

Notice inviting Expression of Interest (EoI)

<u>for</u>

Strategic Tie-up for Battery-Electric Powertrain Solutions for BEML's Current and Future Vehicle Platforms

Eol Reference No : CTPAM/Eol/BEV/2025

Date of Issue : 10.10.2025

Issued by

BEML LIMITED

(Schedule 'A' Company under Ministry of Defence, Govt. of India)



INDEX

SI. No.	Section	Description
01	Section 1	Disclaimer
02	Section 2	Schedule of EoI process & Contact details
03	Section 3	About BEML Limited
04	Section 4	Details Of Expression of Interest (EoI)
05	Section 5	Scope of the Collaboration
06	Section 6	Eligibility Criteria
07	Section 7	General Terms & Conditions
08	Section 8	Presentations on proposed solution/ Methodology
09	Section 9	Submission of the EoI
10	Annexure-1	Prospective Collaborator Information
11	Annexure-2	Eligibility Criteria
12	Annexure-3	Technical Compliance Checklist
13	Appendix' A	Project Details
14	Appendix' B	Eol response format
15	Appendix' C	Certificate as to Authorized Signatories
16	Appendix' D	Declaration by the Entity/Firm/Company
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DISCLAIMER

- 1.1 The information contained in this Expression of Interest (EoI) document provided to the Prospective Collaborator(s), by or on behalf of BEML Limited or any of its employees or advisors, is provided to the Prospective Collaborator(s) on the terms and conditions set out in this EoI document and all other terms and conditions subject to which such information is provided.
- 1.2 The purpose of this document is to provide the Prospective Collaborator(s) with information to assist the formulation of their proposal. This EoI document does not purport to contain all the information each Prospective Collaborator may require. This EoI document may not be appropriate for all persons / entities, and it is not possible for BEML, its employees or advisors to consider the business / investment objectives, financial situation and particular needs of each Prospective Collaborator who reads or uses this EoI document. The assumptions, assessments, statements and information contained in this EoI may not be complete, accurate, adequate or conclusive. Each Prospective Collaborator should conduct his own investigations, due diligence and analysis and should check the accuracy, adequacy, reliability and completeness of the information in this EoI document and where necessary, obtain independent advice from appropriate sources.
- 1.3 BEML, its employees and advisors make no representation or warranty to full completeness or makes any representations, express or implied, in relation to the adequacy or accuracy of the information contained herein and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of the EoI document.
- 1.4 BEML may, in its absolute discretion, but without being under any obligation to do so, modify, amend or supplement the information in this EoI document.
- 1.5 BEML reserves the right to not proceed with the EoI, or to alter the timelines reflected herein, or alter its procedure for the selection of Prospective Collaborators. Even upon selection of suitable Prospective Collaborator, BEML is not bound to proceed ahead with the Prospective Collaborator and in no case be responsible or liable for any commercial and consequential liabilities in any manner whatsoever.
- 1.6 The Prospective Collaborator(s) shall bear all costs associated with or relating to the preparation, technical discussion / presentation and submission of response against this EoI. BEML shall in no case be responsible or liable for these costs regardless of the conduct or outcome of the EoI process.



- 1.7 Canvassing in any form by the Prospective Collaborator(s) or by any other agency on their behalf shall lead to disqualification of their Eol.
- 1.8 Notwithstanding anything contained in this EoI, BEML 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 BEML rejects or annuls all the applications, it may at its discretion, invite all eligible Prospective Collaborators to submit fresh applications.
- 1.9 BEML reserves the right to disqualify any Prospective Collaborator during or after completion of Eol process, if it is found there was a material misrepresentation by any such Prospective Collaborator or the Prospective Collaborator fails to provide within the specified time, supplemental information sought by BEML.
- 1.10 BEML reserves the right to verify all statements, information and documents submitted by the Prospective Collaborator in response to the Eol. Any such verification or lack of such verification by BEML shall not relieve the Prospective Collaborator of his obligations or liabilities hereunder nor will it affect any rights of BEML.

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SCHEDULE OF EoI PROCESS & CONTACT DETAILS

2.1 Schedule of Eol process:

The schedule of activities during the EoI Process shall be as follows:

SI. No.	Description	Date
01	Issue of Eol Document	10.10.2025
02	Last date of Submission of EoI response	27.10.2025

- 2.2 Eol response E-mail ID: bemleoi@bemlltd.in
- 2.3 Contact details for clarification related to Eol:

Mr. Prasada Rao CH V R S,

Deputy General Manager Corporate Technology Planning & Alliance Management BEML Soudha, BEML Ltd., Bengaluru, Karnataka, INDIA

Email: prasadrao.ch@bemlltd.in Mobile: +91 08022233350

2.4	In case any amendment / corrigendum to this EoI is issued, it shall be notified only at
	www.bemlindia.in

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ABOUT BEML LIMITED

- 3.1 BEML Limited (formerly Bharat Earth Movers Limited), a "Schedule 'A" company under the Ministry of Defence (MoD), Government of India, was established in the year 1964. BEML Limited is a listed company at NSE and BSE, wherein Government of India is holding 54% of its equity & having a state-of-the art, well established and dedicated Research & Development, Product Design, Manufacturing Facilities, Assembly Shops for Equipment and Aggregates, Testing facilities etc. The Company is backed with a strong and well experienced skilled manpower in the areas of Defence & Aerospace, Mining & Construction and Rail & Metro equipment.
- 3.2 BEML Limited has three business verticals viz., Defence & Aerospace, Rail & Metro and Mining & Construction which are divided into 12 SBUs & 2 Micro SBUs, with four manufacturing complexes located at Bengaluru, Kolar Gold Fields (KGF), Mysuru and Palakkad. All the manufacturing divisions of BEML Limited have been accredited with ISO 9001 2015 and ISO 14001 (HSC) certification. Apart from this, BEML Limited has its own world-class composite R&D establishment for Design & Development of various products. BEML's product portfolio includes the following:

DEFENCE & AEROSPACE	MINING & CONSTRUCTION	RAIL & METRO
Unmanned Aerial Vehicles	Bull Dozers	Integral Rail Coaches
Tatra based High Mobility	Excavators	Metro Cars
Trucks	Loaders	AC EMUs
Recovery Vehicles	Pipe Layers	OHE Cars
Bridge Systems	Wheeled Dozers	Steel and Aluminium
Vehicles for Missile Projects	Tyre Handlers	Wagons
Tank Transportation Trailers	Shovels	Track Laying Equipment
Milrail Wagons	Dumpers	Utility Vehicles
Mine Ploughs	Water Sprinklers	Treasury Vans
Crash Fire Tenders	Motor Graders	Spoil Disposal Units
Snow Cutters	Underground Mining	Broad gauge Rail bus
Aircraft Towing tractors	Equipment	
Aircraft Weapon Loading		
Trolley		

Expression of Interest (EoI) for Battery-Electric Powertrain Solutions for BEML's Current and Future Vehicle Platforms



- **3.3** More details about BEML's profile and its entire range of product portfolio can be viewed by visiting our web site www.bemlindia.in
- 3.4 BEML Limited is backed by a strong and well established after Sales & Service network right at the Customers' sites, spread across the length and breadth of India. Marketing Network includes dedicated ware houses at various places and Service Centre facility at strategic locations for extending efficient and quick support to customers. In addition, BEML Limited has a well-established and exclusive International Business Division to cater for export business and has a sizeable market share in export markets with exports to 72 countries across the globe. Over the years this division has exported over 1300 machines covering all the three verticals.

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DETAILS OF EXPRESSION OF INTEREST (EoI)

- 4.1 This Expression of Interest (EoI) seeks responses from eligible and technically competent Prospective Collaborator(s) who possess proven experience and solutions in battery-electric mobility and are willing to collaborate with BEML through strategic partnership for the design, development, integration, validation, manufacturing, testing, installation, commissioning and after-sales service of battery-electric powertrain systems.
- 4.3 BEML primarily intends to accelerate the adoption of Battery-Electric Powertrain Solutions i. e. BESS-Only powertrain configuration (Battery Energy Storage System in tandem with the Electric Drive System) across its existing and future product portfolio, which includes dumpers, dozers, loaders, railway rolling stock, defence mobility platforms and potential commercial vehicles. The objective is to develop indigenous capability for greenfield electric vehicle development as well as conversion of existing diesel-powered platforms into fully electric configurations, while maintaining performance, durability and safety standards.
- 4.4 The proposed solutions should be adaptable to diverse duty cycles and terrains, particularly in mining, construction, defence and urban logistics sectors. They may include both modular, retrofit-ready kits and completely new platform powertrains depending on the application segment. Prospective collaborators must also support localization, training and regulatory compliance initiatives.
- 4.5 The scope of supply under this collaboration shall include, but not be limited to, the following systems and sub-systems:
 - 4.5.1 Electric Drive Systems Electric motors suitable for traction and hydraulics (for work, steering, braking, conditioning, etc.) purposes, along with necessary inverters (DC-AC converters), DC-DC converters (including power take-offs for auxiliary purposes), thermal management and integrated control systems tailored to the specific application duty cycle (e.g., high shock and vibration environments).
 - 4.5.2 Battery Energy Storage Systems (BESS) High-capacity, rugged battery packs (Li-ion chemistries: LFP, NMC, LTO, etc. and other chemistries), Battery Management System (BMS), Battery Thermal Management Systems (BTMS), Supercapacitors (as required for managing high transient power loads) and associated communication interfaces.
 - 4.5.3 Power Electronics & High-Voltage Systems Inverters (DC-AC converters), DC-



DC converters (including power take-offs for auxiliary purposes), high-voltage distribution units (HVDUs), onboard chargers.

- 4.5.4 Vehicle Control, Diagnostics & Telematics Vehicle Control Units (VCU), robust communication protocols (CAN bus integration, Ethernet), Data Acquisition systems and advanced remote Telematics Systems.
- 4.5.5 Energy Management System (EMS) Algorithm-driven energy distribution and support for regenerative braking to optimize overall vehicle energy efficiency.
- 4.5.6 Safety & Compliance Systems High-voltage interlocks, thermal runaway protections, ISO compliances (as applicable), cybersecurity and fail-safe logic.
- 4.5.7 Charging Infrastructure Interface Mobile Charging Solution (MCS) capable of supplying both DC fast charging and AC charging functionality compatible with standard (e.g., CCS2) or custom charging systems; optional swappable battery configurations; fast/slow charge interface and communication.
- 4.6 Furthermore, BEML may also adopt other electric powertrain configurations for mobility applications such as HFC-BESS configuration (Hydrogen Fuel Cell System and Battery Energy Storage System in tandem with Electric drive system), BESS-Pantograph configuration (BESS in tandem with a Pantograph Interface Unit and the Electric Drive System), Pantograph-Only configuration (Only the Pantograph Interface Unit in tandem with the Electric Drive System), etc. against specific application requirements. In case of BESS-Pantograph and Pantograph-Only Configuration, the scope of supply may also include the Pantograph Interface Unit (PIU), responsible for high-power rectification and isolation for catenary power input.

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SCOPE OF THE COLLABORATION

The scope of strategic collaboration between BEML and the selected Prospective Collaborator(s) shall include, but not be limited to, the following areas of engagement related to the electrification of BEML's vehicle platforms:

- 5.1 Prospective Collaborator(s), upon being shortlisted through this EoI, shall be willing to enter into a Technology Collaboration Agreement (TCA) with BEML for offering customized Battery-Electric Powertrain Solutions, other powertrain configuration-based solutions tailored to BEML's vehicle platforms and also individual systems/subsystems/aggregates against specific BEML requirements. This includes support for conversion of existing conventional vehicles as well as development of new electric vehicle platforms for both Indian and global markets, aligned to specific customer RFIs/RFPs/tenders.
- 5.2 Prospective Collaborator(s) shall enter into Definitive Agreement(s) with BEML for each identified project, development order, or customer RFP/tender, clearly defining the scope of work, technical specifications, division of responsibilities and outsourcing requirements, wherever applicable.
- 5.3 Prospective Collaborator(s) shall assist BEML in identifying suitable vehicle platforms for electrification, conducting feasibility studies and preparing Detailed Project Reports (DPRs) as applicable, for targeted programs and deployment use cases.
- 5.4 Prospective Collaborator(s) shall associate with BEML to design, develop, manufacture, integrate, test and supply complete battery-electric powertrain solutions or other powertrain configuration-based solutions suitable for:
 - 5.4.1 New electric vehicle platforms, and
 - 5.4.2 Conversion of existing conventional BEML vehicles into electric variants.
- 5.5 Prospective Collaborator(s) shall support the end-to-end development of Proof of Concept (PoC) vehicles, including system-level integration, commissioning, performance testing and field validation trials under real-world operating conditions.
- 5.6 Prospective Collaborator(s) shall assist BEML in achieving compliance for relevant certifications with applicable Indian and international regulatory standards such as, but not limited to, AIS, DGMS, CMVR, ISO, and IEC for electric mobility systems.
- 5.7 Prospective Collaborator(s) shall provide all updated and project-specific technical documentation, integration manuals and compliance reports required for project



execution and customer submission.

- 5.8 Prospective Collaborator(s) shall enter into project-specific Definitive Agreements with BEML and extend full support to BEML under each agreement for the preparation and submission of techno-commercial bids and successful execution of contracts in case of award. This support shall include but not be limited to:
 - 5.8.1 Support during pre-bid and bid phases by deputing technical experts and participating in customer interactions, clarification meetings and evaluations.
 - 5.8.2 Providing cost-related data and inputs necessary for BEML to prepare competitive commercial offers aligned to customer specifications and formats.
 - 5.8.3 Furnishing a price list with long-term validity, including a Price Variation Clause, for assemblies, subassemblies, components, spares and recommended spare parts for 5 years, where applicable.
 - 5.8.4 Providing all updated and customized technical documentation, test certificates, integration drawings, performance data and compliance reports for their scope of supply.
 - 5.8.5 Furnishing any additional technical or commercial information reasonably required by BEML to respond to customer RFPs/tenders or to execute awarded contracts.
- 5.9 The above-mentioned requirements are indicative and may be supplemented with any other documentation, deliverables, or inputs necessary to enable BEML to participate in and execute projects successfully involving battery-electric or other powertrain configuration-based vehicle platforms or individual systems/subsystems /aggregates against specific BEML's requirements.
- 5.10 Prospective Collaborator(s) shall provide after-sales support including on-site service assistance, training to BEML engineers and customer personnel, spares provisioning, software updates and diagnostics for deployed battery-electric powertrain solutions or other powertrain configuration-based solutions or individual systems/subsystems /aggregates against specific BEML's requirements.
- 5.11 Prospective Collaborator(s) shall conduct structured training programs for BEML engineers and service staff on electric vehicle architecture, operation, diagnostics and maintenance practices.
- 5.12 Prospective Collaborator(s) shall support BEML during customer field evaluation trials, service interventions, lifecycle support and ensure long-term product reliability.

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- 5.13 The Prospective Collaborator(s) shall acknowledge and agree that BEML reserves the right to engage the Prospective Collaborator for the independent supply of any of its individual system or sub-system or aggregates listed in Section 4 (e.g., Energy Storage Systems only, Vehicle Control Unit only, Pantograph Interface Unit only, or Mobile Charging Solution only) without requiring the supply of a complete, integrated powertrain. The Collaborator must provide competitive pricing and full technical documentation and support for such modular sourcing requirements. This obligation extends to necessary software licensing and communication protocols essential for BEML's standalone operation of the component.
- 5.14 In the event that BEML procures individual systems or sub-systems or aggregates (as per clause 5.13) and selects other entities for system integration, the Prospective Collaborator(s) shall extend full, mandatory technical, engineering and interfacing support to BEML's internal R&D/Production teams and/or other designated third-party system integrators and component suppliers. This mandate is crucial for ensuring system-level performance and stability. Required support includes, but is not limited to:
 - 5.14.1 Sharing comprehensive communication protocols (e.g., CAN matrix database, diagnostics interface specifications).
 - 5.14.2 Providing detailed 3D models, integration envelope drawings, and interface specifications (mechanical, electrical, and thermal etc.).
 - 5.14.3 Deputing qualified technical specialists to BEML's facilities or specified integration sites to assist in the successful installation, calibration, commissioning, and validation of the supplied systems, to ensure seamless interoperability among systems/aggregates sourced from multiple vendors.



ELIGIBILITY CRITERIA

The Prospective Collaborator(s) should fulfil the mandatory conditions by submitting the response against the Eligibility Criteria Form (Annexure–2) with relevant supporting documents, certificates and undertaking letters, wherever applicable.

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GENERAL TERMS & CONDITIONS

- 7.1 This EoI document for Strategic Tie-up for Battery-Electric Powertrain Solutions for BEML's Current and Future Vehicle Platforms is independent and has no relation to any previous EoI / RFI / RFP issued by BEML for similar or related activities.
- 7.2 This Eol document is not an offer and is issued with no commitment.
- 7.3 Timeline and sequence of events resulting from this EoI shall ultimately be determined by BEML.
- 7.4 By submitting bid / offer in response to this EoI, each interested Prospective Collaborator shall be deemed to have acknowledged that it has carefully read all the terms & conditions of this EoI document, and has fully informed itself / himself / herself as to all existing terms and conditions.
- 7.5 The interested Prospective Collaborator shall compulsorily fill up the following to this Eol document, along with all supporting documents.
 - 7.5.1 Prospective Collaborator Information as per *Annexure* 1
 - 7.5.2 Compliance to Eligibility Criteria as per *Annexure* 2
- 7.6 The response shall necessarily be accompanied with following details:
 - 7.6.1 Prospective Collaborator's company profile with Management structure and Group information if any.
 - 7.6.2 Product Profile
 - 7.6.3 Product Technical details
 - 7.6.4 Reference list of customers
 - 7.6.5 Any other information which is relevant to business and requirement of BEML and would make the interested Prospective Collaborator relevant for long term mutually beneficial relationship.
- 7.7 The interested Prospective Collaborator shall abide by the terms & conditions of this EoI. [Please note that this is a fundamental condition of this EoI document and must be well understood and accepted by the interested Prospective Collaborator before participating in the EoI].



- 7.8 The person signing response to the EoI should have due written authorization from the bidding Prospective Collaborator to sign the documents and should duly authenticate any errors or corrections in the EoI. Over writing should be avoided. All pages of the response against this EoI shall be duly signed by the authorised signatory. Copies of the credentials/ documents which are to be annexed must be self-attested and bear the signature and seal of the authorized signatory / authorised representative of the interested Entity/Firm/Company. The interested Prospective Collaborator will be requested to produce the originals of all information / documents as and when so required by BEML.
- 7.9 Multiple proposals from the same Prospective Collaborator should not be submitted.
- 7.10 BEML at its discretion shall inspect the Prospective Collaborator's works/ office/reference site premises for the purpose of evaluation, as deemed necessary before selection of collaborator. BEML's decision in this regard shall be final.
- 7.11 BEML shall receive responses pursuant to this EoI in accordance with the terms set forth herein, as modified, altered, amended and clarified from time to time by BEML and all responses shall be submitted in accordance with such terms on or before the date specified in this EoI for submission of responses.
- 7.12 The EoI and all correspondences and documents related to the EoI response shall be in English language, provided that any printed literature furnished by the interested Prospective Collaborator 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. However, if the translation is found to be incorrect subsequently, appropriate action as may be deemed fit shall be initiated against the Prospective Collaborator.
- 7.13 The Prospective Collaborator should not subcontract the work related to the agreed scope of work without prior written consent from BEML.
- 7.14 The Prospective Collaborator shall provide the number of resources required for development of the work during different phases with necessary technical capabilities.
- 7.15 The personnel of Prospective Collaborator must adhere to all the safety guidelines while handling/ manufacturing equipment, machinery, components etc. All the safety gadgets procurement and issue shall be within the scope of work and responsibility of the Selected Prospective Collaborator.
- 7.16 Eol Process to be confidential: Information relating to the examination, clarification, evaluation and comparison of Eol and recommendations shall not be disclosed to Prospective Collaborator(s). Any effort by Prospective Collaborator(s) to influence



- BEML in processing of EoI or selection decisions may result in the rejection of the response against EoI.
- 7.17 Governing Law & Jurisdiction: The Eol process shall be governed by, and construed in accordance with the laws of Republic of India and shall be subject to exclusive jurisdiction of the Courts at Bengaluru (India)
- 7.18 Foreign entity interested for collaboration with BEML must have necessary clearance from their Govt., wherever required, for Technology Sharing / Transfer & Collaboration.
- 7.19 The terms and conditions as stated in this EoI document are not exhaustive and BEML reserves the right to add or delete or modify any terms and condition of this EoI to be incorporated in the RFP / definitive agreement to be entered into with the Prospective Collaborator, when on-boarding for a specific project.
- 7.20 The interested Prospective Collaborator may refer BEML Limited website (www.bemlindia.in) for BEML General Procurement Terms & Conditions from BEML Purchase Manual. In case of inconsistencies between the said General Procurement terms & conditions and terms & conditions of EoI, terms & conditions of EoI will prevail.
- 7.21 Restrictions on specified Strategic tie-up with an Entity from a Country which shares a Land Border with India:
 - 7.21.1 Interested Prospective Collaborator from a country which shares a land border with India will be eligible to respond to this EoI only if interested Prospective Collaborator is registered with Competent Authority (Registration Committee constituted by the Department of Promotion of Internal Trade (DPIIT) of Govt. of India). Such registration should be at least valid for the entire period of EoI due date or any extension thereof.
 - 7.21.2 Interested Prospective Collaborator from a country which shares a land border with India means: a) An entity incorporated, established or registered in such country; or b) A subsidiary of an entity incorporated, established or registered in such country; or c) An entity substantially controlled through entities incorporated, established or registered in such country; or d) An entity whose beneficial owner is situated in such a country; or e) An Indian (or other) agent of such an entity; or f) A natural person who is a citizen of such a country; or g) A joint venture where any member of the joint venture falls under any of the above.



Evaluation & Selection:

- 7.22 Upon receipt of response(s) against this EoI, BEML will review the responses, shortlist the Prospective Collaborator(s) and call the shortlisted Prospective Collaborator(s) for a presentation.
- 7.23 Post selection, BEML and the selected Prospective Collaborator shall execute into specific MoU / MoA based on specific Projects detailing the roles and responsibilities of Parties, time-lines, exclusivity, indemnification, non-compete, financials, etc, on a case-to-case basis.
- 7.24 **Rejection**: An Expression of Interest is liable to be rejected if:
 - 7.26.1 The Expression of Interest is not accompanied by required documentation and has failed to provide clarifications related thereto, when sought by BEML.
 - 7.26.2 There is Misrepresentation, lack of proper documentation, fraud, coercion, undue influence, canvassing etc., by the prospective collaborator/applicant
 - 7.26.3 The Expression of Interest is received after the closing time and date.
 - 7.26.4 any information which would have entitled BEML to reject or disqualify the prospective collaborator/applicant becomes known to BEML after the prospective collaborator/applicant has been qualified
 - 7.26.5 The Prospective Collaborator is restricted under GFR Rule 144(xi) as may be amended from time to time.
- 7.25 The Prospective Collaborator should agree to sign the "Integrity Pact" with BEML in the format provided by BEML committing the persons / officials of both the parties, not to exercise any corrupt practices on any aspect of the Eol, selection, joint working / future contract (as per the provisions of the BEML Purchase Manual).

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PRESENTATIONS ON PROPOSED SOLTION/ METHODOLOGY

- 8.1 Shortlisted Prospective Collaborator(s) shall be invited to present their proposed Battery-Electric Powertrain Solution to BEML either physically or through video conference at a date, time and location as notified by BEML. The presentation should outline the firm's experience, global references and capabilities in electric mobility, along with the proposed technical architecture suitable for BEML vehicle platforms. Key aspects must include battery system details (cell chemistry, ratings, cooling, lifecycle), BMS, EMS, VCU, drive system specifications (motor, inverter, control strategy) and charging interface compatibility.
- 8.2 The methodology for integrating these solutions into BEML's existing and future vehicle platforms should be addressed, including packaging, driveline interface and system-level adaptations. The Collaborator should also detail their testing and validation plan, compliance with AIS/CMVR/ISO standards and approach for localization of manufacturing and supply chain. Additionally, the presentation must cover after-sales support, spares, training, diagnostics and software updates. BEML may seek further clarification or conduct follow-up discussions post-presentation.
- 8.3 To aid the technical evaluation process, all Prospective Collaborators are required to submit a duly filled, along with relevant supporting documents.

8.3.1	Technical	Comp	liance	Check	klist - 1	Annexure	9-3

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SUBMISSION OF THE EOL

- 8.4 The EoI response to be submitted online through email bemleoi@bemlltd.in, stating compliance to each point, along with the enclosures to be forwarded by interested Prospective Collaborator(s), super scribing "Expression of Interest (EoI) for Strategic Tie-up for Battery-Electric Powertrain Solutions for BEML's Current and Future Vehicle Platforms" and EoI reference number.
- 8.5 Submission of Responses to this EOI shall have the following documents:
 - a) Covering letter referring this EOI.
 - b) Prospective Collaborator Information as per Annexure 1
 - c) Eligibility Criteria format as per Annexure 2
 - d) Technical Compliance Checklist Annexure-3
 - e) Project Details as per Appendix' A
 - f) Eol response format as per Appendix' B
 - g) Certificate as to Authorized Signatories as per Appendix' C
 - h) Declaration by the Entity/Firm/Company as per Appendix' D

The declarations / documentary proof shall be submitted by the Prospective Collaborator as and when provided or required to impress upon any averment or claim etc.

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Annexure-1

PROSPECTIVE COLLABORATOR INFORMATION

1.	Name, Address, and Unique ID (if any) of the Prospective Collaborator.		
	(Profile may include Share Holding pattern, etc., in brief, to be attached.		
2.	Type (Tick the relevant category).		
	Original Equipment Manufacturer (OEM): Yes/No		
	Authorized Vendor of OEM Yes/No (attach details, if yes)		
	Others (give specific details)		
3.	Contact Details:		
	Postal Address: State: City: Pin/Zip Code Tele: Fax: URL/Web site: VINDER TO THE TO		
4.	Local Branch / Liaison Office / Authorised Representatives.		
	Name & Address: State: City: Pin/Zip Code Tele: Fax:		
5.	Financial Details.		
	Audited financial statements for the last 3 financial years are to be attached:		
6.	Category of Industry (like Medium/Small/Micro Scale and others):		
	Registration certificate to be furnished.		

7.

Certification by Quality Assurance Organisation.



Name of Agency	Certification	Applicable from (date & year)	Valid till (date & year)

8.	Declaration: It is certified that the above information is true and any changes will be intimated at the earliest.			
	a.	I/Wehereby declare that the information given above is true, correct, and complete in every respect to the best of my/our knowledge and belief and no material facts have been concealed and any changes will be intimated within one month of occurrence.		
	b.	I am/ We are authorized to sign this information.		
		(Authorized Signatory)		



			Annexure - 2	
	Eligibility Criteria and Compliance Declaration			
SI. No.	Eligibility Parameter	Prospective Collaborator's Response (Yes/No)	Supporting Document(s) to be Enclosed*	
1	Whether the Prospective Collaborator is a Foreign / Domestic Original Equipment Manufacturer (OEM) of electric powertrain systems/aggregates (e.g., traction motors, batteries, inverters, BMS) and has a minimum of five (05) years of continuous operation and experience in the field of design, development, supply and integration of battery-electric vehicle powertrain systems/aggregates, as on the date of publication of this Eol. In case of a Foreign OEM, proposed model for supporting developmental activity in India during various stages of project execution such as data acquisition, feasibility study, conceptual design, prototyping, in-house testing, certification from authorities, commissioning & testing at customer premises, after-sales support, etc. should be submitted. Note: In case of an Indian MSME participating as an OEM, in exercise of Para 16 of Public Procurement Policy for Micro and Small Enterprises Order 2012, the condition of prior turnover and prior experience may be relaxed with respect to Micro and Small Enterprises provided that all the quality and technical specifications are met	□ Yes □ No	1. Certificate of Incorporation 2. Brief Company Profile 3. Reference customer list 4. R&D capability and manufacturing facilities. 5. For a foreign OEM – Proposed model for supporting developmental activity in India. 6. For an Indian MSME participating as an OEM – Udyam Certificate / Registration	
2	Whether the Prospective Collaborator has successfully executed or field-tested at least two (02) battery-electric powertrain solutions (either for greenfield EVs or diesel-to-electric conversions) in last three (03) years, of which at least one (01) project should have completed satisfactory performance for at least one (01) year as on the date of publication of this Eol.	□ Yes □ No	Work Order or Completion Certificate or Proof of Successful execution (for at least one project) along with Project summary with client details as per Appendix A.	
3	Whether the Prospective Collaborator has an average annual turnover of at least INR 500 Crores over the last three (03) financial years.	□ Yes □ No	Audited financial statements	



Annexure - 2 **Eligibility Criteria and Compliance Declaration Prospective** Supporting SI. Collaborator's Document(s) to be **Eligibility Parameter** No. Response Enclosed* (Yes/No) and has maintained a positive net worth over the last three (03) financial years as on the date of publication of this Eol. ☐ Yes ☐ No Whether the Prospective Collaborator agrees to hold joint ownership of Intellectual Property Rights (IPR) with BEML for all systems, 4 products, or technologies jointly developed under this collaboration. Declaration as per Prospective Collaborator should not have any Appendix D pending litigation, arbitration cases or disputes against BEML before any court, tribunal or 5 statutory authority in connection with any past or current contracts or tenders issued by BEML. Declaration as per Prospective Collaborator should not have been Appendix D declared insolvent, bankrupt, debarred or blacklisted by any Central / State Government 6 or public sector undertaking in India or any entity controlled by such governments, as on the date of submission of the Eol. ☐ Yes ☐ No Whether the Prospective Collaborator restricted under GFR Rule 144(xi) or any other 7 rules notified by the Government of India, as amended from time to time. Whether the Prospective Collaborator agrees ☐ Yes ☐ No that submission of incomplete, false or misleading information, or failure to furnish required documents will result in its immediate disqualification Whether the Prospective Collaborator is ready ☐ Yes ☐ No and willing to fulfil scope of collaboration as mentioned in Section 5 of this Eol. Whether the Prospective Collaborator agrees ☐ Yes ☐ No to comply by General Terms & Conditions as 10 per Section 7.

^{*} NOTE: Supporting document(s) enclosed should be in a readable pdf format. Any submissions in form of links will not be accepted as a valid response.



Annexure - 3

Technical Compliance Checklist for Battery-Electric Powertrain Solutions

Prospective Collaborators shall indicate response against each requirement to confirm whether the respective system is designed and/or supplied by them. Relevant supporting documents must be enclosed as specified.

		_	
SI.	Technical Requirement	Response	Supporting Document(s)
No.	Pottom: Francis Standard Swatons		to be Enclosed*
1	 Battery Energy Storage System a. Battery: Li-ion (NMC/LFP /LTO or equivalent) containerized battery packs (IP67), certified to respective IEC / ISO or equivalent; designed for rugged environments (shock, vibration, temperature range) with validated lifecycle performance. b. Battery Management System (BMS) with SoC/SoH monitoring, cell balancing, diagnostics, communication interface (CAN/J1939), and compliance to relevant ISO functional safety standards. c. Battery Thermal Management System (BTMS) d. Supercapacitors (as required for managing high transient power loads) and associated communication interfaces. 	Yes / No	 a. Battery range, type and relevant product brochures b. BMS product overview with a standard compliance declaration with equivalent ISO certificate, protocol details. c. BTMS details (air/liquid-cooled, active/passive) d. Product brochures
2	Electric Drive System a. Electric motors (PMSM / asynchronous or equivalent) suitable for traction and hydraulics (for work, steering, braking, conditioning, etc.) purposes, offering suitable torque-speed characteristics and lifecycle performance under demanding applications. b. Inverters (DC-AC converters), DC-DC converters (including power take-offs for auxiliary purposes) c. Integrated control systems tailored to the specific application duty cycle (e.g., high shock and vibration environments). d. Thermal management	Yes / No	a. Manufacturer's product range, technical brochure or product specification sheet covering performance, torque-speed curve, and lifecycle details. b. Product brochures including technical specs, quality certifications complied to. c. Thermal management system details (air/liquid-cooled, active/passive)
3	Power Electronics & High-Voltage Systems a. Inverters (DC-AC converters) b. DC-DC converters (including power take-offs for auxiliary purposes) c. High-voltage distribution units (HVDUs), d. Onboard Chargers	Yes / No	Product brochures including technical specs, quality certifications complied to.
4	Energy Management System (EMS) Algorithm-driven energy distribution and support for regenerative braking to optimize overall vehicle energy efficiency.	Yes / No	EMS functional overview / Declaration of capability
5	Vehicle Control, Diagnostics & Telematics	Yes / No	VCU specs, safety logic description, OTA capability,



	Vahiala Control Unita (VCII) rahuat	I	Tolomotico probito et uro
	Vehicle Control Units (VCU), robust		Telematics architecture,
	communication protocols (CAN bus integration,		data capture/reporting
	Ethernet), Data Acquisition systems and		capability
	advanced remote Telematics Systems.		
6	Charging Infrastructure Interface		MCS technical specs &
	Mobile Charging Solution (MCS) capable of		brochure and/or details of
	supplying both DC fast charging and AC		optional swappable battery
	charging functionality compatible with standard	Yes / No	configurations
	(e.g., CCS2) or custom charging systems;		
	optional swappable battery configurations;		
	fast/slow charge interface and communication.		
7	Safety & Compliance		Copy of certifications, safety
	AIS, CMVR, ISO or equivalent, fail-safe design,	Yes / No	design overview
	thermal runaway protection.		_
8	Testing & Validation		Validation summary,
	Field/lab validation results, IP rating,	Yes / No	selected test report excerpts
	performance data.		·
9	Other Relevant Subsystems		Technical specifications with
	Any additional component or control system	Vac / Na	system overview, if
	essential for full vehicle-level electrification and	Yes / No	applicable
	integration		

^{*} NOTE: Supporting document(s) enclosed should be in a readable pdf format. Any submissions in form of links will not be accepted as a valid response.



Appendix' A

Project Title:

SI.	Project Details	Prospective Collaborator's Response
No.		
1	Solution Offered	Battery Electric
		☐ Dumper ☐ Excavator ☐ Dozer ☐ Loader ☐ Railway
		Rolling Stock □ Others (specify):
2	Project Description	
	(Use case & technology)	
3	Location of Deployment /	
	Demonstration	
4	Payload / Application Rating	(e.g., 100T dumper, 20T excavator)
5	Vehicle Configuration	
	(2WD / 4WD, axle layout, etc.)	
6	Commissioning Timeline / Year	
7	Battery Pack Rating	
	(kWh, voltage level)	
8	Electric Motor Rating	
	(kW / Nm)	
9	Charging Strategy	
	(Fast/Slow, CCS2, GB/T)	
10	Operation Summary	
	(If already deployed)	
11	a. Hours of operation per day	
	b. Hours of operation per year	
	c. Total months/years of	
	operation	
12	Any Other Relevant Information	



Appendix' B

{With Cover Letter in Company letterhead}

EOI RESPONSE FORMAT

To,
Corporate Technology Planning & Alliance Management
BEML Limited
SR Nagar, Bangalore 560027
E-mail: bemleoi@bemlltd.in
Dear Sir,
Ref: Expression of Interest to Partner with BEML Limited for Strategic Tie-up for Battery- Electric Powertrain Solutions for BEML's Current and Future Vehicle Platforms
Having examined the Expression of Interest (EoI) document dated, downloaded from the BEML website, i.e., www.bemlindia.in , we, the undersigned, intend to submit an EoI in response to the aforesaid EoI document.
We attach hereto the EoI and response as required by you, which constitutes our EoI.
Primary and Secondary contacts for our company are:

	Primary Contact	Secondary Contact
Company Name:		
Name:		
Title:		
Address:		
Phone:		
Mobile:		
Fax:		
E-mail:		



We confirm that the information contained in this response or any part thereof, including its exhibits, and other documents and instruments delivered or to be delivered to BEML Limited are true, accurate, verifiable and complete. This response includes all information necessary to ensure that the statements therein do not in whole or in part mislead BEML Limited in its short-listing process nor suppressed any material facts.

We fully understand and agree to comply that on verification, if any of the information provided herein is found to be misleading the short-listing process, we are liable to be disqualified / rejected from the selection process or termination of the contract after the execution of the contract, besides other action as may be required as per the BEML Purchase Manual.

We agree to the unconditional acceptance of all the terms and conditions set out in the Eol document.

It is hereby confirmed that I / We are entitled to act on behalf of our company/ corporation/ firm / organization and empowered and authorised to sign this document as well as such other documents, which may be required in this connection.

Dated this

```
(Signature)
(In the capacity of)
(Name)
```

Duly authorized to sign the EoI Response for and on behalf of: (Name and Address of Entity/Firm/Company) Seal / Stamp of Entity

Witness Signature:

Witness Name: Witness

Address:



Appendix' C

{With Cover Letter in Company letterhead}

CERTIFICATE AS TO AUTHORIZED SIGNATORIES

l,		, the Cor	npany Secreta	iry of
		,	certify	that
	Wh	o signed the ab	ove Eol for Stra	ategio
•	ric Powertrain Solutions for Bl o do so and bind the company			
	Date:			
	Signature:			
	(Company Seal)			



Appendix' D

{With Cover Letter in Entity/Firm/Company's letterhead}

DECLARATION BY THE ENTITY/FIRM/COMPANY

	is to certify that our Entity/Company/Firm, y/Firm/Company herein,	the
а	. does not have any litigation, arbitration cases or any litigation against BEML pending before any Court / Arbitrator in connection with any contract / tender iss by BEML Ltd.	
b	has not been declared insolvent, bankrupt, debarred or blacklisted by any Central / State Government or public sector undertaking in India or any entity controlled by such governments, as on the date of submission of the EoI.	
C	. I / we hereby certify that all the information given above are true and correct.	
S	ignature with date of Authorized signatory	
N	lame:	
D	esignation:	
F	irm's Seal·	