

भारतीय प्रौद्योगिकी संस्थान पटना
INDIAN INSTITUTE OF TECHNOLOGY PATNA

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

E-PROCUREMENT MODE

Invitation of Expression of Interest

For

**Study, Implementation, Testing and Commissioning of Data and
Telephone Network for Upcoming Sites
at IIT Patna**

Estimated Budget: INR 1.078 Cr.



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Bihta, Patna - 801 106, Bihar, INDIA

EoI Reference No.: IITP/S&P/EPR/1/CC-88/2022-23

Date: 20.09.2022

Indian Institute of Technology Patna is in the process of extending Data and Telephone Connectivity to upcoming sites in campus as per the details as given as under:

Name of Expression of Interest (EoI)	Study, Implementation, Testing and Commissioning of Data and Telephone Network for Upcoming Sites at IIT Patna
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1. Detailed Tender/EoI 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/EoI such as tender/EoI document, pre-bid report, corrigendum and any further updates will be available only on our website & also at CPP Portal.
3. **No manual bid/EoI will be accepted. All quotations/proposals (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

Date of Issue/Publication of EoI	21.09.2022 (03:00 PM)
EoI Document Download Start Date	21.09.2022 (03:00 PM)
EoI Submission Start Date	21.09.2022 (03:00 PM)
Last Date and Time for submitting e-mail queries regarding technical specifications and other conditions of EoI document	06.10.2022 (03:00 PM)
Pre-bid meeting	10.10.2022 (11:00 AM)
EoI Document Download End Date	25.10.2022 (03:00 PM)
Last Date and Time for uploading of response to EoI	25.10.2022 (03:00 PM)
Opening Date and Time of Bid Online	26.10.2022 (03:30 PM)
Physical / Online presentation Date & Time. The prospective bidders desirous to bid may attend the physical meeting or alternatively join the meeting with the following link :	Will be communicated to bidders later after submission of response to EoI.
Tentative Schedule for Floating RFP/Tender	09.11.2022 (03:00 PM)
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 submission, if any	CPP Portal Website: https://eprocure.gov.in Help Desk Number 0120-4200462, 4001002, 4001005 and 4001005.

REGISTRAR, IIT PATNA

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1. Introduction

The campus data and telephone network at IIT PATNA provides the high performance, resilient, highly available and scalable LAN, Internet and IP telephone service to the students and employees working and residing at the campus. It comprises both wired and wireless networks spanning across academic, hostels and residential areas. There are approximately 850 IP phones, 5000 information outlets (IO) and 100 wifi access points in the LAN and approximately 22 Km single mode OFC (48 core) is laid down across the campus in ring-star topology. This hybrid network is capable of providing data and voice service through 10-gigabit optical backbone along with wireless connectivity through indoor access points.

There are adequate redundancies present in the critical resources located at the core and distribution layer of the network for service continuation in case of faults. For ease of operations, the entire campus is divided into five zones:

- The admin and academic zone- Admin blocks, academic blocks and tutorial blocks
- The Hostel zone- Girl's and Boy's Hostels
- The Residential zone- A, B,C,D type quarters, Director Bungalow, Guest house
- The Campus services zone- School, Hospital, CPWD office, IC etc
- The Core zone- Block 9 network server where core components are hosted

Division of campus network into zones

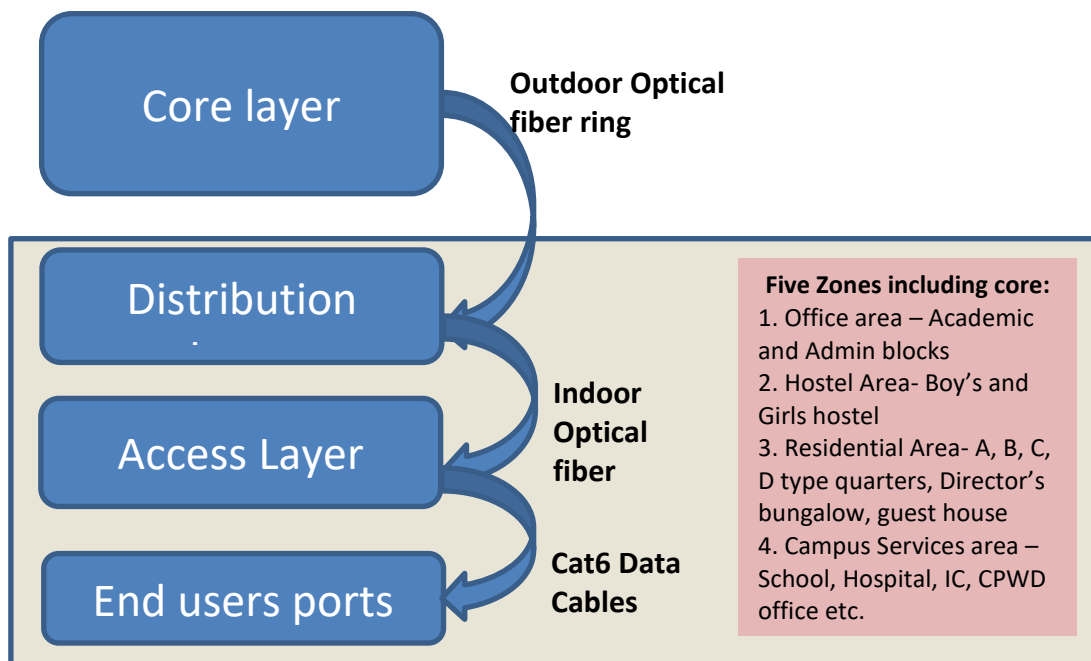


Figure 1: Three layer design with network zones

2. Invitation for Expression Of interest

Objective

Overall objective of this EoI is to invite Agencies with proven capabilities for “Study, Implementation, Testing and Commissioning of Data and Telephone Network at Residential Zone Sites at IIT PATNA with 05 years warranty”.

Selection Procedure

Each bidder shall participate in the following stages:

Stage I: Pre-Qualification based selection of bidders.

Stage II: Technical Presentation of Solution.

Stage III: Floating RFP/Tender to the bidders selected through Stage I and selection of final bidder through technical and financial evaluation as per RFP/Tender.

Each shortlisted bidder based on the pre-qualification criteria shall mandatorily participate in Technical Presentation of the Solution which forms an integral part of the EoI process. Final selection shall be done based on response to the RFP/TENDER floated to qualifying bidders in this EoI and shall include the financial bid. It is important to note that only selected vendors through this EoI shall be eligible to participate in the RFP/TENDER stage. The section 5 describes the broad scope of work that shall be carried out by the bidder who is selected in the RFP/TENDER stage.

Some salient terms and conditions about this EoI:

1	The Expression of Interest must be accompanied with duly filled Information sheets and sufficient documentary evidence. Expression of Interest with incomplete Information or insufficient documentary evidence shall be rejected.
2	IIT PATNA reserves the right to modify, expand, restrict, scrap, and refloat the Expression of Interest.
3	Formal Tender/Bid(Technical and Financial bids) will be invited later from the eligible/qualifying firms based on the EOI submitted and presentation. Physical presence of the firms shall be mandatory at the time of presentation of solution in response to the EOI submitted before to the committee. No EOI shall be considered in absence of detailed technical presentation of the complete solution on the dates decided by the Institute.
4	Clarification: Clarification, if any, about the requirement can be obtained by visiting the Computer Centre with prior information.
5	It will be the sole discretion of IIT PATNA to or not to incorporate any changes in the requirement based on feedback/input/suggestions received during the presentation/discussion. The decision of the IIT PATNA regarding acceptability of any suggestion shall be final in this regard.
6	Only shortlisted bidders/vendors who have participated in the EOI will be allowed to finally submit their quotation (technical and financial). Those who have not been shortlisted in EOI will not be allowed to submit their quotation and the quotation received from any such vendor will be rejected. Hence all the prospective bidders are requested to participate in EOI.
7	The bidder (OEM/ System Integrator) is required to do the site survey and submit the complete solution with EOI including design, drawing.
8	The survey shall be carried out by nominated authorized person/team by the bidder with prior permission of the institute authorities. This includes cabling plan, network structure plan, network design and complete solution.

3. On-site Presentations:

The participating applicants shall be called for on-site presentations after the proposal due date (tentatively within two weeks of proposal due date). The schedule of such presentations will be communicated to the participating applicants through mail.

4. Pre-Qualification/Essential Eligibility Criteria

Sl. No.	Technical	Compliance (Y/N)	Page No. in Bid Doc. & Packet no.
1	Valid ISO and CMMI certification - ISO/IEC 20000-1 international standard for IT service management, ISO 9001:2000, ISO 9001:27000 and CMMI level 3. The relevant certification document with validity must be presented.		
2	The bidders must have an office registered in India for at least three years.		
3	The bidder should be in existence in India and provide IT services/ business in the area of implementation of Campus Data and Telephone Network for a minimum of five year as on date of EoI. (Please submit proof, such as Registration Certificate etc for existence and purchase order/work order showing implementation since last three years.)		
4	The vendor/bidder must be the Highest level partner of the proposed OEM (Original Equipment Manufacturer).		
5	The bidder should be able to provide services at PATNA, BIHAR.		
6	The Bidder must have experience in executing at least two similar projects (Value, number of nodes and equipment) within the last 03 (Three) years. The bidder must produce the supporting documents Works order/purchase order and completion/performance certificates.		
7	The bidder should be the one-point contact for the entire project.		
8	The products offered preferably have been implemented in at least 2 IIT/ NIT/ IISER/ Institute of National Importance/ Central Universities/ Central Govt. PSUs. These installations should be live for at least for latest one year.		
9	The product and features are certified from internationally or nationally recognised bodies like IEEE and should feature in leaders/top 5 products in relevant domains in internationally or nationally recognised rating bodies like Gartner or equivalent.		
10	Valid Manufacturer's Authorization Form (MAF) (Duly attested hard copy must be submitted with the bid documents.) bearing reference to this EoI.		

Sl. No.	Technical	Compliance (Y/N)	Page No. in Bid Doc. & Packet no.
11	The bidder should have a dedicated comprehensive support service center having minimum 02 OEM certified engineers for each product offered in this EoI. The engineers should have minimum 2 years working experience on the offered OEM or devices.		
12	The Vendor/Bidder should not have been blacklisted by any Central/State Government Organization or PSU for any corrupt and fraudulent practice. An Undertaking by the Authorized Signatory on the letter head of the Vendor/Bidder should be submitted as a part of Technical Offer in format given in Form-2 .		
13	Bidder should be a well-established vendor registered (existing for minimum three years) as a company under Indian Companies Act.		
14	For the financial and operational stability, the applicant should have an average annual turnover of the last three financial years-each year of at least INR 10.00 (Ten) Crore. The CA certified financial statements must be provided along with Form-3 .		
15	The bidder must have registered net profit during the last 3 financial years. This should be an individual company's turnover and net profit and not that of a group of companies. Documents supporting Financial Statement (like Copies of published Annual Reports etc.) should also be supplied along with Technical offer.		

5. Broad Scope of Work

The upcoming site details are given below. This is a tentative list and subject to modification before it is finalized for the RFP/TENDER stage.

The number of IO ports required is given below:

Sl. No.	UPCOMING BUILDING	ZONE	Tentative IO port requirements	Estimated number of IO ports already existing
1	Girls Hostel new	HOSTEL	427	234
2	Married Scholar Hostel	HOSTEL	128	128
3	WORKSHOP- CIVIL	ACADEMIC	15	10
4	WORKSHOP- MECHANICAL	ACADEMIC	15	10
5	WORKSHOP- CHEMICAL	ACADEMIC	15	10
6	D-type qtr- D5, D6, D7	RESIDENTIAL	156	144
7	Guest House	RESIDENTIAL	286	89
8	C-Type QTR-C3, C4	RESIDENTIAL	180	168
9	A-Type QTR-A1	RESIDENTIAL	168	162
10	B-Type QTR-B5	RESIDENTIAL	150	144
			1540	1099
	Expected number of IO ports that needs to be deployed along with passive cabling and cabling accessories for surface cabling			441

Important note: There are some IO ports being deployed along with cat6 data cables through concealed conduits and racks by the agency involved in the site/building construction. The expected number is given in the last column of the table above. The approximate number of extra IO ports required to make the site operational along with cat6 data cables through surface cabling is the difference between actual requirement and already provisioned number of IO ports. The interested bidders are advised to conduct a detailed and careful site survey under guidance of the Computer Center Department to assess the actual requirement for cost effective solution. The terms and conditions as per section 6 is applicable for this purpose.

The tentative details of the active and passive equipment, accessories, services and project implementation is given in subsequent section 7 and 8.

5.1 Supply and Installation of Active Network Components in three-layer design- Fig.-1

- a. Distribution Switches with all accessories
- b. Access Switches with all accessories
- c. Wifi Access Points with all accessories
- d. IP Telephones with all accessories

5.2 Supply and Installation of Passive Network Components

- a. Outdoor underground Single Mode 24 Core OFC through HDPE pipe as per extension rings. For representation and information purposes, the main outdoor underground rings and an example extension ring are given in figure 2 and figure 3 below.
- b. Indoor Single Mode 12 Core OFC through cable trays
- c. LIU fixing with splicing and OFC cable termination
- d. Cat 6 cable with field side and rack side termination

- e. Cabling accessories for surface cabling and Trunking
- f. Rack, patch panels and field side IO box fixing
- g. UPS with battery bank for providing power to Network equipment

5.3 Supply and Installation of Cabling Accessories for indoor surface cabling and trunking.

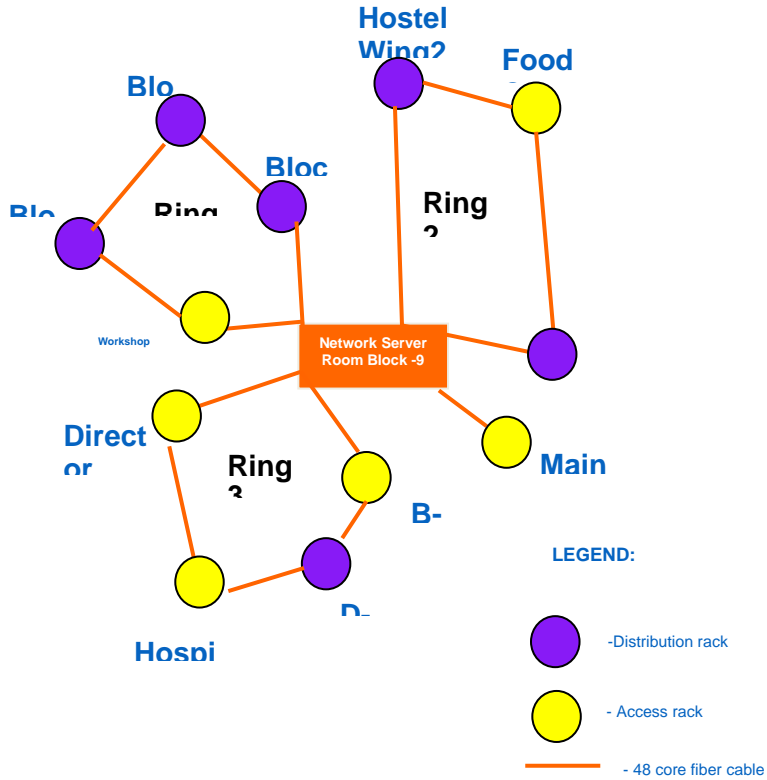


Figure 2: Outdoor OFC Main Rings - 48 Core

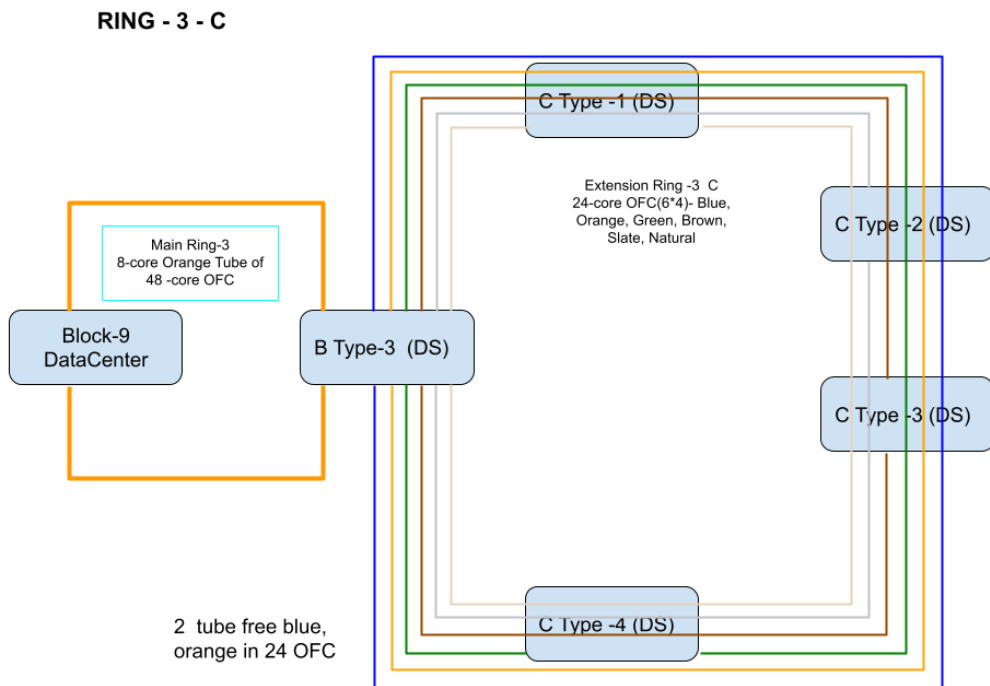


Figure 3: Outdoor OFC Extension Ring for C-Type Quarters

6. Local Conditions, Site Survey Gap Analysis

It will be incumbent upon each Bidder to fully acquaint himself with the local conditions and other relevant factors at the proposed site which would have any effect on the performance of the contract and / or the cost. For site visits and other information, the bidders may contact Computer Centre (cc_office@iitp.ac.in).

The Bidder is expected to make a site visit to obtain for himself on his own responsibility all information that may be necessary for preparing the bid and entering into contract.

Failure to obtain the information necessary for preparing the bid and/or failure to perform activities that may be necessary for the providing services before entering into contract will in no way relieve the successful Bidder from performing any work in accordance with the RFP/TENDER documents.

It will be imperative for each Bidder to fully inform themselves of all legal conditions and factors which may have any effect on the execution of the contract as described in the bidding documents. The Purchaser shall not entertain any request for clarification from the Bidder regarding such conditions.

It is the responsibility of the Bidder that such factors have properly been investigated and considered while submitting the bid proposals and that no claim whatsoever including those for financial adjustment to the contract awarded under the bidding documents will be entertained by the Purchaser and that neither any change in the time schedule of the contract nor any financial adjustments arising thereof shall be permitted by the Purchaser on account of failure of the Bidder to appraise themselves of local laws and site conditions.

- The quantity of items and works mentioned in this EoI are best effort estimation only (at least these estimated items will be required). The supplier/ vendor/ bidder must conduct a physical site survey to create the actual B.O.Q
- Any item required for properly implementing and commissioning the entire solution but missing in the B.O.Q/B.O.M due to poor estimation by the selected bidder must have to be provided without any additional cost impact to IIT PATNA. Hence, the physical site survey and estimation by interested bidders is imperative.
- Interested bidders should visit the site within 10 days of publishing EoI. The bidder will have to take prior appointment at “cc_office@iitp.ac.in” before site survey. The bidder has to verify the photo ID of his employee on his authorization letter on company letter-head and send it to the email given above.
- All Design & configurations should be as per industry best practices.
- The Bidder will provide IITP with the gap identification report along with the necessary solutions to overcome the gaps within the time limit and the time frames. The Bidder will incorporate all the suggestions made by IITP to the gap report.
- The selected bidder will also ensure that gaps pointed out by the audit and inspection team, statutory and regulatory bodies, or any other third party agency engaged by IITP within the project period will be immediately resolved.

7. Estimated Items List and Minimum Technical Requirements

Some salient points about overall solution architecture:

1	The architecture should be built on open-standards based protocols and open APIs
2	The network should deliver a flexible model for deploying Edge devices from a single point.
3	The devices in the network should have full IPv6 functionality.
4	The network devices should deliver the lowest possible latency.
5	The network should provide a resilient architecture through redundant paths and multiple devices.
6	The architecture should support separate, dedicated data, control, and management planes.
7	The architecture should support In-service software upgrade, which will allow seamless upgrades with no traffic loss or performance impact.
8	The network hardware should support Energy Efficient Ethernet (EEE) specified in IEEE 802.3az on user access ports.
9	The network deployment should ensure low power consumption for environmental friendly deployment.
10	The scope of the work can be suitably modified by the Institute, if deemed necessary.

7.1 List of estimated items- Active Network Equipment

Sl. No.	Item	Quantity (approx.)
1.	Distribution Switch - 12 X 1/10/25G data ports - 2 X 10/25G uplink - L2/L3 - managed - stackable-Rack-mountable 1U	
2.	24-port Access switch (Non-PoE) with sufficient number of stack cable	
3.	48-port Access switch (Non-POE) with sufficient number of stack cable	
4.	24-port Access switch POE/POE+ (with sufficient number of stack cable)	
5.	48-port Access switch POE/POE+ (with sufficient number of stack cable)	
6.	IP Phone with all accessories and licenses required for call manager	
7.	Wifi access points 4X4 MIMO-indoor with external antenna	
8.	Single mode 10/25G SFP/SFP+/SFP28 Module for distribution switch uplinks for connecting with core switch. Single SFP must support both 10/25 based on auto-negotiation and must be from the same OEM as switch or OEM certified.	
9.	Single mode 10G SFP/SFP+/SFP28 Module for distribution switch downlinks and access switch uplinks. It must be from the same OEM as switch or OEM certified.	

7.2 General Requirement for all active equipment:

General Requirement for all active equipment:	Compliance (Yes/No)
<p>Operating Conditions: All the equipment, components must have the operating conditions aligned to the deployment location like weather, temperature, humidity etc. or proper arrangements must be made to ensure the appropriate operating conditions.</p>	
<p>Seamless Integration with backbone network: It should seamlessly integrate with the existing network backbone and infrastructure locally (Bidder is entirely responsible for gathering such information in a comprehensive manner).</p>	
<p>NMS/EMS Support: The active components must be discoverable and manageable from existing NMS/EMS (Cisco Prime Infrastructure 3.1.0 and Cisco Data Center Network Manager for LAN (DCNM-LAN) or a campus hosted centralized H/W or S/W based NMS/EMS must be provided at no extra cost with following features:</p> <ul style="list-style-type: none"> ● Real-time monitoring of network status, traffic patterns, client connectivity, access point and wireless controller status, and alarms. ● Object management ● State management ● Notification management ● Performance management ● Fault management ● Device configuration management, management of release, upgradations, patches etc. ● Rapid and comprehensive switch, endpoint, and Layer 2 device connectivity discovery ● Security alarms, including rogue access points, DoS and probe attacks ● Any other value-added services. 	
<p>Warranty and Support:</p> <ul style="list-style-type: none"> ● Bidders must produce a comprehensive OEM warranty certificate for the warranty period mentioned in the NIQ/Tender document. Only OEM warranty will be acceptable. ● Online OEM portal for product and warranty details along with support and complaint facilities. The supplied items warranty & support will be started after commissioning and acceptance of work. ● Escalation matrix ● Comprehensive OEM support (including installation and deployment) and maximum 24 hrs. problem/ issue resolution. ● Valid Manufacturer's Authorization Form (MAF) (Duly attested hard copy must be submitted with the bid documents.) bearing NIQ/Tender No. ● OEM must have 24*7*365 operational support center to address and rectify the issue/problems occurring during the entire warranty period. Latest software upgrade for all products should be available free of charge without any additional cost during the warranty. 	
<p>EoS/EoL: The comprehensive declaration of EoS/EoL for all the equipment must be provided on the OEM letterhead. The supplied active components should have End of Life (EoL) at least 5 years from post installation (Proper Certificate from OEM to be attached with bid document).</p>	

7.3 OEM's qualification criteria - Active Equipment

Sl. No.	Criteria (The applicants must satisfy all the criteria)	Compliance (Yes/No)
1	Technical compliance to be provided on OEMs letterhead with signatures, name, email, contact number of Authorized signatory.	
2	Products should be quoted with Next Business Days (NBD) replacement warranty.	
3	Quoted products should have 24x7x365 comprehensive Support.	
4	All categories of Network Switches, Transceivers & Switch OS should be from the same OEM.	
5	OEM must be a declared leader in nationally or internationally accepted ratings like Gartner.	

7.4 General Technical Specifications for Passive Cabling and Accessories :

As per the applicable technical specifications available on TEC- Department of Telecommunications, Govt. Of India for passive components (with Latest versions/amendments) or of better quality and performance parameters. All passive components must have min. 10 years warranty:

- Armored OFC for Direct Burial - TEC 85010:2003
- Raw Materials used in manufacturing of OFC: TEC 89010:2021
- Flexible Optical Fiber Cable for indoor applications: TEC 85110:2021
- Armored optical fiber cables for duct applications- TEC 85170:2011
- Raw Materials used in manufacturing of OFC: TEC 89010:2021
- Splice Closure for Optical Fiber cables: TEC 87020:2010
- Permanently lubricated HDPE telecom ducts for use as underground OFC conduits: TEC 72030:2019
- Structured LAN cabling: TEC 52010:2005

Desirable features for OEM OFC and copper cabling and accessories:

- OEM should have accessories like IO etc which promote tool less handling and hassle-free deployment and troubleshooting.
- OEM should have accessories like JACK/PATCH PANEL which are based on modular design, easy to handle, maintain in field deployments, can be easily scaled up without disturbing existing set-up and may be universally used for copper and OFC connectivity.

7.5 Passive Implementation Services

Sl. No.	Description	UOM
A	Optical Fiber Cabling	
1	Excavation and Resurfacing of the soil (Depth 1.6m to 2 M)	Mtr
2	Excavation and Resurfacing of Concrete (Depth 1.6m to 2 M)	Mtr
3	Trenchless digging (With HDD Machine)	Mtr
4	Installation of HDPE Pipe - upto 50mm	Mtr
5	Laying of Optical Fiber Cable Armoured upto 48 Core in HDPE Pipe or Over Head	Mtr

6	Laying of Inter floor/block indoor OFC cable of a site between distribution to access location	Mtr
7	Supply and Installation of Fiber optics cable route marker per unit (With painting and writing) -	Nos.
8	Installation of LIU	Nos.
9	Cable pulling pit (minimum size 2*2*2 feet) made of reinforced concrete and brick walls with removable covers per unit.	Nos.
10	Splicing of Optical Fiber Cable in LIU with fusion splicier (Fusion Splicing machine to be provided by IIT PATNA)	Core
11	OTDR of Optical Fiber Cable (OTDR equipment to be provided by IIT PATNA)	Core
12	AutoCAD marking of OFC Route, in existing AutoCAD diagram, Networking Points (Per Route)	Route
B	COPPER UTP CAT6 CABLING	
1	Laying of CAT 6, CAT6A UTP and STP Cables	Mtr
2	Punching of CAT 6.0 I/O Single Side including labelling of cable, face plate installation, Gang box installation, and patch chord, patch chord labelling and installation	Nos.
3	Punching of CAT 6.0 I/O both Side including labelling of cable, face plate installation, Gang box installation, and patch chord, patch chord labelling and installation	Nos.
5	Testing and Pentascanning with Cable Analyzer equipment (Pentascanner to be provided by IIT PATNA)	Nos.
6	Installation of Jack Panel	Nos.
C	MISC. Cabling ACCESORIES FIXING	
1	Installation of PVC Conduit / channel upto 50mm with supply of all consumables and accessories as required	Mtr
2	GI pipe (1 inch/ 1.5 inch) under ground and on surface - Including all accessories and consumable as required	Mtr
3	Installation of GI Cable tray upto 300mm width and upto 75mm depth standard accessories to be supplied according to the cable tray requirements, like Thread road, anchor fasteners etc.	Mtr
4	Installation of PVC Wiring Duct / trunking (Solid type) of various sizes, ISI mark with standard accessories and Duct Color -Grey / white, Length size -2 Mtrs /2.5Mtrs	Mtr
5	Installation of PVC Gang box PVC 3" X 3"	Nos.
6	Wall punching for cable crossing from passage to rooms to lay UTP & conduit with restoration work.	Nos.
7	Installation of utp 50 MM PVC flexible pipe for industrial use.	Mtr
8	Installation of Wall Mount rack (6U, 9U, 12U, 15U)	Nos.
9	Installation of Floor Standing Rack (17U to 42U)	Nos.

8. Project Management and Implementation

The bidder would be responsible, but not limited, to perform the following activities during the installation:

- Checking site readiness for integration
- Meet all plans, specifications and applicable codes and regulatory requirements.
- Installation, deployment and integration of all the hardware and software components of the solution.
- Installation of all the accessories, cable and connectors
- Bunching, dressing and labeling of the cables
- Detailed project documentation (operational, functional and technical), troubleshooting manuals, FAQs, end user manuals etc

- Project Sign off
- Certification
- Develop and implement a quality control system for the project.
- Coordinate with all the stakeholders to ensure that the project design and schedule is met.
- Coordinate with the General Contractor (and all other appropriate groups) on any infrastructure issues arising during construction, including: scheduling, finishes, clarifications, and identified deficiencies.
- Adherence to design specifications, in case of any deviation the same has to be conveyed to design team
- Coordinate with design team for all design related queries
- Submit regular progress reports to project management team
- Adhere to quality of work during the implementation.
- Establish and maintain on site a complete file of all drawings and items submitted.
- Distribute meeting minutes following each progress meeting.
- Coordinate the preparation of punch lists and ensure that all items are completed on a timely basis.
- Adhere to all safety measures at site during implementation.

8.1 Kick-Off

The start of the project implementation will be marked by a Project Kick-off meeting. This meeting will act as a launch pad for the entire project. The project team of selected bidders should be present during the kick-off meeting. During the kick-off, the implementation related details, stakeholders, project plans etc will be discussed.

8.2 Go-Live

The Go-Live happens to be one of the most important milestones wherein, all the components of the project has been implemented and integrated in all respects and the entire solution is operational. At this stage, the solution is ready for use and acceptance testing.

8.3 Commissioning

This milestone marks final acceptance of the solution by IIT Patna. By this time, all the items in scope of works must be completed with proper documentation and sign-off. This milestone also marks the start of the support, warranty and maintenance phase. All the components (Hardware/Software etc), remain under the responsibility of the selected bidder until this milestone.

8.4 Acceptance testing

The acceptance test cases and schedule will be provided by the selected bidder covering all requirements and components. The test cases, procedures and plans should be accepted by IIT Patna and then testing will be conducted accordingly.

On successful completion of installation, commissioning, acceptability test, receipt of deliverables, training & handholding etc, and after the solution runs successfully for three months after “Go-Live” milestone and IIT Patna is satisfied with the working on the system, the acceptance certificate (as mutually decided and approved by IIT Patna) duly attested and signed by the selected bidder and IIT Patna will be issued.

8.5 Training and handholding

End-User Training:

The selected bidder for implementation must conduct end-user training to familiarize the end-users with the features available in the solution. The schedule and content of such training must be prepared

by the bidder and shared with IIT Patna. This training must be supported with the detailed end-user manuals, help documents, FAQs etc.

Technical Training:

The selected bidder for implementation must conduct detailed technical training for the various components of the solution for the technical team of IIT Patna. This must be supported with detailed technical documentation with diagrams, configurations, connectivity and interface details, technical references and literature etc. Furthermore, a demo test bed setup should be a part of this training.

Operational Training:

The selected bidder must provide handholding and training support for operational requirements. The operations part must be documented appropriately with steps, configurations, illustrative practical use cases etc.

9. Warranty and Support

- The vendor warrants that the products supplied under the Contract are of the most recent version and that they incorporate all recent improvements in design and/or features. The vendor further warrants that all the Products supplied under this Contract shall have no defect, arising from design or from any act of omission of the vendor that may develop under normal use of the supplied products in the conditions prevailing in India.
- Warranties for OEM products shall be provided on a pass-through basis. There are no implied conditions or warranties.
- The minimum warranty period shall be 5 (Five years) years/ 60 (Sixty) months or as per requirements mentioned in section 7 from the date of commissioning and acceptance of the work in totality. The vendor shall, in addition, comply with the performance guarantees specified under the Contract. If, for reasons attributable to the Selected applicant, these guarantees are not attained in whole or in part the vendor shall make such changes, modifications and/or additions to the Products or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests.
- During the warranty period, the vendor shall repair/replace at the installed site, at no charge to IIT Patna, all defective components that are brought to the Vendor's notice. Warranty should not become void, if IIT Patna buys any other supplemental hardware from a third party and installs it within these machines under intimation to the vendor. However, the warranty will not apply to such supplemental hardware items installed.
- In case of critical non-functioning of any item under warranty, the replacement of equipment has to be done within 48 hours.
- Post commissioning, there will be a SLA based defect liability and hand holding period of three months wherein the selected bidder will operate the implemented solution and fix any defect arising during this period without any cost impact to IIT PATNA. Any additional equipment required to operate the solution or fix the defects will be bidders responsibility.

10. GENERAL TERMS AND CONDITIONS

01. **Rates:** Rates quoted must be on F.O.R basis for IIT Patna, on DOOR DELIVERY Basis, with break up as per details given in BoQ at the time submitting the tender.
02. **Validity:** The validity period of the offer should be clearly specified. It should be valid for at least 180 days from the last date of submission of quotations/proposal/tender.
03. **GST Certificates & TDS:** Scanned Copy of GST Certificate must be uploaded with technical bid. Appropriate GST TDS and IT TDS will be applicable.
04. **Dealership Certificate:** Dealership certificate (in case of authorised dealers) and standard Technical literature on the offered products must be uploaded with technical bid.
05. **Performance Guarantee:** An amount of 03% of total order value needs to be paid using link <https://www.onlinesbi.com/sbicollect/icollecthome.htm?corpID=595859> towards Performance Security/ Guarantee. Performance Security/Guarantee may also be submitted in the form of Bank Guarantee/ Fixed Deposit for such period as to cover two months beyond the AMC/Warranty period for the order.
06. **Late and delayed quotation:** Late and delayed quotations will not be considered in any circumstances.
07. **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.
08. **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. Payment will be made online only. 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
09. **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 debarment.
10. **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 Patna (or takes longer period in spite of what IIT Patna may authorize in writing), IIT Patna may terminate the contract / purchase order in whole or in part.
11. **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 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.

12. **Important:** The Director may accept or reject any or all the bids in part or 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.
13. **Force Majeure:** The Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, its 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.
14. 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.
15. 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.
16. If agency does not complete assigned job as per the satisfaction of IIT Patna, 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.
17. The "in general Printed conditions" of supply of the firm, if any, will not be binding on the Institute.
18. The bidders can quote only those products in the bid which are not obsolete in the market and has at least 3 years residual market life. Moreover, the bidders are bound to supply the spares till 10 years from the date of installation, on the same payment terms.
19. The bidders can quote only items with minimum 20% domestic value additional/local content. Local content means the amount of value added in India which shall be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all custom duties) as a proportion of the total value, in percentage. The bidders are required to furnish a self-certificate regarding the items meeting local content requirement, mandatorily mentioning following:
 - a. Percentage of Local Content
 - b. Location(s) at which the local value addition is made.
20. 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as per instructions contained in Public Procurement (Preference to Make in India) Order 2017, as amended from time to time. The margin of purchase preference shall be 20%.
21. Any bidder from other countries (outside India) is not eligible to bid in this tender. Bidder for the purpose of this clause means:
 - a. Any entity incorporated, established or registered outside India; or
 - b. A subsidiary of an entity incorporated, established or registered outside India; or
 - c. An entity substantially controlled through entities incorporated, established or registered outside India; or
 - d. An entity whose beneficial owner is situated outside India; or
 - e. An Indian (or other) agent of entity incorporated, established or registered outside India; or
 - f. A natural person who is a citizen of other countries; or
 - g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above (a to f).

11. Documents to be submitted

A. General Documents:

1. Scanned copy of bank details for NEFT/RTGS on letter head and certificate of GST.
2. Scanned copy of self-declaration of original manufacturer or authorized dealership certificate from OEM.
3. Scanned copy of self-certificate regarding the items meeting local content requirement as mentioned in clause 20 of general terms and condition.

B. Duly filled, signed and stamped Form-1 to Form-5.

C. EoI Specific Documents:

1. Scanned copy of Prequalification/Essential Eligibility document.
2. Copy of the certificate of registration of the firm.
3. Copy of the Company profile.
4. Documents supporting all the details for information provided above.

D. Technical Documents

1. Solution and Architecture to Scope of work mentioned in section 5.
2. Duly attested Detailed Unpriced BOM/BOQ for the Solution based on section 5, 6, 7 and 8.
3. Compliance, test reports and supporting documents to Minimum Technical requirements mentioned in section 7.
4. Integration with existing Campus Data and telephone network.
5. End-of-sale, end-of-life and end-of-support details for each component of the solution.
6. Product literature and data sheets.
7. User friendly and innovative features.
8. Scalability w.r.t. future expansion and integration of new technologies.
9. Management and monitoring.
10. Project Management-section 8
11. Warranty and support details, methodology, and plan with well-defined SLAs and escalation matrix-section 9.

Form-1

TENDER/EoI ACCEPTANCE LETTER

(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

Sub: Acceptance of Terms & Conditions of Tender/EoI.

Tender/EoI Reference No.: _____

Name of Tender/Work/EoI:-

Dear Sir/Madam,

1. I / We have downloaded / obtained the tender/EoI document(s) for the above mentioned "Tender / Work/EoI" 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/EoI 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. I/We have read the clause 22 of General Terms & Conditions, regarding restrictions on procurement from a bidder outside the country; I/We certify that this bidder is from India. I/We hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered.
4. The corrigendum(s) issued from time to time by your department / organizations too have also been taken into consideration, while submitting this acceptance letter.
5. I / We hereby unconditionally accept the tender/EoI conditions of above-mentioned tender/EoI document(s) / corrigendum(s) in its totality / entirely.
6. I / We do hereby declare that our Firm has not been blacklisted / debarred by any Govt. Department / Public Sector Undertaking.
7. 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)

Email ID:

Phone no.:

Mobile no.:

Address for notice:

Form-2
STRUCTURE & ORGANIZATION

Name & Address of the applicant	
Telephone No. Telex No. Fax No.	
Particulars of registration with various Government bodies (attach attested photocopy) a. Organization/Place of Registration b. Registration No.	
Name and Titles of Director & Officers with designation to be concerned with this work	
Designation of individuals authorized to act for the organization	
Has the applicant ever abandoned the awarded work before its completion? If so, give the name of the project and reasons for abandonment.	
Was the applicant ever required to suspend assignment for a period of more than six months continuously after commencement of the assignment? If so, give the name of the project and reasons for suspension of work.	
Has the applicant ever been debarred / black listed for tendering in any organization at any time? If so, give details.	
Has the applicant ever been convicted by a court of law? If so, give details	
Any other information considered necessary but not included above	

Form-3

Applicants must furnish annual financial statements for the last five years in Form_____.

FINANCIAL INFORMATION

- I. Financial Analysis – Details to be furnished duly supported by figures in balance sheet/profit and loss account for the last five years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (copies to be attached).

Particulars	Financial Year		
	18-19	19-20	20-21
(i)Gross Annual Turnover (In Lakhs Rupees)			
(ii) Profit/Loss (In Lakhs Rupees)			
(iii)Income from IT service and solutions (In Lakhs Rupees)			

- a) Current Profit & Loss account

Signature of Chartered Accountant with seal

Signature of Applicant(s)

Form-4

DETAILS OF ASSIGNMENTS PROJECTS OF SIMILAR NATURE COMPLETED DURING THE LAST FIVE YEARS ENDING <Date>

Sr. No.	Description	Project Details
1	Name of work/project and Location	
2	Project Objectives	
3	Name & Address of Employer/organization	
4	Cost of work in INR.	
5	Complexity of the task (modules, etc.)	
7	Date of commencement as per contract	
8	Stipulated date of Completion	
9	Up to date percentage progress of work	
10	Slow progress if any and reasons thereof	
11	Name and address/email and telephone number of officer to whom reference may be made.	
12	Remarks	

- * For each work, a separate sheet be prepared.
- * For each work, a duly attested performance report must be provided.

Signature of Applicant(s) with date & seal

Form-5

Document Check-List

Description	Yes/No
1. Proposal for EOI	
2. All the documents listed in documents section 9 along with supporting documents	
3. Is the document is in pdf only	
4. If any other information (not called for in Form 1-5) is furnished, it is in A4 size sheets, endorsed with seal and signature of the applicant along with date of submission on every page	
5. All corrections are neatly crossed out, rewritten, initialed with date	
6. Pages of the documents are numbered as "page m of n"	
8. Each page of the application is signed	
9. There are no .ppt or .xls files embedded or attached.	
10. References, information & certificates from clients are signed by authorized persons.	