

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



CSIR - NAL Estd. 1959  
ISO 9001 : 2015  
Certified Organization

### INVITATION FOR TENDERS

**Tender No. NAL/PUR/ELK/366/21-Y**

**Dated: 24/12/2021**

CSIR - National Aerospace Laboratories (NAL), Bengaluru, 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 Organisation. It is internationally known for its excellence in Scientific Research in Aerospace Engineering.

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

Sl. No.	Description of Item(s)	Unit	Quantity
1	All-inclusive comprehensive maintenance contract for various types of room air conditioners. (Please refer annexure for detailed specification and Scope or works)	Set	01
<b>Note:</b>	<b>AMC Period: 2 years from the date of purchase order will be placed for the period of one year and subsequent period will be renewed based on the performance.</b>		

Single / Double Bid	Single	Tender Type	Open
<b>Bid Security (EMD) (in INR)</b>	Bid Security Declaration should be enclosed with quotation	Bid submission end date	13-Jan-2022 10.00 Hrs
<b>Performance Security</b>	3% of Purchase Order Value	Bid opening date	14-Jan-2022 11.00 Hrs

- Tender Documents may be downloaded from Central Public Procurement Portal <https://www.etenders.gov.in>. Aspiring Bidders who have not registered in e-procurement can register free of cost before participating through the website <https://www.etenders.gov.in>. Bidders are advised to go through instructions provided at 'Instructions for Online Bid Submission'.
- Tenderers can access tender documents on the website (for searching in the NIC site <https://www.etenders.gov.in>, kindly go to Tender Search option, select tender type and select 'Council of Scientific and Industrial Research', in organisation 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 on the website <https://www.etenders.gov.in> as per the schedule given in the next page.

पी बी सं. 1779, एचएएल एयरपोर्ट रोड, कोडिहल्ली, बेंगलुरु - 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



<http://www.nal.res.in>



[purchasek@nal.res.in](mailto:purchasek@nal.res.in)





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

03. 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 authorisation letter from their principal. To maintain sanctity of tendering system, one Indian Agent **cannot** represent two different Foreign principals in one tender.
04. Unsolicited / conditional / unsigned Quotations/Quotations received after the due date and time shall be summarily rejected. The Bidder shall comply the terms and conditions of the tender, failing which, the offer shall be liable for rejection.
05. The bids failing to comply with the following clauses will be summarily rejected.
  - a. The Bidders proposing to supply finished products directly/indirectly from vendors' of countries sharing the land border with India should submit copy of registration done with the Ministry of Home Affairs and Ministry of External Affairs.
  - b. 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.
06. 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.
07. The prospective bidders are requested to refer to the Standard Terms and Conditions available on NAL Internet ([www.nal.res.in](http://www.nal.res.in)) under the icon Tender-Purchase before formulating and submitting their bids
08. 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 reasons there for.

Thanking you,

Yours faithfully

Section Officer (S&P)  
For and on behalf of CSIR

**SCOPE OF WORK****ALL INCLUSIVE COMPREHENSIVE MAINTENANCE CONTRACT FOR WINDOW, SPLIT & MULTI-SPLIT AIR-CONDITIONERS FOR THE PERIOD – 2022 to 2024. (2 YEARS)**

- 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 full-fledged 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 compressors, 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 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 and 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 to 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 Annexures 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. These 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.
- The contractor has to dismantle the old Air conditioners and reinstall in the new location as per Electrical section / Group leader / Engineer In charge instructions.

**TECHNICAL REQUIREMENTS FOR SERVICING & REPAIR OF WINDOW / WALL MOUNTED SPLIT MULTI SPLIT / INVERTER AND CASSETTE TYPE AIR CONDITIONER.**

This section indicates the technical requirements for maintenance, repair, installation and re-installation of split/window type room air conditioners of various capacities and makes. 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 compressor, fan motors, condenser, cooling coil, blower, fan and main body with its associated sheet metal parts assembled on M.S / G.I. base tray with all electrical accessories for efficient operation of the air conditioners.

**ROUTINE MAINTENANCE OF SPLIT/WINDOW 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 and ensuring the functional working of all electrical components.
- Checking for noise and vibration.
- 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 etc. Fan motor, if found defective is to be repaired or replaced.
- Corroded sheet metal parts to be painted.
- Condenser fans and blowers to be replaced if found broken or damaged.



**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:**

The Bidder shall furnish documentary evidence that it meets the following financial requirements(s):

- 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 representative of a manufacturer who must have designed, manufactured, tested and supplied the equipment(s) similar to the type specified in the "Technical specification". The **Manufacturers' Authorization Form** must be enclosed with the technical bid.

**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 7.0 lakhs each.
- Proof of adequate field service organization to provide handling, servicing and maintenance of air conditioners.
- List of works on hand, name of clients, cost, date of starting, due date of completion and present progress.

**Evaluation and Selection Criteria:**

- On the due date the Technical bids will be opened and referred to the Technical Committee which is duly constituted by the Director, CSIR-NAL.
- 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-1& Annexure -2 for 2 year of the AMC contract.
- Lowest bidder will be arrived on final landing cost (Total Amount of Annexure -1 & Annexure -2 + Tax).



## Annexure-1

(First Year 2022-23)

SINo	Type of Air-Conditioner	Description of Air Conditioner's	Qty Nos.	Rate per year ₹	Amount per year ₹
1.1	Window Model AC's	1.0 Ton Capacity	10		
1.2		1.5 Ton Capacity	20		
1.3		2.0 Ton Capacity	4		
2.1	Multi Split AC's	2.0 Ton Capacity (1x2 compressors each unit)	6		
3.1	Non Inverter Split Air conditioners	1.0 Ton Capacity	1		
3.2		1.5 Ton Capacity	63		
3.3		1.8 / 2.0 Ton Capacity	242		
4.1	Inverter type split AC's with compressor warranty	1.0 Ton Capacity	8		
4.2		1.5 Ton Capacity	11		
4.3		2.0 / 2.2 Ton Capacity	19		
5.1	Inverter type split AC's	1.0 Ton Capacity	31		
5.2		1.5 Ton Capacity	42		
5.3		1.8 / 2.0 / 2.2 Ton Capacity	88		
6.1	Inverter Cassette type AC's	1.8 / 2.0 / 2.2 Ton Capacity	6		
6.2		3.0 Ton Capacity	10		
6.3		3.75 Ton Capacity	20		
7.1	Dismantling of existing Air conditioners including pumping down refrigerant, disconnection of copper pipes & drain pipes etc. and shifting the same to central stores / section as required by Engineer Incharge.	1.0 ton to 2.2 ton Window / Split type AC	10		
7.2	Shifting, reinstallation, testing & commissioning of Air conditioners including supply & fixing of necessary copper pipe (upto 5 meters), Refrigerant, drain pipes, electric cables & all other accessories etc. as required and directed by Engineer In charge.	1.0 ton to 2.2 ton Split type AC	5		
Total per annum (₹)			596		
GST @ 18%					

## Annexure-2

## (Second Year 2023-24)

(Second Year 2020-21)

SINo	Type of Air-Conditioner	Description of Air Conditioner's	Qty Nos.	Rate per year ₹	Amount per year ₹
1.1	Window Model AC's	1.0 Ton Capacity	10		
1.2		1.5 Ton Capacity	20		
1.3		2.0 Ton Capacity	4		
2.1	Multi Split AC's	2.0 Ton Capacity (1x2 compressors each unit)	6		
3.1	Non Inverter Split Air conditioners	1.0 Ton Capacity	1		
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6.1	Inverter Cassette type AC's	1.8 / 2.0 /2.2 Ton Capacity	6		
6.2		3.0 Ton Capacity	10		
6.3		3.75 Ton Capacity	20		
7.1	Dismantling of existing Air conditioners including pumping down refrigerant,disconnection of copper pipes & drain pipes etc. and shifting to central stores / section as required by Engineer Incharge	1.0 ton to 2.2 ton Window / Split type AC	10		
7.2	Shifting, reinstallation ,testing & commissioning of Air conditioners including supply & fixing of necessary copper pipe (upto 5 meters),Refrigerant ,drain pipes,electric cables & all other accessories etc.as required and directed by Engineer In charge.	1.0 ton to 2.2 ton Split type AC	5		
Total per annum (₹)			596		
				GST @ 18%	



## BID-SECURING DECLARATION FORM

Date: \_\_\_\_\_

Bid No. \_\_\_\_\_

To (insert complete name and address of the purchaser)

I/We. The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

(a)	have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or
(b)	having been notified of the acceptance of our Bid by the purchaser during the period of bid validity
	(i) fail or refuse to execute the contract, if required, or
	(ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown)  
in the capacity of (insert legal capacity of person signing the Bid Securing Declaration).

Name: (insert complete name of person signing the Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of: (insert complete name of Bidder)

Dated on \_\_\_\_\_ day of \_\_\_\_\_ (insert date of signing)

Corporate Seal (where appropriate)

Note:

1. In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid.
2. Bid Security declaration must be signed in by the Proprietor/CEO/MD or equivalent level of Officer of the company.