

# Expression of Interest (EOI)

ELECTRO HYDRAULIC ACTUATOR

Supply Chain Management

Hyderabad

July 8, 2025

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## 1 Introduction

BrahMos Aerospace Private Limited, a joint venture between India's Defence Research and Development Organization (DRDO) and Russia's NPO Mashinostroyeniya, is a leading Aerospace and Defence Corporation specialized in Design, Development and Production of supersonic cruise missile systems. BrahMos missile, a versatile weapon deployable from multiple platforms, the company plays a critical role in enhancing India's defence capabilities and is actively pursuing advancements in missile technologies, solidifying its position as a key player in the global defence sector.

BAPL invites Expressions of Interest (EOI) from qualified manufacturers for supply of Electro Hydraulic Actuators (EHA) for integration into BAPL's critical defence systems. Responses should demonstrate adherence to relevant Aerospace Standards, robust Quality Control procedures, and a proven track record in delivering reliable solutions for demanding Defence applications.

Intending Manufacturing Industries are advised to read the EOI document, Terms and Conditions, and other details carefully relating to the work contemplated in the procurement /development of EHA.

## 2 Objective

The EOI aims to develop new vendors qualifying to the technical requirements of EHA. The information collected will be used to identify suitable partners for subsequent phases of vendor development activity.

## 3 Eligibility Criteria

Interested Manufacturing Industries must meet the following minimum criterion in order to apply for EOI:

- a) The Manufacturing Industries must be an Indian Registered Partnership / LLP / Company with a majority stake of the company held by a Resident and Citizen of India.
- b) The average annual turnover of the interested partner during the last three years should be at least INR 50 Cr. Audited Annual Financial Statements in support of the same shall be furnished. The long-term credit rating by ICRA/CRISIL (or) equivalent as on date of submission of EOI shall be "A" or above.
- c) QMS Certifications AS9100D is perforable, and the valid Certification shall be submitted along with EOI.
- d) Minimum experience of 10 years in manufacturing and supply of high pressure system.
- e) SAMAR Level 3 Certification / CIS / equivalent Certification is mandatory, and the valid Certification shall be submitted along with EOI.
- f) Experienced technical manpower availability.
- g) Experience on working with inspection agencies viz., MSQAA, R&QA, RCMA etc. is mandatory.
- h) Data and Cyber Security Certification is mandatory.

- i) Prior experience of Study & Conversion of Design documentation in to Manufacturing Process Sheet, Heat Treatment Process Sheet, Surface Treatment Process Sheet, and Welding Process Sheet is preferred.
- j) In-house Design and manufacture of Machining fixtures & Jigs, Welding Fixtures, Assembly fixtures for realization of more than 300 types of components for various assemblies.
- k) Requirement of minimum 1000 Sq. Meter Space for Stores, Machine Shop, Assembly & Integration Facility and Final Assembly, Heat Treatment & Surface Treatment facilities.
- l) Stringent Quality Control and Traceability system.
- m) Stores - Minimum 500 Sq. Meter for storage of items with climate control
- n) Availability of In-house research & development facility and reverse engineering capability is preferred.
- o) Experience in developing Solenoid valve as per the technical specification.
- p) Experience in developing LVDT/Potentiometer for feedback signal as per the technical specification.
- q) Subcontract management of critical components like springs, Rubber 'O' rings, gaskets, rubber bellows, Teflon washers etc.
- r) Capability to carry out compressive testing(In-house/NABL) to validate the functionality and reliability of the system under specified operating condition as per the Technical Specification.
- s) Experience in Subcontract management for Qualification Testing and Endurance Testing of finished product / assembly.
- t) Capability/Capacity for following **Machining Facilities**
  - CNC turning and milling machines with capability of precision machining
  - CNC Turn Mill
  - EDM
  - 5- Axis Milling machine
  - Precision Grinding
- u) Capability/Capacity for following **Fabrication Facilities**
  - Sheet metal operation
  - Forming facility
- v) Capability/Capacity for following **Welding Facilities**
  - Welding machines- TIG, MIG Welding
  - Soldering Station
- w) Capability/Capacity for following **Heat Treatment Facilities**
  - Hardening, Tempering, Annealing, Solutionising
  - Stress Relieving
  - Cold Treatment
- x) Capability/Capacity for following **Surface Treatment Facilities**
  - Anodization (Hard, Ti Pulse & Colour)
  - Electro-polishing
  - Case Hardening (Carburizing and Nitriding)
  - Zn – Ni Plating
  - Chemical Passivation

- Hard Chrome plating
- Zinc Cadmium Plating
- Brush & Spray Painting facility

y) Capability/Capacity for following **Inspection and Testing facilities**

- High pressure hydraulic (Oil & Water) and pneumatic facility
- Armoured Chamber for conducting High Pressure Strength & Leak Check
- Component Cleaning facility using fluid
- NDT facilities- RT enclosures, MPI, UT
- Profile Projector for measurement of Surface roughness
- CMM
- EMI/EMC testing
- Environment Tests such as Vibration, Bump, Shock, Humidity, Linear Acceleration etc.
- Metrology laboratory
- Active Insulation and Insulation strength tests of solenoid coils and potentiometer
- Testing of potentiometer/LVDT feedback
- Measurement of different current and resistance parameters of potentiometer channels and solenoid valve using DC bridge.
- Data acquisition system for plotting characteristics such as Velocity Vs Current, Load vs Current etc.

z) Minimum experience of 10 years in manufacturing and Supply of actuators for Defence/Aerospace industry. Shall be supported with contract references.

aa) Failure rate of last three financial years shall be declared; zero rejection is preferred.

bb) Experience in dealing with inspection authorities like DGQA, MSQAA, CEMILAC during the product life cycle.

cc) Higher indigenous content is preferable.

#### 4 EOI Submission

Interested Manufacturing Industries are requested to submit their response as per Format enclosed in **Annexure-A as per Demand Notification**.

#### 5 Evaluation Criteria

The evaluation of responses will be based on the following criteria:

- Technical capabilities and experience in Defence applications.
- Production capacity and lead time for high-reliability products.
- Quality Management System and compliance with Defence and Aerospace Standards
- Financial stability and references in the defence sector.
- Infrastructure/Facility evaluation.
- Security Certifications and its compliance.

The shortlisted Industries will be informed for further discussions on the sub-systems mentioned in Demand Notification.

#### 6 Confidentiality

All information provided in response to this EOI will be treated as Confidential and shall be subject to Non-Disclosure Agreements(NDA).

**7 Disclaimer**

This EOI does not constitute a commitment for placement of contract / PO, and BAPL reserves the right to accept or reject any or all the responses.

**8 Contact Information**

For any inquiries, please contact: Refer Demand Notification.