

'Expression of Interest' for Development of Cabin Electrical & Electronic 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 items related to basic vehicle and Cabin Electrical & Electronic system. In this regard, BEML intends to identify reputed developer and supply for development of Electrical items. Annual consumption of the Mentioned items will be more than 300 numbers.

2. Technical Description:

i) Cabin Lighting System & other electrical components :



The Cabin lighting system & other electrical components with brief description mentioned below.

S.No	Description	Specification	Photo
01	Impurities indicator	Part number :131 743 050 000 Specification: Nominal Voltage : 24V DC Set pressure: 6+0.6kPa Max pressure : 10 kPa Electrical Contact : Type "NO" Operating temp : -20 deg C to 60 dec C Qty : 01 No. per eqpt	 
02	Oil pressure gauge sensor	Part Number : 130 099 701 524 Specification: Nominal Voltage : 24V DC Measuring Range : 0 to 5 bar Pressure (Low) switch warning Point : 0.8 ± 0.15 bar Working Medium : Engine Oil (15W40) Max Pressure: 30 bar (Max) Operating Temp : -25 Deg C to +90 DegC Electrical Connection : IP 00 Qty : 01 No. per eqpt	

03	Pressure switch	<p>Part Number : 131 400 414 000</p> <p>Specification:</p> <p>Operating Medium : Air</p> <p>Nominal Voltage : 24V DC</p> <p>Operating Pressure : 15 bar</p> <p>Maximum Pressure : 30 bar pressure for 1 min duration</p> <p>Off Point : 4.5 ± 10% bar upwards</p> <p>Qty : 01 No. per eqpt</p>	
04	Pressure switch	<p>Part Number: 131 400 415 000</p> <p>Specification:</p> <p>Operating Medium : Air</p> <p>Nominal Voltage : 24V DC</p> <p>Operating Pressure : 15 bar</p> <p>Maximum Pressure : 30 bar pressure for 1 min duration</p> <p>Off Point : 6.3 ± 10% bar upwards</p> <p>Qty : 01 No. per eqpt</p>	
05	Switch	<p>Part Number: 131 999 108 000</p> <p>Specification:</p> <p>Nominal Voltage : 24V DC</p> <p>Nominal Current : 1.16 A</p> <p>Load : 28W</p> <p>Operating Temp :-40 degC to +120 deg C</p> <p>Ingres Protection : IP 65</p> <p>Contact Pressure : 600p (Min)</p> <p>Max torque : 50Nm (Max)</p> <p>Electrical Contact Type : NC Type</p> <p>Qty : 01 No. per eqpt</p>	

06	Starter Push Button	<p>Part Number: 131 853 040 000</p> <p>Specification:</p> <p>Nominal Voltage : 24V DC</p> <p>Nominal Current : 10A</p> <p>Electrical Contact Type : NO type</p> <p>Operation : Momentary</p> <p>Mounting hole : Dia 30mm</p> <p>Panel mounted</p> <p>Qty : 01 No. per eqpt</p>	
07	Circuit Breaker	<p>Part Number: 131 815 432 020</p> <p>Specification:</p> <p>Nominal Voltage : 24V DC</p> <p>Nominal Current : 150A (Min) to 300A</p> <p>Safe Switching Current :1200A to 2000A</p> <p>Type: Single pole</p> <p>Operating temperature: -55⁰C to 65⁰C</p> <p>Terminal size:</p> <p>Connector terminals: Terminals are for 95Sq mm cables.</p> <p>Qty : 01 No. per eqpt</p>	
08	Push Button Switch	<p>Part Number: 131 853 026 000</p> <p>Specification:</p> <p>Nominal voltage : 24 V DC</p> <p>Nominal current : 4 A</p> <p>Type of switch : NO (Normally Open)</p> <p>No of Pole : Single pole - Body grounded.</p> <p>Thread Size : M14 x 1.5</p> <p>Water Resistance : Water tight</p> <p>Qty : 01 No. per eqpt</p>	
09	Socket	<p>Part Number: 130 079 070 054</p> <p>Specification:</p> <p>Nominal Voltage : 24 V DC</p> <p>Nominal current : 6A</p> <p>Number of Poles : Single</p> <p>Type : Plug In</p> <p>Qty : 01 No. per eqpt.</p>	

10	Socket	<p>Part Number:131 857 019 000</p> <p>Specification:</p> <p>Nominal Voltage : 24 V DC Nominal Current : 16A No of poles : Seven Standard : ISO 1724 / : IS 13461:2005 Material : Metal Contact Type : Screw Contact Qty : 01 No.</p>	
11	7 Pole Socket (N Type)	<p>Part Number: 131 400 238 000</p> <p>Specification:</p> <p>Nominal Voltage : 24 V DC Nominal Current : 15A No of poles : Seven Standard : ISO 1185 (N- Type) / : IS 13491:2005 (N- Type) Material : Metal Contact Type : Screw Contact Qty : 01 No. per eqpt</p>	
12	7 Pole Socket (S Type)	<p>Part Number: 131 400 239 000</p> <p>Specification:</p> <p>Nominal Voltage : 24 V DC Nominal Current : 15A No of poles : Seven Standard : ISO 3731 (S- Type) / : IS 13499:2005 (S - Type) Material : Metal Contact Type : Screw Contact Qty : 01 No. per eqpt.</p>	
13	Watertight Asymmetric Headlamp – Dia 160 mm	<p>Part No: 131 311 026 000 (131 311 075 000)</p> <p>Specification:</p> <p>Nominal voltage : 24 V DC Nominal current : 3.125 / 2.91 A Nominal wattage : Main Bulb - H4 Category : 75W / 70 W Bulb Base : P43T (IEC 60061) Nominal Wattage(Position Bulb- Ba9s):4W Water Resistances: Water Tight (IP 67) Standard to be complied for lamp : AIS</p>	

		<p>012 , AIS 037& AIS 008 (As per CMVR Norms)</p> <p>Standard to be complied for bulb : AIS 034 (As per CMVR)</p> <p>Environmental standard : JSS55555–2012 (Rev3)</p> <p>Qty : 03 No. per eqpt.</p>	
14	<p>Headlamp, Watertight In Fog 891017-2</p>	<p>Part No: 131 311 065 000</p> <p>Specification: Nominal voltage : 24 V DC Nominal current : 2.91 A Nominal wattage Bulb - H3 Category :70 W, Bulb Base : H3,PK22S Water Resistances: Water Tight (IP 67) Standard to be complied for lamp : AIS 012, AIS 037 & AIS 008 (As per CMVR Norms) Standard to be complied for bulb : AIS 034 (As per CMVR) Environmental standard : JSS 55555 – 2012 (Rev3) Qty : 02 No. per eqpt.</p>	
15	<p>Rear Cluster LH – 891 015</p>	<p>Part No: 131 312 035 000</p> <p>Specification: Nominal voltage : 24 V DC Nominal wattage : Stop Lamp (Bulb – BAY 15d) : 21/5 W Directional Indicator (Bulb- Ba15s) : 21W Water Resistances: Water Tight (IP 67) Standard to be complied for lamp : AIS 012, AIS 037 & AIS 008 (As per CMVR Norms) Standard to be complied for bulbs : AIS 034 (As per CMVR) Environmental standard : JSS 55555 – 2012 (Rev3) Qty : 01 No. per eqpt.</p>	

16	Rear Cluster, RH - 891 016	<p>Part No: 131 312 037 000</p> <p>Specification:</p> <p>Nominal voltage : 24 V DC</p> <p>Nominal wattage :</p> <p>Stop Lamp & registration Lamp (Bulb – BAY 15d) : 21 W, 21/5 W</p> <p>Directional Indicator (Bulb- Ba15s) : 21W</p> <p>Cut out for : Registration Plate Illumination.</p> <p>Water Resistances: Water Tight (IP 67)</p> <p>Standard to be complied for lamp : AIS 012 , AIS 037& AIS 008 (As per CMVR norms)</p> <p>Standard to be complied for bulbs : AIS 034 (As per CMVR)</p> <p>Environmental standard : JSS 55555 – 2012 (Rev3)</p> <p>Qty : 01 No. per eqpt.</p>	
17	WATERING LAMP.	<p>Part No: 130 080 361 004</p> <p>Specification:</p> <p>Nominal voltage : 24 V</p> <p>Nominal wattage : 4 W</p> <p>Water Resistances: Water Tight (IP 67)</p> <p>Standard to be complied for lamp : AIS 012 & AIS 008 (As per CMVR)</p> <p>Standard to be complied for bulb : AIS 034 (As per CMVR)</p> <p>Environmental standard : JSS 55555 – 2012 (Rev3)</p> <p>Qty : 02 No. per eqpt</p>	
18	Indicator - 892 003	<p>Part No: 131 312 009 000 (131 312 804 109)</p> <p>Specification:</p> <p>Nominal Voltage : 24V DC</p> <p>Nominal Current : 0.875 A</p> <p>Nominal Wattage : 21 W</p> <p>Bulb base : Ba 15S</p> <p>Lens color : White (Clear)</p> <p>Water Resistances : Water tight (IP 67)</p> <p>Qty : 01 No. per eqpt</p>	

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

A. The development and Production is planned in three phases

- 1) Development stage: 25 sets to be developed within 1 months of PO.
- 2) Pilot Production stage: 10 sets to be produced based on feedback of prototypes within 1 month from prototype clearance.
- 3) Bulk Production stage: More than 300 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 finished one for inspection and clearance by BEML.
- b. Supply the Electrical & Electronic system to BEML along with quality inspection records for having complied for all the relevant standards.

C. Firm has to provide relevant certificates for all the electrical & electronic components as per JSS55555 & MIL standards as applicable.

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 of Electrical & Electronic components and aggregates.
- 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 modular type.

2. 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 Electrical & Electronic control system for the Cabin
- 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.

3. Submission of EOI:

In this context, Eoi in sealed cover, Providing all details, documents and certificates shall be submitted by interested reputed firms, superscribing "**Expression of Interest' for development of "** on or before 15:00 hours of 13.10.2020, to

Deputy General Manager – Materials

BEML Ltd,

Kinfra wise Park, Menonpara Road,

Kanjikode East P.O.

Palakkad-678 621, Kerala, India.

Tel (Off): +91-491- 2568178

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 15:30 hrs.

~~~~\*~~~~