#### GOVERNMENT OF INDIA DEPARTMENT OF SPACE LIQUID PROPULSION SYSTEMS CENTRE (LPSC-B) BANGALORE

# Tender for AMC for SCADA system of ACTF

Bids to be submitted online

Tender No.: LPSC-B/Liquid Propulsion Systems Centre, Bengaluru/LB202500008301 dated 05-04-2025

## A. Tender Details

Tender No :	LPSC-B/Liquid Propulsion Systems Centre, Bengaluru/LB202500008301
Tender Date :	05-04-2025
Tender Classification:	SERVICES
Purchase Entity :	Liquid Propulsion Systems Centre, Bengaluru
Centre :	LIQUID PROPULSION SYSTEMS CENTRE (LPSC-B)

# AMC for SCADA system of ACTF

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## A.1 Tender Schedule

Bid Submission Start Date :	07-04-2025 17:00
Bid Clarification Due Date :	15-04-2025 17:00
Bid Submission Due Date :	22-04-2025 14:00
Bid Opening Date :	22-04-2025 14:30
Price Bid Opening Date :	30-04-2025 14:30

### **B. Tender Attachments**

NA

#### **Instructions To Vendors**

#### 1. Instructions to Vendors

1. LPSC(B) invites offers through eprocurement portal (https://eproc.isro.gov.in) for the supply / service of items as listed in the Tender document.

2. Prospective vendors interested in participating in the tendering process need to get registered in the e-procurement portal by using Digital Signature Certificate. Offers submitted through our online portal only shall be considered and offers received through fax or email or in person shall not be considered.

3. The Tenderers are requested to update their address and contact details, if necessary and submit the Bids online at least two days prior to closing date to avoid last minute system / network related problems. In case of any technical issues, tenderers may write to helpdesk team (eprocure@vssc.gov.in, egps@lpscb.gov.in) for resolution. Request for the extension of the due date for such instances shall not be considered.

4. GST @ 5% is applicable for following goods mentioned under SI. No. 243B as per Department of Revenue Notification No. 25/2018 - Integrated Tax (Rate) dated 31/12/2018 (Amendment to Notification Nos. 07/2018 dated 25/01/2018 and 01/2017 dated 28/06/2017) and Department of Revenue Notification No. 24/2018 - Central Tax (Rate) dated 31/12/2018 (Amendment to Notification Nos. 06/2018 dated 25/01/2018 and 01/2017 dated 28/06/2017) and Government of Karnataka Notification No. 24/2018 dated 31/12/2018 (Amendment to Notification Nos. 06/2018 dated 25/01/2018 and 01/2017 dated 28/06/2017) and Government of Karnataka Notification No. 24/2018 dated 31/12/2018 (Amendment to Notification Nos. 06/2018 dated 25/01/2018 and 01/2017 dated 28/06/2017).

"Scientific and technical instruments, apparatus, equipment, accessories, parts, components, spares, tools, mock ups and modules, raw material and consumables required for Launch Vehicles and Satellites and Payloads"

5. LPSC(B), ISRO is eligible for Customs Duty Concession vide Notification No.12/2012-Customs dated 17/03/2012 and Notification No. 50/2017-Customs dated 30/06/2017. Necessary Customs Duty Concession Certificate shall be provided if applicable.

6. Offer Validity: The offer shall be valid for a period of 90 days (for Single Part Tender) and 120 days (for Two Part Tender) from the date of opening of the tender or any other period as specified in the Tender document. Offers with lesser validity period than that specified are liable for exclusion from the procurement process.

7. In case of Two Part Tender, Tenderers shall not mention any kind of price element in Techno-Commercial Bid. If any Price element is mentioned in the Techno-Commercial bid, their offer shall be liable for rejection.

8. LPSC(B) reserves the right to accept or reject any quotation in part or in full or part without assigning any reason thereof. LPSC(B) shall be under no obligation to accept the lowest tender and reserves the right to accept whole or any part of the tender or part of the quantity offered and the Tenderers shall supply the same at the rates quoted.

9. Bank Details: Tenderer shall provide their bank details such as IFSC code, IBAN No., SWIFT etc. along with their offer which shall be not be changed till completion of supply/service.

10. Applicable Law: The Contract shall be governed by Indian Law for the time being in force and jurisdiction shall lie in the Courts of India.

11. Only Class-I and Class-II Local suppliers as per Public Procurement Policy (Preference to Make in India) Order, 2017 are eligible to participate in the bid unless otherwise specified in the Tender document.

12. As far as implementation of Public Procurement Policy (Preference to Make in India) Order, 2017 is concerned, the Office Orders vide No. P-45021/2/2017-B.E-II dated 15/06/2017, which is partially modified by Order No. P-45021/2/2017-PP(BE-II) dated 28/05/2018, Order No. P-45021/2/2017-PP(BE-II) dated 29/05/2019, Order No. P-45021/2/2017-PP (BE-II) dated 04/06/2020 and Order No. P-45021/2/2017-PP (BE-II) dated 16/09/2020 and subsequent Amendments issued by the Department for Promotion of Industries and Internal Trade (DPIIT), Ministry of Commerce and Industry regarding Class-I / Class-II local suppliers, Purchase preference, verification of local contents etc. shall be applicable to this tender unless otherwise specified in the Tender document. Therefore, bidders may ensure compliance of the same while submitting tenders.

13. Price Preference shall be extended to the MSEs under the Public Procurement Policy for MSEs formulated under the Micro, Small and Medium Enterprises Development Act, 2006 unless otherwise specified in the Tender document. Such MSEs shall produce documentary proof of registration as per provisions of the Policy i.e. registration with District Industries Centre (DIC) or Khadi and Village Industries Commission (KVIC) or Khadi and Industries Board (KVIB) or Coir Board or National Small Industries Commission (NSIC) or Directorate of Handicrafts and Handlooms or Udyog Aadhar Memorandum or any other body specified by Ministry of MSME.

14. As per the Rule 144 (xi) of General Financial Rules,2017, any bidder from a country which shares a land border with India will be eligible to bid in this tender, only if the bidder is registered with the Competent Authority. Competent Authority for the purpose of registration shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).

15. Resolution of Disputes: Any dispute, disagreement or question arising out of or relating to or in consequence of the contract or to its fulfillment, or the validity of enforcement thereof which cannot be settled mutually, or the settlement of which is not herein specifically provided for, shall within 30 (thirty) days from the date either party informs the other in writing that such dispute or disagreement exists be referred to arbitration by the sole arbitrator. The Arbitrator shall be appointed as per the Indian Arbitration and Conciliation Act 1996 and proceedings will be conducted in Bangalore. The Arbitration proceedings shall be conducted in accordance with and subject to the Arbitration and Conciliation Act 1996 (Act 26 of 1996) as amended from time to time and the decision of the Arbitrator shall be final and binding on the parties thereto. Each party shall bear its own cost of preparing and presenting its case. The cost of Arbitration including the fees and expenses of the Arbitrator shall be shared equally by the parties unless the award provides otherwise. Subject to provisions of this clause, the courts at Bangalore shall have exclusive jurisdiction. Performance under this Contract shall, however continue during Arbitration proceeding and no payment due or payable by the parties hereto shall be withheld unless any such payment is/or forms a part of the subject matter of the Arbitration proceedings.

16. Force Majeure: Neither party shall bear responsibility for the complete or partial non-performance of any of his obligations if the non-performance results from such force majeure circumstances such as, but not restricted to, flood, fire, earthquake, civil commotion, sabotage, explosion, epidemic, quarantine restriction, strike, lock-out, freight embargo, acts of the Government, acts of public enemy and other acts of God as well as war or revolution, military operation, blockade, acts or actions of State authorities or any other circumstance beyond the control of the parties provided the other party is notified in writing within 21 days from the date of commencement of the unforeseeable event.

# C. Bid Templates

## C.1 Technical Bid - AMC for SCADA system of ACTF

#### 1. AMC: AMC of SCADA System for ACTF

### Item specifications for AMC: AMC of SCADA System for ACTF

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	1. Definitions	The term LPSC (B) or Department shall mean Liquid Propulsion Systems Centre, HAL IInd stage, Bangalore – 560 008 service receiver. The term service provider shall mean vendor. Service provider shall provide non- comprehensive annual maintenance service for a period of 2 years or till the completion of total AMC visits whichever is later. This document describes the non- comprehensive annual maintenance service of SCADA (Wincc based) system in vacuum test facilities.	Yes / No / Explain		

2	Introduction	Electric Propulsion Test Facility Division ETF-D of LPSC, Bangalore is involved in the development and qualification testing of Stationary Plasma Thrusters (SPT). High vacuum test facilities are established by the division to carry out testing of plasma thrusters & cathodes. Win CC based SCADA system is being utilized to carry out the vacuum chamber operations remotely using PC.	Yes / No / Explain	
3	1.1. Description: Autonomous Cathode Test Facility (ACTF) OEM list of major equipment	1.SCADA SystemWincc basedInstrumentatio n to indicate vacuum chamber operational parameters like vacuum, temperatures, status indications of vacuum elements, valve position indicators etc. continuously by PLC software package on a dynamic screen based mimics (WincCC, SCADA system)1 Nos	Yes / No / Explain	
4	2. Type of Contract:	The proposed Annual Maintenance Contract shall be of non-comprehensive type. Spares required for the AMC will be procured by LPSC and inventory will be maintained by LPSC.	Yes / No / Explain	
5	Duration of contract	4 visits over a period of 2 years or till the completion of AMC visits whichever is later	Yes / No / Explain	
6	Type of contract	Non-Comprehensive	Yes / No / Explain	
7	3. Frequency of AMC		-	

8	3.1 Preventive maintenance 1:	AMC shall be carried out two times in a year with six months of interval.	Yes / No / Explain	
9	Preventive maintenance 2	A log book has to be maintained for every visit. The log book shall contain nature of complaint, time taken for servicing, and signature of the indenter and party.	Yes / No / Explain	
10	Preventive maintenance 3	Maintenance to be completed in 5 working days	Yes / No / Explain	
11	Preventive maintenance 4	Vendor has to provide a list of essential spares required for maintenance and a budgetary offer of the same along with quotation of AMC. The vendor has to hold the price quoted for spares during the period of AMC order.	Yes / No / Explain	
12	3.2 Breakdown maintenance 1:	Vendor has to provide unlimited number of break down calls at free of cost.	Yes / No / Explain	
13	Breakdown maintenance 2	If vendor is not ready to provide unlimited breakdown calls, vendor has to mention clearly what will be the charges per visit for a paid service. The same amount has to be held valid till the completion of AMC contract. This amount should not be mentioned seperately in price bid only	Yes / No / Explain	
14	Breakdown maintenance 3	Break down maintenance call has to be attended within 48 hrs from the time of intimation/ complain.	Yes / No / Explain	

15	Breakdown maintenance 4	If essential spares are not available with LPSC(B) for the restoration of system during any breakdown call, a separate purchase order will be placed with party for the procurement of required spares at the rates as submitted along with AMC quotation will be considered. A prior approval has to be taken for supply of emergency essential spares from the contract manager at LPSC.	Yes / No / Explain	
16	4. Scope of AMC:	Maintenance activities for control system: PLC network	Yes / No / Explain	
17	Activity 1	Update the number of DI/DO cards available at facility. Ensure proper numbering is available on cards is visible.	Yes / No / Explain	
18	Activity 2	Physically verify individual PLC digital inputs and digital outputs. Identify and record in logbook the damaged channels/ports of DI/DO and reason of failure.	Yes / No / Explain	
19	Activity 3	Check proper working of PLCs, check the condition of battery cells and replace if required. Record in logbook about the cell replacement date.	Yes / No / Explain	
20	Activity 4	Verification of mimic simulation of all digital inputs and outputs. Carry out the functional verification of all the analogue input readings to PLC.	Yes / No / Explain	

21	Activity 5	Check for proper operation of network cards i.e NI cards, MOXA hub installed on control panels by pinging and recording the values in log book.	Yes / No / Explain	
22	Activity 6	Check low and high range vacuum set points in vacuum gauge controller for each pressure range and also their corresponding relays. It has to be recorded in the logbook and verify relay operation with set points. Check gauge controller display for proper functioning and replace the same if necessary.	Yes / No / Explain	
23	Activity 7	Identify the defects and replace the network cards if necessary. Spares will be provided by LPSCB	Yes / No / Explain	
24	Activity 8	Cross verify all safety interlocks from the last AMC visit, if any changes are observed, inform to facility in-charge and update the interlock list accordingly.	Yes / No / Explain	
25	Activity 9	Clear and take the backup of SCADA data and check the mimic. Copy of the backup should be provided to LPSCB.	Yes / No / Explain	
26	Activity 10	Check the health of 3.6V batteries in the PLC and replace if necessary	Yes / No / Explain	
27	3.Other Terms & conditions 1	Party should hold AMC prices till the completion of the contract.	Yes / No / Explain	

28	Other Terms & conditions 2	The non comprehensive AMC charges shall include cost of travel, accommodation and conveyance to vendor's service team.	Yes / No / Explain	
29	Other Terms & conditions 3	Preventive maintenance should be well planned and shall be executed within 7-10 working days from the date of start of the maintenance work.	Yes / No / Explain	
30	Other Terms & conditions 4	All emergency breakdown calls have to be attended within 48 hours of intimation to the party. Vendor has to provide any number of breakdown calls for free of cost.	Yes / No / Explain	
31	Other Terms & conditions 5	Party shall submit quote for all the spares required to maintain the vacuum chamber along with the AMC quotation. (i.e separate price list of all spares must be submitted in the price bid	Yes / No / Explain	

32	Other Terms & conditions 6	LPSC shall provide spare parts required for the repair/ maintenance of equipments. However during any maintenance call if required essential spares to restore the equipment are not available with LPSC B, then party shall supply the spares as and when required during the AMC contract period for which a separate purchase order shall be placed later and payment shall be made after installation & testing at LPSC B. however party shall submit a quote for essential spares. The old worn out parts which will be replaced by new parts will be property of LPSC B and hence they have to be surrendered to department and due acknowledgement to be obtained from proper authority.	Yes / No / Explain	
33	Other Terms & conditions 7	Party shall replace spares of low cost amount to a total value of INR 10,000/- at free of cost during each AMC visit for which LPSC shall not pay /refund the amount.	Yes / No / Explain	
34	Commercial Terms		-	

35	2.1 Price	The contract is for the non- comprehensive annual maintenance service of water chiller for high vacuum chamber. Price indicated is firm, fixed and valid for a period of 2 years from the date of purchase order or till the completion of the AMC visits whichever is later. However, it can be terminated by either party giving one month notice in writing.	Yes / No / Explain	
36	2.2 Removal of equipments to contract works	The contractors shall make all the efforts to repair as far as possible the systems covered under the contract at our premises. However, in case any system is not covered under this contract is to be taken out to contractors premises for repair shall be subject to furnishing of bank guarantee towards the cost of item and valid till returning of the item.	Yes / No / Explain	

37	2.3Payment terms	Maintenance charges shall be paid every Half year proportionately to completion of each satisfactory service visit. After completion of each preventive maintenance service visit, a service report has to be signed by the contractor, indenter and shall be approved by competent authority to indicate the service has been conducted and the system is working satisfactorily. The certified report shall be submitted to Sr. Accounts officer, LPSC along with bill/invoice in duplicate with a copy to purchase order.	Yes / No / Explain	
38	2.4 Liquidated Damages	If the ordered items are not supplied within the delivery schedule, LD shall be levied from your bill @ 0.5% of the order value per week or 0.5% of the value of the stores for which the delivery is delayed for each week of delay subject to a maximum of 10% of the order value. (NOTE : This is a mandatory clause)	Yes / No / Explain	

39	2.5 Security Deposit	Vendor has to furnish a Bank Guarantee for 3% of the order value within 10 days of receipt of order towards the faithful execution of the order valid till the completion of the scope of work as per order plus sixty days. (This will be returned to you immediately on execution of the order satisfactorily as per order terms. In case of non- performance, the amount will be forfeited)	Yes / No / Explain	
40	2.6 Performance Bank Guarantee (PBG)	Vendor has to submit a PBG from a Nationalised / Scheduled Bank for 3% of the order value towards the performance of the system at the time of supply valid till the completion of warranty period plus 60 days as per the format provided by the Department. OR 10% of the order value shall be with held till the completion of Warranty Period plus 60 days	Yes / No / Explain	
41	2.7 Security Deposit cum Performance Bank Guarantee (SD cum PBG)	In case, if vendor is unable to provide two separate BGs, i.e., one for SD and one for PBG, they can submit a combined BG for SD cum PBG within 10 days of receipt of order for 3% of order value valid till the completion of total contractual obligation (i.e., supply period + warranty period + 60 days) as per the format provided by the Department	Yes / No / Explain	

42	2.8Arbitration	In the event of dispute or difference arising out of or in connection with this purchase order/contract, which cannot be resolved through amicable settlement by mutual consultation, the same shall be settled under the Rules of Arbitration & Conciliation act 1996 under the Indian statue only, whose decision shall be final and binding on both the parties	Yes / No / Explain	
43	2.9Jurisdiction	The courts in and around the city of Bengaluru alone shall have jurisdiction to deal with and decide any matter or dispute whatsoever arising out of this agreement including those arising under the Arbitration Act	Yes / No / Explain	
44	2.10 Insurance	Being a Government of India Department, Insurance is not required at our cost. Please ensure the safe delivery of the ordered item with proper AIR / SEA / ROAD worthy packing	Yes / No / Explain	

45	2.11 Fall Clause	The rate charged for the work/supply shall in no event exceed the rates for similar work/supply to any other party during the said period of AMC contract. If at any time during the said period, reduction on the charges for similar work/supply to other customer extended by you (vendor), shall forthwith notify to the Purchase & Stores Division. LPSC and rate payable under the contract after the rate, coming into force of such reduction shall stand correspondingly reduced and refunded to us.	Yes / No / Explain		
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46 fo	.12 Compensation or damages caused or persons, goods & roperty	The party shall indemnify and hold harmless, LPSC B and or any officer employees assignee thereof, against any loss, damage or expense resulting from damage to property or personnel injury arising out of willful misconduct or gross negligence of the party or their personnel in the execution of the work under this contract. The party shall at its expense defend any suit or proceedings brought against LPSC B on account thereof, and shall satisfy all judgments and pay all expenses which may be incurred or rendered against them or any of them in connection therewith. LPSCB shall not be responsible for any damages, loss, claims, financial and other injury for any personnel in the course of their service or for payment towards any compensation.	Yes / No / Explain		
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#### **Document : RFP**

#### Common Specifications (Applicable for all items)

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Please refer to the details in RFP	as per RFP	Yes / No / Explain		

#### Supporting Documents required from Vendor

#### 1. Price & technical bid documents

5 additional documents can be uploaded by the vendor

### C.2 Commercial Terms / Bid

. No.	Description	Compliance	Vendor Terms
1	Supply conditions are not applicable as this is a service	Yes / No / Explain	
2	Contract Period: The Non- comprehensive AMC shall be valid for a period of Two years from the date of PO. (Detailed scope of work as per Annexure I)	Yes / No / Explain	
3	<ul> <li>Preventive maintenance:</li> <li>AMC shall be carried out two times in a year with six months of interval.</li> <li>A log book has to be maintained for every visit. The log book shall contain nature of complaint, time taken for servicing, and signature of the indenter and party.</li> <li>Maintenance to be completed in 5 working days</li> <li>Vendor has to provide a list of essential spares required for maintenance and a budget- ary offer of the same along with quotation of AMC. The vendor has to hold the price quoted for spares during the period of AMC order. This amount should not be mentioned separately in price bid only</li> </ul>	Yes / No / Explain	
4	Breakdown Maintenance: - Vendor has to provide unlimited number of break down calls at free of cost. - Break down maintenance call has to be attended within 48 hrs from the time of intimation/ complain. - If essential spares are not available with LPSC(B) for the restoration of system during any breakdown call, a separate purchase order will be placed with party for the procurement of required spares at the rates as submitted along with AMC quotation will be considered. A prior approval has to be taken for supply of emergency essential spares from the contract manager at LPSC	Yes / No / Explain	
5	Goods and Services Tax (GST): Kindly mention percentage of GST considered in your offer along with HSN Code.	Yes / No / Explain	

6	Payment Terms: Maintenance charges shall be paid within 30 days after completion of each satisfactory Maintenance against submission of Invoice and Service report duly certified by the End User Division	Yes / No / Explain
7	Security Deposit (SD): You have to furnish a Bank Guarantee from a Nationalized / Scheduled Bank on non-judicial stamp paper of appropriate value for 3% of the AMC value within 10 days of receipt of order towards the faithful execution of the Contract valid till the completion of the scope of work as per Contract plus sixty days (as claim period). SD shall only be applicable for order value above INR 50.00 Lakhs.	Yes / No / Explain
8	Down Time Compensation: In case the breakdown is not attended to in stipulated time i.e. within 24 hours of intimation down-time compensation at the rate of 0.5% (of the Annual Maintenance Charges) per day shall be recovered from your outstanding bills subject to a maximum of 5% of the Contract Value.	Yes / No / Explain
9	Bank Guarantee (BG): In the event that any item / instrument needs to be taken out of LPSC(B) premises for service / maintenance, you have to submit a Bank Guarantee equivalent to the value of item / instrument taken out.	Yes / No / Explain
10	Fall Clause: The rates charged for the service / calibration under the Contract by the vendor should in no event exceed the lowest rate charged by the vendor for similar activity to any other party during the period of the Contract. If at any time, the prices are reduced, the same shall be notified to the Department and shall stand correspondingly reduced & refunded to the Department.	Yes / No / Explain
11	During AMC, in the event of damages to our property or injury to our personnel due to the negligence of your employees, the responsibility shall solely rests with you.	Yes / No / Explain
12	Address, contact details like Telephone Number, e-mail, etc. on which order to be placed.	Yes / No / Explain
13	Details of Principal: Address, contact details like Telephone Number, e-mail, etc. (if applicable)	Yes / No / Explain

14	Bank Details: Bank name, Branch address, Account No., IFSC Code, IBAN Number, SWIFT, etc.	Yes / No / Explain	
15	Income tax at applicable rates shall be deducted at source.	Yes / No / Explain	
16	Validity of offer: 120 days from the date of opening of tender or as specified in the Tender Document.	Yes / No / Explain	
17	Any Other terms	Yes / No / Explain	

## C.3 Price Bid

SI. No.	Item	Quantity	Unit Price	Currency	Total Price	Remark
1	AMC: AMC of SCADA System for ACTF	1.00 Nos.		-		

# Common charges (Applicable for all items)

P & F Charges	
Freight if any (Value)	
Installation & Configuration	
Other Costs, if any (Value)	
Taxes, if any (Percentage)	