

# भारतीय प्रौद्योगिकी संस्थान पटना INDIAN INSTITUTE OF TECHNOLOGY PATNA

बिहटा, पटना-801106, बिहार, भारत Bihta, Patna - 801 106, Bihar, INDIA

## **E-PROCUREMENT MODE**

Tender Reference No.: IITP/S&P/EPR/9/CC-61/2020-21
E-tender for Comprehensive Annual Maintenance
Contract (CAMC) of Network Devices along with
Configuration Support of all the feature/module of
each network device and related electrical
equipment at IIT Patna, Bihta, Patna

**Documents to be submitted online only** 



## भारतीय प्रौद्योगिकी संस्थान पटना INDIAN INSTITUTE OF TECHNOLOGY PATNA

बिहटा, पटना-801106, बिहार, भारत Bihta, Patna – 801 106, Bihar, INDIA

Tender Reference No.: IITP/S&P/EPR/9/CC-61/2020-21

Indian Institute of Technology Patna, an Institute of National Importance, invites sealed bids for the Comprehensive Annual Maintenance Contract (CAMC) of Network Devices along with Configuration Support of all the feature/module of each network device and related electrical equipment for their Campus Networking Components from competent vendors who have adequate credential for similar type of work in large organizations. Initially the contract will be for one year from Dec 15, 2021 to December 14, 2022, which will be extended on a year to year basis for another two years on satisfactory performance.

Tender document can be downloaded from Institute website www.iitp.ac.in (Link: Tenders), the same is also available on CPP Portal (https://eprocure.gov.in). Any Corrigendum/addendum shall only be published on the Institute website and CPP Portal.

The technical bids (should also contain detailed un-priced bill of material) will be opened on 01.09.2021 by 3:30 p.m. in the presence of the authorized representatives of Vendors and price bids will be opened (to be notified separately), only of those firms, who will be found technically qualified/short listed, after evaluation of their technical bids.

- 1. Detailed Tender Documents may be downloaded from Central Public Procurement Portal (https://eprocure.gov.in/eprocure/app) and from our website (https://www.iitp.ac.in/).
- 2. All details /document pertaining to the tender such as tender document, pre-bid report, corrigendum and any further updates will be available only on our website & also at CPP Portal.
- 3. No manual bid will be accepted. All quotations (both technical & financial) should be submitted in the e-procurement portal only.
- 4. IIT Patna shall not be responsible for non-receipt of bid due to internet issues or any other reasons.

#### **CRITICAL DATES**

D 11' 1' D 4	07.07.0001 (07.00DM)		
Publishing Date	27.07.2021 (05:00PM)		
Document Download / Sale Start Date	27.07.2021 (05:00PM)		
Bid Submission Start Date	27.07.2021 (05:00PM)		
Pre-bid Meeting date & time	10.08.2021 (11:00AM)		
Pre-bid Meeting Vanue	Senate Hall, IIT Patna, Bihta, Patna - 801106		
Last Date & Time of Submission of Bids (Technical	31.08.2021 (03:00PM)		
& Financial Bid)			
Opening Date & Time of Technical Bids Online	01.09.2021 (03:30PM)		
Address of Communication	The Registrar,		
	(for Stores & Purchase),		
	Indian Institute of Technology Patna		
	Kanpa Road, Bihta, Patna, Bihar-801106		
	Phone: 06115-233-683		
For taking technical assistance regarding bid	CPP Portal Website: <a href="https://eprocure.gov.in">https://eprocure.gov.in</a> Help		
submission, if any	Desk Number 0120-4200462, 4001002, 4001005		
	and 4001005.		

Date: 27.07.2021

#### **SCOPE OF WORKS**

Indian Institute of Technology Patna has a large campus network consisting of both wired and wireless network spanning across academic, hostels, hospital, school and residential areas etc. There are approximately 850 IP phone, 5000 information outlets (IO) in the LAN and approximate 22 Km single mode OFC (48 core) is laid down across the campus. This hybrid network is capable of providing data and voice service through 10-gigabit optical backbone along with wireless connectivity through indoor access points.

Adequate redundancies are present in the critical resources located at the core and distribution layer of the network for service continuation in case of faults. Vendor/Bidder should have their own Network/System support team onsite to configure, monitor, and troubleshoot the networking infrastructure on 24x7x365 basis.

Any passive component maintenance work of existing network infrastructure as given in Annexure-I(e) will be vendors responsibility. All materials for such work will be provided by IIT Patna, the replacement of damaged passive components (UTP Cables, OFC Patch cords, IO Ports, Casing/Conduit, LIU, Network Racks) should be done by the onsite deputed passive technicians.

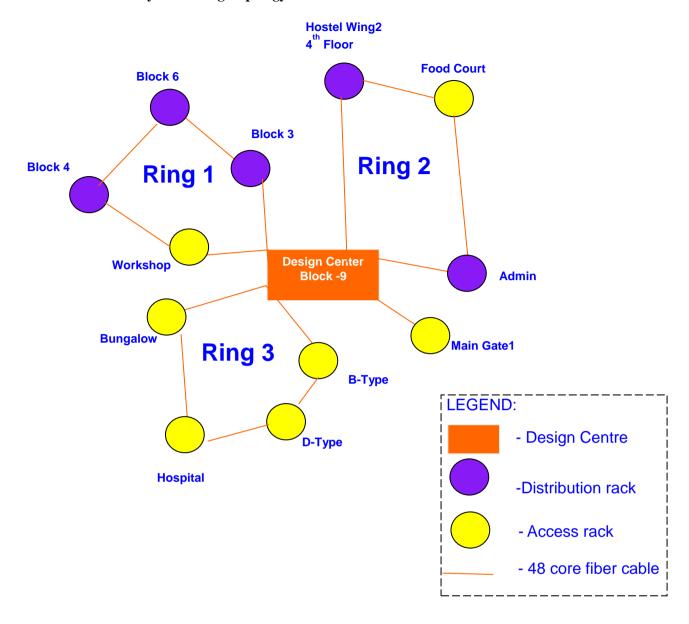
Presently, Indian Institute of Technology Patna (IITP), at its campus, has network active equipment of make CISCO like Access Switch, Distribution Switch, Core Switch, IP Phone etc. as per Annexure-I(b). Adequate redundancies have been made in the critical resources located at the core and distribution layer of the network for service continuation in case of faults.

Presently there are many End of Life (EoL) and End of Support (EoS) devices are installed at IITP, for details see Annexure-I(d). The vendor has to ensure replacement of these items as per Annexure-I(d) with the equivalent or higher specification devices along with licenses, installation and configurations without any additional charges. The replaced items should compatible with the existing network infrastructure and should have End of Life (EoL) at least 5 years from post installation.

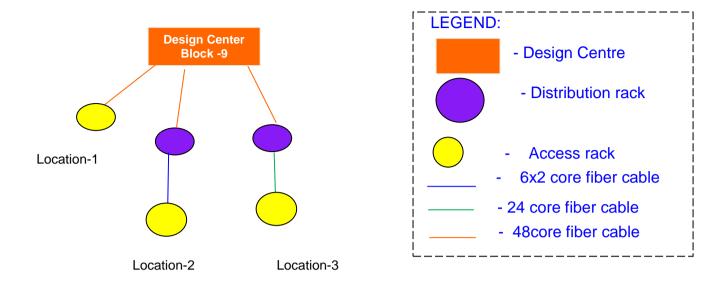
Presently, the existing network devices are in CAMC (upto 14.12.2021). If there is any change in the serial numbers of present inventory, the updated serials numbers should be considered at the time of work order. The quantity of devices, however, will remain same.

With a view to give comprehensive annual maintenance contract (CAMC) of network devices along with configuration, the institute is looking for a suitable experienced service provider / system integrator to undertake onsite comprehensive annual maintenance contract for the entire campus (Academic area, Hostels, Hospitals, School and Residential area etc.)

#### 1. Schematic OFC Layout in Ring Topology



# 2. Schematic Optical Fiber Connectivity from Core Switch to Distribution Switch and Distribution to Access Switch Rack



Campus network topology is divided into three rings and each ring covering various buildings. In every building, Distribution Switch Rack is connected with 48 core OFC uplinks from Computer Center, Block-9. And the Access Switch Racks are connected with 24/6 core OFC uplinks from Distribution Switch Rack. However, in some locations access switch rack are directly connected to Core Switch.

The above campus network layout depicts a general overview. For detailed information about existing network, vendor should conduct a site survey before participating in bidding/tendering.

#### 1. Scope of work:

- Items specified in the Annexure-I(b) need to be covered under Comprehensive AMC by the
  vendor. The vendor will need to operate, monitor, reconfigure if needed, troubleshoot and
  resolve problems with the support from OEM, and/or replace faulty item with back to back
  arrangement from OEM.
- Vendor will ensure the availability of professionally experienced team to provide the required on-site operation and maintenance on 24x7x365 basis.
- Cisco license like Prime Infrastructure for Prime Infra Base, Lifecycle, Business Edition 7000 Server for UCSS, Top Level SKU for 9.x / 10 / x for UC Manager, ASA 5585-20 Firepower Amp and URL, Freight Management Center (VMware)) etc., they will also have to renew. Vendor will ensure about all the related license of existing running equipment.
- Vendor has to perform day-to-day network administration and maintenance of the entire networking infrastructure of Institute campus in coordination with Computer Center (CC) team, IIT Patna. Detailed list of equipment is provided in attached annexure [I(b) to I(e)].
- Vendor will ensure the availability of following level of experienced manpower for entire
  period of contract. IITP (IIT Patna) will assess the experience of the proposed manpower before
  deployment of onsite engineer. The relevant supporting documents (Experience certificate)
  should be produced at the time of assessment.
  - To provide support for all Cisco equipment (as mentioned in the annexure [I(b) to I(e)]) like Core switches, ASA Firewall, distribution switches, access switches, wireless

controllers, wireless access points, Call manager, and IP telephony services etc. to the highest level of satisfaction, vendor has to ensure the availability of at least one technical support persons at IIT Patna with average experience of 5 years with skill set dedicated for the Cisco devices.

- Institute has laid underground single mode optical fiber cable (48core, 24core, 12core and 6core) by micro tunneling and normal trenching method for campus network and installed fiber LIU at various blocks/buildings in the campus area. The vendor has to ensure one of the deputed technical support person should have good experience on operating OTDR and splicing machines for troubleshooting of uplinks maintenance.
- One Team Leader (TL) has to be deployed for managing the issues, who will be the single point of contact (SPOC) for any communication from Institute end. Team Leader should have a graduate degree (CSE/EE/IT) with at least 5 years of experience in managing similar kind of network and with a team leading capability to achieve the targeted SLA.
- Vendor should report immediately if any existing manpower goes on leave or is replaced. New manpower on specific role should be approved by the Institute. Also the Institute reserves the right to call for replacement of manpower if the deployed manpower is not up to the satisfaction of the Institute.

#### • Onsite Manpower:

S.NO	Post	Qualification	Nos	Experience
1	Team Leader	Min. BE/B.Tech	1	Min. 5 Years
	(TL)	(CSE/EE/IT)		
2	Technical	Min. Three Yr. Diploma	2	Min. 3 Years
	Engineer	(CSE/EE/IT)		
3	Passive	Min. ITI	2	Min. 3 Years
	Technician	(CSE/EE/IT)		

• As a part of problem management, Team Leader will assign calls to all the field technicians. Once field related problem is resolved the open call should be closed. If any support is required from Computer Center to close that field call, TL will escalate the matter to Computer Center.

If the problem is related with critical network resources, then TL will escalate the problem to their own Project Manager (PM) and also intimate to the Institute CC team. Such call for critical network resources will be closed in the call register by CC team.

- It is the responsibility of the vendor to check the inbuilt redundancies within the network devices on regular basis. In case any hardware fault is identified during routine checkup, faulty item needs to be replaced within five working days to bring back the original redundancies.
- The vendor deputed team should have direct access to the OEM Technical Assistance Center (TAC) on 24x7 basis
- Vendor will have to maintain adequate spares at Computer Center to restore network service
  within the stipulated resolution time in the SLA, but the faulty item covered under
  comprehensive AMC need to be replaced in the stores kept within 5 working days from the time
  of failure. The standby equipment will be the property of bidder after AMC duration.
- Bidder/Vendor has to provide a standby access switch for every 20 installed switch, Access Point for every 50 installed APs and reasonable quantity of UPS (upto 1kVA). The standby equipment will be the property of bidder after AMC duration.
- Vendor has to check the power condition, UPS backup, UPS load and all the components across
  the campus for all network racks and outdoor AP locations. Vendor will also responsible to
  replace faulty UPS, replacement of batteries and its related work at their end. Computer Center
  will engage separate team for repairing of raw power supply only.

- Most of the Access Network Racks and Indoor APs are installed at certain height. Maintenance
  activity at those locations will need suitable ladders, the vendor has to arrange the ladders at
  their own end. Vendor has to ensure that adequate safety measures are taken during repairs and
  take the responsibility in case of any accident.
- Institute has installed two RF devices (Cambium ePMP) as per Annexur-1, one each at Director Bungalow and block 9 buildings, to provide point-to-point LAN/Internet connectivity. Both the devices including the towers and beacon should be in comprehensive warranty. The vendor has to ensure about its working round the clock 24x7x365. The tower should be painted once in a year with water proof color.
- Vendor has to keep a set consisting of following tools for every onsite engineer within the campus required for maintenance of active/passive devices.
  - Screw Driver Kit
  - Electrical Multimeter
  - Optical Power Meter
  - Crimping/Punching tools.
  - Industrial Blower (one)
  - Industrial Vacuum Cleaner/Sucker (one)
  - OFC Splicer and OTDR (one)
  - Laptop
  - Any other tools as per requirement
- Vendor should weekly monitor the physical status of all network racks, all passive components and report any need for cleaning/dressing to Computer Center.
- Based on the network expansion plan of the Institute, Computer Center procures different
  network devices from different vendors. Many of the network devices are under warranty with
  different vendors and integrated with different network devices which will be covered under
  this AMC. Vendor has to provide all necessary co-operation and co-ordination with those
  existing vendors. In case of future expansion also Vendor has to provide similar co-operation
  and co-ordination with the future vendors.
- Vendor will develop and maintain Known Error Database (KEDB) for the entire campus network during their operation. At the end of the contract vendor has to submit the KEDB along with troubleshooting steps to the Institute.
- Vendor will circulate the call status (including closed call) report performed by Helpdesk on weekly basis to the respective stakeholders as defined by the Institute.
- Vendor will also circulate the status of item replacement report of all defective Items on weekly basis.
- Vendor has to maintain a performance log of all critical network devices and alert Computer Center in advance if there is any irregularity.
- Bidder/Vendor should maintain weekly, monthly and quarterly reports of lodged calls. The
  reports should cover all activity done by technical support team along with troubleshooting
  steps and commands.
- Security for the Intranet (Local Network)- A LAN, especially at an educational institution should be protected not only from the outside threats (Internet), but also from within due to various reasons, some of which are outlined below:
  - I. Students, internal users out of curiosity or even unknowingly may initiate actions which may result in data loss or breach of security from within. Disgruntled users (employees, students) may resort to hacking or cause denial of service attacks on network resources.
  - II. Improperly updated workstations, servers, laptops or any end user clients may be infected with malware which try to spread to other user nodes by generating unwanted broadcast traffic thereby choking the network.

- III. Botnets are malware which infect user nodes and usually bypass local anti-virus checks. These Botnets pass on control of the user node to hackers/criminals outside the network (Internet) who use the node to run automated attacks or generate spams, malicious content, etc.
- IV. Improperly configured passwords may result in password hacks and usage of local network resources to send spam or unsolicited terror threats through email or using local network access to post incriminating blogs or posts on websites or social network sites.
- Vendor will have to maintain the network asset base of equipment covered under the AMC deployed across the campus and timely update the database in case of replacement. The updated database should be shared with CC Team.
- Configure network devices (routers, switches, firewalls, servers, etc.) to capture logging messages and backup to an external server. Whenever an interface goes down or the CPU usage goes above 80%, an e-mail alert should be sent to a specific email id.
- Networking requirements in the campus are dynamic. During various institute events, onsite
  engineer will assist installation of temporary network with the help CC Team. During Computer
  laboratory based test, onsite engineer may need to reconfigure the network for access control.
  Also, help in the installation of new device along with its configuration in forthcoming
  buildings or any place of the institute as per the contract period.
- All the active components are to be monitored by the existing NMS (Cisco Prime) for their live status. The vendor has to ensure that all such devices are monitored by the NMS. If any new active device is added to campus network, the vendor has to integrate it in existing NMS.
- Vendor will have to implement and verify the network configuration to adhere to the Institute IT security policy.
- Vendor should maintain the confidentiality of the network topology including campus Wi-Fi & configurations of all devices, administrative password of the devices and other sensitive documents/ reports related to Institute campus network. Vendor should not share any of these to any other organization or personnel without explicit permission of Head, Computer Center. A non-disclosure agreement needs to be signed with IIT Patna for this purpose.
- Vendor has to ensure hardware replacement, OS software updates, Firmware updates, troubleshooting and configuration support of all feature/module/component for ex- VPN, Routing etc. of all the network equipment as per requirement.
- Vendor has to give free software patches and upgrades for network devices to resolve any technical problem.
- Managed equipment inventory should reflect on OEM website, product lifecycle and contract status, view alerts and reports relevant to IIT Patna network all with the ease of automated tools.
   All the replaced active components must be reflected on the OEM website in IIT Patna account.
- 24x7 monitoring of OFC cable and satisfactory working of rings, and monitoring of abnormality of bit error rate of OFC. In the event of unforeseen damage to any OFC link, ensure the traffic shift on the other ring and repair of OFC must be completed within 24 hrs. Generation of Logs/reports and submission to IITP Patna for review and necessary maintenance of reports.
- Continuous monitoring of core switches, servers and distribution switches for proper working.
- Bidder/Vendor will replace the damaged equipment with new equipment of same model or with higher model of same OEM without any extra cost. The higher model should be compatible with the existing network devices. A certificate will be required from OEM that the replaced equipment is new and genuine; Refurbished devices will not be acceptable.
- The shipment detail of replaced items should be intimated via email before delivery.
- The replaced defective equipment's shall be the property of the Bidder/Vendor.
- If the Bidder/Vendor does not respond/rectify the problem of active components within five working days. Institute repair/new will carry out the cost and the charges will be recovered from Bidder/Vendor.
- The Vendor has to provide all passive components required for maintenance.
- Vendor must have 24x7 call center support.

- Traffic towards internet gateway; Check the uplink and downlink data and latency on the links
  towards the internet gateway and immediately lodge the complaints with ISP support and report
  to CC Team. Generation of Logs/reports and submission to IIT Patna for review and necessary
  action, maintenance of reports.
- Telephone system; Make sample calls of different types (Local outgoing, Local incoming, Direct Inward Dialing, Direct Outward Dialing). Monitoring of PRI line and lodge complaint to the service provider if services go down. Generation of Logs/reports and submission to IIT Patna for review and necessary action, maintenance of reports.
- Daily visit of network/server room for checking optimum temperature and humidity, working of core, servers and distribution switches.
- Weekly visiting of installed distribution switch room of each location for checking of room environment like temperature and humidity.
- Quarterly preventive maintenance for upkeep and cleanliness of core, distribution, edge switches and network racks of each location. The roster plan for preventive maintenance should be shared with the CC Team. The PM should be done outside institute working hours.
- Traffic monitoring ensure that traffic of firewall is shared between both hot and standby mode.
  Data throughput and latency should be within the allowed limit, checking of network defense
  layers such as virtual private networks, user access controls, double authentication measures,
  log inspections for usage documentation, real-time breach notifications and auto-generated
  security reports.
- Every day analyzing top network performance concerns influencing the speed and reliability of network devices, including bandwidth usage, frequently down or crashed servers, connection lags, delays and more.
- 24x7 monitoring of OFC cable and satisfactory working of rings. Monitoring of alarms. If any link down is detected, immediate remedial steps to be taken and the detail should be shared with the CC Team.
- Monitoring the physical OFC route including chambers; and repair the chamber also if found damaged and provide the action taken report to the CC.
- Quarterly submitting OTDR report of OFC status of each route (Server Room to Distribution) and as needed for other routes of all the locations.
- Taking weekly backup of all the active devices and share with the CC Team.
- All the above preventive maintenance activities should be maintained in the log register provided by the CC Team.
- Call Logging Process with OEM/Vendors; the onsite team should get alerts on any issue in the data/phone network. The onsite team will identify the area of problem and define problem severity into minor or major call. Call severity will be decided on basis of unit under suspect and impact on functions inside data/phone network. Based upon this on site team will either manage to close the problem in case of minor alerts/alarms or In case of major alarms the team will raise an alarm over phone and email to OEM/Vendor with information to IIT Patna designated team and O&M in-charge. O&M team will follow the Escalation matrix. The OEM will identify problem area and will work towards resolution of problem keeping SLA in consideration. Once the call is completed the Operations team will record this log into the call register and update in daily monitoring report. Depending upon the severity of call and impact of business caused due to the call the Uptime will be calculated. An incident report will be generated by Operations team and will be flashed within 24 hours of the time incident was reported with a preventive and corrective action description. This report will be flashed after Operations in-charge scrutinizes the problem and provides concurrence to the Incident report. The action against preventive action will be tracked by Operations in-charge till its closure and approved by IIT Patna.

- Change Management; Any change in configuration of equipment due to loss of efficiency or isolated frequent failures of units deployed inside Data/telephone network by O&M team will be the responsibility of Bidder. Even if Operational & Maintenance (O&M) Team owns the responsibility of such changes in configurations the final decision of any such modification will be jointly discussed and agreed by IIT Patna before the change is done.
- Operation and Management Structure;

The operations at data/telephone network will be 24x7. There will be three shifts of operations. The indicative shift timings are

Shift I: 0700 - 1500.

Shift II: 1500 - 2300.

Shift III: 2300 - 0700.

All the additional accessories for repairing the outdoor/indoor fiber should be maintained in stock onsite, for timely repair, in case of damage.

2. The institute has various UPS, which are catering uninterrupted power supply to network rack at various blocks/buildings across the campus. The full details of UPS is shown in Annexure-I(c).

#### 2.1 UPS Terms & Conditions:

- Authorization letter (on letter head) from Original Equipment Manufacturer (OEM) must be submitted by Bidder/Vendor/ Contractor.
- Comprehensive annual maintenance contract (CAMC) includes all spares of UPS system like I/P card, O/P card, logic card etc.
- Bidder/Vendor/Contractor shall render its services 24x7x365 days including Sunday and Public holidays.
- Response time to reach onsite shall be 2-4 hours during office hours (9 am to 5 pm) Monday to Friday and 4-6 hours in off hours & holidays.
- OEM service center must be in Patna.
- Service should be provided by trained/experienced engineer.
- In case of breakdown or any malfunctioning of the UPS, the UPS must be repaired/replaced within 24 hours.
- Bidder/Vendor/Contractor shall ensure that only genuine/certified parts of UPS are being used during any replacement.
- The damaged equipment shall be taken out by the Bidder/Vendor/Contractor.
- The service engineer must have the photo identity card issued by the company or certified on company letterhead.
- Any replacement item/part should be informed to Computer Center team, which will issue a Gate Pass.

#### 2.2 UPS Preventive Maintenance scope of work:

 There will be 4 Nos scheduled Preventive Maintenance on quarterly basis at each site in a year, the time and date of these Preventive Maintenance schedules will be mutually decided by both the parties.

- Cleaning of equipment including UPS internal connections (Input/output cable, DC cables & Control cables etc.)
- Checking of Input/output voltage and DC voltage.
- Checking of Rectifiers, Invertors, Fans, Power supply, Contactors, Sticking or welded relays etc.
- Checking of all functional load transfer between mains to battery and vice versa.
- Voltage/Current checking of associated batteries with the UPS.
- Dismantling and reinstallation of UPS and batteries if required.
- Provide a report with all the details of the service performed and suggestions for any changes.
- All the above preventive maintenance activities should be maintain in the log register provided by the CC Team.

#### 3. Service Level Agreement (SLA):

For purposes of this Service Level Agreement, the definitions and terms as specified in the contract along with the following terms shall have the meanings set forth below: Uptime shall mean the time period for which the specified services/components with specified technical and service standards are available to the state and user departments. Uptime, in percentage can be calculated as:

Uptime =  $[1 - (Downtime/Total Time)] \times 100$ 

Downtime shall mean the time period for which the specified services/components with specified technical and service standards are not available to the state and user departments and excludes the scheduled outages planned in advance.

Incident refers to any event/abnormalities in the functioning of the LAN/Wi-Fi/telecom Equipment/specified services that may lead to disruption in normal operations of the services.

Resolution Time shall mean the time taken (after the incident has been reported at the help-desk), in resolving (diagnosing, troubleshooting and fixing)

Replacement Time shall mean the time taken (after the device is designated to be replaced with the consent of IIT Patna representatives) to the time new device is installed and running.

	Table-1								
Utility	Uptime	Resolution time							
OFC ring	99.99%	6 to 8 hours for minor complaints, 24-48 hours for major complaints							
Core and servers including soft switch for telephone	99.99%	6 to 8 hours for minor complaints, 24-48 hours for major complaints							
Distribution Switch	99.8%	6 to 8 hours for minor complaints, 24-48 hours for major complaints							
Voice Gateway	99.8%	6 to 8 hours for minor complaints, 24-48 hours for major complaints							
Access Switches	99.8%	4 - 6 Hrs							
Wi-Fi System	99.8%	4 - 6 Hrs							
RF equipment	95%	4 - 6 Hrs							
Individual LAN/Wi-Fi/telephone ports	95%	Within 24 hours							
Availability of power to data and telephone system(non-HA item)	99.99%	Within 24 hours							

#### **Uptime and Penalty:**

Uptime shall be calculated on quarterly basis. Uptime will be based on the report produced by vendor and verified by representative of IIT Patna, based on system logs, equipment logs, downtime and rectification reporting etc. In case the uptime for each of the system under Warranty/AMC is less than the respective SLA, the non-performance deduction from payments for the system under Warranty/AMC shall be as per the following table:

Table - 2						
Uptime	Non-performance deduction in each case					
As prescribed above	No deduction					
Up to 1% fall in uptime as prescribed	2% of the operations value for the quarter					
Up to 3% fall in uptime as prescribed	10% of the operations value for the quarter					
More than 3% fall in uptime	Breach of Contract					

For HA Devices: - The devices which are working in HA (High Availability) mode, should be replaced within the prescribed time when any of these devices is out-of-order, so as to bring back the HA in minimum time. The list of devices and their prescribed replacement time is given in Table-3 below:

Table-3						
Sl No.	Device Name	Replacement Time				
1	Core Switch (CS)	5 working days				
2	Distribution Switch (DS)					
3	ASA Firepower					
4	ISE					
5	CUCM					
6	WLC					
7	Router (server Room)					
8	UPS attached to Network rack and to					

Failing to replace any device in HA within replacement time, will attract penalty as per following table-4: -

	Table-4								
1	Prescribed Replacement time	No Penalty							
2	Upto 5 days after grace period	.25% of maintenance value							
3	For every next 5 days	.25% increase in previous penalty value							
4	Beyond 25 days	Breach of Contract							

However, if both the devices in HA go down and the service is affected, then SLA will be applicable as per Table-1 above.

Part Codes	Device Name	Qty
AIR-CAP2702I-D-K9	Cisco AP	100
AIR-CT5760-100-K9	Cisco WLC	1
AIR-CT5760-HA-K9	Cisco WLC	1
ASA5585-S20F20-K9	Cisco ASA	2
BE7K-K9	Call Manager	2
C2921-VSEC/K9	Router	2
CP-3905=	Cisco IP Phones	852
PRIME-NCS-APL-K9	Cisco Prime	1
SNS-3415-K9	ISE	2
VG310	Voice Gateway	1
WS-C3850-12S-E	Distribution Switches	10
WS-C3850-24S-E	Distribution Switches	2
WS-C6513-E	Core Switches	2
WS-C2960X-48LPS-L	Cisco Access Switches	72
WS-C2960X -24PS-L	Cisco Access Switches	38
Total Device	1088	
Cambium AP, ePMP 5Ghz	02	
Outdoor Tower approx	01	
Outdoor Tower approx	01	

<sup>\*</sup>The serial numbers of CISCO devices may be obtained from CISCO personnel at gsumra@cisco.com for budgetary purposes.

## Annexure-I(c)

SI. No.	Serial Number	Model / Make	Power in VA/KVA			· 1		No of batt With Ul Power	HA Details /Status	
					Input	Output	No of Batteries	Power	Make	
1	IV141209920	Numeric	20KVA	Online	3 Phase	Single Phase	48	100 AH	Exide	
2	IV141209921	Numeric	20KVA	Online	3 Phase	Single Phase	48	100 AH	Exide	YES
3	IV141209918	Numeric	15KVA	Online	3 Phase	Single Phase	48	28 AH	Exide	No
4	IV141209932	Numeric	5 KVA	Online	Single Phase	Single Phase	20	42 AH	Quanta	Yes
5	IV141209933	Numeric	5 KVA	Online	Single Phase	Single Phase	20	42 AH	Quanta	
6	IV141209919	Numeric	20 KVA	Online	3 Phase	Single Phase	24	75 AH	Exide	No
7	IV141209905	Numeric	3 KVA	Online	Single Phase	Single Phase	6	65 AH	Exide	Yes
8	IV141209906	Numeric	3 KVA	Online	Single Phase	Single Phase	6	65 AH	Exide	

9	IV141209929	Numeric	7.5 KVA	Online	Single Phase	Single Phase	20	42 AH	Quanta	No
10	IV141209934	Numeric	5 KVA	Online	Single Phase	Single Phase	20	42 AH	Quanta	Yes
11	IV141209935	Numeric	5 KVA	Online	Single Phase	Single Phase	20	42 AH	Quanta	
12	IV141209928	Numeric	10 KVA	Online	3 Phase	Single Phase	24	42 AH	Quanta	No
13	IV141209903	Numeric	3 KVA	Online	Single Phase	Single Phase	6	65 AH	Exide	Yes
14	IV141209904	Numeric	3 KVA	Online	Single Phase	Single Phase	6	65 AH	Exide	
15	B21450001096	APC	5 KVA	Online	Single Phase	Single Phase	20	26 AH	Exide	No
16	IV141209930	Numeric	5 KVA	Online	Single Phase	Single Phase	20	26 AH	Exide	No
17	IV141209913	Numeric	5 KVA	Online	Single Phase	Single Phase	20	42 AH	Quanta	Yes

18	IV141209914	Numeric	5 KVA	Online	Single Phase	Single Phase	20	42 AH	Quanta	
19	IV141209907	Numeric	3 KVA	Online	Single Phase	Single Phase	6	42 AH	Exide	No
20	IV141209924	Numeric	1 KVA	Online	Single Phase	Single Phase	3	28 AH	Exide	No
21	IV141209925	Numeric	1 KVA	Online	Single Phase	Single Phase	3	28 AH	Exide	No
22	IV141209923	Numeric	1 KVA	Online	Single Phase	Single Phase	3	28 AH	Exide	No
23	IV141209922	Numeric	1 KVA	Online	Single Phase	Single Phase	3	28 AH	Exide	No
24	II150100593	Numeric	800 VA	Ofline	Single Phase	Single Phase	1	42 AH	Exide	No
25	II150100682	Numeric	800 VA	Ofline	Single Phase	Single Phase	1	42 AH	Exide	No
26	BB0742000822	APC	1 KVA	Ofline	Single Phase	Single Phase	2	7 AH	Exide	No

27	II150100658	Numeric	800 VA	Ofline	Single Phase	Single Phase	1	42 AH	Exide	No
28	JB0447028405	APC	1 KVA	Ofline	Single Phase	Single Phase	2	7 AH	Exide	No
29	II150100635	Numeric	800 VA	Ofline	Single Phase	Single Phase	1	42 AH	Exide	No
30	II150100634	Numeric	800 VA	Ofline	Single Phase	Single Phase	1	42 AH	Exide	No
31	EB1153003107	APC	1 KVA	Ofline	Single Phase	Single Phase	2	7 AH	Exide	No
32	II150100602	Numeric	800 VA	Ofline	Single Phase	Single Phase	1	42 AH	Exide	No
33	II150100632	Numeric	800 VA	Ofline	Single Phase	Single Phase	1	42 AH	Exide	No
34	S1500254	Tritronics	7.5 VA	Ofline	Single Phase	Single Phase	2	42 AH	Exide	No
35	II150100594	Numeric	800 VA	Ofline	Single Phase	Single Phase	1	42 AH	Exide	No
36	II150100617	Numeric	800 VA	Ofline	Single Phase	Single Phase	1	42 AH	Quanta	No

### Annexure-I(d)

Item Product Code	Item Name	End of Life (EoL) Date	End of Support (EoS) Date
PRIME-NCS-APL-K9	NMS	Not Announced	5/31/2020
BE7K-K9	Call Manager	March 31, 2018	8/31/2020
VG310	Voice gateway	Not announced	Not announced But the replacement may require due to dependency of Call manager
SNS-3415-K9	ISE	April 8, 2016	10/31/2021
AIR-CT5760-100-K9	WLC	October 14, 2016	4/30/2022
AIR-CT5760-HA-K9	WLC	October 14, 2016	4/30/2022

#### **Passive Components:**

#### **Structured Cabling Standards**

- TIA/EIA-568-C.2 and ISO/IEC 11801 standards Commercial Building Telecommunications Cabling Standards (latest revision)
- TIA/EIA-569 Commercial Building Standard for Telecommunications Pathways and Spaces
- TIA/EIA-568C.3 Optical Fiber Cabling Components Standard.
- TIA/EIA-607 Grounding and Bonding.
- TIA/EIA-598-B Optical Fiber Color Coding.
- TIA/EIA-604.2, FOCIS 2-Fiber Optic Connector Intermateablility Standard.
- TIA/EIA-568-C.1-4 Commercial Building Telecommunications Cabling Standard, Part 1: General Requirements, Addendum 4-Additional Media20 Recognition of Category 6 and 850 nm Laser-optimized 50/125 um Multimode Optical Fiber Cabling.
- TIA/EIA-568C.2.1 Optical Fiber Cabling Components Standard. Addendum Additional Transmission Performance Specification for 50/125 um Optical Fiber Cables.

#### LC to LC Patch Cord SM:

S.No.	Specifications	Requirement
1	Type	LC to LC Duplex Fiber Optic Patch Cords 3m 9/ 125 micron
2	Cable Sheath	LSZH
3	Cable Diameter	1.8 mm mini twin zip
4	Ferrule	Ceramic
5	Buffer	.6 mm
6	Return Loss	> 45 db
7	Insertion Loss	.1 db Typical Max .3 db
8	ROHS	ROHS/ELV Compliant

#### 6/12 -core, Single mode Armoured:

Sr No.	Cable Type	Requirement
1	6/12 Fiber Optic	6/12 -core, Single mode Armored
	outdoor armored	Fiber cable, 9/125, ITU-T 652.D (Zero Water Peak), Compliance Cable
	cable Single mode	Construction BELLCORE GR 20 / IEC 794-1
	(SM)	Attenuation
		@1310nm $< = 0.34$ dB/Km
		@1550nm $< = 0.22$ dB/Km
		Coating / Cladding <= 9 microns
		Chromatic Dispersion @ $1310 \text{ nm} \le 3.5$
		ps/nm x km and @ $1550 \text{ nm} \le 18 \text{ ps/nm x km}$
		Tensile rating 1250N
		Maximum resistance Crush 3000N
		Operating Temperature -20 Degree C to +70
		Degree C, Armor Corrugated Steel tape Armor, HDPE Outer Jacket,
		Aramid yarn as a strength
		member Gel filled Loose Tube, minimum
		installation bend radius- 200mm, Fiber Core
		should be Silica Glass or equivalent- Fiber
		Core, standard factory of cable drum, RoHS
		Compliant, IEC 60332-1, Core should be Silica Glass or equivalent.

## 24/48 Core Single mode Outdoor Fiber:

S. No.	Cable Type	Requirement
1	Fiber Optic	24/48 -core, Single mode Armoured
	outdoor	Fiber cable, 9/125, ITU-T 652.D( Zero Water Peak), Compliance Cable Construction
	Armoured cable	BELLCORE GR 20 / IEC 794-1Attenuation @1310nm < = 0.34 dB/Km@1550nm <
	Single	= 0.22  dB/Km
	mode (SM)	Coating / Cladding <= 9 microns non-circularity Zero Dispersion Slope <= 0.086 ps /
		sq nm-km Max (chromatic) <5.3 ps/nm- km@1270-1340 nm <3.5 ps/nm-km
		@1285-1330 nm <185 ps/nm-km @1550 nm Tensile rating 1250NMaximum
		resistance Crush 3000NOperating Temperature -20 Degree C to +70 Degree C,
		Armor Corrugated Steel tape Armor, Rip Cord, Color Black Outer jacket HDPE.
		Aramid yarn as a strength member Gel filled Loose Tube, minimum installation bend
		radius- 200mm, Fiber Core should be Silica Glass or equivalent- Fiber Core,
		standard factory of cable drum, RoHS compliant, IEC 60332 Parts 1 and 3, IEC
		61034 Parts 1 and 2, IEC 6075 Parts 1 and 2, NES 713 Core should be Silica Glass
		or equivalent.

## **Copper cables:**

S.No	Cable Type	Requirement
1	Capper UTP Cat-6 Cable	<ul> <li>Should exceed all TIA/EIA-568-C.2-1 Category 6 cable performance requirements for frequency up to 250MHzto 500 MHz.</li> <li>Should be ETL tested and verified for Category 6component performance.</li> <li>The Conductors should be twisted in pairs with four pairs contained in a flame retardant PVC jacket separated by a divider.</li> <li>Should support the following applications: Ethernet10Base-T, 100Base-T (Fast Ethernet), 1000Base-T(Gigabit Ethernet); 1.2 Gb/s ATM; Token Ring 4/16;digital video; and broadband/base band analog video.</li> </ul>
2	Copper Cat 6 Information Outlets	<ul> <li>Should exceed all TIA/EIA-568-C.2-1 Category 6 cable performance requirements for frequency up to 250MHz</li> <li>Should meet TIA/EIA-568-C.2-1 Category 6 standard.</li> <li>Should be ETL tested and approved for Category 6 component compliance.</li> <li>Should be 100% tested to ensure NEXT performance.</li> <li>Should be compatible with modular patch panels, faceplates and surface mount boxes of UTP.</li> </ul>
3	Copper Cat 6 Patch Cords	<ul> <li>Should exceed TIA/EIA-568-C.2-1 Category 6 ISO 11801 Class E standards</li> <li>Should be ETL tested and approved for Category 6 component compliance.</li> <li>Each patch cord should be 100% factory made and performance tested.</li> <li>Plug performance should be in center of TIA/EIA component range, ensuring interoperability and Gigabit Ethernet channel performance.</li> </ul>
4	Surface Mount Boxes	<ul> <li>Should accept Cat 6 modules for UTP, Fiber Optic and Audio/Video, which snap in and out for easy moves, adds and changes.</li> <li>Should be easily mountable easily with supplied mounting screws, adhesive tape or optional magnet.</li> <li>There should be cable entry from side and rear knockout sand from opening in center of base.</li> </ul>

#### INSTRUCTIONS TO THE TENDERERS

The tender shall be submitted in accordance with these instructions and any tender not conforming to the instructions as under is liable to be rejected. These instructions shall form the part of the tender and the contract.

- 1. For Online Bid Submission as per the directives of Department of Expenditure, this tender document has been published on the Central Public Procurement Portal (URL:http://eprocure.gov.in/eprocure/app). The bidders are required to submit copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates.
- 2. More information useful for submitting the online bids on the CPP Portal is available/ obtained at <u>URL:http://eprocure.gov.in/eprocure/app</u>
- 3. For Registration, Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: http://eprocure.gov.in/eprocure/app) by clicking on the link \*"Click here to Enroll". Enrollment on the CPP Portal is free of charge.
- 4. Foreign Bidders have to refer "DSC details for foreign Bidders" for Digital Signature Certificate requirements which comes under Download Tab at http://eprocure.gov.in/eprocure/app?page=Standard Bidding Documents &service=page and the remaining part is same as above and below.
- 5. While submitting the tender, if any of the prescribed conditions are not fulfilled or are incomplete in any form, the tender is liable to be rejected. If any tenderer stipulate any condition of his own, such conditional tender is liable to be rejected.
- 6. IIT Patna reserves the right to reject any tender/bid wholly or partly without assigning any reason.
- 7. The technical committee constituted by the IIT Patna shall have the right to verify the particulars furnished by the bidder independently.
- 8. Tenderer shall take into account all costs including installation, commissioning, cartage etc. for giving delivery of material at site i.e. IIT Patna before quoting the rates. In this regard no claim for any extra payment for any reason shall be entertained.
- 9. The item should be delivered at IIT Patna, Kanpa Road, Bihta, Patna-801106, Bihar, INDIA and the supplier shall be responsible for any damage during the transit of goods.
- 10. All the tender documents & price bid to be uploaded as per this tender are to be digitally signed by the bidder.
- 11. Interested bonafide and reputed manufacturers/India agents (on behalf of their foreign principals) may submit Online bids for each of the above equipment along with all requisite documents and scanned copy of EMD submission reference.
- 12. The Bidder(s) may note that ONLINE BIDS will ONLY be accepted. All the requisite supporting documents mentioned in the bid document should and must be uploaded On-line http://eprocure.gov.in/eprocure/app. The Bids sent through FAX, E-mail, by hand and/or by post shall not be accepted/ processed, in any case.
- 13. The bidders may submit duly filled and completed bidding document ONLINE as per instruction contained in the bidding documents. Incomplete bid shall be rejected. The conditions of tender shall be governed by the details contained in complete bid document.
- 14. In case, holiday is declared by the Government on the day of opening the bids, the bids will be opened on the next working day at the same time. IIT Patna reserves the right to accept or reject any or all the tenders.
- 15. The detailed instruction for Online submissions of bid(s) through e-Procurement module of Central Public Procurement of NIC, the bidder(s) may visit the following link:- http://eprocure.gov.in/eprocure/app?=HelpForContractors&service=page

#### INSTRUCTIONS FOR ONLINE BID SUBMISSION

(Department User may attach this Document as an Annexure in their Tender Document which provides complete Instructions for on line Bid submission for Bidders)

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: https://eprocure.gov.in/eprocure/app.

#### REGISTRATION

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: https://eprocure.gov.in/eprocure/app) by clicking on the link "Online bidder Enrollment" on the CPP Portal which is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID/ password and the password of the DSC / e-Token.

#### SEARCHING FOR TENDER DOCUMENTS

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e- mail in case there is any corrigendum issued to the tender document.
- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

#### PREPARATION OF BIDS

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these may lead to

rejection of the bid.

- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

Note: My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.

#### SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as "offline" to pay the tender fee/ EMD as applicable and enter details of the instrument.
- 4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- 5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- 6) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 7) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 9) Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.

10) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

#### ASSISTANCE TO BIDDERS

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

#### GENERAL TERMS AND CONDITIONS

- 01. <u>Rates:</u> Rates quoted must be on F.O.R basis for IIT Patna, on <u>DOOR DELIVERY</u> Basis, with break up as per details given in BoQ.
- 02. *Validity:* The validity period of the offer should be clearly specified. It should be at least for 120 days from the last date of submission of quotations.
- 03. <u>Bid Security Declaration:</u> Scanned copy of signed Bid Security Declaration should be submitted in the prescribed format.
- 04. <u>Period of Contract:</u> Initially for one year, and can be extended on awarded rates and terms of conditions of the tender document for another two years on satisfactory performance on year to year basis. Vendor has to provide the price for another two years which will be considered for the selection of lower vendor during bid evaluation process.
- 05. <u>GST Certificates & TDS:</u> Scanned Copy of GST Certificate must be uploaded with technical bid. Appropriate GST deduction at source will be applicable.
- 06. <u>Dealership Certificate:</u> Dealership certificate (in case of authorised dealers) and standard Technical literature on the offered products must be uploaded with technical bid.
- 07. **Performance Guarantee:** 3% in the form of Bank Guarantee/ Fixed Deposit of the total order value needs to be submitted for such period as to cover two months beyond the AMC period for the order.
- 08. <u>Late and delayed quotation:</u> Late and delayed quotations will not be considered. In case any unscheduled holiday occurs on prescribed closing/opening date, the next working day shall then automatically be the prescribed date of closing/opening of the quotation with no change in timing.
- 09. **Ground for Rejection of Quotation:** The quotations are liable to be rejected if the foregoing conditions are not complied with. The quotation should be complete in all respects if a firm quotes NIL charges / consideration, the bid shall be treated as unresponsive and will not be considered. The quotations shall be rejected if the information, on the outer cover of the bid, is not provided in the format given in the table in Page 1.
- 10. <a href="Payment">Payment</a> will be made on quarterly basis after producing the invoice along with maintenance, uptime, attendance, duty roster, call reports and with ESIC, PFA data of deputed employee duly certified by Head Computer Center. The payment will be made generally through RTGS / FUND TRANSFER. Following information must be clearly written in the uploaded bank details for RTGS / FUND TRANSFER: -
  - (a) Name of the Firm with complete postal address
  - (b) Name of the Bank with Branch where the Account exist
  - (c) IFSC CODE
  - (d) ACCOUNT No
  - (e) PAN No
  - (f) GST/TIN No
- 11. **Liquidated Damage:** If a firm accepts an order and fails to execute the order in part or in full, as per the terms and conditions stipulated in the Purchase Order, it will be open to the institute to recover the liquidated damages from the firm at the rate of 0.5% per week of the order value subject to a maximum of 10% of the order value. It will also be open to the institute alternatively, to arrange procurement of the required stores from any other source at the risk and expense of the defaulter firm/vendor, which accepted the order but failed to execute the order according to the stipulated agreed upon. Defaulter vendor(s)/ firm(s) are also liable for blacklisting.
- 12. Termination for default: Default is said to have occurred
  - (a) If the supplier fails to deliver any or all of the goods/ items/ services within the time period(s) specified in the purchase order or any extension thereof granted by IIT Patna.
  - (b) If the supplier fails to perform any other obligation(s) under the contract
  - (c) If the vendor, in either of the above circumstances, does not take remedial steps within a period of 04 days after receipt of the default notice from IIT (or takes longer period in-spite of what IIT may authorize in writing), IIT may terminate the contract / purchase order in whole or in part.

#### 13. Applicable Law:

- (a)The contract shall be governed by the laws and procedures established by Govt. of India, within the framework of applicable legislation and enactment made from time to time concerning such Commercial dealings / processing, as may be applicable upon IIT Patna.
- (b) All disputes are subject to exclusive jurisdiction of Competent Court and Forum in Patna, India only.
- (c) Any dispute arising out of this purchase shall be referred to the Registrar IIT Patna, and if either of the parties hereto is dissatisfied with the decision, the dispute shall be referred to the decision of an Arbitrator, who should be acceptable to both the parties, (to be appointed by the Director of the Institute). The decision of such Arbitrator shall be final and binding on both the parties.

- 14. The acceptance of the quotation will rest solely with the Registrar, IITP, who in the interest of the Institute is not bound to accept the lowest quotation and reserves the right to himself to reject or partially accept any or all of the quotations received without assigning any reason(s).
- 15. **Important:** The Director may accept or reject any or all the bids in part of in full without assigning any reason and doesn't bind himself to accept the lowest bid. The institute at its discretion may change the quantity / upgrade the criteria / drop any item, at any time before placing the Purchase Order.
- 16. <u>Force Majeure:</u> The Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
  - (i) For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
  - (ii) If a Force Majeure situation arises, the Supplier shall promptly notify IIT Patna in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
- 17. It is the sole responsibility of the vendor to comply with all labor laws applicable during execution of service/AMC in IIT Patna for safeguard of their employees.
- 18. IIT Patna will deduct statutory taxes applicable at the time of making payment to the vendor from regular Bill/Invoice of the vendor and only net payment will be released to the vendor.
- 19. If agency has not completed assigned job as per the satisfaction of IIT Patna then IIT Patna will engage some other agency for completion of work and actual expenditure incurred by IIT Patna will be recovered from the due payment of AMC charges.
- 20. The in general Printed conditions of supply of the firm, if any, will not be binding on the Institute.

#### **SPECIAL TERMS & CONDITION**

(In case of any contradiction between General Terms and Special Terms, the information mentioned as Special Terms will prevail.)

- 1. Vendor must have registered office in India and must have at least 5 years of experience in networking projects in India. The relevant work orders and completion certification should be attached for supporting experience. Bidder should have the experience of relevant scope of work as in this tender in premiere institutions of national importance institute/organizations like IITs, NITs, IISERs, PSUs, State Govt etc. The bidder has to provide the satisfactory completion certificate in this regard from the respective organization. The participating bidder company should be at least 8 years old with the same registration, ID and PAN number.)
- 2. Vendor should be ISO 9001:2015 certified.
- 3. The bidder should not have been blacklisted by any IITs or similar Autonomous Institutions /Universities, Government /Public Sector Undertakings in the last three years from the last date of submissions of bids. A declaration from the bidder must be submitted.
- 4. In the event of an accident with an onsite engineer, the sole responsibility lies with the vendor. The vendor has to submit undertaking in this regard for each deployed engineer.
- 5. Experience of having successfully completed networking implementation and services (Supporting PO copy needs to be submitted) during last 3 years ending last day of month previous to the one in which applications are invited should be either of the following:

Three similar completed works/services costing not less than Rs. 32,00,000/- (Rupees thirty two lakhs).

or

Two similar completed works/services costing not less than Rs. 40,00,000/- (Rupees forty lakhs).

or

One similar completed work costing not less than amount equal to Rs. 64,00,000/- (Rupees sixty four lakhs).

- 6. Bidder should be profitable organization in each year for last three years. Audited statement should be submitted.
- 7. The Vendor should have adequate backend team to provide the technical support to the onsite team at IIT Patna. The vendor should have at its own payroll at least two-backend engineer having minimum 5 years' experience in the relevant scope of work of this tender. The engineers should be minimum B.Tech (CSE/IT/EE) and Cisco certified engineer or CCNP/CCNA. The relevant supporting documents should be submitted along with technical bid.
- 8. The vendor should be a partner of the OEM, especially for the network active components as per Annexure-I(b) of this tender. The Vendor has to produce MAF and contract copy (showing serial number of devices and the covered warranty) from OEM.
- 9. Successful vendor or its service partner must have to enter in back to back service support arrangement with OEMs for items listed for in the Annexure [I(b) to I(e)]. Vendor needs to submit MAF from respective OEMs for this tender.
- 10. Vendor must submit the Escalation Matrix for technical support.
- 11. All equipment installed in the IIT Patna campus and mentioned in Annexures [I(b) to I(e)] are running smoothly under well maintained environment.

- 12. The Bidder/Vendor may visit the site for any clarification about existing environment and existing working network equipment's as per Annexures [I(b) to I(e)].
- 13. Computer Center will provide the sitting arrangements to deputed manpower of the Vendor, but adequate number of two wheelers / transport arrangement should be available with the team to attend calls at Hostel, Departments, and residences etc. to attend the complaints.
- 14. The technically qualified lowest (L1) vendor will be selected based upon financial bid amount. There will be no partial award of tender.
- 15. The selected bidder will be provided the updated list of devices (which will include replaced device, if any). The total count of devices will be unchanged.
- 16. Items which are to be replaced as per Annexure-I(d), will be decided by IIT Patna.

#### 17. Consortium

Consortium is not allowed.

#### 18. Sub-Contracting of Scope of Work activities

The Bidder can have only one level of sub-contracting for OFC cable laying, supply of switches/equipment, onsite engineer, UPS and earthing preferably to OEMs. The Bidder would have to provide details of sub-contracting of the above activities if any as part of the Technical bid in the form of relevant documentary evidence.

- Details should be provided as to breakup of services to be provided by the vendor and its service partner.
- The service partner must provide in writing that it is willing to provide the services.
   However, the vendor should certify that it remains primarily responsible for providing the entire services specified under this contract.
- Purchase Order will be issued only to the vendor and all payments will be made only to the vendor.

All other activities not mentioned explicitly in the clause above cannot be sub-contracted by the Bidder.

#### 19. Period of Contract:

Initially for one year (15 December 2021 to 14 December 2022), and can be extended on awarded rates and terms of conditions of the tender document for another two years on satisfactory performance of the vendor/bidder. The bidder should submit the price of CAMC for 3 years (year 1, year 2 and Year 3 separately). While selecting lowest bidder, the price of all the 3 years will be considered. The price of year 1 for replaced items must include comprehensive warranty & support from OEM for three (03) years. The bidder has to ensure that the warranty & support cost for these devices should not be included in the price submitted for year 2 and year 3.

#### 20. Payment mode:

#### • Maintenance Support Payment:

After extending the device license validity, the vendor will produce the invoice for payment. The extended warranty period should reflect on the OEM website and device should also show the extended warranty period.

#### • Operational Payment:

Payment will be made on quarterly basis after producing the invoice along with maintenance, uptime, attendance, duty roster, call reports and with ESIC, PFA data of deputed employee duly certified by Head Computer Center.

\*The cost of maintenance support should not exceed 70% of the total bid value.

#### 21. Bid Quotation:

The financial quotation should clearly show the price for operational and maintenance cost separately.

- Maintenance Cost—covers the networking active components etc., also clearly mention about price in INR. The price bid should contain the price breakup item-wise such as manpower, license renewal, active component warranty and support and individual price of the item to be replaced as per Annexure-I(d).
- Operational Cost–covers the onsite engineer.

### TENDER ACCEPTANCE LETTER

(To be given on Company Letter Head)

To,							
	egistrar,						
•	ores & Purchase Section)						
	Institute of Technology Patna Road, Bihta, Patna, Bihar-801106						
	06115-233-683						
Sub: A	Sub: Acceptance of Terms & Conditions of Tender.						
	Tender Reference No.:						
Name	of Tender / Work:-						
	ir/Madam,						
1.	I / We have downloaded / obtained the tender document(s) for the above mentioned "Tender / Work" from the website(s) namely:						
	as per your advertisement, given in the above mentioned website(s).						
2.	I / We hereby certify that I / We have read the entire terms and conditions of the tender documents from Page No to (including all documents like annexure(s), schedule(s), etc.), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.						
3.	The corrigendum(s) issued from time to time by your department / organizations too have also been taken into consideration, while submitting this acceptance letter.						
4.	I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirely.						
5.	I / We do hereby declare that our Firm has not been blacklisted / debarred by any Govt. Department / Public Sector Undertaking.						
6.	I / We certify that all information furnished by our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department / organization shall without giving notice or reason thereof or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including forfeiture of the full said EMD absolutely.						
	Yours Faithfully,						
	(Signature of the Bidder, with Official Seal)						

Tender No. \_\_\_\_\_

# Bid Securing Declaration Form (To be given on Company Letter Head)

To, The Registrar, (for Stores & Purchase Section) Indian Institute of Technology Patna Kanpa Road, Bihta, Patna, Bihar-801106 Phone: 06115-233-683
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 five years from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because of
<ul> <li>a) withdrawal/modification/amendment, impairment or derogation from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or</li> </ul>
b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity (i) fail or reuse 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 receipt of your notification of the name of the successful Bidder.
Signed: (put 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 he 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: 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).

#### LIST OF DOCUMENTS TO BE UPLOADED WITH TECHNICAL BID

- 1. Scanned copy of certificate of GST & bank details for NEFT/ RTGS on letter head.
- 2. Scanned copy of self-declaration of original manufacturer or authorized dealership certificate from OEM.
- 3. Scanned copy of the POs as mentioned in clause no. 5 of Special Terms and Condition.
- 4. Scanned copy of Audited balance sheet & profit and loss account for last 03 (three) years as per clause no. 6 of Special Terms and Condition.
- 5. Scanned copy of MAF from respective OEMs for this tender as per clause no. 9 of Special Terms and Condition.
- 6. Scanned copy of Escalation Matrix for technical support as per clause no. 10 of Special Terms and Condition.
- 7. Scanned copy of tender acceptance letter. (Annexure-V)
- 8. Scanned copy of signed Bid Security Declaration. (Annexure-VI).
- 9. Scanned copy of detailed technical specification & brochure (if any).

(Please note that no indication of the rates/ amount be made in any of the documents submitted with the technical bid)

#### INSTRUCTION RELATED PRICE BID

#### PRICE BID -

#### A. Schedule of price bid in the form of BOQ format:

- 1. The below mentioned Financial Proposal / Commercial bid format as given in Annexure-IX is provided as BOQ along with this tender documents at <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>
- 2. **Bidders are advised to download this BOQ.xls** as it is and quote their offer / rates in the permitted column and upload the same in the commercial bid.
- Bidder shall not tamper / modify the downloaded price bid template in any manner. In case if the same
  is found to be tampered/ modified in any manner, tender will be completely rejected and EMD shall be
  forfeited.
- 4. Any element of cost, taxes, duties levies etc. not specifically indicated in the BOQ, shall not be paid by the purchaser. If GST amount is not quoted in the BOQ (Financial Bid), the total cost will be treated as inclusive of GST amount. No further communication will be entertained later or else the EMD will be forfeited.
- 5. The tender shall remain valid for acceptance for 120 days, from the date of tender opening.

#### B. Break-up of price in PDF format:

- 1. The break-up of price for AMC of 2<sup>nd</sup> & 3<sup>rd</sup> year should be given in PDF format (Signed Scanned Copy) with details of components with individual prices in the format provide as Annexure-IX.
- 2. Prices for 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> year will be considered for price comparision and selection of L1 vendor. However, the contract will be awarded initially for one year only which may be extended for 2<sup>nd</sup> & 3<sup>rd</sup> year on the basis of performance.

Validate	Validate Print Help Item Rate BoQ								
Tender Inviti	Tender Inviting Authority: Dy. Registrar (S&P), IIT Patna								
	Name of Work: Supply of Comprehensive Annual Maintenance Contract (CAMC) of Network Devices along with Configuration Support of all the feature/module of each network device and related electrical equipment at IIT Patna, Bihta, Patna								
1	•								
Contract No:	IITP/S&P/EPR/9/CC-61/2020-21								
Name of the									
Bidder <i>l</i> Bidding Firm									
l Company :									
. company:	<u></u>			DE	NCE CCUEDIN E				
(This BOQ n	emplate must not be modified/replaced by t	he hidder and	d the same		NCE SCHEDULE ploaded after filli	na the relever	nt columns, else th	e hidder is liable	to be rejected for this tender. Bidders
(mis body)	complate mast not be mounted replaced by t	ne bidder din			the Bidder Name			ic bidder is lidble	to be rejected for this tender. Bluders
NUMBER *	TEXT •	NUMBER •	TEXT •	TEXT •	NUMBER *	NUMBER	NUMBER *	NUMBER *	TEXT •
SI.	Item Description	Quantity	Units	Quoted	BASIC RATE In	GST Amount	TOTAL AMOUNT	1	TOTAL AMOUNT
No.				Currency in	_		Without Taxes	AMOUNT With	In Words
				INR / Other	entered by the Bidder in	Rs. P	in Rs. P	Taxes	
				Canency	Rs. P		ns. F		
1	2	4	5	12	13	14	53	54	55
1	Comprehensive Annual Maintenance Contract	1	Years	INR			0.00	0.00	INR Zero Only
	(CAMC) of Network Devices along with Configuration Support of all the feature/module of								
	each network device and related electrical								
	equipment at IIT Patna, Bihta, Patna								
2	Renewal Charges 2nd year	1	Years	INR			0.00	0.00	INR Zero Only
3	Renewal Charges 3rd year	1	Years	INB		<del> </del>	0.00	0.00	INR Zero Only
			1						·
Total in Figur	res						0.00	0.00	INR Zero Only
Quoted Rate	in Words					IND	Zero Only	I	I .
	INIX Zero Only								

## Format for Breakup of Price/Bill of Quantity

Sl. No.	Description			1st Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year
A	Mainterance support cost for					
A	Part Codes	Device Name	Quantity	-		
1.	AIR-CAP2702I-D-K9	Cisco AP	100			
2.	AIR-CT5760-100-K9	Cisco WLC	1			
3.	AIR-CT5760-HA-K9	Cisco WLC	1			
4.	ASA5585-S20F20-K9	Cisco ASA	2			
5.	BE7K-K9	Call Manager	2			
6.	C2921-VSEC/K9	Router	2			
7.	CP-3905=	Cisco IP Phones	852			
8.	PRIME-NCS-APL-K9	Cisco Prime	1			
9.	SNS-3415-K9	ISE	2			
10.	VG310	Voice Gateway	1			
11.	WS-C3850-12S-E	Distribution Switches	10			

12.	WS-C3850-24S-E	Distribution Switches	2		
13.	WS-C6513-E Core Switches		2		
14.	WS-C2960X-48LPS-L	Cisco Access Switches	72		
15.	WS-C2960X -24PS-L	Cisco Access Switches	38		
16.	Cambium AP, ePM	IP 5Ghz Force 300-25	02		
17.	Outdoor Tower a	approx 32 Mtr high	01		
18.	Outdoor Tower approx 10 Mtr high		01		
19.					
20.					
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41.					
42.	Total Maintenance Support Cost				
43.	GST Rate				

44.	Total GST Amount			
45.	Total Maintenance Support Cost including Taxes			
В	Operational Cost			
1.	<b>Basic Amount of Operational Cost</b>			
2.	GST Rate			
3.	GST Amount			
4.	Total Operational Cost including GST			
Total bas	ic amount yearly	It should be equal to value in cell no. BA13 of BoQ	It should be equal to value in cell no. BA14 of BoQ	It should be equal to value in cell no. BA15 of BoQ
Total GS	Γ Amount Yearly	It should be equal to value in cell no. N13 of BoQ	It should be equal to value in cell no. N14 of BoQ	It should be equal to value in cell no. N15 of BoQ
Total Am	ount including Taxes per year	It should be equal to value in cell no. BB13 of BoQ	It should be equal to value in cell no. BB14 of BoQ	It should be equal to value in cell no. BB15 of BoQ
(CAMC) the featur	ount for Comprehensive Annual Maintenance Contract of Network Devices along with Configuration Support of all re/module of each network device and related electrical nt (As in cell no. BB16 of BOQ)		pe equal to value in cell no. BB16 (	