INTER – UNIVERSITY ACCELERATOR CENTRE (An Autonomous Centre of UGC) Aruna Asaf Ali Marg, New Delhi – 110067

NOTICE INVITING E – TENDER

Tender No: IUAC/NIT/60/AK/2019-20 Dated: 17/02/2020

Inter-University Accelerator Centre (IUAC) invites online bids through e-Procurement Portal under two bid system, viz., Technical and Financial bids, from eligible / experienced parties for the "Management of server system software at the Inter University Accelerator Centre".

Tender Documents may be downloaded from Central Public Procurement (CPP) Portal https://eprocure.gov.in/eprocure/app and www.iuac.res.in

Aspiring Bidders who have not enrolled / registered in e-procurement portal should enroll / register before participating through the website https://eprocure.gov.in/eprocure/app

Bids should be submitted online only at website: https://eprocure.gov.in/eprocure/app. Tenderers / Contracters/ Bidders are adviced to follow the instructions provided in the e-procurement portal. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned documents.

Only bids received through e-procurement portal will be considered for opening. Bids not covering full scope of work/ supply of the products/goods will be rejected and only complete bids will be considered. IUAC reserves the right to accept / reject any / all tenders in part / full without assigning any reasons whatsoever, and decision of IUAC in this regard wll be binding on all bidders.

Bidders have to select the payment option as "**offline**" to pay the tender fee and EMD as applicable. The tender fee and Earnest Money Deposit (EMD) shall be in the form of demand draft only issued in favor of "**Inter University Accelerator Centre, New Delhi**" and it should be deposited at IUAC before the bid opening time and date. Bidders registered with MSME / NSIC and foreign bidders quoting directly are exempted from payments of EMD and tender fee. Copy of valid registration/exemption certificate should be uploaded in the portal.

Bidders are requested to note that they should necessarily submit their financial bids in the standard .XLS BOQ format provided and no other format will be acceptable. BOQ format is to be downloaded and to be filled and uploaded without modification. If the BOQ file is found modified by the bidder, the bid will be rejected.

Any Corrigendum / Amendments in respect of above tender shall be issued on website https://eprocure.gov.in only. Bidders should take into account any corrigendum published on the tender document before submitting their bids.

Name of Work / Supply	Management of server system software at the Inter University Accelerator Centre	
Tender Number	IUAC/NIT/60/AK/2019-20	
Tender Value (Estimate only)	Rs. 9,50,000/- (Nine lakh fifty thousand)	
Earnest Money Deposit	Rs. 19,000/- (Nineteen thousand only)	
Tender Document Fee	Rs.500/- (Five hundred only)	
Bid Submission End Date and Time	March 12, 2020 at 3.00 p.m.	
Technical Bid Opening Date (Part- A)	March 13, 2020 at 3.30 p.m.	
Price Bid Opening Date (Part -B)	Will be intimated later	
Address for contact	M. B. Joseph, Administrative Officer (S & P), Inter University Accelerator Centre, Aruna Asaf Ali Marg, New Delhi – 110067 E-mail: joseph@iuac.res.in Phone: 011-24126018 & 24126022	

General Terms and Conditions of the Tender:

1. Submission of Tender:

Tenders should be uploaded on CPP Portal in two parts, i.e., Technical Bid(Part- A) and Price Bid / BOQ (Part-B).

1. Technical Bid (Part-A):

In this bid, the bidder should upload the following documents required for technical qualifications with respect to the scope of work and technical specifications laid down in Annexure I. No deviations in respect of NIT conditions are acceptable.

- (a) Covering letter on the Company's Letter Head
- (b) Biodata of company / company profile
- (c) Copies of work orders of similar type of work received during the last 3 years in Govt., Public sector, Autonoumous body or reputed Public Ltd. Company, with at least one work of value not less than Rs. 7.6 Lakhs or two similar works, each of value not less than Rs. 5.7 Lakhs or three similar works, each of value not less than Rs. 3.8 Lakhs. Work order(s) must be in favour of bidder.
- (d) Entire NIT (except Price bid) duly signed & stamped by the bidder as acceptance of all the terms & condition of tender.
- (e) Duly filled table given in the Annexure III

<u>Technical bids which are not conforming to the General / technical specifications will be disqualified.</u>

2. Price Bid/BOQ (Part-B):

The bidder is required to quote his unconditional rates for the services of one year, excluding taxes (GST). Bidders are advised to quote all the items in the BOQ in the format laid down in Annexure-II. Incomplete quotes will be rejected.

- 3. <u>Earnest Money:</u> An earnest money deposit (EMD) of Rs 19,000/- (Rupees nineteen thousand only) has to be submitted before opening of the technical bid (Part-A). The EMD shall be only in the form of Bank Draft / Banker's cheque in favour of "Inter-University Accelerator Centre", payable at New Delhi. No Cheque/ Cash shall be accepted as EMD. The refund of EMD to the technically disqualified & lowest 4th bidders onwards shall be made within 15 days from the date of opening of price bid. The refund of EMD of the 2nd & 3rd lowest bidders shall be made after award of work and site mobilization by the successful bidder. The EMD of the successful lowest bidder (L1) shall be adjusted against Security deposit.
- 4. **Exemption from EMD:** Unit registered with MSME/NSIC is exempted from payment of EMD.

5. Validity of Tender:

Tender shall be valid for our acceptance without any change in the rates and NIT conditions for a period of 90 days from the date of opening the technical bid. No escalation of cost will be acceptable in any condition after opening of tender.

6. The resident engineers should have appropriate knowledge of Linux server maintenance.

7. Office in Delhi/ NCR

The bidder should have an office in Delhi / NCR (attach supporting documents) so as to ensure timely resolution of issues pertaining to concerned work.

8. Escalation/ Deviation:

No escalation or deviation shall be allowed till execution of order / contract.

9. Terms of Payment:

Payment will be made against quarterly invoices raised by the successful bidder after completion of every quarter of the annual contract.

10. Delivery Period:

The contract period will be for a period of one year. Start date of contract period will be within thirty days from the date of confirmed order.

11. Correspondence:

All the correspondence in respect of tender / contractual obligation shall be made to "The Administrative Officer (S & P), Inter University Accelerator Centre, Aruna Asaf Ali Marg, New Delhi – 110067". E-mail: joseph@iuac.res.in, Phone: +91-11-24126018, 24126022

12. Tender Rejection:

- a) IUAC reserves the right to accept/ reject any/ all tenders in part/ full without assigning any reason whatesover and the decision of the IUAC in this regard will be binding on all the bidders.
- b) Bids received by means other than e-procurement portal will be rejected.
- c) Bids not covering full scope of work/ supply of the services/ goods will be rejected and only complete bids will be considered.
- d) If BOQ file is found to be modified by the bidder, the bid will be rejected.
- e) Tenders not complying with any of the provisions stated in this tender document are liable to be rejected.

- **13. IUAC reserves the right** to reject or accept any or all the tenders in full or in part without assigning any reasons whatesoever, and the decision of the Centre in this regard will be binding in on all the bidders. Tenders not complying with any of provisions stated in this tender document are liable to be rejected. Director, IUAC reserves the right to accept or reject any tender without assigning any reason and does not bind himself to accept the lowest tender.
- **14.** The contract shall be governed by Indian Laws. Any dispute arising out of this contract will be subjected to jurisdiction of New Delhi/ Delhi.

Accepted (Signature of Bidder)

Annexure-I

Scope of Work

It is proposed to appoint a vendor with appropriate skills and experience for the management of central server systems and associated terminals. The vendor would manage the computing resources by assigning to IUAC two resident engineers on a 5 days a week, 8 hours a day basis, who would work with and under the supervision of IUAC's computer division, and who would have access when required to the vendor's remote resources.

The resident engineers would undertake to administer and manage software for all central servers (firewall, mail, web, proxy, DNS, ssh, LTS) and the associated terminals (thin clients for LTS server). The scope of work would include operating system and application software installation, configuration, maintenance, upgrade, and troubleshooting. A total of 4 servers and 45 thin clients are proposed to be placed under this management contract. All operating systems and software are Linux based.

The resident engineers would also be involved in configuration and maintenance of Sophos UTM (firewall), including monitoring of inward and outward web traffic and local network traffic, and when required configure switches on the IUAC wired LAN and the central wireless controller.

The resident engineers should have at least two years prior experience in system administration of Linux servers, preferably RHEL/CentOS/Scientific Linux / Ubuntu distributions; should be familiar with Ethernet network, switch and firewall configuration; should have experience of Apache, DNS configuration; should have experience ipertainingn using standard Linux text editors; should have experience of writing Linux bash shell scripts; and should be capable of independently diagnosing and trouble-shooting server and network problems.

I. The operating systems, application software and description for each of the central servers is given below:

1. Email Server

The e-mail server runs the Linux OS (Ubuntu 16.04), with the Zimbra network edition e-mail and groupware application. The Zimbra software is based on the Postfix mail transport with virtual users, the NGINX web server, Amavis, ClamAV, Policyd and SpamAssassin, and a proprietary authentication module and web, mobile and desktop mail clients. The Zimbra mail application is vendor-supported, with next business day and telephonic / e-mail support. The resident engineers would be expected to:

- Manage and monitor the Zimbra application, create mail user accounts, routinely generate user logs, flag security issues including outgoing and incoming bulk e-mail and compromised user passwords, ensure proper functioning and updates of anti-spam, anti-virus and mail throttling software.
- Respond to security threats by modifying and updating firewall, anti-virus and mail filtering policies.

- Configure mail client software wherever required.
- Liaise with Zimbra support personnel, including Zimbra vendor personnel, for immediate resolution of mail server issues.
- Ensure no listing of the iuac.res.in domain on spam block lists.
- Ensure mail backup and migration as required.
- Monitor server parameters for early warning signals of software and hardware failures.

2. DNS / web server

This Linux (Scientific Linux 6) system has multiple functions. It serves IUAC's web page www.iuac.res.in using Apache httpd, routes all Internet access from the IUAC LAN (including wireless LAN) through the Squid proxy server, and currently has a limited number of user accounts on the server to enable ssh access to staff from the outside world. The Apache httpd configuration on this server holds the pointer to the actual content, which is hosted on the web content server described below. The server also holds the internal (LAN) DNS records, and is the name server defined for all installations inside the IUAC LAN. The vendor would be expected to:

- Install, configure, manage and monitor the iptables firewall, allowing and blocking access in line with IUAC requirements
- Monitor and generate reports from Squid access and error logs
- Configure and manage the Squid user database, including user accounts and passwords
- Configure and manage Squid ACLs
- Configure secure and private browsing
- Block websites and client software and configure content filtering, as required
- Configure transparent proxy if required
- Install and configure Apache to serve multiple domains from a single server, and pass through http requests to another server, in line with IUAC requirements.
- Manage and monitor the Apache httpd server, and generate reports from access and error logs
- · Configure and manage name based virtual hosting
- Configure and manage IP based virtual hosting.
- Install, configure and manage DNS services
- Maintain up-to-date DNS and RDNS records
- Configure and manage file system access from Apache
- Configure and ensure controlled access to users' web directory, possibly on another system.

3. LTS server

This Linux (Scientific Linux 6) server acts as the Linux Terminal Server for thin clients in the administrative and academic network. This allows PCs in the academic network to access the Linux OS without actually loading it, and is often the preferred alternative for older PCs and Windows PCs which need also to access Linux accounts. All administrative staff use thin clients which act as terminals to this server. The administration department, which takes care of IUAC's finance, accounts, personnel, stores, purchase, estate and general administration functions, uses open source software for all activities, including the LibreOffice suite. The server also acts as the gateway from the administration network to the academic network. Management tasks on this server include:

- Install, configure and manage LTSP server on open source Linux (Fedora), with MAC-based DHCP for client IP allocation, and user home directory mount on NFS.
- Configure, install and manage LTSP clients with MAC address based DHCP.
- Update LTSP server with latest network/video driver, to enable new thin client hardware to access LTS services.
- Associate multiple clients with different hardware vendors/ architectures as thin clients.
- Install and upgrade LTSP servers and clients as required.
- Manage and monitor automated weekly backup of user space
- Troubleshoot client-server connectivity issues, browser and plugin issues, LibreOffice suite issues, printer connectivity issues, and any other issues that may arise with server or thin clients.

4. Web content server:

This server contains the content to which the IUAC web page (www.iuac.res.in) points. The server runs the Apache httpd server, and serves up CGI/PHP/Java content besides http content as required. The vendor would:

- Install, configure, manage and monitor the iptables firewall, allowing and blocking access in line with IUAC requirements
- Install and configure Apache, in line with IUAC requirements.
- Manage and monitor the Apache httpd server, and generate reports from access and error logs
- Configure and manage file system access from Apache

For all servers:

- 1. Resident engineers have to ensure backup management for system administration and configuration tools, utilities and databases..
- 2. For hardware troubleshooting and repair/replacement, as well as mail system and network issues, resident engineers have to coordinate with hardware vendor / AMC vendor in consultation with IUAC computer personnel to ensure system is brought up as soon as possible.
- 3. Resident engineers have to ensure 99.9% uptime on all servers. Hardware troubleshooting and replacement issues will not be considered as system downtime for this purpose.
- 4. Weekly and monthly MIS report will be generated by the resident engineers, in a format mutually agreed with IUAC.
- 5. Performance of contract will be reviewed quarterly.

II. Local Area Network and WAN link

The wired local area **network** at IUAC is a gigabit network, consisting of a core switching system of 2 Extreme X650 24-port switches stacked in a 10 Gbps per port non-blocking configuration, 21 Extreme X350 and 3 Juniper 48-port edge switches with 10 Gbps fibre uplinks to the core and 1 Gbps UTP links to the desktop. The wireless LAN network consists of a Zyxel controller, a Zyxel 24-port core switch, 14 Zyxel PoE 12-port switches, and 60 Zyxel a/g/n/ac access points. In addition, the Centre has a WAN link to ISP Power Grid Corporation, and a second link to the National Knowledge Network. The vendor would undertake to manage and monitor active components of this network, and make any configuration changes required for performance or policy implementation. The management tasks include, but are not limited to

- Managing L2/L3 switches and wireless access points from multiple OEM
- Configuration and maintenance of port-by-port access and blocking based on IP or MAC addresses.
- Configuration and change, as required, of port forwarding and static routing between the Internet and the IUAC LAN in line with the requirements of IUAC.
- Diagnosis of network related issues involving both active and passive components, such as network cable, switch port, network port, I/O Port faults and rectification by coordinating with IUAC computer division personnel, suppliers and AMC providers.
- Monitoring of WAN traffic and configuration and implementation of adequate security measures to protect IUAC servers and systems.
- Managing, monitoring and resolving WAN/DNS/Link issues by coordinating with ISPs.

For effective network management,

- 1. Resident engineers have to provide all tools for network monitoring and diagnosis.
- 2. Resident engineers have to ensure backup management for network administration and configuration databases.

- 3. For hardware troubleshooting and repair/replacement, resident engineer has to coordinate with hardware vendor / AMC vendor in consultation with IUAC computer personnel to ensure network is brought up as soon as possible.
- 4. Resident engineers have to ensure 99.9% uptime on the network. Hardware troubleshooting, replacement and ISP issues will not be considered as system downtime for this purpose.
- 5. Weekly and monthly network performance reports will be generated by the resident engineers, in a format mutually agreed with IUAC.
- 6. Performance of contract will be reviewed quarterly.

Accepted (Signature of Bidder)

Annexure-II

Tender inviting authority: Inter-University Accelerator Centre

Name of work : Management of server system software at the Inter-University Accelerator Centre

Tender No.:

S.No.	Description	Unit
1.	Annual charges for "Management of server system software at IUAC as per the attached scope of work"	

Accepted (Signature of Bidder)

Annexure-III

Checklist items	Yes/No
The resident engineers should have appropriate knowledge of Linux server maintenance.	
The bidder is having an office in Delhi/NCR(supporting documents attached)	
Whether past work orders of similar kind of work are attached?	
Earnest Money Deposited	