

'Expression of Interest' for Development of Heating Ventilation and Air Conditioning (HVAC) system for BEML Heavy Duty Truck (HDT)

1. Objective:

BEML Limited is a Defence PSU under the Ministry of Defence (MoD), Govt. of India. BEML HDT vehicles are mainly used for General Service and special projects carrying super structures as per MOD requirement. As part of indigenous program, the development and production of HVAC system. In this regard, BEML intends to identify reputed developer and supply of HVAC system and associate in integration and testing. Annual consumption of HVAC system are more than 600 numbers.

2. i) HVAC system:

HVAC system should be a fully integrated heating and cooling system for Drivers cabin interiors. HVAC system must maintain the interior temperature of the cabin, but also protect your plumbing lines and tanks from adverse weather conditions. The strength of our ventilation components must address the issue of condensation, guarding against water damage and sub-par performance.



Fig 1: HVAC system inside the cabin



Vehicle Alternator

HVAC compressor

Fig 2: HVAC system below the cabin (engine tunnel)



HVAC condenser



Fig 3: HVAC system on roof of cabin

Features of HVAC system are as mentioned below :

1. HVAC system includes compressor, evaporator, heater, blower motor, dashboard components, temperature control unit
2. HVAC system must be completely integrated system for streamlined installation
3. Engineered to maintain controlled temperature for all classes of driver cabin
4. Refrigerant used must comply with R134a / equivalent refrigerant meeting Indian environmental regulations
5. Refrigerant routings is included in the HVAC system

2. Scope of work:

Based on the response from Interested Firms for this EOI, Separate RFQs will be floated to shortlist one capable firm for development of HVAC system.

NDA and MoU will be signed with the final firm evaluated in the RFQ. BEML will issue drawing & specifications to the firm.

A. The HVAC system development and Production is planned in three phases

- 1) Development stage: 5 sets HVAC system to be developed within 1 month of contract.
- 2) Pilot Production stage: 10 sets of HVAC system to be produced based on feedback of prototypes within 1 month from prototype clearance.
- 3) Bulk Production stage: More than 600 numbers in the first year after pilot batch clearance by BEML/MoD.

B. The brief scope of work is,

- a. The firm has to offer the HVAC system assembly for inspection and clearance by BEML.
- b. Supply the HVAC system to BEML along with quality records for having complied for materials, processes and dimensions.
- c. Associate with BEML during integration, furnishing, internal trials and MoD performance evaluation trials.

C. Firm has to give test certificates along with HVAC system.

3. Pre-Qualification Criteria:

Interested firms shall fulfill the following criteria while submitting the EOI.

- i. Firm having more than 5 years of experience in design, development, and development of HVAC system.
- ii. Firm with sound financial status – Consistently profit making for the past 3 years.
- iii. Firm should be certified for the latest Quality Management System.
- iv. EOI may be responded by individual firm or a consortium of firms represented by a lead member. In case of consortium, lead member shall respond to the EOI and will be responsible for the success of the program.
- v. The firm shall have the following basic and essential facilities to qualify to this EOI.
 - a) Latest CAD software & hardware for handling Design & Documentation
 - b) Capability to design and development of HVAC system.
 - c) Possess requisite for HVAC system testing facilities as per CMVR.

4. 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 and development of HVAC system.
- iv. Copy of the Supply Orders to brief the past and similar ongoing projects, if any.
- v. Details of IT infrastructure and certificates of quality management system of the firm.
- vi. Financial performance documents (Audited Balance sheets and Profit & Loss statements etc.) with details of turnover for last three (3) years
- vii. Details of Contract(s) or order(s) terminated before completion, if any
- viii. Details of any premature termination of job/supply order/contract for Min of Defence, India or any other Government / Quasi Government organization in India.
- ix. Value of largest two projects executed in last 5 years
- x. Capability to furnish Bank guarantees.

xi. Details of important customers

Note: The responses from Firms/OEMs that are black listed/restricted by Government of India or its Agencies will not be considered.

5. Submission of EOI:

In this context, Eoi in sealed cover, Providing manufacturing capability details, documents, similar existing product development details, covering letter and certificates (MSME,ISO etc) shall be submitted by interested reputed firms, superscribing “**Expression of Interest’ for development of HVAC system**” on or before 14:00 hours of 16.09.2019, to

**DGM–Materials
BEML Ltd.,Palakkad Complex,
Kinfra Wise Park,
Menonpara Road,
Kanjikode
Palakkad-678 621
Kerala,
India.**

For any queries please contact below mentioned details:

Tel(Off):04912568178

Email: pm@beml.co.in

The last date for receipt of EOI at the above address will be as per the information published and will be opened on the same date at 1515 hrs.

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