

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

INVITATION FOR TENDERS

Tender No. NAL/PUR/ELK/084/23 (AMC)

Dated: 04/08/2023

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 Organisation. 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.

Sl. No.	Description of Item(s)	Unit	Quantity
1	Comprehensive Annual Maintenance Contract (CAMC) for		
	online UPS systems: Comprehensive Annual Maintenance		
	Contract (CAMC) for 4 (Four) Nos, Online UPS systems of the		
	following ratings and makes installed at Electrical Section,		
	CSIR-NAL, Kodihalli campus. The detailed scope of work shall		
	be as per the "Annexure" enclosed. The CAMC Period will be		
	for 1 year (12 calendar months).		
1.1	CAMC for 200 KVA online UPS system of make "AROS"	No	1
1.2	CAMC for 200 KVA online UPS system of make "POWER	No	1
	ONE".		
1.3	CAMC for 60 KVA online UPS system of make "DB POWER".	No	1
1.4	CAMC for 40 KVA online UPS system of make "DB POWER".	No	1

Single / Double Bid Only	Single		Tender Type	Open
Bid Security (EMD) (in INR)	Bid Security Declaration be enclosed with quotation	should	Bid submission end date	28-Aug-2023 10.00 Hrs
Performance Security	Nil		Bid opening date	29-Aug-2023 11.00 Hrs

01. Tender document(s) may be downloaded from the Central Public Procurement Portal i.e., https://www.etenders.gov.in. 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.

पी बी 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**



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- 02. Tenderer's can access tender document(s) 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 in the website as per the schedule given in the next page.
- 03. 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 authorisation letter from their principal. To maintain sanctity of tendering system, one Indian Agent *cannot* represent *two* different Foreign Principals in *one* tender
 - b. Open Tender Enquiry: Only Local supplier's 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 16th 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.

- 04. 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.
- 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 a copy of registration done with DPIIT.
 - 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. As per Government of India procurement policies,
 - a. 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.
 - b. The procuring entity intends to give purchase preference to products/goods manufactured by Micro, Small and Medium Enterprises.

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- 07. 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.
- 08. 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.
- 09. 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 Internet (www.nal.res.in) 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

SCOPE OF WORK FOR UPS SYSTEMS

1. **DEFINITION**:

It will be comprehensive maintenance contract including repair, replacement and maintenance of all spares of the UPS. DC capacitors and Batteries are excluded.

2. PREVENTIVE MAINTENANCE:

Preventive maintenance consists of measures as necessary to maintain the equipment in a proper operating condition. Preventive maintenance includes functional checking and necessary adjustment of the electrical parameters. The service required includes the following.

A. QUARTERLY MAINTENANCE:

✓ UPS SYSTEM:

➤ VISUAL INSPECTION & INTERNAL INSPECTION

- Inspect all printed circuit board connections, power connection, sub-assemblies, bridges and legs.
- Inspect AC/DC capacitors for signs of leakage.
- Input Bus & Output Bus including all protective devices and connected switchgear.
- Converter module.
- Inverter module.
- Functional checking and necessary adjustment of the electrical parameters.
- LCD screen and touch buttons.
 - > EXTERNAL OPERATING PARAMETERS:
- System input and output voltage (All phases/Neutral/Earth).
- System input and output currents (All phases/Neutral/Earth).
- DC bus voltage.
- Adjust all panel meters to measured values.
- System Bypass voltage.
- Input and output frequency.
- Neutral to Earth voltages.
 - > ENVIRONMENTAL PARAMETERS:
- Condition of all ventilating equipments like blowers, cooling fans etc.
- Replacement and corrective action of ventilating equipments if found defective.
- General cleanliness of UPS power module and other connected modules.

➤ OPERATING AND MONITORING SYSTEM PARAMETERS:

- Alarm archive revive and printing on display.
- Working condition of LCD screen and touch buttons.

✓ BATTERY SYSTEM:

- ➤ BATTREY CABINET CHECK:
- General appearance and cleanliness of battery system.
- Inspect all DC connections for abnormalities.
 - > MEASURES:
- Measure and record the voltage of each battery cell using calibrated measuring equipment.
- Charger output current and voltage.
- Continuity test of each cell/battery.
- A functional test of stored emergency power supply for 12 minutes
 - ➤ VISUAL INSPECTIONS and ACTION:
- Check connection terminals/corroded terminals and replace if required.
- Check the integrity of battery rack/cabined.
- Check distilled Water Levels and specific gravity of batteries, top up of distilled water as required. (Distilled water will be supplied by NAL)

B. ANNUAL MAINTENANCE:

- Clean the interior of units with vacuum cleaner.
- Verify that all electrical connections are tight. Tighten if necessary.

3. BREAKDOWN MAINTENANCE:

This is to be carried out in the event of malfunction/ failure which prevents the operation of the equipment. It includes fault finding, repair, or replacement of the defective parts, functional checking and bring back the UPS system to the working condition within 2 Hrs once the breakdown complaint is lodged. If it is major breakdown need to be restored within 24 Hrs of complaint lodged.

GENERAL SCOPE OF WORK:

- AMC service shall be performed at the same time as scheduled quarterly.
- Ensure continuous spares availability during the contract period without downtime.
- Vendor/Firm shall replace all spares free of cost in the UPS system except the batteries and Capacitors (Capacitors that are older than 5 years).
- Response time to attend the breakdown calls shall be within 2 hours.
- Any breakdown calls will be attended/repaired/replaced during all days, including Govt. holidays round the clock.

- Following the preventive maintenance inspections/service, a written report shall be provided detailing the result of the inspection.
- If the equipment is required to be shifted to another location, the AMC firm should send representative who will extend their help by way of supervision from vendor's side, but shifting cost of UPS to another location will be on chargeable basis/ CSIR-NAL will take care of this.
- The firm/vendor should extend their technical support for any modifications, upgradation or any kind of add-ons proposed on mutually agreed upon to the existing UPS systems. The cost involved in this case can be charged extra.
- The Firm should monitor and intimate well in advance the condition of faulty batteries if any connected with these UPS systems and earthing systems, so that CSIR-NAL will take necessary action on time.
- Quarterly payment will be paid after satisfactory completion of services as per scope of work.
- CSIR-NAL has an option to terminate this contract at any point of time by giving 1-month notice.
- CSIR-NAL will intimate the vendor/firm if any additional attachments, features
 or devices are directly or indirectly connected to the equipment and all such
 connections of additions will be conducted only after receiving mutually agreed
 prior written consent between CSIR-NAL and AMC vendor/firm.
- In case of major breakdowns, replacement or standby UPS must be provided by the AMC vendor at free of cost within a day except batteries.
- Vendor/firm must agree to maintain the equipment specified in this agreement in accordance with and subject to the terms & conditions mentioned before.
- The client will ensure proper electrical grounding for the UPS system.
- The firm /vendor shall perform quarterly measurement of earth values and ensure predetermined earth to neutral voltages.

Caupy 24/38/23