

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 BIDS/NIT

Tender No. NAL/PUR/FMCD/348/19-Y

Dated: 12-Dec-19

CSIR- National Aerospace Laboratories (NAL), Bengaluru, India is one of the premier laboratories under Council of Scientific and Industrial Research (CSIR), an autonomous body under 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 for procurement of the following item(s) for day to day research work.

Sl.No.	Description of Items	Unit	Quantity
01	Supply, Installation and Setting up of Data Archival System for Multiple user personal computer data. Please refer Annexure for detailed specification.	No	01

Single / Double Bid	Two Bid
Bid Security (EMD) (in INR)	Rs. 50000/-
Performance Security	10% of the purchase order value

01. Tender Documents may be downloaded from Central Public Procurement Portal <https://www.etenders.gov.in>. Aspiring Bidders who have not enrolled/ registered in e- procurement should enroll/ register before participating through the website <https://www.etenders.gov.in>. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at 'Instructions for online Bid Submission'.
02. 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 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 on the website <https://www.etenders.gov.in> as per the schedule given in the next page.
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 authorization 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 tenders (Quotations) shall not be considered. Quotations received after the due date and time shall be summarily rejected.
05. The Bidder shall comply the terms and conditions of the tender, failing which, the offer shall be liable for rejection.
06. 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.


Raman Kumar
(Section Officer S&P)

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SCHEDULE CUM CRITICAL DATE SHEET

1	Name of Organization	CSIR-National Aerospace Laboratories, Bengaluru	
2	Tender Reference No	NAL/PUR/FMCD/348/19-Y dated: 12-Dec-19	
3	Tender Type (Open/Limited/EOI/Auction/Single)	Limited Tender	
4	Type/Form of Contract (Work / Supply / Auction / Service / Buy / Empanelment / Sell)	Supply	
5	No of Covers (One/Two/Three/Four)	Two	
6	Tender Category (Services/Good/Works)	Goods	
7	Allow Resubmission (Only in online mode within scheduled period)	Yes	
8	Allow Withdrawal (Only in online mode within scheduled period)	Yes	
9	Allow Offline Submission	No	
10	Work Item Title	Supply, Installation and Setting up of Data Archival System for Multiple user personal computer data.	
11	Work Description	Supply, Installation and Setting up of Data Archival System for Multiple user personal computer data	
12	Delivery Schedule	60 days from the date of purchase order	
13	Product Category (Civil Works / Electrical Works / Fleet Management / Computer Systems)	R & D Equipment	
14	Is Multi Currency Allowed	Yes	
15	a) Tender Publishing Date -	16-Dec-19	1800 Hrs
	b) Document Download Start Date-	16-Dec-19	1800 Hrs
	c) Bid Submission Start Date-	16-Dec-19	1800Hrs
	d) Bid Submission End Date-	02-Jan-20	1000 Hrs
	e) Bid Opening Date-	03-Jan-20	1100 Hrs
16	Bid Validity Days	90 days	
17	Address for communication	Stores and Purchase Officer CSIR-National Aerospace Laboratories, HAL Airport Road, Kodihalli, Bengaluru - 560017	
18	Inviting Officer	Director, CSIR-NAL	
19	Contact No	25086040, 25086041	
20	E-mail Address	purchasek@nal.res.in	
21	Detailed specification of item	Refer Invitation for bids / NIT	
22	Tender Terms & Conditions & Instruction for online bid submission	The prospective bidders are requested to refer to the Standard Tender Document available on NAL Internet (www.nal.res.in) under the icon Tender-Purchase before formulating and submitting their bids	

Note:

- a) **Participation in this tender is by invitation only and is limited to the selected bidders. Unsolicited offers are liable to be ignored. However, bidders who desire to participate in such tenders in future may bring it to the notice of Procuring Entity and apply for registration.**

- b) **To get registered as an approved bidder with the procuring entity please refer our website www.nal.res.in and submit.**

Supply, Installation and Setting up of Data Archival System for FMCD

Vendor has to supply, install and configure the automatic backup to a NAS storage of about 60 individual desktop computer running windows XP/7/8/10/Linux. Vendor should do the Networking to the user computers and the NAS storage. The NAS storage and the server has to be installed in a 19" rack. The deliverables should include the following items.

1. 1U rack server with the following specification -1 No

1.	Processor	Intel® Xeon® processor E3-1200 or higher
2.	Operating System	Windows 10 Professional
3.	RAM	16GB DDR4
4.	Storage	256GB Usable SSD storage with RAID-1
5.	Networking	10G Ethernet Port -1, 1G Ethernet port -1
6.	Accessories	USB-KeyBoard and Mouse, 17" LED Monitor
7.	Warranty	1 Year Onsite Warranty

2. Acronis Backup software for workstations: 60 perpetual license**3. 42U 800mmx1200mm 19" Netrack with Lockable Perforated front and back steel doors with two Power Distribution Units and all standard accessories -1No****4. Network Attached Storing with the following specification -1No**

1	Chassis	The NAS system should be rack mountable and shall be supplied with all rack mounting accessories
2	Storage Bays	Should have at least 12 Hot Plug LFF(for 3.5" 1TB/2TB/4TB/6TB/8TB/12TB) SATA/SAS Hard Drive Bays with support of up to 144TB or higher storage with unused bays covered with HDD Blanks.
3	Drives	Supplied with at least 80 TB (8TBx10 disks) of raw disk capacity with LFF(3.5") SAS/SATA 7.2K RPM 6Gbps drives or better
4	Raid Support	Should support RAID levels 0,1,5,6,10,50,60 with multivolume support and global hot spare support and it should also be possible to configure the entire capacity as a single volume
5	Protocols	Should support CIFS/SMB, NFS v2/v3, HTTP/S, FTP/S , Microsoft iSCSI target
6	Data Services	Should support scheduled snapshots and recovery, replication, and should support expansion of capacity online and without service disruption
7	Management	NAS System should have inbuilt OS, and it should support browser based management, configurable periodic alerts and reports through e-mail and SNMP
8	Processor	Intel Xeon Quad Core 3.5GHz or better Processor with 16 GB DDR4 RAM or higher
9	Networking	At least Two 1Gbps Ethernet ports and Two 10Gbps SFP+ ports with load balancing and failover support
10	Power Supply	Dual Loaded Hot-plug Redundant power supplies(1+1) with 15A 230V Indian Standard Power chords

11	Fans	System with Redundant Fans
12	Support	The NAS should be of a reputed make from one of HP/Dell/EMC/Netgear. The vendor shall have 24x7 support number with local office in Bangalore for onsite support
13	Features	Inbuilt real time Antivirus with automatic updates, Data compression, IPv4 and IPv6 support. All kernel and security updates shall be provided during warranty period.
14	Service	Installation, configuration and training of NAS System and software at CSIR-NAL
15	Licenses	Quote should include perpetual licenses for the all the features required for above specifications for the entire capacity from Day 1
16	Warranty	5-year comprehensive warranty for NAS and HDDs with onsite next business day support. Hard disk replacement without surrendering the faulty hard disk.

5. Active and passive networking items as per the list given below.

SI No	Item	Unit	Qty
1	24 Port Layer 2 Switch as per the specifications attached in Annexure-1	nos	1
2	48 Port Layer 2 Switch as per the specifications attached in Annexure-2	nos	1
3	Single Information Outlet with faceplate and backbox having shutter facility of Molex make	nos	90
4	Dual Information Outlet with faceplate and backbox having shutter facility of Molex make	nos	10
5	CAT6 UTP patch cord-1m of Molex make	nos	120
6	CAT6 UTP patch cord-2m of Molex make	nos	120
7	24 Port CAT6 UTP Jack panel with Cable Manager of Molex make	nos	6
8	CAT6 UTP Cable roll with 305m length of Molex make	nos	22
9	NETRACK make 19" 12U/600mm Depth Wallmount Steel Rack with Lockable Toughened Glass Door, 2 Fans, 6 Socket Powerstrip, 2 Cable Managers and Standard Accessories	nos	2
10	Legrand make DLP Plastic Trunking without cover 80 mm X 50 mm Cat. No 0104 12	m	180
11	Legrand make DLP Flexible cover 65mm width Cat. No 0105 21	m	180
12	Legrand make DLP 80 mm x 50 mm End cap Cat. No 0107 22 as required	nos	20
13	Legrand make DLP Mini-trunking 32 x 20mm white - system with independent cover - without central partition Cat. No 0300 17	m	240
14	Legrand make DLP 32 x 20mm End Cap Cat. No 0312 09 as required	nos	30
15	Fixing of Single Information Outlet with faceplate and back box including termination, labelling as required	nos	90
16	Fixing of Dual Information Outlet with faceplate and back box including termination, labelling as required	nos	10
17	Fixing of 24 Port CAT6 UTP Jack panel including termination, labelling as required	nos	6
18	Fixing of NETRACK 19" 12U Wall mount Rack with all accessories including cable dressing as required	nos	2
19	Fixing of DLP 80 mm x 50 mm plastic trunking with accessories in surface/recess including cutting the wall and making good the same as required	m	180

20	Fixing of DLP Mini-trunking 32 x 20mm with accessories in surface/recess including cutting the wall and making good the same as required	m	240
21	Laying of CAT6 UTP Cable in existing Casing/PVC/conduit as required	m	4200
22	Fusion Splicing for SMF/MMF fibre cables as required	nos	36

Notes:

1. Provide 1-year onsite warranty for the storage system and networking.
2. Detailed specification of storage system and backup software has to be provided in the quotation.
3. The system will be accepted only after successful completion of the Acceptance Test Procedure given in Annexure 3

Annexure 1: Specifications for 24 Port Layer 2 Switch Make Juniper/Allied

Telesis/Brocade/Ruckus/Extreme

1	Fully managed Layer2 Gigabit Ethernet Switch with at least 24 no's of 10/100/1000 Mbps Base-T Ports and with 4 no's additional 1000 Mbps SFP uplink ports
2	Should be of 1U Height and 19" Rack mountable along with all mounting accessories and Indian Standard Type Power Chord and should work with AC Single Phase Supply of 230V 50Hz
3	Should be Manageable through CLI, Web Interface, SSH/Telnet and should allow to take Configuration backup via FTP/secure copy
4	Should include Comprehensive Warranty including onsite hardware replacement, ongoing software upgrades and next business day support for 5 years from the date of Installation and should not have End Of Life Declared on the date of quotation/installation
5	Should include Supply and installation including the configuration of the switches
6	SFP Uplink ports should work with Generic Standard 1000 Mbps SFP fiber Modules
7	Should support Switching bandwidth of at least 56 Gbps
8	Should have Throughput of at least 41 Mbps
9	Should Support minimum 8000 Mac Addresses
10	Should Support minimum 64 Active VLANs and 4000 VLAN Ids
11	Should support Jumbo frames - 9,000 bytes
12	Should support the standards: IEEE 802.1D, IEEE 802.1p, IEEE 802.1Q, IEEE 802.1s, IEEE 802.1w, IEEE 802.1X, IEEE 802.1ab, IEEE 802.3ad, IEEE 802.3x full duplex, IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3ab 1000BASE-T, IEEE 802.3z 1000BASE-X
13	Should Support SNMP v1, v2c, and v3

Annexure-2: Specifications for 48 Port Layer 2 Switch Make Juniper/Allied

Telesis/Brocade/Ruckus/Extreme

1	Fully managed Layer2 Gigabit Ethernet Switch with at least 48 no's of 10/100/1000 Mbps Base-T Ports and with 4 no's additional 1000 Mbps SFP uplink ports
2	Should be of 1U Height and 19" Rack mountable along with all mounting accessories and Indian Standard Type Power Chord and should work with AC Single Phase Supply of 230V 50Hz
3	Should be Manageable through CLI, Web Interface, SSH/Telnet and should allow to take Configuration backup via FTP/secure copy
4	Should include Comprehensive Warranty including onsite hardware replacement, ongoing software upgrades and next business day support for 5 years from the date of Installation and should not have End Of Life Declared on the date of quotation/installation
5	Should include Supply and installation including the configuration of the switches
6	SFP Uplink ports should work with Generic Standard 1000 Mbps SFP Fiber
7	Should support Switching bandwidth of at least 104 Gbps
8	Should have Throughput of at least 77 Mbps
9	Should Support minimum 8000 Mac Addresses
10	Should Support minimum 64 Active VLANs and 4000 VLAN Ids
11	Should support Jumbo frames of size upto 9,000 bytes
12	Should support the standards: IEEE 802.1D, IEEE 802.1p, IEEE 802.1Q , IEEE 802.1s, IEEE 802.1w, IEEE 802.1X, IEEE 802.1ab , IEEE 802.3ad, IEEE 802.3x full duplex, IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3ab 1000BASE-T, IEEE 802.3z 1000BASE-X
13	Should Support SNMP v1, v2c, and v3



Annexure-3 ATP for Supply, Installation and Setting up of Data Archival System

Sl No	Requirement	Yes/No
1.	Is all contracted equipment delivered to the site?	
2.	Is all equipment installed	
3.	Is all equipment connected and operational	
4.	The system can be restarted without any issues?	
5.	has the site been cleaned up after the works?	
6.	Requested network points are provided?	
7.	whether all the network points are connected to the switch and connectivity tested?	
8.	Is the storage device configured and connected to the server computer?	
9.	Is the backup software installed in at least five user workstation?	
10.	Is the server computer configured to take backup of all the above five computers to the storage system?	
11.	Is periodic backup is configured and tested?	
12.	Whether all the user manuals supplied?	
13.	Whether all the Operating System, Driver Software and application software medias for the server are provided?	
14.	Whether all the Operating System, Driver Software and application software medias for the storage device are provided?	

Note: Training of Two NAL personnel for one day at CSIR-NAL.

Pre-Qualification / Eligibility Criteria (Documentary evidence should be provided along with the quotation)

1. Bidder shall have successfully executed at-least one installation for a storage system at a single location for any government or non-government organization in India.
2. Contractor shall enclose an affidavit stating that the company is / has not been black listed by Central/State Government/PSU
3. Bidder shall be a system integrator for storage networks.
4. Bidder should submit copies of Purchase ordered along with all technical details of previous such works.
5. Bidder should submit copies of installation reports and/or completion certificate certified by the customer indicating the purchase order references.

