

वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद् Council of Scientific & Industrial Research राष्ट्रीय वांतरिक्ष प्रयोगशालाएं National Aerospace Laboratories

# **INVITATION FOR TENDERS**

#### No. NAL/PUR/ELK/302/23 (AMC)

Dated: 07-FEB-2024

CSIR – National Aerospace Laboratories (NAL), Bengaluru, Karnataka, Republic of India, is one of the premier research laboratories under aegis of Council of Scientific and Industrial Research (CSIR), an autonomous body under the Department of Scientific and Industrial Research, Government of India, New Delhi. CSIR-NAL is a Science and Knowledge based Research, Development and Consulting Organization. It is internationally known for its excellence in Scientific Research in Aerospace Engineering.

The Director, CSIR-NAL invites online quotation(s) for the procurement of the following item(s) for day to day research work.

SI. No	Description of Item(s)	Unit	Quantity		
1	All inclusive Comprehensive Maintenance Contract for various types of Room Air Conditioners for a period of One year.	Set	1		
	AMC Period: One year. Please refer Annexure for detailed Specification and Scope of AMC.				

Single /Double Bid	Single	Tender Type	OPEN		
Bid Security (EMD) (in INR)	Bid Security Declaration should be enclosed with the quotation		29-02-2024 10.00 Hrs		
Performance Security	Nil	Bid opening date	01-03-2024 11.00 Hrs		

- 1. Tender document(s) may be downloaded from the Central Public Procurement Portal i.e., <u>https://www.etenders.gov.in</u>. Aspiring Bidders' who have not registered in the portal can do the same at free of cost before participating in our tendering process. Bidders are advised to go through instructions provided at 'Instructions for Online Bid Submission', in the portal.
- 2. Tenderer's can access tender document(s) on the website (for searching in the NIC site <u>https://www.etenders.gov.in</u>, kindly go to "Tender Search", option, select tender type and select 'Council of Scientific and Industrial Research', in organization tab and select NAL-Bengaluru-CSIR in department type. Thereafter, click on "Search", button to view all CSIR-NAL, Bengaluru tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online in the website as per the schedule given in the next page.

पी वी संख्या :1779, एचएएल एयरपोर्ट रोड, बेंगलूरु-560 017, भारत / P.B.No. 1779, HAL Airport Road, Kodihalli, Bengaluru-560 017, INDIA फोन / Phone (का / Off.) : +91-80-2508 6040-45, फैक्स / Fax : +91-80-2526 9611

👰 purchasek@nal.res.in

CSIR-National Aerospace Laboratories, Bengaluru-560 017, INDIA



- 3. a. Global Tender Enquiry: Either the Indian Agent on behalf of the Foreign Principal or the Foreign Principal can bid directly in a tender but *not* both. However, the offer of the Indian Agent should also accompany the authorization letter from their principal. To maintain sanctity of tendering system, one Indian Agent *cannot* represent *two* different Foreign Principals in *one* tender.
  - Den Tender Enquiry: Only Local Suppliers with prescribed local content as detailed in Department for Promotion of Industry and Internal Trade (DPIIT) Order No. P-45021/2/2017-PP (BE-II), dated 16<sup>th</sup> Sep, 2020, and subsequent orders issued by the Ministry of Finance, Government of India from time to time, are eligible for bidding. Bidders' must enclose the certificate declaring their local content of supplies as per our standard form.

Note: Kindly, refer to the first page of Notice Inviting Tender for tender type i.e. Open Tender Enquiry / Global Tender Enquiry and submit your bid accordingly.

- 4. Unsolicited / Conditional / Unsigned Quotations/Quotations received after the due date and time shall be summarily rejected. The Bidder should comply with the terms and conditions of the tender, failing which, their offer will be liable for rejection.
- 5. The bids' failing to comply with the following clauses will be summarily rejected.
  - The Bidders' proposing to supply finished products directly/indirectly from vendors' of countries sharing the land border with India should submit a copy of registration done with DPIIT
  - If the products supplied are not from vendors of countries sharing land border with India, the Bidders' have to enclose a declaration to that effect.
- 6. As per Government of India procurement policies:
  - The purchaser intends to give purchase preference to local supplies (preference to Make in India) in case the cost of procurement is up to Rs.50 (fifty) lakhs.
  - The procuring entity intends to give purchase preference to products/goods manufactured by Micro, Small and Medium Enterprises.
- 7. Bidders' are requested to refer to the instructions regarding Procurement Policies for "Make in India", issued by Ministry of Commerce and Industry, Department of Industrial Policy and promotion dated. 28-May-2018, and 4-Jun-2020 and guidelines as and when issued.



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- 8. Kindly, note CSIR-NAL GST No.29AAATC2716R1ZB. And, the bidders' are requested to furnish their GST No. in their invoice failing which we will *not* be able to make timely payment.
- 9. Printed conditions, if any, submitted along with your quotation will not be binding on us.
- 10. The prospective bidders' are requested to refer to the Standard Terms and Conditions available on NAL website (<u>www.nal.res.in</u>) under the icon Tender-Purchase before formulating and submitting their bids'.
- 11. The Director, CSIR National Aerospace Laboratories, Bengaluru, reserves the right to accept any or all the tenders either in part or in full or to split the order without assigning any reason(s) thereof.

Thanking You,

Yours faithfully

Stores & Purchase Officer For and on behalf of CSIR-NAL



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# CSIR - National Aerospace Laboratories, Bengaluru - 560017 Electrical Section

## Annexure

1.1      Window Model Air Conditioners      1.0 Ton Capacity      10      .        1.2      Multi Split Air Conditioners      2.0 Ton Capacity (1x2 compressors each unit)      5      .        2.1      Multi Split Air Conditioners      2.0 Ton Capacity (1x2 compressors each unit)      5      .        3.1	SI.No	Type of Air-Conditioner	Description of Air Conditioner's	Qty in Nos.	Rate per year <i>₹</i>	Amount per year ₹
1.2    1.5 Ton Capacity    13      2.1    Multi Split Air Conditioners    2.0 Ton Capacity (1x2 compressors each unit)    5      3.1    1.0 Ton Capacity    1    1      3.2    Non Inverter Split Air conditioners    1.5 Ton Capacity    63      3.3    1.8 / 2.0 Ton Capacity    63    1      4.1    1.8 / 2.0 Ton Capacity    237    1      4.1    1.9 Conditioners    1.0 Ton Capacity    237      4.1    1.0 Ton Capacity    20    1      4.2    Inverter type Split Air Conditioners with compressor warranty    1.5 Ton Capacity    20      4.3    1.0 Ton Capacity    24    1      5.1    1.0 Ton Capacity    24    1      5.2    Inverter type Split Air Conditioners    1.5 Ton Capacity    24      5.1    1.0 Ton Capacity    31    1      5.2    Inverter type Split Air Conditioners    1.5 Ton Capacity    42      5.3    1.8 / 2.0 / 2.2 Ton Capacity    88    1      6.1    1.8 / 2.0 / 2.2 Ton Capacity    8    1      6.2    Inverter Cassette type Air Conditioners    3.0 Ton C	1.1	Window Model Air Conditioners	1.0 Ton Capacity	10	ł	<u>`</u>
2.1    Initial Split Air Conditioners    1.0 Ton Capacity    1      3.1    1.0 Ton Capacity    63      3.2    Non Inverter Split Air conditioners    1.5 Ton Capacity    63      3.3    1.8 / 2.0 Ton Capacity    237      4.1    1.8 / 2.0 Ton Capacity    8      4.2    Inverter type Split Air Conditioners    1.5 Ton Capacity    20      4.3    1.0 Ton Capacity    24      5.1    1.0 Ton Capacity    31      5.2    Inverter type Split Air Conditioners    1.5 Ton Capacity    31      5.2    Inverter type Split Air Conditioners    1.5 Ton Capacity    31      5.3    1.0 Ton Capacity    31    10      5.4    1.8 / 2.0 / 2.2 Ton Capacity    42    11      5.3    1.8 / 2.0 / 2.2 Ton Capacity    88    11      6.1    1.8 / 2.0 / 2.2 Ton Capacity    88    11      6.2    Inverter Cassette type Air Conditioners    3.0 Ton Capacity    8    11      6.3    3.75 Ton Capacity    20    11    11	1.2	Window Moder Air Conditioners	1.5 Ton Capacity	13		
3.2      Non Inverter Split Air conditioners      1.5 Ton Capacity      63        3.3      1.8 / 2.0 Ton Capacity      237        4.1      1.8 / 2.0 Ton Capacity      8        4.1      1.0 Ton Capacity      8        4.2      Inverter type Split Air Conditioners with compressor warranty      1.5 Ton Capacity      20        4.3      2.0 / 2.2 Ton Capacity      24      1.0 Ton Capacity      24        5.1      1.0 Ton Capacity      31      1.0 Ton Capacity      31        5.2      Inverter type Split Air Conditioners      1.5 Ton Capacity      42      1.0 Ton Capacity        5.3      1.0 Ton Capacity      31      1.0 Ton Capacity      31      1.0 Ton Capacity        5.3      Inverter type Split Air Conditioners      1.5 Ton Capacity      42      1.0 Ton Capacity      3.0 Ton Capacity      8      1.0 Ton Capacity      8      1.0 Ton Capacity      3.0 Ton Capacity      8      1.0 Ton Ca	2.1	Multi Split Air Conditioners		5		
3.31.8 / 2.0 Ton Capacity2374.11.0 Ton Capacity84.2Inverter type Split Air Conditioners with compressor warranty1.5 Ton Capacity204.32.0 / 2.2 Ton Capacity245.11.0 Ton Capacity315.2Inverter type Split Air Conditioners1.5 Ton Capacity425.31.8 / 2.0 / 2.2 Ton Capacity426.11.8 / 2.0 / 2.2 Ton Capacity886.2Inverter Cassette type Air Conditioners3.0 Ton Capacity86.33.75 Ton Capacity20	3.1		1.0 Ton Capacity	1		-
4.1    1.0 Ton Capacity    8      4.2    Inverter type Split Air Conditioners with compressor warranty    1.5 Ton Capacity    20      4.3    2.0 / 2.2 Ton Capacity    24      5.1    1.0 Ton Capacity    31      5.2    Inverter type Split Air Conditioners    1.5 Ton Capacity    42      5.3    1.0 Ton Capacity    42      5.3    1.8 / 2.0 / 2.2 Ton Capacity    88      6.1    1.8 / 2.0 / 2.2 Ton Capacity    88      6.1    1.8 / 2.0 / 2.2 Ton Capacity    8      6.2    Inverter Cassette type Air Conditioners    3.0 Ton Capacity    8      6.3    3.75 Ton Capacity    20    20	3.2	Non Inverter Split Air conditioners	1.5 Ton Capacity	63		
4.2Inverter type Split Air Conditioners with compressor warranty1.5 Ton Capacity204.32.0 / 2.2 Ton Capacity245.11.0 Ton Capacity315.2Inverter type Split Air Conditioners1.5 Ton Capacity425.31.8 / 2.0 / 2.2 Ton Capacity426.11.8 / 2.0 / 2.2 Ton Capacity886.11.8 / 2.0 / 2.2 Ton Capacity86.2Inverter Cassette type Air Conditioners3.0 Ton Capacity86.33.75 Ton Capacity20	3.3		1.8 / 2.0 Ton Capacity	237		
4.2with compressor warranty1.5 Ton Capacity204.32.0 / 2.2 Ton Capacity245.11.0 Ton Capacity315.2Inverter type Split Air Conditioners1.5 Ton Capacity425.31.8 / 2.0 / 2.2 Ton Capacity886.11.8 / 2.0 / 2.2 Ton Capacity86.2Inverter Cassette type Air Conditioners3.0 Ton Capacity86.33.75 Ton Capacity20	4.1		1.0 Ton Capacity	8		
5.11.0 Ton Capacity315.2Inverter type Split Air Conditioners1.5 Ton Capacity425.31.8 /2.0 / 2.2 Ton Capacity886.1Inverter Cassette type Air Conditioners1.8 / 2.0 / 2.2 Ton Capacity86.2Inverter Cassette type Air Conditioners3.0 Ton Capacity86.33.75 Ton Capacity20	4.2		1.5 Ton Capacity	20		
5.2Inverter type Split Air Conditioners1.5 Ton Capacity425.31.8 /2.0/ 2.2 Ton Capacity886.11.8 / 2.0 / 2.2 Ton Capacity886.2Inverter Cassette type Air Conditioners3.0 Ton Capacity86.33.75 Ton Capacity20	4.3		2.0 / 2.2 Ton Capacity	24		
5.3    1.8 /2.0 / 2.2 Ton Capacity    88      6.1    1.8 / 2.0 / 2.2 Ton Capacity    8      6.2    Inverter Cassette type Air Conditioners    3.0 Ton Capacity    8      6.3    3.75 Ton Capacity    20	5.1	Inverter type Split Air Conditioners	1.0 Ton Capacity	31		
6.1      1.8 / 2.0 /2.2 Ton Capacity      8        6.2      Inverter Cassette type Air Conditioners      3.0 Ton Capacity      8        6.3      3.75 Ton Capacity      20	5.2		1.5 Ton Capacity	42		
6.2  Inverter Cassette type Air Conditioners  3.0 Ton Capacity  8    6.3  3.75 Ton Capacity  20	5.3		1.8 /2.0/ 2.2 Ton Capacity	88		
6.2  Conditioners  3.0 for Capacity  8    6.3  3.75 Ton Capacity  20	6.1		1.8 / 2.0 /2.2 Ton Capacity	8		
	6.2		3.0 Ton Capacity	8		
Total 578	6.3		3.75 Ton Capacity	20		
			Ţotal	578		

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#### SCOPE OF WORK

#### ALL INCLUSIVE COMPREHENSIVE MAINTENANCE CONTRACT FOR VARIOUS TYPES OF ROOM AIR-CONDITIONERS FOR THE PERIOD OF ONE YEAR

- Under the all-inclusive maintenance service contract, the contractor shall maintain all air-conditioners units as indicated in Annexure in good working condition throughout the period of contract. For this purpose, the contractor shall have fullfledged workshop / office with all servicing facilities and also adequately manned. The workshop shall be equipped with all essential spare parts for all the categories of equipment listed in Annexure. The cost of all replacement of spares such as new compressors and faulty compressors will be scraped at NAL Stores and it will not be returned to Vendor, PC Boards, fan motors, condensers, universal remote control, filling of refrigerant and repairs etc., for all types of Room Air conditioners shall be responsibility of the contractor at his own cost and maintenance shall be borne by the contractor.
- The contractor shall make his own gas fillings, brazing, and welding arrangements in the place of workshop / office at his own risk. The necessary transportation only in unavoidable circumstances if required any for shifting the AC units fully / partly from NAL to workshop or vice-versa shall be borne by the contractor.
- Sufficient stock of spare parts for all kinds of AC's shall be kept at NAL site. The contractor shall ensure that no AC's shall ideal due to non-availability of spare parts.
- Sufficient stock of refrigerant gas shall be kept at site. At least 10Kg of R-22, R-32
  & R410A refrigerant gas shall be always available at site.
- The contractor shall deploy a minimum of two experienced technicians with sufficient labour force at site to attend the day-to-day break downs and regular service. The staff shall be available at site from 8-30 Hours to 17.00 hours in all working days and during holidays if necessary.
- The contractor shall maintain all the AC's in good working condition throughout the contract period and they will be handed over to NAL in good working condition on the eve of the expiry of the contract period. If any AC unit found not working during handing over the same shall be rectified by the contractor at his own cost.

- The Contractor shall not do any private jobs in NAL premises.
- Contractor shall be called to attend complaints during any time and on holidays in some very special cases without any extra charges.
- Normal code of ethics and discipline has to be followed by the contractor's labour while working at site.
- Normal working hours followed by NAL have to be adhered by the contractor's labour except under special circumstances where prior permission of the Head, Electrical section / Group leader / Engineer in charge.
- The contractor and his staff shall be allowed to enter the laboratory premises on production of valid gate pass issued by NAL and all the staff members are bound to display their identity card in the working premises.
- The vendor / firm shall be responsible for adherence to all labour laws & Apprentice Act, building and other construction workers (Regulation of employment and condition of service) Act 1996 and the building and other construction workers welfare cess Act 1996 as per latest amendment.
- Contractor shall attend promptly the complaints received from users and try to rectify the problem with minimum down time.
- NAL will handover the units indicated in Annexure to the contractor in good working condition prior to starting of the contract.
- In case any air conditioner found beyond repairable and very old after duly certified by Engineer-in-charge ELK. Those AC's will be returned to NAL stores as unserviceable and no AMC charges will be paid for such air conditioners.
- The contractor has to handover all the AC's in working condition after completion of the AMC contract to CSIR-NAL. Necessary charges will be deducted from the bills for the AC's which are not in working conditions during handing over to CSIR-NAL by the AMC contractor.

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#### TECHNICAL REQUIREMENTS FOR SERVICING & REPAIR OF WINDOW / WALL MOUNTED SPLIT, MULTI SPLIT / INVERTER AND CASSETTE TYPE AIR CONDITIONERS.

This section indicates the technical requirements for maintenance and repair. The maintenance is to be carried out on all components of the air-conditioners while repair / replacement is to be made as found necessary to all or any of the components like new compressor, fan motors, condenser, cooling coil, blower and fan for efficient operation of the air conditioners.

# ROUTINE MAINTENANCE OF WINDOW/SPLIT/CASEETTE TYPE AIR-CONDITIONERS:

- Cleaning of filters, intake, exhaust screens & replace them if required.
- Lubricating the fan, motor and other mechanical parts such as hinges, checking of all electrical connections and ensuring the functional working of all electrical connections.
- Checking for noise and vibration.

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- Checking grill temperature, current and recording the same.
- Checking electronic control parts like remote, relay, PC board and ensuring the functional working of these parts.
- Cleaning of the condenser, cooling coil, blower and condenser fans with air pressure & water MAJOR OVERHAUL MAINTENANCE for all types of Air-conditioners.

## **GENERAL BREAKDOWN CONDITIONS:**

- In case of gas leaks, the same is to be rectified & gas charged for satisfactory working condition. Compressor if found defective due to any reason the same is to be got replaced with new compressor.
- All electrical / electronic components are to be replaced if found defective such as start relay, Remote, PCB circuit, overload protector, start and run capacitors, thermostat, selector switches rotary switched, knobs, fan motor and any other spares if found defective are to be repaired or replaced.
- Corroded sheet metal parts to be painted.
- Condenser fans and blowers to be replaced if found broken or damaged.

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## **POWER SUPPLY:**

- NAL shall not guarantee the supply of electricity and no compensation shall be entitled for any damages occurred due to failure / short circuit of electricity.
- All temporary power lines and other works laid by the contractor shall confirm to the Indian Electricity Act and rules may there be under and subjected to the approval of the officers in charge, Electrical Section.
- NAL- will provide one store room for keeping firm's tools, testing equipment's, refrigerants for servicing arrangements such as vacuum pump, gauges, blow pumps, voltmeter and ammeter etc. for carrying out day to day service at NAL.

#### **PAYMENT:**

The payment will be made after the completion of service for Air conditioners in
 every four months (three times per year).

# CONTRACTOR SHALL VISIT THE SITE BEFORE QUOTING

## **Technical Qualification Requirements**

The Bidder shall furnish documentary evidence along with Technical Bid to support the following Qualification Criteria:

#### **Financial Qualifying Criteria:**

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The Bidder shall furnish documentary evidence that it meets the following financial requirements: •

- An undertaking (self-certificate) is to be submitted that the Organization has not been blacklisted during last 3 years by any Central / State Government Department / Organization.
- Solvency certificates (not older than twelve months) issued by scheduled/ nationalized bank with whom bidder holds the current account.
- The Bidder should be a manufacturer / Authorized dealer / Service Provider duly supported by the OEM with an authorization letter.

#### Experience and Technical Capacity:

The Bidder shall furnish documentary evidence to demonstrate that it meets the following experience requirement(s):

- Name and style of firms with constitution (Proprietorship / partnership) date of establishment/ Registration.
- > Proof of enlistment / registration with appropriate authorities.
- Organizational structure list of technical & other supporting staff with their qualification and experience for handling, servicing and maintenance of air conditioners.
- > Registration with employee's provident fund, ESI, Sales tax on works contract.
- List of tools and plants available with firm.
- List of similar works fulfilling criteria involving annual maintenance contract (AMC) for air conditioner carried out during the past three years with testimonials from the concerned organization i.e., of any Govt., Semi, Autonomous organizations and reputed private firms.
- The firms should have executed minimum of 2 AMC's of Air conditioners of value not less than 8.0 lakhs each.
- List of works on hand, name of Clients, cost, date of starting, due date of completion and present progress.

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## **Evaluation and Selection Criteria:**

- On the due date the technical bids will be opened and referred to the Technical Committee.
- The information received and the bids already submitted together will be examined with reference to the tendered specifications and evaluation is made by the Technical Committee.
- After the technical evaluation is completed and approved, CSIR-NAL shall inform to the bidders whose bids have been rejected technically with the reasons for rejection.
- Selection Criteria of the tender will be based on the total value of the amount quoted in Annexure for 1 year of the AMC contract.
- Lowest bidder will be arrived on final landing cost (Total Amount of Annexure including tax).

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# ABSTRACT

SL.NO	Type of Air-conditioner	ACD	ALD	APMF	CEM	CSMST	FMCD	FS	ICAST	ктмр	MSD	SED	STTD	OTHER	Total
		Α	В	С	D	F	G	Н	1	J	К	L	М	N	
1	Window AC's														
1.1	1 TON	0	0	0	0	0	0	0	0	0	0	0	2	8	10
1.2	1.5 TON	0	0	Ũ	6	2	0	0	0	0	0	0	2	3	13
2	MULTISPLIT AC								·						
2.1	2X1 TON	0	0	0	2	0	0	0	0	2	0	0	0	1	5
3	Non Inverter Split AC														
3.1	1 TON	0	0	0	0	0	0	0	0	1	0	0	0	0	1
3.2	1.5 TON	3	7	6	5	1	0	0	8	3	11	1	8	10	63
3.3	1.8/2.0 TON	15	27	9	5	19	12	9	4	16	15	40	38	28	237
4	INVERTER Split AC														
4.1	1 TON	2	0	0	0	3	2	0	0	24	2	0	3	3	39
4.2	1.5 TON	0	1	0	2	0	6	0	0	13	9	6	14	11	62
4.3	1.8 /2.0 /2.2 TON	2	12	4	2	2	14	0	1	4	9	15	32	15	112
5	INVERETR CASSETTE AC														
5.1	1.8 /2.0 /2.2 TON	0	0	0	0	0	0	0	0	0	2	0	0	6	8
5.2	3 TON	0	0	0	0	8	0	0	0	0	0	0	0	0	8
5.3	3.75 TON	6	0	0	0	12	0	0	0	2	0	0	0	0	20
														Total	578

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