वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्

Council of Scientific & Industrial Research





CORRIGENDUM

In continuation of the Tender No. NAL/PUR/ELK/368/19-Y(AMC) released on 25-Nov-19 for Procurement of Annual Maintenance Contract for various types of Room Air conditioners for the year 2020-2021 and 2021-2022., following amendments are being issued: -

Sr.No.	ITEM Description	EXISTING	AMENDED AS
1	Annual Maintenance Contract for various types of Room Air conditioners for the year 2020-2021 and 2021-2022.	1. Scope of work	Enclosures 1. Scope of work 2. Annexure 1 & 2 3. Technical Qualification Requirements

All other terms and conditions of the tender document remains the same.

S/d Section Officer (S&P)

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







CSIR - National Aerospace Laboratories, Bengaluru - 560017

Annexure-1

		(First Year 2020-21)		•	
Type of Air-Conditioner	SI.No	Description of Air Conditioner's	Qty Nos.	Rate per unit ₹	Amount per year ₹
	1.1	1.0 Ton Capacity	10		
Window Model AC's	1.2	1.5 Ton Capacity	23		
	1.3	2.0 Ton Capacity	5		
Multi Split AC's	2.1	2.0 Ton Capacity (1x2 compressors each unit)	10		
	3.1	1.0 Ton Capacity	1		
Split AC's	3.2	1.5 Ton Capacity	69	Street name of the street name o	
	3.3	1.8 / 2.0 Ton Capacity	258		
	4.1	1.0 Ton Capacity	14		
Inverter type split AC's with R 410A refrigent with compressor warranty	4.2	1.5 Ton Capacity	9 .		The Market State of the State o
working	4.3	2.0 / 2.2 Ton Capacity	20		
	5.1	1.0 Ton Capacity	4		
Inverter type split AC's with R 410A refrigent	5.2	1.5 Ton Capacity	34		
	5.3	1.8 /2.0/ 2.2 Ton Capacity	78		
	6.1 .	1.8 Ton Gapacity	2		
nverter Cassette type AC's with R 410A refrigent	6.2	3.0 Ton Capacity	8		
	6.3	3.75 Ton Capacity	20		
Dismantling the existing AC as and when required and returning to stores	7.1	1.0 ton to 2.2 Ton Window / Split type AC	5		
Shifting and re-installing of AC's including supply of necessary copper pipe, gas(R-22/R-410A), drain pipes etc., as per site requirement.	8.1	1.0 ton to 2.2 Ton Window / Split type AC	3		
		Total Quantity	573		
			G	ST @ 18%	
		, т	otal per	annum (₹)	



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Annexure-2

(Second Year 2021-22)

	SI.No	Description of Air Conditioner's	Qty Nos.,	unit ₹	Amount pe year ₹
	1.1	1.0 Ton Capacity	10		
Window Model AC's	1.2	1.5 Ton Capacity	23		
	1.3	2.0 Ton Capacity	5 ;		
Multi Split AC's	2.1	2.0 Ton Capacity (1x2 compressors each unit)	10		
	3.1	1.0 Ton Capacity	1		
Split AC's	3.2	1.5 Ton Capacity	69		
	3.3	1.8 / 2.0 Ton Capacity	258		Control Contro
	4.1	1.0 Ton Capacity	14		
Inverter type split AC's with R 10A refrigent with compressor warranty	4.2	1.5 Ton Capacity	9		
	4.3	2.0 / 2.2 Ton Capacity	20		
	5.1	1.0 Ton Capacity	4		
Inverter type split AC's with R 410A refrigent	5.2	1.5 Ton Capacity	34	11.11	
	5.3	1.8 /2.0/ 2.2 Ton Capacity	78		
	6.1	1.8 Ton Capacity	2		
nverter Cassette type AC's with R 410A refrigent	6.2	3.0 Ton Capacity	8		
	6.3	3.75 Ton Capacity	20		
Dismantling the existing AC as and when required and returning to stores	7.1	1.0 ton to 2.2 Ton Window / Split type AC	5	i i	
Shifting and re-installing of AC's including supply of necessary copper pipe, gas(R-22/R-410A) drain pipes etc., as per site requirement.	8.1	1.0 ton to 2.2 Ton Window / Split type AC	3		
		Total Quantity	573		
			G	ST @ 18%	CONTRACTOR OF A

SCOPE OF WORK

ALL INCLUSIVE COMPREHENSIVE MAINTENANCE CONTRACT FOR WINDOW, SPLIT & MULTI-SPLIT AIR CONDIOTIONERS FOR THE PERIOD: 2020 TO 2022 (2 YEARS).

- Under the all-inclusive maintenance service contract, the contractor shall maintain all air-conditioner units as indicated in AC list in good working condition throughout the period of contract. For this purpose, the contractor shall have full-fledged workshop 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-1 & Annexure -2. The cost of all replacement of spares such as new compressor, PCB boards for all types of AC's, fan motors, condensers, filling of refrigerant, repairs etc., and shall be responsibility of the contractor at his own cost and maintenance should be borne by the contractor.
- The workshop shall be well equipped with all tools, testing equipment's for servicing arrangements such as vacuum pump, gauges, blow pumps, voltmeter and ammeter etc.
- The contractor shall make his own gas fillings, brazing and welding arrangements in their workshop at his own risk. The necessary transportation if required any for shifting the AC units fully/partly from NAL to their workshop their workshop of 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 idle due to non-availability of spare parts.
- Sufficient stock of refrigerant gas shall be kept at site. At least 10 kg of R-22/R410A refrigerant gas shall be always available at site.
- The contractor shall deploy a minimum of two experienced mechanics with sufficient labour force at site to attend the day-to-day breakdowns and routine service and the staff shall be available at site from 8.30 to 17.000 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 with other agency art the risk and cost of the existing contractors.
- The contractor shall not do any private jobs in NAL premises.
- The maintenance of the machine shall be according to the preventive maintenance schedule chart.
- Contractor shall be called to attend complaints during any time including any holidays in some special cases, and bound to attend 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 officer in charge in Electrical Section, Kodihalli.
- The contractor and his staff shall be allowed to enter the laboratory premises with valid gate passes issued by NAL and all staff members are bound to display their identify card in the working premises.
- The contractor shall be responsible for adherence to all labour laws & apprentice act, building and other constriction workers (Regulation of employment and condition of service) Act 1996, the building and other construction workers welfare chess Act 1996 as per latest amendment.
- Contractor shall attend promptly to the complaints received by him from NAL and try to rectify the such as compressor, fan motor, leakage of refrigerant etc., contractor must attend promptly and quickly and complete the same within three working days from the receipt of complaints. In case the unit at no extra cost at the place of breakdown in order to continue the operations.

- NAL shall hand over all the units indicates in Annexure-1 & Annexure -2 to the contractor in good working condition prior to the starting of the contract.
- In case any air conditioner found beyond repairable 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.

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 is to be made, as found necessary, to all or any of the components like compressor, fan motors, condenser, cooling coil, blower, fan, 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 and exhaust screens & replacing 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, PCB card 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 OF SPLIT / WINDOW AIR CONDITIONERS

The following works are to be carried out every year:

- Parts completely (in case of windows), whereas dismantling the casing of condensing units on its position (In case of Split unit). Cleaning rust, removing and painting with Red Oxide primer and any synthetic enamel paint of approved quantity. Fan, motor to open and overhaul Bearing and shift to replace/fabricate if required.
- Corroded sheet metal parts to be renewed / damaged to be replaced.
- Base tray to be bituminized and if corroded / damaged to be replaced.

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. Base tray to be bituminizes and 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 for 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

PAYMENTS:

The payment will be made after the completion of service for all Air conditioners as per the Annexures 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):

- a) 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.
- b) 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** Annexure B 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 form 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 conditioner of value not less than 8.0 lakhs each.
- Proof of adequate field service organization to provide handling, servicing and maintenance of air conditioners.
- List of work 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).