# भारत सरकार/GOVERNMENT OF INDIA अंतरिक्ष विभाग/DEPARTMENT OF SPACE क्रय यूनिट-।।।/PURCHASE UNIT-III

विक्रम साराभाई अंतरिक्ष केंद्र/VIKRAM SARABHAI SPACE CENTRE

तिरुवनंतपुरम/THIRUVANANTHAPURAM – 695 022

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# **EXPRESSION OF INTEREST**

No. VSSC/SPRE-PUR/EOI-03/HMSA/2021-22

"दो वर्षों के लिए सरकार स्वामित्व कंपनी प्रचालित (गोको) विधा पर वीएसएससी द्वारा स्थापित सुविधाओं का उपयोग करके वीएसएससी/इसरो के लिए अग्र-सिरा आरोपित सेफ आर्म (एचएमएसए) युक्ति के समुच्चयन, परीक्षण तथा वितरण" के लिए अभिरुचि की अभिव्यक्ति

EXPRESSION-OF-INTEREST FOR "Assembly, Testing and Delivery of Head-end Mounted Safe Arm (HMSA) Device for VSSC/ISRO using VSSC established facilities on "Government Owned Company Operated (GOCO) mode for Two Years"

इच्छुक प्रत्याशित निर्माता हमारे संदर्भ सं. VSSC/SPRE-PUR/EOI-03/HMSA/2021-22 का उद्धरण करते हुए 21/10/2021 [16:00 Hrs.] को या उससे पहले निम्नलिखत पते पर अपनी अभिरुचि की अभिव्यक्ति दे सकते हैं।

VSSC invites, EOI from prospective bidders for "Assembly, Testing and Delivery of Head-end Mounted Safe Arm (HMSA) Device for VSSC/ISRO using VSSC established facilities on "Government Owned Company Operated (GOCO) mode". Interested parties may furnish their Expression of Interest in Sealed Envelope quoting our Reference No. VSSC/SPRE-PUR/EOI-03/HMSA/2021-22 on or before 21/10/2021 [16:00 Hrs] to the following address:

नोट:- मेक इन इंडिया नीति के अनुसार केवल श्रेणी-। और श्रेणी-।। के स्थानीय आपूर्तिकार इस बोली में भाग लेने के पात्र हैं।

Note:- Only Class-I and Class-II Local suppliers as per Make in India policy are eligible to participate in the bid

वरि. क्रय एवं भंड़ार अधिकारी / Sr. Purchase & Stores Officer, क्रय यूनिट III /Purchase Unit- III, आरएफएफ क्षेत्र, इसरो पीओ / RFF Area, ISRO. PO, तिरुवनंतपुरम/Thiruvananthapuram- 695022. फोन / Ph: 0471-256 3775/3609

EOI documents are available at our website <a href="www.isro.gov.in">www.vssc.gov.in</a>. and <a href="www.vssc.gov.in">www.vssc.gov.in</a>.

हस्ताक्षरित/Sd/-

Date: 14/09/2021

वरि.प्रधान, क्रय एवं भंड़ार/ Sr.Head, Purchase & Stores



# Government of India Department of Space

# Vikram Sarabhai Space Centre

Indian Space Research Organisation Thiruvananthapuram-695022, Kerala

No. VSSC/SPRE-PUR/EOI-03/HMSA/2021-22

# INVITATION FOR EXPRESSION-OF-INTEREST

Date: 14/09/2021

**Vikram Sarabhai Space Centre (VSSC)** invites **Expression-Of-Interest (EOI)** for Assembly, Testing and Delivery of Head-end Mounted Safe Arm (HMSA) Device in VSSC/ISRO using VSSC, Thiruvananthapuram facilities by a Vendor who possesses a skilled production team with experience in carrying out mechanical assembly of precision components and wiring, assembly & testing of electronic packages.

It is proposed to entrust the scope of Assembly, Testing and Delivery of HMSA Device in "Government Owned Company Operated (GOCO) mode". The total quantity shall be a minimum of 150 nos. which is to be realized by the vendor through their production team within a total period of about 2 years from the date of signing the contract. However, the production team should be equipped to increase the quantity up to 300 nos. within the specified period in case required by VSSC.

This is an on-going activity closely related to the launch vehicle programme of ISRO and hence involves precise time-lines and critical milestones in production. For the Vendor to carry-out uninterrupted production, continuity of work-force is an essential aspect. To ensure this, it is necessary that the Vendor should have a proven track record and some financial/human resources. In addition to the requirement of a fully qualified production team to undertake the work, the special quality standards of VSSC necessitates the team to undergo training in VSSC including Soldering School prior to commencement of the work. The team who is successfully getting qualified only will be allowed to be associated with the activities. Safety and quality are of utmost importance while working in this environment. The vendor is responsible to supply the product as per the production schedule to meet the critical launch requirements.

Interested Vendors who have undertaken similar activities involving precision mechanical assembly, electrical wiring and electrical checks, possess sound financial background, commitment and desirous of long-term partnership with ISRO are invited to participate in the Expression-Of-Interest. On receipt of EOI, VSSC shall evaluate and assess the suitability prior to short listing. This call for EOI does not carry with it any guarantee for award of contract.

Brief description, scope of work and pre-qualification criteria are available in our website. EOI document can be downloaded from website www.isro.gov.in and the same shall be submitted along with all necessary documents well within the Due Date and Due Time.

"Expression of Interest" with all essential information shall reach the Senior Purchase & Stores Officer, Purchase unit III, VSSC, ISRO Post, Thiruvananthapuram 695022, Kerala, on or before 16:00 hours on 21st OCTOBER,2021. This EOI is issued as a "Pre-Bid Qualification". Inadequate or incomplete information will result in rejection of the offer. VSSC reserves the right to accept or reject all or any of the EOI. Mere compliance to the EOI terms does not guarantee further consideration for qualification.

Addendum, if any, to this EOI shall be hosted in our website www.isro.gov.in/ www.vssc.gov.in

Senior Purchase and Stores Officer, Purchase Unit III,SPRE PURCHASE Vikram Sarabhai Space Centre; ISRO P.O. Thiruvananthapuram - 695 022, Kerala State Government of India



Government of India
Department of Space
Vikram Sarabhai Space Centre
Indian Space Research Organisation
Thiruvananthapuram-695022
Kerala

No. VSSC/SPRE-PUR/EOI-03/HMSA/2021-22

INVITATION FOR EXPRESSION-OF-INTEREST

Date: 14/09/2021

"Invitation for Assembly, Testing and Delivery of Head-end Mounted Safe Arm (HMSA) Device for VSSC/ISRO using VSSC established facilities on "Government Owned Company Operated (GOCO) mode"

1. Preamble

Vikram Sarabhai Space Centre (VSSC), Thiruvananthapuram, the lead Centre of Indian Space Research Organisation (ISRO) pioneers in rocket research and launch vehicle projects of ISRO. VSSC invites Expression-Of-Interest (EOI) for Assembly, Testing and Delivery of Head-end Mounted Safe Arm (HMSA) Device (an electromechanical device used for safety in launch vehicles) at VSSC, Thiruvananthapuram using VSSC facilities on "Government Owned Company Operated (GOCO) mode" by a Vendor who possess skilled work force and has necessary expertise in the field of mechanical assembly of precision components and wiring, assembly & testing of electronic packages.

2. Scope of work

The scope of work includes assembly and testing of Head-end Mounted Safe Arm (HMSA) by a production team in GOCO mode for a total quantity of 150 numbers to be realized within a total period of 2 years from the date of signing the contract as per the specifications and requirements of VSSC using VSSC facilities. The production team shall be equipped to increase the production up to 300 nos. within the specified period, in case required by VSSC. The production team shall also carry out all inprocess checks viz. dimensional measurements, torque measurements and electrical parameter measurements during various stages of assembly/ testing. The scope of work also includes on-line inspection and quality control at various stages of assembly as specified in the process documents as

well as detailed documentation as required by VSSC. During the initial trial batch processing, expected during the first 3 months of signing the contract, VSSC shall closely associate with the production team and transfer the necessary skills and technical details. Towards this, the production team should have experience in carrying out mechanical assembly of precision components for aerospace/ defense sectors such as gears, clutches, bearings etc and also electrical harness preparation, assembly and testing of electronic packages. Preference will be given to parties who have prior experience in associating with Space programmes. Further, knowledge is essential on the part of Quality Control (QC) to assess/evaluate performance parameters and adhere to stringent quality requirements. The product shall be delivered within the stipulated schedule with full complement of test and evaluation documents as per approved formats provided by VSSC. Finally, the production team should be conversant with safety practices and shall ensure compliance to safety regulations.

# 3. Functional Description of the Device

Head-end Mounted Safe Arm (HMSA) is an electromechanical device used to safely initiate the explosive systems in a launch vehicle. It consists of an internal electrical initiator, pyrocharges and an actuation system to enable or disable triggering of the system. It carries a number of internal hardware and bought-out elements viz. a friction clutch, ball bearings, spur gears, a miniature DC motor and a rotary switch housed in a metallic Body.

The activities entrusted with the production team are confined to mechanical, electrical assembly and testing and does not involve handling of exposed pyro charges.

# 4. Assembly & Test Equipments/ Facility

The Assembly & Test Facility established at VSSC, Thiruvanathapuram is a self contained facility and includes full complement of standard assembly tools & equipments for mechanical assembly and electrical soldering along with inspection/ test equipments viz. profile projectors, climatic test chambers, power supplies, CRO and data acquisition systems.

#### 5. Human resource and HR policy

- 5.1 The vendor shall position the production team (technical and skilled) in VSSC for the assembly & testing of HMSA device as described.
- 5.2 The production team should be qualified, experienced and possess requisite skill-sets for operation of the dedicated facilities and to perform production work as specified.

- 5.3 It is anticipated that the production team should consist of about 4-6 personnel comprising of Graduate/ Diploma Engineers (Mechanical & Electrical) and ITI Technicians (Mechanical fitter & Electronics) to be deployed by the Vendor for the assembly & testing.
- 5.4 The Vendor shall have a HR policy of retaining trained workforce. This is very essential since attrition would lead to derailment of production activities, affect quality and result in inordinate delay in delivery schedule and lead to uncertainty in contract execution which can have serious consequences on ISRO space programmes.

# 6. Other requirements

#### Security

The production team shall comply with security regulations of VSSC, Thiruvananthapuram.

#### Safety

The production team shall follow all safety stipulations as and when issued by VSSC, Thiruvananthapuram.

#### Secrecy

The production team shall abide by INDIAN OFFICAL SECRETS ACT, 1923 in vogue and shall provide information of awareness of the above in writing.

#### 7. General

The EOI shall contain complete information of the vendor, human resource, infrastructure, assets, financial standing, line of business and credentials as detailed below:

- 7.1 Prior experience of 3 years (minimum) is essential in working with aerospace/defense sectors in manufacturing, assembly, testing and delivery of products as detailed under 'Scope of work'. This is stipulated due to the critical nature of the work and due to the similarity of these fields in technological sophistication, high precision process, short production cycles, established guidelines in management, control of data in maintaining traceability, comprehensive documentation as well as strict compliance to quality and safety standards. The Vendor should be currently in the business related to similar products. (Copies of the contract/PO shall be submitted).
- 7.2 The Vendor shall possess human resource with adequate knowledge in the areas of manufacturing, metrology, non destructive inspection and quality control and experience in assembly & testing. (Organization structure with human resource competency and experience

shall be submitted). This is to ensure the necessary level of competency, understanding of technical specifications and awareness of engineering practices being followed.

- 7.3 The Vendor should be a Public Sector Undertaking / MSME / Company registered under the Companies Act. In case of Companies it should be consistently profit making for the last 3 years. Certified audit copies of the annual financial turnover, IT returns and balance sheet are to be furnished for the previous 3 financial years.
- 7.4 The Vendor should have executed a single Purchase order in the related field of value not less than Rs.40 lakhs / or two separate orders of value not less than Rs 30 lakhs each / or three orders of not less than Rs. 20 lakhs each for the previous 3 financial years. Copies of Purchase orders are to be furnished.
- **8.** This call for EOI does not carry with it any guarantee for allotment of work.
- **9.** The Vendor who gets short listed by VSSC for awarding the Request for Proposal (RFP) document shall be invited to visit the premise of VSSC, Thiruvanathapuram for assessment of work content before submitting the quotation.

### 10. Compliance Chart

Vendor has to fill in the following compliance chart.

Sl.no.	Activity	Compliance
1	Proof of expertise in precision mechanical assembly, electrical wiring & testing	Yes / No
2	Proof of prior experience of 3 years (minimum) in aerospace/defense sectors	Yes / No
3	Proof to certify that the vendor is a PSU/ company registered under companies act	Yes / No
4	Proof of financial status (consistently profit making for the last 3 years.)	Yes / No
5	Copy of annual financial turn, IT returns and balance for the previous 3 financial years.	Yes / No
6	Copy of Purchase orders for the previous 3 financial years as specified in Sec. 7.4.	Yes / No