Expression of Interest for collaboration with BEML Limited for Joint Production of various types of Rotary UAVs (Multicopters) for both Military & Civil applications.

1.0 Background:

BEML Ltd has three business verticals viz Defence & Aerospace, Rail & Metro and Mining & Construction with four manufacturing complexes located at Bengaluru, Kolar Gold Fields (KGF), Mysuru and Palakkad.

All the manufacturing divisions of BEML have been accredited with ISO 9001 – 2000 and ISO 14001 (HSC) certification. 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 the BEML Ltd is available on www.bemlindia.in

2.0 Overview of BEML Capabilities:

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

2.1 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, Armoured Recovery Vehicle, Milrail Coaches and Wagons, ground support vehicles and other products to the Indian and other Armed Forces.

3.0 Objectives of the Eol:

BEML is actively seeking partnership with reputed Global Original Equipment Manufacturers (OEMs) for joint production of various types of Rotary UAVs (Multicopters) (different modes & ranges) for both military & civil applications.

Note: 1. Please refer Annexure for eligibility criteria and request to furnish the details against each point.

2. The format provided may be used for furnishing the details of the individual products in your product range.

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	Annexure				
	Eligibility Criteria for responding to this Eol				
SN	Eligibility Criteria	OEM response with supporting document / Certificates			
1	Should be a registered OEM with global reputation not placed on the restricted list by Indian MoD. Dealers/ distributors/ agents/ representatives need not respond to this EoI.				
2	Should have demonstratable experience of minimum 03 years in developing / customizing Multicopters for military / civil applications. Kindly submit certificate / document for the same.				
3	The firm should have demonstrated / supplied the equipment to its own country's military or other reputed countries military and should have been accepted or shortlisted.				
4	The firm shall be willing to modify / customize their equipment to the customer's need and coproduce the equipment in BEML's plant in India.				
5	The firm shall be interested to transfer the technology to BEML to locally produce the parts / assemblies as to offer a very competitive price for domestic requirement only.				
6	The OEM should be able to get the export clearance from its government for local production in BEML and supply of the equipment to Indian Customers.				
7	The firm shall note that Govt. of India, Ministry of Defence will be acquiring these stores only through a competitive tender process following the Defence Procurement Procedure (DPP) 2016. As per DPP 2016 one equipment has to be offered to the Ministry of Defence for trial testing on No-Cost-No- Commitment (NC-NC) basis. The firm shall be agreeable to offer one equipment abiding this condition.				
8	BEML will have the exclusivity to market the product in India for military / Para Military and others customers and export on mutual consent for exports to friendly neighbouring countries.				
9	Brief description on company profile covering below aspects with supporting documents: 1. Products profile.				

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Annexure Eligibility Criteria for responding to this Eol				
SN	Eligibility Criteria	OEM response with supporting document / Certificates		
	 Annual turnover of the company in the last 3 years. Board of directors. Head Quarters. Subsidiaries / JVs in India Contact details of the Single Point of Contact. 			
10	 The firm shall abide to the following: Initially support by way of Product supply. Support in testing / commissioning during Trials at user end Sales support & Warranty After sales support and supply of spares as specified & required by end user on back to back basis. Phased localisation programme (Transfer of Technology) for specific product lines based on the then demand in the agreed Market. 			
11	The firm shall indicate the following specifications for each of their products as per the format enclosed annotating the specific ranges ad seriatim. (Refer format below)			

<u>Note:</u> The financial stability, revenue, product range and past performance of the company plays a decisive role in shortlisting of the firms.

Format:

SN	Specifications	OEM Response		
		Product 1	Product 2	Product 3
1	All up weight with battery & payload			
2	Maximum Size: Propeller to Propeller			
3	Endurance			
4	Range of Operation			
5	Minimum launch altitude			
6	Minimum operating altitude			
7	Operating and Storage Temp Range			
8	Wind Resistance			
9	Aural Signature			
10	Launch & Recovery			
11	Max space reqd for launch and recovery			
12	Flight Modes			
13	Deployment Time (from fully packed state to Take-off)			
14	Failsafe features			
15	Packaging & Storage			



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SN	Specifications	OEM Response		
		Product 1	Product 2	Product 3
16	Operating Crew			
17	Payloads			
18	Payload Replacement Time			
19	Payload Freedom (in flight)			
20	Target Detection Slant Range (Human Size Target)			
21	Stabilization			
22	Communication link capability			
23	Video Link			
24	Minimum Transmitted Video Resolution at full			
24	operating Range			
25	Frequency Band			
26	No of Ch / No of UAS that can be operated in same			
20	vicinity			
27	Computing Hardware			
28	GUI Display parameters			
29	Maps			
30	User Controls			
31	Joystick Control			
32	Video			
33	Pre-flight checks			
34	Battery type			
35	Battery life			
36	Battery charging time			
37	Battery shelf life			
38	No of additional battery Packs/Sets			
39	EMI / EMC Compliance			

4.0 <u>Submission of the EOI</u>

Interested parties may forward their interest by providing the details of their organization with credentials and areas of interest by providing the time line to following address by post (super scribing EoI reference ASBD/MC/EOI/2020/001 dt 26-08-2020) or email to *office@vds.beml.co.in* on or before 31-08-2020, 5:00 PM. (31ST August 2020)

Shri. SUNIL KHARAD General Manager, Corporate Materials BEML Ltd, BEML Soudha No 23/1, Sampangirama Nagar Bangalore – 560 027 Karnataka State, INDIA Phone: +91 80 2296 3179

Email id: office@vds.beml.co.in



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For any further technical details, you may contact the following official:

Name	: Sridhara S R
Designation	: General Manager
Mobile	: 9902477767
Phone	: 080-22963206
Email ID	: asbd@beml.co.in