
		$> 20\% \text{ \& } < 30\%$	6 Marks	
		$> 30\%$	0 Marks	



Expression of Interest (Eoi) for Selection of Joint Venture partner for Propulsion Systems and its services, digitalisation business in rail transportation

Sl. No.	Parameters	Maximum Marks		Prospective JV Partner's Claim/Response
2.12	Technology Collaboration Fee: Willingness to sign long term Technology Collaboration Agreement with the proposed JVC, without any lump sum or initial technology fee	Yes	10 Marks	
		No	0 Marks	
2.13	Willingness of the prospective JV Partner for the proposed JVC to source certain components/ products from BHEL for the prospective orders to be executed by the JVC (subject to BHEL's capability to offer cost competitive and, delivery and quality compliant products/ systems)	Sourcing of $\geq 20\%$ of proposed JVC's turnover from BHEL in first five years	10 Marks	
		Sourcing of $>5\%$ to $< 20\%$ of proposed JVC's turnover from BHEL in the first five years	5 Marks	
		Sourcing of $<5\%$ proposed JVC's turnover from BHEL	0 Marks	

(The prospective JV partner shall share suitable supporting documents, wherever applicable)

Note: Last 5 years means FY2019-2020, FY 2018-2019, FY 2017-2018, FY 2016-2017, FY 2015-2016

(SIGNATURE)