



भारत सरकार/Government of India
अंतरिक्ष विभाग/Department of Space
द्रव नोदन प्रणाली केंद्र
LIQUID PROPULSION SYSTEMS CENTRE
एच ए एल II स्टेज, 80 फीट रोड
HAL II STAGE, 80 FEET ROAD,
बेंगलुरु/BANGALORE-560 008.
फोन सं./Phone No.080 25037171/140
ई-मेल/Email: purchase@lpscb.gov.in



दिनांक/Date: 05.05.2025

लोक निविदा सूचना सं. एल बी 2025000116-01 दिनांक 05.05.2025
PUBLIC TENDER NOTICE NO. LB2025000116-01 DATED 05.05.2025

द्रव्यमान स्पेक्ट्रोमीटर रिसाव संसूचक के साथ सहायक उपकरणों के प्रापण हेतु निविदा
Tender for Procurement of Mass Spectrometer Leak Detector with accessories

निविदा वर्गीकरण: लोक निविदा
Tender Classification: PUBLIC TENDER

निविदा की निर्धारित तिथियाँ/TENDER SCHEDULE

बोली प्रस्तुति की आरंभिक तिथि/Bid Submission Start Date	: 05.05.2025 17:00
बोली स्पष्टीकरण की नियत तिथि/Bid Clarification Due Date	: 13.05.2025 16:00
बोली प्रस्तुतीकरण की नियत तिथि/Bid Submission Due Date	: 27.05.2025 14:00
बोली खुलने की तिथि/Bid Opening Date	: 27.05.2025 14:30
मूल्य बोली खुलने की तिथि / Price Bid Opening Date	: 10.06.2025 14:00

निविदा दस्तावेज़ <https://www.isro.gov.in/> OR <https://eproc.vssc.gov.in> या इसरो ई-प्रापण पोर्टल से डाउनलोड किए जा सकते हैं।/Tender documents can be downloaded from <https://www.isro.gov.in/> OR <https://eproc.vssc.gov.in> or ISRO E-Procurement Portal.

हस्ताक्षरित/Signed
क्रय व भंडार अधिकारी/Purchase & Stores Officer

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

**Tender for Procurement of Mass Spectrometer Leak Detector (MSLD)
with accessories**

Bids to be submitted online

**Tender No.: LPSC-B/Liquid Propulsion Systems Centre,
Bengaluru/LB202500011601 dated 05-05-2025**

A. Tender Details

Tender No :	LPSC-B/Liquid Propulsion Systems Centre, Bengaluru/LB202500011601
Tender Date :	05-05-2025
Tender Classification:	GOODS
Purchase Entity :	Liquid Propulsion Systems Centre, Bengaluru
Centre :	LIQUID PROPULSION SYSTEMS CENTRE (LPSC-B)

Procurement of Mass Spectrometer Leak Detector (MSLD) with accessories

Procurement of Mass Spectrometer Leak Detector (MSLD) with accessories

A.1 Tender Schedule

Bid Submission Start Date :	05-05-2025 17:00
Bid Clarification Due Date :	13-05-2025 16:00
Bid Submission Due Date :	27-05-2025 14:00
Bid Opening Date :	27-05-2025 14:30
Price Bid Opening Date :	10-06-2025 14:00

B. Tender Attachments

NA

Instructions To Vendors

1. GENERAL INSTRUCTION TO TENDERERS : SINGLE or TWO PART PUBLIC TENDER(PT)

1. Mode of delivery should be clearly specified with justification

2. ONLY CLASS I/CLASS II LOCAL SUPPLIERS ARE ELIGIBLE TO PARTICIPATE IN THE TENDER ENQUIRY.

Note: (a)CLASS I: Those suppliers/service providers whose goods/ works/ services offered for procurement meets Local content equal to or more than 50%.

(b)CLASS II : Those suppliers/service providers whose goods/ works/ services offered for procurement meets Local content more than 20%.

(c) The 'Class-I local supplier'/ 'Class-II local supplier' at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for 'Class-I local supplier'/Class-II local supplier', as the case may be. They shall also give details of the location(s) at which the local value addition is made along with the offer.

3. 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 dt. 15.06.2017, which is partially modified by Order No. P-45021/2/2017-PP(BE-II) dt. 28.05.2018, Order No.P-45021/2/2017-PP(BE-II)dt. 29.05.2019, Order No. P- 45021/2/2017-PP (BE-II) dt 04.06.2020 and Order No.P-45021/2/2017-PP (BE-II) dt 16.09.2020 and subsequent Amendments issued by the Department for Promotion of Industries and Internal Trade, Ministry of Commerce and Industry and Internal Trade, 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. Therefore, bidders may ensure compliance of the same while submitting tenders.

4. Based on the response to the e-Public tender Notice, LPSC(B) reserves the right to change any milestone date of the tendering activity.

5. Bidders are expected to comply with the technical & commercial and other terms and conditions given in vendor specified terms of this tender. In case of any deviation, the reasons thereof should be clearly specified in the vendor specified terms column.

6. Bids will not be entertained after the due date and time.

7. Delivery Terms:

In case of Indigenous items : FOR LPSC, ITPF, TUMAKURU CAMPUS

In case of Foreign orders: EX-WORKS / FOB /FCA

8. EARNEST MONEY DEPOSIT NOT APPLICABLE

9. Fax & Email offers are not accepted.

10. Head, Purchase and Stores, LPSC, Bangalore, reserves the right to accept or reject any/or all the tenders in part or full without assigning any reasons thereof.

11. If an agent submits bid on behalf of the Principal/OEM the same agent shall not submit a bid on behalf of another Principal/OEM in this tender for the same Item/Product.

12. In a tender, either the Indian Agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same Item/Product in this tender.

13. In case of any clarification to be sought to this tender you may please contact Purchase and Stores Officer (PSO) through Email: purchase@lpsc.gov.in and Ph No: 080 250 37 170/171/140

14. Instructions to Indian Agent:- Bidders are required to provide the following information in respect of their authorization from their Principal, if any, along with technical bid as the same is mandatory as it is required for consideration of the bid. Name, Address, Telephone no. , Fax no., email of the Indian Agent including the contact person to be provided.

15. LPSC(B) reserves the right to verify all claims made by the bidder.

16. Original Equipment Manufacturer (OEM) or their representative can submit bid to LPSC(B). Indian agents while quoting on behalf of their principals are requested to attach necessary authorization letter from their Principals in their bid.

17. Price Preference shall be extended to the MSEs under the Public Procurement Policy for MSEs. Such MSEs shall produce documentary proof of registration as per provisions of the Policy ie: 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.

18. Request for the extension of the due date will not be considered.

19. Tenderers can participate in the said tender opening for which, the representative of the firm shall be duly authorized by Competent Authority. Against proper e-authorization only such representatives shall be allowed to attend the tender opening.
20. TENDER FEE NOT APPLICABLE.
21. Tenders which are not prepared in terms of these instructions are liable to be rejected.
22. The exact date and time of opening of price bid of successful tenderers will be intimated later.
23. The offer should be valid for a minimum period of six (06) months from the due date of opening.
24. The parties are advised to download the tender and submit the bid on online at least two days prior to Tender Closing Date to avoid last minute network problem. The due date shall not be extended due to network or computer related problems.
25. The quoted price is fixed & firm. Once the offer is submitted in on line mode by the vendor and bid sealing is done by LPSC(B), vendor will not be able to provide revised offer.
26. The quote should indicate quantity wise unit rate separately which have to be filled online in Price Part-II. The Prices are to be mentioned both in figures as well as in words. The GST, Duties, etc., are to be calculated and indicated in the column provided in online forms explicitly.
27. The vendors have to compulsorily submit the compliance statement online otherwise their offer will not be considered for further evaluation. Before entering the compliance statement, vendors are advised to refer the detailed specification provided in the Technical Writeup/ Drawings document. The specification offered by the vendors may also be indicated in the compliance statement wherever necessary.
28. The vendors have to get themselves registered in above site to download the tender details. To register in above ISRO portal (<https://eprocure.isro.gov.in>) the vendors need to have Class - III Digital Certificate. The Digital Certificate can be obtained from any digital certifying authority. The following e-tokens with their current drivers are tested and working fine with our system. Aladdin, Vasco, Starkey, Moser baer, E-pass-2003, Safenet-2032, WD Proxkey Grey / SPC Token and Trustkey.

2. STANDARD TERMS AND CONDITIONS FOR PUBLIC TENDER(PT)

1. 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.

2. 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 dt. 15.06.2017, which is partially modified by Order No. P-45021/2/2017-PP(BE-II) dt. 28.05.2018, Order No.P-45021/2/2017-PP(BE-II)dt. 29.05.2019, Order No. P- 45021/2/2017-PP (BE-II) dt 04.06.2020 and Order No.P-45021/2/2017-PP (BE-II) dt 16.09.2020 and subsequent Amendments issued by the Department for Promotion of Industries and Internal Trade, Ministry of Commerce and Industry and Internal Trade, 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. Therefore, bidders may ensure compliance of the same while submitting tenders.

3. Bank Details

You shall provide your bank details such as IFSC code, IBAN No. , SWIFT etc along with your offer which shall be not be changed till completion of supply/service.

4. Custom Duty Concession Certificate:

LPSC is providing concession certificate towards the of payment of Customs Duty vide As per the Customs Notification No. 50/2017, Sl. No. 539(b)-CUSTOMS Dated 30.06.2017 & Amendment No: 5/2018, Sl No.539(A) - CUSTOMS Dated: 25/01/2018.

5. FORCE MAJEURE

Neither LPSC, Bangalore nor Supplier/ Contractor, shall be considered in default of the performance of their obligations under this Purchase Order if such performance is prevented or delayed for any causes beyond the reasonable control of the parties to the Order getting affected, such as Acts of God, war, riots, civil, commotion, illegal strikes, legal lock-outs, epidemics, fire accidents, floods, earthquakes, proclamation or regulation or ordinance of any Government thereof, provided notice in writing of any such cause with necessary proof that the obligation under the Purchase Order is hereby affected or prevented or delayed is given within 14 days from the happening of the event. As soon as the cause of force majeure has ceased to exist, the party of the actual delay that has occurred due to such force majeure condition.

6. Instruction to Foreign Suppliers:-

a)Our normal payment term is SIGHT DRAFT, Please confirm acceptance in your offer, if you insist for L/C, and all bank charges shall be to your account. Confirm acceptance.

b)Confirm whether any Export clearance is required and for which End User Certificate is to be provided by us, in case of an Order on you. (Enclose format for EUC, if applicable)

c)Warranty/Guarantee applicable for the item shall be mentioned in your offer

d)Special Certification for packing Material: as per Plant Quarantine (Regulation of Import into India) Order 2003, Articles packed with packing material of plant origin viz., hay, straw, wood shavings, wood chips, saw dust, wood waste, wooden pallets, Dunn age Mats, wooden packages, coir pith, pear or sphagnum moss etc., will be allowed entry by Customs only with a Phytosanitary Certificate. In case if a Purchase Order, if you propose to us any of the above material for packing such a certificate issued by your local Plant Quarantine Authority shall be furnished.

e)The tenders received from Indian agents on behalf of their foreign Principals/OEMs (in cases where the Principals/OEMs also submit their tenders simultaneously for the same item/product in the same tender) the same will be not be considered.f) In case two or more tenders are received from an Indian agent on behalf of more than one foreign Principal/OEM, in the same tender for the same item/product will not be considered. (In either case an Indian agent cannot represent more than on principal against the same tender)

g)If an agent submits Bid on behalf of the Principal/OEM the same agent shall not submit a bid on behalf of another Principal/OEM in this tender for the same Item/Product. (In either case an Indian agent cannot represent more than on principal against the same tender)

h)In case the quote is on Indian Rupee (High Sea Sale), the price shall include GST and duties if any, Department will provide concessional certificates. If the item quote is of USA / France / Germany / Japan/Italy and etc. make, please quote for all-inclusive price since we prefer to get the item on FOR destination basis.

7. Instruction to Indigenous Suppliers:

a)Our Normal payment terms are 100% within 30 days after receipt and acceptance of the item at our site. Please confirm acceptance in your quotation.

b)Please specify GST percentage, if any, in your offer.

(i) GST @ 5% is applicable for following goods mentioned under Sl. 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 29/06/2017). "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"

(ii) In case of service (i.e. Installation, commissioning & testing and AMC, etc.) GST @18% extra.

(iii) GST is not applicable for imported items.

8. JURISDICTION

The court of Bangalore only shall have jurisdiction to deal with and decide any legal matter or dispute whatsoever arising out of this in case PO/contract.

9. Liquidated Damages:

If you fail to deliver the ordered items satisfactorily within the time specified or any extension thereof, Liquidated Damage @ 0.5%(zero point five percent) of the order value or part thereof the un-delivered items for each calendar weeks of delay shall be recovered from your bill. However total Liquidated Damage shall not exceed 10% (ten percent) of the order value.

10. Offers received through fax or email or unsigned will not be considered.

11. Offer Validity

Your offer shall be valid for 120 days from the date due date of tender opening. In case you offer validity is less than 120 days, the said offer is liable for rejection which may please be noted.

12. Performance Bank Guarantee (PBG) :

You have to submit a PBG from a Nationalised / Scheduled Bank in Rs.200/- Stamp Paper 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 claim period) as per the format provided by the Department. OR 3% of the order value shall be with held till the completion of Warranty Period plus 60 days.

13. Price Preference shall be extended to the MSEs under the Public Procurement Policy for MSEs. Such MSEs shall produce documentary proof of registration as per provisions of the Policy ie: 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. Purchase / Price preference to MSEs (Not applicable to foreign Suppliers/Vendors)

Purchase/Price preference will be applicable to the product reservation admissible to the Micro and Small Enterprises. Purchase/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. The participating MSEs in a tender, quoting price within the band of L-1 plus 15% may also be allowed to supply a portion of the requirement by bringing down their price to the L-1 price, in a situation where L-1 price is from someone other than an MSE. Such MSEs may be allowed to supply upto 20% of the total tendered value. In case of more than one such eligible MSE, the supply will be shared equally.

15. Security Deposit (SD):

You have to furnish a Bank Guarantee from a Nationalised / Scheduled Bank in Rs.200/- Stamp Paper 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 (as claim period). (This will be returned to you immediately on execution of the order satisfactorily as per order terms. In case of non-performance / poor performance, the amount will be forfeited).

16. SD cum PBG:

Security Deposit cum Performance Bank Guarantee (SD cum PBG): In case, if parties are 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 from a Nationalised / Scheduled Bank in Rs. 200 Stamp Paper within 10 days of receipt of order for 3% of order value valid till the completion of total contractual obligation (i.e. supply period plus warranty period plus 60 days) as per the format provided by the Department.

17. Warranty:-

Warranty for the offered item shall be from the date of installation/acceptance of the item at our site for a minimum period of one year or as specified in the tender document.

C. Bid Templates

C.1 Technical Bid - Procurement of Mass Spectrometer Leak Detector (MSLD) with accessories

1. MSLD equipment with accessories

Item specifications for MSLD equipment with accessories

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Scope:	Supply, installation & commissioning of Mass Spectrometer Leak Detector (MSLD) and accessories as per the specification	Yes / No / Explain		
2	Quantity	ONE number with Accessories	Yes / No / Explain		
3	Operating principle	Counter flow of helium principle	Yes / No / Explain		
4	Backing pump Capacity	35 m3/h minimum	Yes / No / Explain		
5	Helium Pumping speed	10 L/s minimum	Yes / No / Explain		
6	Detectable masses	4He, 3He, H2	Yes / No / Explain		
7	Minimum detectable leak rate of Helium	Vacuum mode: $\leq 5 \times 10^{-12}$ mbar l/s Sniffer mode: $\leq 5 \times 10^{-8}$ mbar l/s	Yes / No / Explain		
8	Maximum inlet pressure	Better than 20 mbar	Yes / No / Explain		
9	Gross leak mode	5×10^{-9} mbar l/s to ~ 1 mbar l/s	Yes / No / Explain		
10	Normal leak mode	5×10^{-12} mbar l/s to 2×10^{-4} mbar l/s	Yes / No / Explain		
11	Start up time for operation without calibration	≤ 2 minutes	Yes / No / Explain		
12	Response time	≤ 2 s	Yes / No / Explain		

13	Test port/Inlet flange	DN 40 ISO-KF or DN63 ISO-K	Yes / No / Explain		
14	Leak rate display	Numerical value from 10-12 to ~500 mbar l/s displayed	Yes / No / Explain		
15	Internal test leak	Built in as standard	Yes / No / Explain		
16	Calibration	Automatic mode & Calibration history should be provided by the leak detector	Yes / No / Explain		
17	Filaments	Iridium Yttriated	Yes / No / Explain		
18	High Vacuum Pump (internal)	Air cooled Turbo Molecular pumps to be incorporated in the vacuum related system to get the better performance	Yes / No / Explain		
19	Power supply	220-240 V, 50 Hz, 1 phase	Yes / No / Explain		
20	Operating temperature	+10° C to +35° C	Yes / No / Explain		
21	Noise level	≤ 55 dB (A)	Yes / No / Explain		
22	Venting 50L to atm.	≤ 20 s	Yes / No / Explain		
23	Evacuation Time to 1 mbar	Volume: ~50 litres Time: ≤ 60 s Volume: ~100 litres Time: ≤ 200 s Volume: ~500 litres Time: ≤ 700 s	Yes / No / Explain		
24	Maximum Power Consumption	≤ 1600 W	Yes / No / Explain		
25	Weight of complete system	≤ 150 kg	Yes / No / Explain		
26	Operation	1. Completely automatic, single button operation, microprocessor based control system with auto calibration and auto ranging. 2. Manual ranging shall also possible and is controlled from Display Control panel.	Yes / No / Explain		

27	Control Display panel	Built in display unit, along with remote display option.	Yes / No / Explain		
28	Touch Screen display	i.Easy operation with colour display ii.Information of Leak rate vs time, Analog / digital and statistics to be displayed iii.Running hours of leak detector, pump and, filaments to be displayed iv. Events and calibration history to be provided.	Yes / No / Explain		
29	Accessories: Filter Inlet Qty: 1 No.	20 micron dust prevention capacity Type: DN 40 ISO-KF or DN63 ISO-K	Yes / No / Explain		
30	Sniffer probe with standard tip Qty: 1 No.	Sniffer probe Nipple pencil of ~5 metre long	Yes / No / Explain		
31	Helium Spray gun	Qty: 01 No.	Yes / No / Explain		
32	External calibrated helium test leak with valve for Vacuum mode Qty : 1 No.	10-8 mbar l/s, Type: DN 40 ISO-KF or DN63 ISO-K	Yes / No / Explain		
33	External calibrated helium test leak for sniffing mode Qty : 1 No.	10-4 mbar l/s , Type: DN 40 ISO-KF or DN63 ISO-K	Yes / No / Explain		
34	Remote Control Qty : 1 No.	Wireless remote control unit with range up to 100 m	Yes / No / Explain		
35	Data software Qty : 1 No.	Can be able to view & record the test values in the PC.	Yes / No / Explain		

36	Terms & Conditions:	<p>a.The Equipment should be delivered, installed & commissioned at LPSC, Bangalore by the party.</p> <p>b.Demonstration of the Equipment for satisfactory performance should be carried out by the party at LPSC Bangalore.</p> <p>c.Necessary operational training for the Equipment should be provided free of cost to LPSC Bangalore Personnel.</p> <p>d.Detailed Operation manual for the Equipment should be supplied in English Language.</p> <p>e.Warranty Period: The Equipment should be warranted against all manufacturing defects and trouble free servicing for a period of one year from the date of commissioning.</p> <p>f.Delivery Schedule: Supply of complete system within 6 Months from the Date of Purchase Order.</p> <p>g.In order to understand the vendors profile for the tender, the following information shall be provided to LPSC along with the technical offer.</p> <p>i. Profile of the company clearly bringing out the areas of strengths to supply the system of such nature.</p> <p>ii. Details of similar system supplied in ISRO or any Aerospace industries in India and reference of 3</p>	Yes / No / Explain		
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		installations during last five years to be provided.			
37	DOCUMENTS:	<p>The following document should be supplied with the Mass Spectrometer Leak Detector with accessories</p> <ol style="list-style-type: none"> 1. User manual and Instruction manual (English) for MSLD and accessories 2. Calibration Certificate MSLD. 3. Manufacturer warranty certificate 4. Certificate of Origin 5. Test certificate at standard condition. 6. Original license for the software which shall be purchased. 7. Licensed version software CD. 	Yes / No / Explain		
38	INSTALLATION, COMMISSIONING AND TESTING OF MSLD FOR FINAL ACCEPTANCE TESTING:	<ol style="list-style-type: none"> a. Authorized service personnel in India: b. General terms and condition : <ol style="list-style-type: none"> i. In case of quote by an agent, agent should submit a valid authorization certificate obtained from OEM along with quote. ii. Deviation if any to our specification shall be brought out very clearly in the compliance matrix. iii. Party should quote the MSLD and MSLD accessories are from the same make. 	Yes / No / Explain		
39	NON-COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT DETAILS:	<ol style="list-style-type: none"> i. Party has to quote separately for Non-comprehensive Annual Maintenance Contract for 03 years for Commitment, after completion of warranty period. ii. The party should provide the list of essential & optional spares for 03 years with breakup cost of each part. 	Yes / No / Explain		

40	Details of Non-comprehensive Annual Maintenance Contract:	Duration of AMC: Three years AMC type : Non-comprehensive Quantity of the Equipment : 01 No.	Yes / No / Explain		
41	Preventive maintenance:	Frequency : Once in yearly No. of visits:Three visits for three years.	Yes / No / Explain		
42	Break down maintenance:	No. of visits:Three visit for three years.	Yes / No / Explain		

Document : MSLD equipment specification

Common Specifications (Applicable for all items)

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Scope:	Supply, installation & commissioning of Mass Spectrometer Leak Detector (MSLD) and accessories as per the specification	Yes / No / Explain		
2	Quantity:	1 No. with accessories	Yes / No / Explain		
3	Operating principle	Counter flow of helium principle	Yes / No / Explain		
4	Backing pump Capacity	35 m3/h minimum	Yes / No / Explain		
5	Helium Pumping speed	10 L/s minimum	Yes / No / Explain		
6	Detectable masses	4He, 3He, H2	Yes / No / Explain		
7	Minimum detectable leak rate of Helium	Vacuum mode: $\leq 5 \times 10^{-12}$ mbar l/s Sniffer mode: $\leq 5 \times 10^{-8}$ mbar l/s	Yes / No / Explain		
8	Maximum inlet pressure	Better than 20 mbar	Yes / No / Explain		
9	Gross leak mode	5×10^{-9} mbar l/s to ~ 1 mbar l/s	Yes / No / Explain		
10	Normal leak mode	5×10^{-12} mbar l/s to 2×10^{-4} mbar l/s	Yes / No / Explain		
11	Start up time for operation without calibration	≤ 2 minutes	Yes / No / Explain		

12	Response time	$\leq 2s$	Yes / No / Explain		
13	Test port/Inlet flange	DN 40 ISO-KF or DN63 ISO-K	Yes / No / Explain		
14	Leak rate display	Numerical value from 10-12 to ~500 mbar l/s displayed	Yes / No / Explain		
15	Internal test leak	Built in as standard	Yes / No / Explain		
16	Calibration	Automatic mode & Calibration history should be provided by the leak detector	Yes / No / Explain		
17	Filaments	Iridium Yttriated	Yes / No / Explain		
18	High Vacuum Pump (internal)	Air cooled Turbo Molecular pumps to be incorporated in the vacuum related system to get the better performance	Yes / No / Explain		
19	Power supply	220-240 V, 50 Hz, 1 phase	Yes / No / Explain		
20	Operating temperature	+10° C to +35° C	Yes / No / Explain		
21	Noise level	≤ 55 dB (A)	Yes / No / Explain		
22	Venting 50L to atm.	≤ 20 s	Yes / No / Explain		
23	Evacuation Time to 1 mbar	Volume: ~50 litres Time: ≤ 60 s Volume: ~100 litres Time: ≤ 200 s Volume: ~500 litres Time: ≤ 700 s	Yes / No / Explain		
24	Maximum Power Consumption	≤ 1600 W	Yes / No / Explain		
25	Weight of complete system	≤ 150 kg	Yes / No / Explain		
26	Operation	i. Completely automatic, single button operation, microprocessor based control system with auto calibration and auto ranging. ii. Manual ranging shall also possible and is controlled from Display Control panel.	Yes / No / Explain		

27	Control Display panel	Built in display unit, along with remote display option.	Yes / No / Explain		
28	Touch Screen display	i.Easy operation with colour display ii.Information of Leak rate vs time, Analog / digital and statistics to be displayed iii.Running hours of leak detector, pump and, filaments to be displayed iv. Events and calibration history to be provided.	Yes / No / Explain		
29	Accessories: Filter Inlet Qty: 1 No.	20 micron dust prevention capacity Type: DN 40 ISO-KF or DN63 ISO-K	Yes / No / Explain		
30	Sniffer probe with standard tip Qty: 1 No.	Sniffer probe Nipple pencil of ~5 metre long	Yes / No / Explain		
31	Helium Spray gun	Qty: 01 No.	Yes / No / Explain		
32	External calibrated helium test leak with valve for Vacuum mode Qty : 1 No.	10-8 mbar l/s, Type: DN 40 ISO-KF or DN63 ISO-K	Yes / No / Explain		
33	External calibrated helium test leak for sniffing mode Qty : 1 No.	10-4 mbar l/s , Type: DN 40 ISO-KF or DN63 ISO-K	Yes / No / Explain		
34	Remote Control Qty : 1 No.	Wireless remote control unit with range up to 100 m	Yes / No / Explain		
35	Data software Qty : 1 No.	Can be able to view & record the test values in the PC.	Yes / No / Explain		

36	Terms & Conditions:	<p>a.The Equipment should be delivered, installed & commissioned at LPSC, Bangalore by the party.</p> <p>b.Demonstration of the Equipment for satisfactory performance should be carried out by the party at LPSC Bangalore.</p> <p>c.Necessary operational training for the Equipment should be provided free of cost to LPSC Bangalore Personnel.</p> <p>d.Detailed Operation manual for the Equipment should be supplied in English Language.</p> <p>e.Warranty Period: The Equipment should be warranted against all manufacturing defects and trouble free servicing for a period of one year from the date of commissioning.</p> <p>f.Delivery Schedule: Supply of complete system within 6 Months from the Date of Purchase Order.</p> <p>g.In order to understand the vendors profile for the tender, the following information shall be provided to LPSC along with the technical offer.</p> <p>i. Profile of the company clearly bringing out the areas of strengths to supply the system of such nature.</p> <p>ii. Details of similar system supplied in ISRO or any Aerospace industries in India and reference of 3 installations during last five years to be provided.</p>	Yes / No / Explain		
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37	DOCUMENTS :	<p>The following document should be supplied with the Mass Spectrometer Leak Detector with accessories</p> <ol style="list-style-type: none"> 1. User manual and Instruction manual (English) for MSLD and accessories 2. Calibration Certificate MSLD. 3. Manufacturer warranty certificate 4. Certificate of Origin 5. Test certificate at standard condition. 6. Original license for the software which shall be purchased. 7. Licensed version software CD. 	Yes / No / Explain		
38	INSTALLATION, COMMISSIONING AND TESTING OF MSLD FOR FINAL ACCEPTANCE TESTING:	<ol style="list-style-type: none"> a. Authorized service personnel in India: b. General terms and condition : <ol style="list-style-type: none"> i. In case of quote by an agent, agent should submit a valid authorization certificate obtained from OEM along with quote. ii. Deviation if any to our specification shall be brought out very clearly in the compliance matrix. iii. Party should quote the MSLD and MSLD accessories are from the same make. 	Yes / No / Explain		
39	NON-COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT DETAILS:	<ol style="list-style-type: none"> i. Party has to quote separately for Non-comprehensive Annual Maintenance Contract for 03 years for Commitment, after completion of warranty period. ii. The party should provide the list of essential & optional spares for 03 years with breakup cost of each part. 	Yes / No / Explain		

40	Details of Non-comprehensive Annual Maintenance Contract:	Duration of AMC: Three years AMC type : Non-comprehensive Quantity of the Equipment : 01 No.	Yes / No / Explain		
41	Preventive maintenance	Frequency : Once in yearly No. of visits:Three visits for three years.	Yes / No / Explain		
42	Break down maintenance:	No. of visits:Three visit for three years.	Yes / No / Explain		

Supporting Documents required from Vendor

1. Details of similar system supplied in ISRO or any Aerospace industries in India and reference of 3 installations during last five years to be provided.

2. Technical Specification compliance statement

3. Certificate of Origin

4. list of equipment accessories

5. Detailed equipment specification Catalogue with respect to the indent specification

6. User manual and Instruction manual (English) for MSLD and accessories

5 additional documents can be uploaded by the vendor

C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	DOCUMENTS: As per mentioned specification	Yes / No / Explain	
2	Supply, installation & commissioning of Mass Spectrometer Leak Detector (MSLD) and accessories as per the specification	Yes / No / Explain	
3	GST: Kindly mention exact percentage of GST (HSN Code, if applicable) IGST@5% concessional rate for supply of Goods: IGST concessional rate @ 5% is applicable for the following goods mentioned under Sl. No. 243B as per Department of Revenue Notification No. 07/2018: "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" Kindly mention the nature of Goods.	Yes / No / Explain	
4	This is a Two Part Tender. Do not mention price element in Techno Commercial Bid. If any Price element mentioned in technical bid, your offer will not be considered.	Yes / No / Explain	
5	P & F charges (if applicable)	Yes / No / Explain	
6	Payment Term: - 100% payment shall be made within 30 days of receipt and acceptance of the items at our site.	Yes / No / Explain	
7	Delivery Period (The complete system shall be supplied within 6 months from date of receipt of PO)	Yes / No / Explain	
8	Liquidated Damages (LD): - Since delivery is the essence of this order, LD @ 0.5% per week or part thereof subject to a maximum of 5% of the order value of undelivered Stores for each calendar week of delay. The total liquidated damages shall not exceed five percent (5 percent) of the contract price of the unit or units so delayed. In case of inordinate delay, LD@10% shall be recovered.	Yes / No / Explain	

9	Warranty : Warranty for the offered item shall be from the date of installation/acceptance of the item at our site for a minimum period of one year or as specified in the tender document. Warranty certificate shall be provided along with supply.	Yes / No / Explain	
10	Performance Bank Guarantee (PBG) : You have to submit a PBG from a Nationalised / Scheduled Bank in Rs.200/- Stamp Paper 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 claim period) as per the format provided by the Department.	Yes / No / Explain	
11	Security Deposit (SD) : You have to furnish a Bank Guarantee from a Nationalised / Scheduled Bank in Rs.200/- Stamp Paper 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(as claim period). (This will be returned to you immediately on execution of the order satisfactorily as per order terms. In case of non-performance / poor performance, the amount will be forfeited).	Yes / No / Explain	
12	Security Deposit cum Performance Bank Guarantee (SD cum PBG):In case, if parties are 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 from a Nationalised / Scheduled Bank in Rs.200/- Stamp Paper within 10 days of receipt of order for 3% of order value valid till the completion of total contractual obligation (i.e. supply period plus warranty period plus 60 days) as per the format provided by the Department.	Yes / No / Explain	
13	Freight charges : If any, mentioned as EXTRA OR INCLUDED in your quote, please mention the percentage in Vendor Terms.	Yes / No / Explain	
14	Installation Charges: If any, mentioned as EXTRA OR INCLUDED in your quote, please mention the percentage in Vendor Terms.	Yes / No / Explain	

15	In case two or more tenders are received from an Indian agent on behalf of more than one foreign Principal/OEM, in the same tender for the same item/product will not be considered.	Yes / No / Explain	
16	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	
17	Validity of Offer : The validity of the offers should be 120 days from the date of opening of the tenders. NOTE : Tenders validity period shorter than offer validity mentioned above will not be considered for evaluation.	Yes / No / Explain	
18	In case of foreign orders:(a) Please specify whether any Export clearance is required. If it is required please provide End User Certificate format along with offer. (b) Please specify whether any Agency Commission is involved or not. If YES mention the percentage of Agency Commission. [Agency Commission shall be claimed by the Indian Agent through an Invoice. The Agency Commission shall be paid to the Indian Agent in Indian Rupees worked out on the basis of Telegraphic Transfer buying rate of exchange prevailing on the date of placement of the Purchase order/Contract and shall be paid within 30 days from the date of satisfactory acceptance of the item at our site. Distributors are not eligible for Agency Commission]	Yes / No / Explain	
19	Arbitration: 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 statute only, whose decision shall be final and binding on both the parties.	Yes / No / Explain	
20	Jurisdiction: The Courts in and around the City of Bangalore 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	

21	Force Majeure: Neither LPSC, Bangalore nor party shall be considered in default of the performance of their obligations under this Purchase Order if such performance is prevented or delayed for any causes beyond the reasonable control of the parties to the order getting affected, such as Acts of God, war, riots, civil, commotion, illegal strikes, legal lock-outs, epidemics, fire accidents of any Government thereof, provided notice in writing of any such cause with necessary proof that the obligation under the Purchase Order is hereby affected or prevented or delayed is given within 14 days from the happening of the event. As soon as the cause of force majeure has ceased to exist, the party whose ability to perform his obligation has been affected shall notify the other party of the actual delay that has occurred due to such force majeure condition.	Yes / No / Explain	
22	Details of Indian Agent: Address, contact details like Telephone Number, Fax, e-mail etc., (if applicable)	Yes / No / Explain	
23	Address, contact details like Telephone Number, Fax, e-mail etc., on which order to be placed.	Yes / No / Explain	
24	Details of Principal: Address, contact details like Telephone Number, Fax, e-mail etc., (if applicable)	Yes / No / Explain	
25	You shall provide suppliers bank details such as name of the bank, IFSC code, IBAN Number, SWIFT etc., along with your offer which shall be not be changed till completion of payment.	Yes / No / Explain	
26	Percentage (%) of local content for quoted item	Yes / No / Explain	
27	Any other terms shall be mentioned in Vendor Terms column.	Yes / No / Explain	

28	Special conditions against Indian Agents submitting quotations in Foreign Currency: (a) Foreign Principals proforma invoice indicating the commission payable to the Indian Agent and nature of after sales service to be rendered by the Indian Agent. (b) Copy of Agency agreement with the Foreign Principal and Indian agent, precise relationship between them and their mutual interest in the business. (c) Copy of registration and item empanelment of the Indian agent.	Yes / No / Explain	
29	The tenders received from Indian agents on behalf of their foreign Principals/OEMs (in cases where the Principals/OEMs also submit their tenders simultaneously for the same item/product in the same tender) the same will be not be considered.	Yes / No / Explain	
30	Purchase/Preference to MSEs: Purchase/Price Preference shall be extended to the MSEs under the Public Procurement Policy for MSEs formulated under the Micro, Small & Medium Enterprises Development Act 2006. Necessary authenticated documentary evidences shall be submitted along with your offer. NOTE: This is not applicable for foreign Suppliers.	Yes / No / Explain	
31	Price Preference shall be extended to the MSEs under the Public Procurement Policy for MSEs. Such MSEs shall produce documentary proof of registration as per provisions of the Policy ie: 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.	Yes / No / Explain	

32	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 dt. 15.06.2017, which is partially modified by Order No. P-45021/2/2017-PP(BE-II) dt. 28.05.2018, Order No.P-45021/2/2017-PP(BE-II)dt. 29.05.2019, Order No. P-45021/2/2017-PP (BE-II) dt 04.06.2020 and Order No.P-45021/2/2017-PP (BE-II) dt 16.09.2020 and subsequent Amendments issued by the Department for Promotion of Industries and Internal Trade, Ministry of Commerce and Industry and Internal Trade, 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. Therefore, bidders may ensure compliance of the same while submitting tenders.	Yes / No / Explain	
33	Delivery Terms : In case of Indigenous Supplier : LPSC, BANGALORE.	Yes / No / Explain	
34	Delivery Terms : In case of Foreign Suppliers: EX-WORKS / FOB /FCA	Yes / No / Explain	
35	Vendor shall offer Non Comprehensive AMC after expiry of the warranty period for a period of Three years. The scope of the Non-comprehensive AMC as per tender document.	Yes / No / Explain	
36	Preventive Maintenance: Yearly.	Yes / No / Explain	
37	Break down maintenance: No. of visits: One number of visits within 48 hours. However, for breakdown maintenance call, cost may be quoted / included on per day basis so that the breakdown maintenance charges can be paid at actual depending on the number of days for which work has been carried out.	Yes / No / Explain	

38	<p>PAYMENT TERMS: Maintenance charges shall be paid yearly proportionately on completion of each satisfactory service. However, at the end of each service, a Service Report duly signed by contractor, Indentor and duly approved by Indentor Divisional Head shall be obtained from the user division to the effect that the system have been serviced and is working satisfactorily and the certified service report shall be submitted to the Sr. Accounts Officer, LPSC, along with your bill/invoice in duplicate with a copy to Purchase Officer.</p>	Yes / No / Explain	
39	<p>SECURITY DEPOSIT : The party shall submit the security deposit equivalent to 3% of the AMC value till the completion of contract in the form of bank guarantee or either form of negotiable instrument valid for the total AMC period, issued by a nationalized or scheduled bank in the form of Rs. 200 non-judicial stamp paper before commencement of the work in favour of Senior Accounts Officer, LPSC, Bangalore. This security deposit will be returned (interest free) after the successful completion of Annual Maintenance Contract. The security deposit shall have a further claim period of 6 months.</p>	Yes / No / Explain	
40	<p>PENALTY CLAUSE: In case service provider fails to complete the required work hours specified/month by the focal point, down time compensation @ 0.5% of cost of the non-completed work hours will be recovered per week. The quantum of down time compensation to be recovered will be decided by the service receiver after assessing the quantum of work hours not completed and the decision will be final and binding on the service provider.</p>	Yes / No / Explain	
41	<p>Maintenance shall be carried out at our premises only. In case any item has to be taken to your premises for repairs, necessary Bank Guarantee for the value of the item shall be furnished, and valid till returning of the item.</p>	Yes / No / Explain	
42	<p>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.</p>	Yes / No / Explain	

43	<p>ARBITRATION: 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 statute only, whose decision shall be final and binding on both the parties.</p>	Yes / No / Explain	
44	<p>Jurisdiction: The Courts in and around the City of Bangalore 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.</p>	Yes / No / Explain	
45	<p>FORCE MAJEURE: Neither LPSC, Bangalore nor Supplier shall be consider in default of the performance of their obligations under this PO if such performance is prevented or delayed for any cause beyond reasonable control of the parties to the order getting affected such as Acts of God, War, Riots, Civil Commotion, Illegal Strikes, Legal Lock-outs, Epidemics, Fire Accidents, Floods, Earthquakes, Proclamation or Regulation or Ordinance of any Government Thereof provide notice in writing of any such cause with necessary proof that the obligation under the PO is hereby affected or prevented or delayed is given within 14 days from happening of the event.</p>	Yes / No / Explain	
46	<p>Fall Clause:The rate changed for the work/ supply shall in no event exceed the lowest rates for the similar work/ supply to any other party during the period of the contract. If at any time during stipulated time period, reduction on the charges for similar work/supply to other customer extended by you, shall forthwith notify to the Purchase and Store Division, rate payable under the contract after the rate , coming into force of such reduction shall stand correspondingly reduced & refunded to us</p>	Yes / No / Explain	

47	DOWN-TIME COMPENSATION: In case the break-down are not attended to in time, i.e., within 48 hrs. of our intimation, down-time compensation at the rate of 0.5% of the Annual Maintenance charges per day shall be recovered from you subject to a maximum of 5% of the Contract value.	Yes / No / Explain	
48	Name and Address of vendor/firm/company/establishment on which PO shall be placed in case of Order.	Yes / No / Explain	
49	Income tax at applicable rates shall be deducted at source.	Yes / No / Explain	
50	Any other terms & conditions.	Yes / No / Explain	

C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Remark
1	MSLD equipment with accessories	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)	

TECHNICAL SPECIFICATION FOR MASS SPECTROMETER LEAK DETECTOR (MSLD)**1.0 Scope:**

Supply, installation & commissioning of Mass Spectrometer Leak Detector (MSLD) and accessories as per the specification.

Quantity: 1 No.

2.0 MSLD Specification:

Sl. No.	PARAMETER	SPECIFICATIONS FOR MSLD	
1.	Operating principle	Counter flow of helium principle	
2.	Backing pump Capacity	35 m ³ /h minimum	
3.	Helium Pumping speed	10 L/s minimum	
4.	Detectable masses	4He, 3He, H ₂	
5.	Minimum detectable leak rate of Helium	Vacuum mode: $\leq 5 \times 10^{-12}$ mbar l/s Sniffer mode: $\leq 5 \times 10^{-8}$ mbar l/s	
6.	Maximum inlet pressure	Better than 20 mbar	
7.	Gross leak mode	5×10^{-9} mbar l/s to ~1 mbar l/s	
8.	Normal leak mode	5×10^{-12} mbar l/s to 2×10^{-4} mbar l/s	
9.	Start up time for operation without calibration	≤ 2 minutes	
10.	Response time	≤ 2 s	
11.	Test port/Inlet flange	DN 40 ISO-KF or DN63 ISO-K	
12.	Leak rate display	Numerical value from 10^{-12} to ~500 mbar l/s displayed	
13.	Internal test leak	Built in as standard	
14.	Calibration	Automatic mode & Calibration history should be provided by the leak detector	
15.	Filaments	Iridium Yttriated	
16.	High Vacuum Pump (internal)	Air cooled Turbo Molecular pumps to be incorporated in the vacuum related system to get the better performance	
17.	Power supply	220-240 V, 50 Hz, 1 phase	
18.	Operating temperature	+10° C to +35°C	
19.	Noise level	≤ 55 dB (A)	
20.	Venting 50L to atm.	≤ 20 s	
21.	Evacuation Time to 1 mbar	Volume: 50 litres	Time: ≤ 60 s
		Volume: 100 litres	Time: ≤ 200 s
		Volume: 500 litres	Time: ≤ 700 s
22.	Maximum Power Consumption	≤ 1600 W	

23.	Weight of complete system	≤ 150 kg
24.	Operation	Completely automatic, single button operation, microprocessor based control system with auto calibration and auto ranging. Manual ranging shall also possible and is controlled from Display Control panel.
25.	Control Display panel	Built in display unit, along with remote display option.
26.	Touch Screen display	<ul style="list-style-type: none"> i. Easy operation with colour display ii. Information of Leak rate vs time, Analog / digital and statistics to be displayed iii. Running hours of leak detector, pump and, filaments to be displayed iv. Events and calibration history to be provided.
	Accessories:	
1	Filter Inlet Qty: 1 No.	20 micron dust prevention capacity Type: DN 40 ISO-KF or DN63 ISO-K
2	Sniffer probe with standard tip Qty: 1 No.	Sniffer probe Nipple pencil of ~5 metre long
3	Helium Spray gun	Qty: 01 No.
4	External calibrated helium test leak with valve for Vacuum mode Qty : 1 No.	10^{-8} mbar l/s, Type: DN 40 ISO-KF or DN63 ISO-K
5	External calibrated helium test leak for sniffing mode Qty : 1 No.	10^{-4} mbar l/s , Type: DN 40 ISO-KF or DN63 ISO-K
7	Remote Control Qty : 1 No.	Wireless remote control unit with range up to 100 m
8	Data software Qty : 1 No.	Can be able to view & record the test values in the PC.

3.0 Terms & Conditions:

- a. The Equipment should be delivered, installed & commissioned at LPSC, Bangalore by the party.
- b. Demonstration of the Equipment for satisfactory performance should be carried out by the party at LPSC Bangalore.
- c. Necessary operational training for the Equipment should be provided free of cost to LPSC Bangalore Personnel.
- d. Detailed Operation manual for the Equipment should be supplied in English Language.

- e. **Warranty Period:** The Equipment should be warranted against all manufacturing defects and trouble free servicing for a period of one year from the date of commissioning.
- f. **Delivery Schedule:** Supply of complete system within 6 Months from the Date of Purchase Order.
- g. In order to understand the vendors profile for the tender, the following information shall be provided to LPSC along with the technical offer.
 - Profile of the company clearly bringing out the areas of strengths to supply the system of such nature.
 - Details of similar system supplied in ISRO or any Aerospace industries in India and reference of 3 installations during last five years to be provided.

4.0 DOCUMENTS:

The following document should be supplied with the Mass Spectrometer Leak Detector with accessories

1. User manual and Instruction manual (English) for MSLD and accessories
2. Calibration Certificate MSLD.
3. Manufacturer warranty certificate
4. Certificate of Origin
5. Test certificate at standard condition.
6. Original license for the software which shall be purchased.
7. Licensed version software CD.

5.0 INSTALLATION, COMMISSIONING AND TESTING OF MSLD FOR FINAL ACCEPTANCE TESTING:

- a. Authorized service personnel in India:
- b. General terms and condition :
 - i. In case of quote by an agent, agent should submit a valid authorization certificate obtained from OEM along with quote.
 - ii. Deviation if any to our specification shall be brought out very clearly in the compliance matrix.
 - iii. Party should quote the MSLD and MSLD accessories are from the same make.

6.0 NON-COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT DETAILS:

- Party has to quote separately for Non-comprehensive Annual Maintenance Contract for 03 years for Commitment, after completion of warranty period.
- The party should provide the list of essential & optional spares for 03 years with breakup cost of each part.

6.1 Details of Non-comprehensive Annual Maintenance Contract:

Duration of AMC	:	Three years
AMC type	:	Non-comprehensive

- Quantity of the Equipment : 01 No.
- 6.2 Preventive maintenance :**
- Frequency : Once in yearly
- No. of visits : Three visits for three years.
- 6.3 Break down maintenance:**
- No. of visits : Three visit for three years.
- 6.4 Scope of Preventive Maintenance Work:**
- Preventive maintenance shall be carried out for MSLD during each visit.
 - The duration shall be for 2-3 days or till the maintenance work is completed.
 - Inspection/Health check of the machine to be carried out.
 - Checking of functionality of vacuum pump.
 - Cleaning of dust filters & complete valve block unit, cleaning of pirani elements, oil reservoir replacement in turbo pump, and assure the health of the unit & suggest any corrective measure.
 - Checking mass spectrometer which includes source & collector.
 - Checking the performance of electrical & electronic circuits, replacing the defective components.
 - Calibrating the MSLD in order to attain the specified sensitivity.
 - Demonstration of the performance of MSLD for its sensitivity.
 - Performance monitoring for repeatable sensitivity.
 - A log book shall be maintained for every visit.
 - The logbook entries shall include nature of complaint, time taken for servicing and repair and the signature of the user and service personnel.
- 6.5 Breakdown maintenance:**
- The break down visit shall be carried out as & when necessary and the breakdown call shall be attended within 48 hours from the time of intimation.
 - Checking of the system against the break down.
 - Identify the nature of the defect/s.
 - Rectify the identified defect/s and set right the system.
 - Demonstration of satisfactory performance of the system
 - For break down maintenance: Quotation may be submitted on per man day per day basis.