CTPAM / EoI / Simulator / 2026 / 39 / Corrigendum - I 06.11.2026

CORRIGENDUM – I

1. Please refer BEML's "Notice Inviting Expression of Interest (EoI) for Joint Development, Supply, Deployment & Maintenance of Simulator Solutions" published on 12.10.2026 and due for closing on 09.11.2026.
2. The EoI closing date is extended up to 23.11.2026, 15.00 Hrs.
3. All other terms and conditions of the EoI remains same.
4. The Corrigendum shall form part of this EoI.

Notice Inviting
Expression of Interest (EoI)

for

Joint Development, Supply, Deployment & Maintenance of Simulator Solutions

Reference No.	:	CTPAM / EoI / Simulator / 2026 / 39
Date of Issue	:	12.10.2026
Extended Due Closing Date & Time	:	**23.11.2026, 15.00 Hrs. (IST)**
EoI Response Mail ID	:	bemleoi@bemlltd.in

Issued by

BEML Limited,
India

INDEX

Sl. No.	Section	Description
1	SECTION – 1	Disclaimer
2	SECTION – 2	Schedule of EoI process & Contact details.
3	SECTION – 3	About BEML Ltd.
4	SECTION – 4	Details of Expression of Interest (EoI)
5	ANNEXURE – 1	EoI response format
6	ANNEXURE – 2	Pre-Qualification Criteria
7	ANNEXURE – 3	Declaration for OEM
8	ANNEXURE – 4	Reference List: Supply of various Simulators undertaken in past Five (5) Years as on Date of Publication of this EoI.
9	ANNEXURE – 5	Technical Compliance Matrix
10	ANNEXURE – 6	Certificate as to Authorized Signatories
11	ANNEXURE – 7	Declaration by the prospective collaborator regarding any pending litigation, arbitration cases
12	ANNEXURE – 8	Declaration by the prospective collaborator regarding blacklisting
13	ANNEXURE – 9	Certificate for Land Border Sharing
14	APPENDIX – A	Types of Simulators
15	APPENDIX – B	Indicative Scope of Collaboration

SECTION – 1

Disclaimer

The information contained in this Expression of Interest (EoI) document provided to the Prospective Collaborator(s), by or on behalf of BEML or any of its employees, advisors, agents etc. 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.

1.1 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 and does not by implied or expressed terms and conditions intend to establish an offer to the prospective Collaborator. This EoI document may not be appropriate for all persons/entities, and it is not possible for BEML, its employees or its advisors to consider the business/investment objectives, financial situation and particular needs of 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 its/their own investigations, due diligence and analysis and should check the accuracy, reliability and completeness of the information in this EoI document and where necessary, obtain independent advice from appropriate sources.

1.2 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.

1.3 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.

1.4 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 Collaborator. 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.

1.5 The Prospective Collaborator(s) shall bear all costs associated with or relating to the preparation, business/ 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.

1.6 Canvassing in any form by the Prospective Collaborator(s) or by any other agency on their behalf shall lead to disqualification of their EoI.

1.7 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.

1.8 BEML reserves the right to disqualify any Prospective Collaborator during or after completion of EoI 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.

BEML reserves the right to verify all statements, information and documents submitted by the Prospective Collaborator in response to the EoI. 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.

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	**12.10.2026**
2	**Last date of Submission of EoI response (extended)**	**23.11.2026**

B. Contact Details for clarification related to EoI

Mr. Saravanan P,
Deputy General Manager,
R&D (Rail & Metro),
BEML Ltd.
Email: bemleoi@bemlltd.in (with a Cc **saravanan.p@bemlltd.in**)

C. The response to EoI shall be submitted on or before the EoI closing date (as mentioned above) **through email to bemleoi@bemlltd.in (with a Cc saravanan.p@bemlltd.in). The subject of the email shall** mention EoI reference: "**CTPAM/EoI/Simulator/2026/39 dtd. 12/10/2026: Response to EoI for Joint Development, Supply, Deployment & Maintenance of Simulator Solutions".**

D. In case any amendment/ corrigendum to this EoI is issued, it shall be notified only at BEML website (www.bemlindia.in).

SECTION-3

About BEML Limited

3.1 BEML Limited, a Central Public Sector Enterprise (CPSE) under the Ministry of Defence (MoD), Government of India, was established in the year 1964. The Company has 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, Maritime, 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 14 SBUs & 2 Micro Strategic Business Units, 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.

3.3 More details about the entire range of BEML's products and operations can be viewed by visiting our web site www.bemlindia.in

SECTION-4

Details of Expression of Interest (EoI)

4.1 Introduction:

BEML invites application/response to this Expression of Interest (EoI) from the eligible Prospective Collaborator(s), who are ready and willing to associate with BEML, for the design, development, manufacture, supply, integration, installation, commissioning, deployment, maintenance and lifecycle support of Simulator Solutions across BEML's business verticals, viz., Rail & Metro, Defence & Aerospace, Maritime and Mining & Construction.

The immediate and primary objective of this EoI is to address upcoming opportunities in Rolling Stock Simulator Solutions for the Rail & Metro vertical, covering Metro cars, EMU / MEMUs, Regional Rapid Transit / Semi High-Speed / High-Speed Rail, Locomotives, Passenger Coaches, etc.

For the purpose of this EoI, a "***Simulator Solution***" shall mean an integrated training system that reproduces the appearance, behaviour, controls and responses of an equipment or any of its sub-systems, for training, assessment and certification of operating and maintenance personnel, without the use of the actual equipment. The term includes, but is not limited to, Driving / Operator Simulators, Maintenance Simulators, Computer Based Training (CBT), as described at APPENDIX – A.

4.2 Objective & Scope of Co-operation:

4.2.1 The objective is to identify and shortlist technically capable Prospective Collaborator(s) that are willing to work with BEML to offer and deliver Simulator Solutions on an end-to-end basis, with immediate priority to Rolling Stock Simulators for the Rail & Metro vertical.

4.2.2 BEML and Prospective Collaborator(s) shall cooperate for opportunity identification, customer approach, tender response preparation, simulator design & development, manufacturing & integration, testing & acceptance, warranty support & Comprehensive Annual Maintenance Contract (CAMC) and Updation or Upgradation of various Simulators including, but not limited to, Driving / Operator Simulators, Maintenance Simulators, CBT, etc., for Rail & Metro, Defence & Aerospace and Mining & Construction applications.

4.2.3 The indicative Scope of collaboration between BEML and Prospective Collaborator is enclosed herewith at APPENDIX – B. A detailed division of scope between BEML and shortlisted Prospective Collaborator(s) shall be mutually discussed and agreed on a case-to-case basis.

4.3 Intellectual Property (IP) & Continuity of Support:

4.3.1 Background IP: Each party shall retain sole ownership of the intellectual property it owned before the commencement of the collaboration, or which it develops independently of the collaboration. Nothing in the collaboration shall transfer ownership of Background IP.

4.3.2 Foreground IP: IP created in the course of the collaboration shall be owned jointly by BEML and the Prospective Collaborator on terms and conditions that may be mutually agreed in the definitive agreement on the case-to-case basis. Each party shall have the right to use jointly owned Foreground IP, on mutual prior consent, for the purposes of the collaboration and for supply, maintenance and support to the End Customer.

4.3.3 The Prospective Collaborator should be ready and willing to enter into Source Code Escrow arrangements, if required, for any upcoming opportunities pursued jointly.

4.3.4 The Prospective Collaborator should be ready and willing to disclose all third-party or licensed software, tools, engines and libraries used in its solution, and shall confirm that the licence terms permit supply, deployment, maintenance and upgradation of the Simulator through BEML to the End Customer for the required period/Project.

4.4 Submission and Process of EoI Evaluation:

4.4.1 The Prospective Collaborator meeting the Pre-Qualification Criteria (PQC) as specified in clause 4.5 below are invited to submit their response to this EoI.

4.4.2 Upon receipt of response(s) against this EoI, BEML will review the response(s) though a Technical Evaluation Committee (TEC) to ascertain suitability and shortlist Prospective Collaborator(s) for further discussions.

4.4.3 On evaluation, only selected Prospective Collaborator(s) will be informed about their shortlisting. BEML may enter into an NDA/MoU with the shortlisted Prospective Collaborator(s).

4.5 Pre-Qualification Criteria (PQC)

Prospective Collaborator(s) should fulfil all conditions in the PQC Form at ANNEXURE – 2, by submitting their response with relevant supporting documents, certificates and undertaking letters, wherever applicable.

NOTE: The condition of prior turnover and prior experience may be relaxed as per General Financial Rules (GFR) Rule 173 (i), for Micro & Small Enterprises

(as defined by Department of Industrial Policy and Promotion) subject to meeting of other pre-qualification requirements of the EoI.

4.6 Technical Compliance:

In addition to the Pre-Qualification Criteria, Prospective Collaborator(s) shall fulfil & furnish their compliance against each element of the Technical Compliance Matrix (as defined in ANNEXURE – 5), together with the documentary evidence indicated therein. The Technical Compliance Matrix sets out the key technology elements expected of a Prospective Collaborator for the delivery of Simulator Solutions.

4.7 Instructions:

4.7.1 The interested Prospective Collaborator(s) should submit their response(s) as per following ANNEXURES along with necessary supporting documents wherever required:

ANNEXURE	Description
1	EoI response format
2	Pre-Qualification Criteria (PQC)
3	Declaration as an OEM
4	Reference List: Supply of various Simulators undertaken in past Five (5) Years as on Date of Publication of this EoI.
5	Technical Compliance Matrix
6	Certificate as to Authorized signatories
7	Declaration by the prospective collaborator regarding any pending litigation, arbitration cases
8	Declaration by the prospective collaborator regarding blacklisting
9	Certificate for Land Border Sharing

4.7.2 **Language:** All correspondences and documents related to the EoI response shall be in English language, provided that any printed literature furnished by the 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 response to the EoI, the English translation shall govern. However, if the translation is found to be incorrect subsequently, BEML will have right to take appropriate action against the Prospective Collaborator as may be deemed fit.

4.7.3 The person signing the response to the EoI should have due written authorization from the Prospective Collaborator to sign the documents and should duly authenticate any errors or corrections in the EoI. Over writing should be avoided. 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 Prospective Collaborator. The interested Prospective Collaborator will be requested to produce the originals of all information / documents as and when so required by BEML.

4.7.4 Multiple proposals by the same Prospective Collaborator should not be submitted.

4.7.5 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 Prospective Collaborator. BEML's decision in this regard shall be final.

4.7.6 Any Prospective Collaborator who has been declared insolvent, bankrupt, debarred/blacklisted by Central/State Governments of India or by any entity controlled by Central/State Governments of India from participating in any of their project/tender, as on date of submission of EoI, shall not be eligible to submit the EoI.

4.7.7 BEML shall receive applications pursuant to this EoI in accordance with the terms set forth herein, as may be modified, altered, amended and clarified from time to time by BEML and all applications shall be submitted in accordance with such terms on or before the date specified in this EoI for submission of applications.

In case any amendment/corrigendum to this EoI is issued, it shall be notified in BEML Portal which shall form part of this EoI.

4.7.8 Restrictions on Prospective Collaborator from a Country which shares a Land Border with India:

a. 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.

b. Interested Prospective Collaborator from a country which shares a land border with India means:

(i) An entity incorporated, established or registered in such country; or

(ii) A subsidiary of an entity incorporated, established or registered in such country; or

(iii) An entity substantially controlled through entities incorporated, established or registered in such country; or

(iv) An entity whose beneficial owner is situated in such a country; or

(v) An Indian (or other) agent of such an entity; or

(vi) A natural person who is a citizen of such a country; or

(vii) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

4.8 REJECTION: An Expression of Interest is liable to be rejected for any of the following conditions:

4.7.1 The Expression of Interest is not accompanied by required documentation and has failed to provide clarifications related thereto, when sought by BEML.

4.7.2 Misrepresentation, lack of proper documentation, fraud, coercion, undue influence, canvassing etc., by the prospective collaborator.

4.7.3 The Expression of Interest is received after the closing time and date.

4.7.4 Any information which would have entitled BEML to reject or disqualify the Prospective Collaborator becomes known to BEML after the Prospective Collaborator has been qualified.

4.9 PROCESS TO BE CONFIDENTIAL:

Information relating to the examination, clarification, evaluation and comparison of EoI 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.

4.10 GOVERNING LAWS & JURISDICTION:

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

Foreign entity interested for collaboration with BEML for Joint Development, Supply, Deployment & Maintenance of Simulator Solutions must have necessary clearance from their Govt. for Technology Sharing & Collaboration (wherever applicable).

—●♦●—

ANNEXURE – 1

{To be printed and submitted on Prospective Collaborator's official letterhead}

EoI RESPONSE FORMAT

To,
BEML Limited
SR Nagar, Bangalore 560027
E-mail: bemleoi@bemlltd.in

Dear Sir,

Ref: Expression of Interest (EoI) to collaborate with BEML Limited for Joint Development, Supply, Deployment & Maintenance of Simulator Solutions.

Having examined the Expression of Interest (EoI) document dated _____, downloaded from the BEML Limited portal. We, the authorised signatories of the Prospective Collaborator, intend to submit the response/proposal to the aforesaid EoI document.

We attach hereto the response/proposal to EoI as required as per the EoI document, which constitutes our response to EoI.

The Primary and Secondary contacts for the prospective Collaborator in respect of the EoI are as under:

Particulars	Primary Contact	Secondary Contact
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 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 in its short-listing process nor suppressed any material facts.

We fully understand and agree that, on verification, if any of the information provided herein is found to be false /misleading, at any point of time, our response / proposal is liable to be disqualified / rejected from the selection process or termination of the

definitive agreement, if the Prospective Collaborator is selected, besides other action as may be required as per the BEML Purchase Manual, as available on the BEML website.

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

It is hereby confirmed that We are entitled and duly authorised to act on behalf of the Prospective Collaborator and empowered and authorised to sign this document as well as such other documents, which may be required in this connection.

Dated this

For Prospective Collaborator

Signature of the Authorized signatory

of the Prospective Collaborator with Seal

Duly authorized to sign the EoI Response for and on behalf of:

(Name and Address of the authorised representative/signatory with Seal / Stamp of the Prospective Collaborator)

Witness Signature:

Witness Name:
Witness Address:

ANNEXURE – 2

Pre-Qualification Criteria (PQC)

Note: In case of Joint Venture (JV) Company participation, only the technical and financial credentials of the JV shall be considered for evaluation.

Sl. No.	Criteria	Compliance*	Documentary Evidence
** The Prospective Collaborator shall fill & submit their response / compliance with supporting document / certificate / undertaking letter*			
(i)	Prospective Collaborator should be an ***Original Equipment Manufacturer (OEM)*** of Simulators in various safety-critical domains such as Rail & Metro and/or Mining & Construction and/or Defence and in continuous operation for ***at least ONE (1) Year*** as on Date of Publication of the EoI.	Yes / No	a. OEM – Declaration to be furnished as per ANNEXURE – 3. b. Incorporation / registration certificate c. Detailed Company Profile including, infrastructure, team strength, products, markets, global presence, etc. d. Udyam Registration Certificate (if applicable)
(ii)	Prospective Collaborator must have designed, developed, supplied and commissioned ***at least ONE (1) Rolling Stock Simulator*** within the ***last Five (5) Years*** as on Date of Publication of this EoI.	Yes / No	Reference List to be furnished as per ANNEXURE – 4.
(iii)	Prospective Collaborator should have Average Revenue of ***at least Rs. 5 Cr*** for ***Three (03) Financial Years*** preceding the Date of Publication of the EoI & should have ***positive net worth*** as per the latest audited financial statements.	Yes / No	Audited Annual Financial Statements for last 3 financial years, together with a certificate from a Chartered Accountant / statutory auditor stating the annual turnover and net worth for each of the three years. *Note: In case audited results are not available, provisional results duly certified by a statutory auditor or self-certified by CEO/MD/Country Head may be submitted.*
(iv)	Prospective Collaborator should have an in-house engineering team for simulation modelling, real-	Yes / No	Team strength and skill profile to be enclosed.

Sl. No.	Criteria	Compliance*	Documentary Evidence
** The Prospective Collaborator shall fill & submit their response / compliance with supporting document / certificate / undertaking letter*			
	time software, visual database creation, hardware and electrical design, and validation.		
(v)	Prospective Collaborator should be ready and willing to deploy engineers to India and to overseas project sites for installation, commissioning and support.	Yes / No	Prospective Collaborator should submit an undertaking to this effect on his Company's Letter Head duly endorsed by Authorized Signatory.
(vi)	Prospective Collaborator should agree in principle to the intellectual property framework set out at clause 4.3.1 & 4.3.2 of this EoI.	Yes / No	Prospective Collaborator should submit an undertaking to this effect on his Company's Letter Head duly endorsed by Authorized Signatory.
(vii)	Prospective Collaborator should be ready and willing to enter into Source Code Escrow arrangements, if required, for any upcoming opportunities pursued jointly.	Yes / No	Prospective Collaborator should submit an undertaking to this effect on his Company's Letter Head duly endorsed by Authorized Signatory.
(viii)	Prospective Collaborator should be ready and willing to disclose all third-party or licensed software, tools, engines and libraries used in its solution, and shall confirm that the licence terms permit supply, deployment, maintenance and upgradation of the Simulator through BEML to the End Customer for the required period	Yes / No	Prospective Collaborator should submit an undertaking to this effect on his Company's Letter Head duly endorsed by Authorized Signatory.
(ix)	Prospective Collaborator should be ready and willing to meet or exceed the indigenous content (IC) for Simulators as required by various customer (wherever required).	Yes / No	Prospective Collaborator should submit an undertaking to this effect on his Company's Letter Head duly endorsed by Authorized Signatory.
(x)	Prospective Collaborator should be ready and willing to front-end / support BEML for gaining various quality certifications (RDSO / EN / Relevant Organizations) as required by BEML or any other customers (wherever required).	Yes / No	Prospective Collaborator should submit an undertaking to this effect on his Company's Letter Head duly endorsed by Authorized Signatory.

Sl. No.	Criteria	Compliance*	Documentary Evidence
** The Prospective Collaborator shall fill & submit their response / compliance with supporting document / certificate / undertaking letter*			
(xi)	Prospective Collaborator should agree that lack of complete information / furnishing of false information related to work carried out / documents submitted will lead to disqualification of the Prospective Collaborator.	Yes / No	Prospective Collaborator should submit an undertaking to this effect on his Company's Letter Head duly endorsed by Authorized Signatory.
(xii)	Prospective Collaborator herein should not have any litigation, arbitration cases, or any litigation against BEML Limited pending before any Court / Tribunal / Statutory Authority in connection with any contract / tender issued by BEML Limited.	Yes / No	Furnish Undertaking as per ANNEXURE – 7.
(xiii)	Prospective Collaborator should not have been declared as insolvent, bankrupt or, debarred /banned/ blacklisted by Central/ State Governments or by any entity controlled by Central/State Governments as on date of publication of this EoI.	Yes / No	Furnish Undertaking as per ANNEXURE – 7 & ANNEXURE – 8.
(xiv)	Prospective Collaborator should confirm that it is not restricted under GFR Rule 144(xi) amended.	Yes / No	Furnish Undertaking as per ANNEXURE – 9.
(xv)	Prospective Firm agrees that it has read, understood, accepts and abides by the Terms & Conditions of this EoI.	Yes / No	Prospective Firm should submit an undertaking to this effect on his Company's Letter Head duly endorsed by Authorized Signatory.

For Prospective Collaborator

Signature & Seal:

Authorised Signatory of the Prospective Collaborator

Note: *The Prospective Collaborator shortlisted based on the PQC may be invited in person / via video conference to make a presentation at a date, time and/or location notified by BEML. The purpose of the presentation would be to allow the prospective Collaborator to present its solution/methodology, experience, capabilities, infrastructure, and other key points, if any.*

ANNEXURE – 3

{To be submitted in the letter head of the Prospective Collaborator}

OEM CERTIFICATE – DECLARATION BY THE PROSPECTIVE COLLABORATOR

We, _____ (name of the Prospective Collaborator), do hereby certify that we are the OEM of Simulators in _____ domain and are proven, established and reputed developers and suppliers of such Simulators, with our own development / engineering / manufacturing / integration facilities at _____ which are fitted with modern equipment.

We further certify that we own, or are duly licensed to use and to sub-license, the simulation software, models, tools and know-how required for the Simulators offered by us, and that the offering of such Simulators in association with BEML does not infringe the intellectual property rights of any third party.

We hereby further certify that all the information furnished above are true and correct.

For Prospective Collaborator

Signature with date of Authorized signatory

Name: _____

Designation: _____

Prospective Collaborator's Entity Seal:_____

ANNEXURE – 4

Reference List: **Supply of various Simulators undertaken in past Five (5) Years as on Date of Publication of this EoI.**

Sl. No.	End Customer / Country	Type of Simulator	Rolling Stock or Other Equipment covered	Scope executed	Qty. / Value	Year of commissioning & present status
1						
2						
3						
4						
5						

Note: *Under "Scope executed", please indicate whether the scope covered design, development, manufacture, integration, deployment, warranty, CAMC, updation and/or upgradation. Copies of purchase orders / contracts and completion or performance certificates shall be enclosed.*

For Prospective Collaborator

Signature & Seal:
Authorised Signatory of the Prospective Collaborator

ANNEXURE – 5

Technical Compliance Matrix

Sl. No.	Technical Capability / Criteria	Compliance (Yes / No)	Documentary Evidence
** The Prospective Collaborator shall indicate "Yes" or "No" against each element and shall enclose the documentary evidence indicated against that element.*			
1	Prospective Collaborator should own or control the core simulation technology it offers, vis-à-vis the simulation engine, the image generation algorithms (for digital mapping of real-world scenario wherever applicable), the model libraries and the Instructor Operating Station (IOS) software and should state clearly which parts are its own and which are licensed from a third party.	Yes / No	Statement on Company's letterhead, clearly identifying, for each of the simulation engine, image generation software, model libraries and Instructor Station software, whether it is owned by the Prospective Collaborator or licensed from a third party, with the name of the licensor and the validity and scope of the licence in each case.
2	Vehicle / train dynamics modelling: capability to model traction, braking, running resistance, gradient, curvature, adhesion and load conditions, and to validate the model against real equipment data.	Yes / No	Technical note on the dynamics model, list of parameters modelled, validation methodology and a sample validation report.
3	Sub-system and circuit modelling: capability to model propulsion, braking & pneumatics, doors, HVAC, auxiliary systems, vehicle control circuits and TCMS, including their fault behaviour.	Yes / No	List of sub-systems modelled in earlier projects, with a technical description of the modelling approach adopted.
4	Visual system & image generation: capability to develop or integrate image generation software and multi-channel visual display / projection systems with the field of view and fidelity required by the End Customer.	Yes / No	Technical write-up with screenshots / video, hardware configuration used, and details of ownership or licence of the image generator.
5	Visual database generation: capability to create 3D route / terrain databases from survey data, LiDAR / photogrammetry, drawings or site photographs, including signals, structures,	Yes / No	Description of the database generation process, tools used, and samples of route databases created in earlier projects.

Sl. No.	Technical Capability / Criteria	Compliance (Yes / No)	Documentary Evidence
** The Prospective Collaborator shall indicate "Yes" or "No" against each element and shall enclose the documentary evidence indicated against that element.*			
	stations, tunnels, depots and yards.		
6	Replica cab, console & mock-up: capability to design and manufacture replica driving cabs, driving desks, consoles, panels and sub-system mock-ups with actual or representative hardware.	Yes / No	Design documents, photographs of cabs / consoles supplied earlier, and details of whether manufacture is in-house or outsourced.
7	Motion platform: capability to supply, integrate and tune motion platforms, including six degrees of freedom (6-DoF) systems, with suitable motion cueing algorithms.	Yes / No	Details of motion systems supplied earlier, make and model of platform used, and a description of the motion cueing approach.
8	Signalling & train control emulation: capability to emulate signalling and train control systems (such as CBTC / ATP / ATO / ATS), Driver Machine Interface (DMI) and on-board equipment, and to interface with systems of third-party OEMs.	Yes / No	Technical note listing the systems emulated earlier, the name of the signalling / equipment OEM and the interface method adopted in each case.
9	Maintenance simulator capability: capability to develop Maintenance Simulators and Computer Based Training (CBT), including 3D virtual maintenance procedures, guided fault diagnosis and integration of actual or representative hardware.	Yes / No	Details of maintenance simulators supplied earlier with scope, sub-systems covered, and photographs / screenshots.
10	Virtual and augmented reality: capability to develop VR / AR based, desktop, portable and web-based training modules and computer-based training (CBT) content.	Yes / No	Description of VR / AR modules developed, platforms supported and sample content.
11	Simulators for Defence & Aerospace applications: capability to develop operator, crew and maintenance simulators for defence and aerospace equipment, systems and platforms.	Yes / No	Details of simulators developed in this domain, or a note on the capability that can be extended to this domain.

Sl. No.	Technical Capability / Criteria	Compliance (Yes / No)	Documentary Evidence
** The Prospective Collaborator shall indicate "Yes" or "No" against each element and shall enclose the documentary evidence indicated against that element.*			
12	Simulators for Mining & Construction equipment: capability to develop operator and maintenance simulators for excavators, dumpers, dozers, loaders and allied mining and construction machinery.	Yes / No	Details of simulators developed in this domain, or a note on the capability that can be extended to this domain.

For Prospective Collaborator

Signature & Seal:
Authorised Signatory of the Prospective Collaborator

ANNEXURE – 6

{To be submitted in the letter head of the Prospective Collaborator}

CERTIFICATE AS TO AUTHORIZED SIGNATORIES

I/We, ……....., the Company Secretary / Chief Executive Officer (CEO) / Managing Director / Key Managerial Person / Authorized Signatory of ……..... (Name of the Prospective Collaborator), do hererby certify that Mr./Ms ……. who signed the response to the EoI floated by BEML for Joint Development, Supply, Deployment & Maintenance of Simulator Solutions is authorized to do so and bind the Prospective Collaborator by virtue of the authority granted by _____ (board / governing body and the reference number, if any).

For Prospective Collaborator

Signature of the Authorized signatory

of the Prospective Collaborator with Seal

Date:

Signature:

(Prospective Collaborator's entity Seal)

ANNEXURE – 7

{To be submitted in the letter head of the Prospective Collaborator}

DECLARATION BY THE PROSPECTIVE COLLABORATOR

This is to certify that we, _____ (name of the Prospective Collaborator), do not have any litigation, arbitration cases, disputes or any other litigation against BEML Ltd pending before any Court / Tribunal/ Statutory Authority/Arbitrator in connection with any contract / tender issued by BEML Ltd. or in any other regard.

Or

This is to certify that we, _____ (Name of the Prospective Collaborator), have the following litigation/arbitration cases/disputes or any other litigation with BEML Ltd.:

Sr No	Petitioner /Respondent	Case number	CNR number	Court Name/place	Present Status/ Remarks, if any

The list of cases, having monetary claims against the Prospective Collaborator, the result of which will have impact on its financial position, pending before any Court/Statutory Authority/Tribunal as on the date of submission of EoI are as under:

Sl. No.	Petitioner / Respondent	Case number	CNR number, if any	Court Name / Place	Present Status / Remarks, if any	Claim Amount
1						

It is further certified that, as on date, no Insolvency, liquidation or bankruptcy proceeding is pending before any Court/Tribunal against the Prospective Collaborator.

For Prospective Collaborator

Signature of the Authorized signatory
of the Prospective Collaborator (with Seal /Entity Seal)

ANNEXURE – 8

{To be submitted in the letter head of the Prospective Collaborator}

DECLARATION BY THE PROSPECTIVE COLLABORATOR

This is to certify we, _____ (Name of the Prospective Collaborator), have not been banned / black listed / debarred from trade or from participating in any tendering process by BEML / Government of India or its State Governments or any of its Dept. / Autonomous Institution / PSUs / any statutory authority/corporation in India or the Government of the Country of the Collaborator in the last 05 years as on the date of submission of the response to the EoI.

I / we hereby certify that all the information given above are true and correct.

For Prospective Collaborator

Signature with date of Authorized signatory of the Prospective Collaborator

Name: _____

Designation: _____

Prospective Collborator's Entity Seal:_____

ANNEXURE – 9

CERTIFICATE FOR LAND BORDER SHARING

[Applicant may refer to GOI Office Memorandum No. F.No.6/18/2019-PPD of Department of Expenditure Public Procurement Division, amended from time to time and its subsequent Orders/Notifications]

The Prospective Collaborator Certifies as below:

We, _____ (name of the Prospective Collaborator) have read the Govt. of India (GOI) Office Memorandum (OM) No. F.No.6/18/2019-PPD of Department of Expenditure Public Procurement Division, Government of India and/or its amendments and in particular the clause regarding restrictions on procurement from the entity of a country which shares a land border with India; Accordingly, we …….. (Name of the Collaborator) do hereby certify that:

We are not from such a restricted country as detailed in the OM

OR,

(If the Collaborator is from such a restricted country),

We are from _____ (name of the country), which is a restricted country as per the said OM and that we have duly registered with Competent Authority (Registration Committee constituted by the Department of Promotion of Internal Trade (DPIIT) of Govt. of India) and the said registration is/shall be valid for the entire period of EoI due date or any extension thereof and the copy of the Up-to-Date Registration Certificate is appended herewith. We, hereby further Certify that we fulfil all requirements in this regard and is eligible to be considered for this EoI"

For Prospective Collaborator

Authorized signatory with company seal / stamp

APPENDIX – A

Types of Simulators
(Sl. No. 1 to 4 pertain to Rolling Stock, being the immediate focus area)

Sl. No	Type	Description
1	**Full-Scope Driving Simulator (with motion platform)**	Highest level of driver training. Full replica cab on a moving base; used for initial training, licensing, rare failures, rescue and emergency scenarios.
2	**Full-Cab Motionless Driving Simulator**	Full replica cab without a moving base. Used for driver training and periodic competency assessment at lower cost than a motion simulator.
3	**Maintenance Simulator**	One sub-system in depth — for example Brakes and pneumatics, Doors, traction converter, auxiliary converter, HVAC, Bogie, Coupler, Gangway, Traction motor and drive gear, Vehicle control circuit or TCMS — with actual or representative hardware, circuit simulation, fault insertion and 3D maintenance procedures.
4	**Computer based Training (CBT)**	CBT for Maintenance Simulator and Driving Simulator. The complete Rolling Stock and all its sub-systems together — overview, operating and emergency procedures, technical description and preventive and corrective maintenance.
5	**Simulators for Defence & Aerospace applications**	Operator, crew and maintenance training simulators for defence and aerospace equipment, systems and platforms, as and when such opportunities arise.
6	**Simulators for Mining & Construction equipment**	Operator and maintenance training simulators for excavators, dumpers, dozers, loaders and allied mining and construction machinery, as and when such opportunities arise.

APPENDIX – B

Indicative Scope of Collaboration

Stage	BEML Scope	Partner Scope
Tender participation	Lead bidder; bid capacity, customer interface	Technical solution, compliance, costing inputs, credentials & backing letters
Requirement capture & design	Rolling stock data, interface definition, customer co-ordination	System architecture and detailed design of the Simulator
Development	Review, validation and domain inputs	Software development including dynamics, visual database, models & instructor station
Manufacture & integration	Cab replica, consoles, panels, structures, cabinets and assembly	Simulation hardware selection, software integration and system testing
Testing & acceptance	Quality assurance & inspection	Documentation, FAT and SAT execution and technical demonstration
Deployment	Logistics and customer handover	Commissioning, configuration and training of the customer's trainers
Warranty & CAMC	Site manpower, spares logistics and customer interface	Software support, technical support and obsolescence advice
Updation & upgradation	Customer interface and commercial closure of change requests	Visual database and software updation, and technology upgradation

NOTE: The above scope is indicative in nature. A detailed division of scope between BEML and shortlisted Prospective Collaborator(s) shall be mutually discussed and agreed on a case-to-case basis.