

**M/s. BEML LIMITED,
BEML SOUDHA,
SAMPANGIRAMNAGAR,
BENGALURU - 560002**

**Invitation for Expression of Interest(Eoi) for Development &
Supply of Crane system**

Reference No	: PDP/Crane System/EOI/01/2023 dated 3rd January 2024
Due closing date	: 17.01.2024
Eoi response mail ID	: bemleoi@beml.co.in
Contact for technical Clarifications	: Name : N. NARASIMHA PRASAD Designation : AGM R&D E mail : narasimha.p@beml.co.in Mobile no :9900590648

Issued by
M/s. BEML, Limited
(Under Ministry of Defence)

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Expression of Interest (Eol) for Development & Supply of Crane system

1.0 Back ground:

BEML Limited is a leading multi-technology and multi-location company under the Ministry of Defence. BEML is operating its business in three verticals viz., Defence & Aerospace, Mining & Construction and Rail & Metro. It offers high-quality products for diverse sectors of economy, such as coal, mining, steel, limestone, power, irrigation, construction, road building, aviation, defence, metro and railways. It has emerged as the forerunner of heavy engineering industry with a track record of growth and revenues for over five decades.

The company has state-of-the-art manufacturing facilities at Kolar Gold Fields, Mysuru, Bengaluru and Palakkad, all possessing ISO 9001-2015 and ISO 14001 (HSC) certifications. BEML has its own world-class composite R&D establishment for Design & Development of products.

The Company has a nationwide Marketing Network and an International Business Division for Exports activity.

Details of BEML Ltd are available at www.bemlindia.in

2.0 Overview of BEML Capabilities:

BEML Limited, a Central Public Sector Enterprise coming under the Ministry of Defense was incorporated in 1964. Subsequently it became a listed company and is engaged in the design, development and manufacturing in the areas of Mining& Construction, Defense& Aerospace and Rail & Metro Equipments.

2.1 Mining &Construction:

BEML Ltd is engaged in the business of Hydraulic Excavators, Bulldozers, Wheel Loaders, Wheel Dozers, Dump Trucks, Motor Graders, Pipe Layers, Tyre Handlers, Water Sprinklers and Backhoe Loaders to customers in the Mining and Construction segments.

BEML is manufacturing Bull dozers from 90 hp to 850 hp and having major market share in Indian Mining and construction.

BEML has also developed Mining Dump trucks of 150 Ton and 200 Ton class and Excavators of both Hydraulic and Electrical of 180 Ton capacity.

2.2 Defence &Aerospace:

BEML Ltd is engaged in the business of High Mobility vehicle for all terrain operations, Heavy Recovery Vehicle, Pontoon Mainstream Bridge Systems, Crash Fire Tenders, Mobile Mast Vehicle, Engineering Mine Ploughs, Tank Transportation Trailers, Weapon Loading equipment, Armored Recovery Vehicle, Military rail Coaches and

Wagons, ground support vehicles and other products to the Indian and other Armed Forces.

2.3 Rail & Metro:

BEML Ltd is engaged in the business of Integral Rail Coaches, Overhead Inspection Cars, AC/DC Electrical Multiple Units, Stainless steel EMUs, Utility vehicles, Track Laying Equipment, Broad-gauge Rail bus, Treasury Vans, Spoil disposal Units to the Indian and other Railways.

BEML Ltd has also successfully diversified into manufacturing state-of-the-art technology stainless steel Metro Cars for various urban Metro Corporations and enjoys a dominant market share in this segment.

3.0 Research & Development:

BEML Ltd has R&D establishment for Design & Development of high-tech engineering products for its three verticals. It employs over 300 professionals with high experience and skills spanning a wide range of technology areas.

The R&D establishment has CAD Centre, Fluid-power, Power line, Structural Engineering & Material Science laboratories and is continuously engaged in New Product Development and upgradation of existing products to meet customer requirements. More than 65% of Company's Sales Turnover is through in-house developed R&D products. The R&D expenditure is around 2 ~ 3% of its turnover.

4.0 International Business Division:

BEML has a sizeable market share in export markets with exports to 68 countries across the globe. Over the years this division has exported over 1200 machines covering all the three verticals.

5.0 Requirements:

BEML is planning to develop crane system – BEML HMV 8X8 vehicles. The BEML HMV vehicle is required for transportation and handling of pods. The handling of the pods will be done through a hydraulic crane mounted on the vehicle BEML- 8x8 chassis. The power for operation of loader crane will be taken either from vehicle engine Power Take off (PTO) or through a separate diesel engine driven Hydraulic power pack as an alternate source with reduced speed. The loader crane will be fitted on chassis at the rear of the vehicle and is required for loading / unloading of rocket pods. All the crane operations i.e. raising/lowering, swiveling, Telescopic boom, Horizontal extension/retraction will be done hydraulically. To keep the vehicle axle loadings within the specified limit, the crane weight with outriggers should not exceed 3.0 tonne.

The Crane system should consist of the following sub systems:

- (i) Crane
- (ii) Crane operator seat/cabin
- (iii) Crane remote control unit
- (iv) Outriggers integrated as part of crane
- (v) Lighting
- (vi) Pod lifting slings
- (vii) Tarpaulin cover for crane systems
- (viii) Painting and finishing

Full details about the scope of supply of crane system is attached as Procurement Technical Specification. Accordingly, BEML is seeking to develop partners for the supply of crane system for BEML HMV equipment who are original Manufacturer & Suppliers of Crane systems with proven record. Reputed OEM manufacturers who are having manufacturing technology /infrastructure for Crane system and supplied to various equipment and having their after-sales service network in India is mandatory for qualifying criteria.

5.1 The supplier shall abide by the following:

- a) The Crane system for BEML HMV equipment should be offered as per the scope of supply indicated in Procurement Technical Specification.
- b) Willingness to develop critical components of Crane system suitable to BEML equipment (as per BEML specifications). Supplier shall supply complete crane system suitable for BEML HMV vehicle and subsequently the critical components of the crane system on mutual agreement for the HMV vehicles which are developed under partnership.
- c) Supplier shall be providing the technical data during the design development of crane which will be integrated on the HMV vehicles.
- d) The supplier shall identify seal kit items, replacement period of components & supply the service manual with assembly, disassembly and troubleshooting procedure.
- e) Price of the components shall be of OEM & competitive.
- f) The supplier shall share all necessary technical documents including 2D drawings and 3D models for the design of structure and details required for engineering the crane system items.
- g) Supplier shall offer back-to-back warranty for its scope of components.
- h) The supplier shall extend technical support during engineering and performance evaluation.
- i) The supplier shall provide technical support, manpower support during the integration of crane system to BEML HMV vehicles.
- j) The supplier shall provide training to BEML engineers/ Customer service personnel for trouble shooting & maintenance of Crane system.

5.2 Qualification criteria:

SL No	Parameter	Supporting Documents
1	Only OEMs are eligible to participate in this tender	Bidder shall submit sufficient proof e.g., Factory registration certificate / MSME certificate etc., to prove OEM.
2	The Average Annual financial turnover during the last 3 years ending 31st March 2019 shall be more than Rs.19 Crores	Audited Balance sheets and Profit & Loss statements etc.) with details of turnover for last three (3) years
3	Firms should have Design & Development experience in the range of tonnage class 3.5 tonne to 5 tonne at 5m radius cranes of telescopic boom-type with hoisting hook, pulley block and swiveling base.	R&D setup details, Infrastructure details such as plant & machinery, shop details, Area etc., required to carry out the activity to be submitted.
4	Firms having more than 5 years of experience in design & development of vehicle mounted, slew base cranes (Knuckle boom type) for military applications with latest technology in Electronics, Hydraulics, logic controls and having successfully developed such products in the field will only be considered.	1. List & Copies of POs executed for similar type of crane. PO with on-going projects if any, can be submitted. 2. Customer Certificate for successful completion in similar nature of project to military application to be submitted as a proof.
5	Firm should have supplied similar proven cranes to Indian Army in last 10 years, details to be furnished.	
6	Consortium of firms will not be considered. It is desirable that the firm shall not outsource in part or full scope of the Design & Development. However, if it is essential for the firm to source critical technologies from other agencies, the details have to be disclosed at this stage itself.	Proof of infrastructure for in-house Design & Development has to be furnished. Relevant details to be submitted
7	This project from MoD is being executed under the procurement category as Buy (Indian) clause. As per DPP 2013: "Buy (Indian)" must have minimum 30% indigenous content on cost basis and it should be manufactured & indigenized in India.	Certificate for the indigenous content being offered to be signed by CFO/ Statutory auditor of the bidder to be provided.
8	The firm should commit providing Service & Spares support for a minimum period of 20 years	Certificate for complying statement to be submitted.
9	Firms should have complete testing facilities for the already supplied cranes, while commitment has to be given for setting up	Document proof for having test facility to be provided.

	testing facilities for 17.5 tm (min) lifting capacity	
10	Firm should be certified for the latest Quality Management System	Details of Quality Management System, Quality Control System etc., and related certificates to be submitted.

Details of the firm to be provided with necessary supporting documents:

- i. Company registration certificate indicating name of the firm, year of establishment, incorporation details, Members of the Board, URL of the firm's website.
- ii. Name of the contact person, address, Telephone, Fax & email
- iii. Number of years of experience in design & development of cranes for military application.
- iv. Brief on Design & Development of similar proven cranes undertaken by the firm for the past 10 years.
- v. Detailed Technical Capabilities and facilities of the firm for having designed and developed similar vehicle mounted slew base cranes.
- vi. Copy of the Supply Orders briefing similar ongoing projects, if any.
- vii. Details of IT infrastructure, change management system, project management system, quality management system etc. of the firm.
- viii. Provide details (Numbers, qualification, years of experience and domain experience) of the team, which shall comprise of program management, project management, design (CAD, CAE, documentation), Subject Matter Experts (SME) in the areas of design, manufacturing, tooling and testing that can be allocated for this programme.
- ix. Financial performance documents (Audited Balance sheets and Profit & Loss statements etc.) with details of turnover for last three (3) years
- x. Details of Contract(s) or order(s) terminated before completion, if any
- xi. Details of any premature termination of job/supply order/contract for Ministry of Defence, India or any other Government / Quasi Government organization in India.
- xii. Value of largest two projects executed in last 5 years
- xiii. Capability to furnish Bank guarantees.
- xiv. Details of important customers with address, contact details, name of the authorized contact person etc., to be submitted

6.0 SUBMISSION OF THE EOI

The EOI response to be submitted online through BEML E-mail: bemleoi@beml.co.in, stating compliance to each point stated in para 5 “requirements”, along with the enclosures to be forwarded by interested reputed firms, in subject “**Expression of Interest (Eoi) for Development & Supply of Crane system**”

For any Technical Clarifications, Contact

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CLOSING DATE OF EOI : 17.01.2024, TIME : 17:00 HRS