INDIAN INSTITUTE OF MANAGEMENT BODH GAYA
Uruvela, Prabandh Vihar
Bodh Gaya – 824234, India

Tender No: IIMBG/NIT/2020-21/ Campus LAN/18 Date: 12 February 2021

(e-Procurement Mode only)

Tender document and other details can be obtained from https://mhrd.euniwizarde.com, http://www.iimbg.ac.in & CPP Portal website: http://eprocure.gov.in/epublish/app

Registration with M/s ITI Ltd: - Intending Consultancy Firm/ Consultants are requested to register themselves with M/s ITI Ltd (if not registered earlier) through https://mhrd.euniwizarde.com for obtaining user-id, by paying a registration fee (As given in the e-portal), and online tender processing fee (As given in the e-portal), etc. Consultancy Firm/ Consultants are also required to obtain Class-III (Signing + Encryption) Digital Signature for participating in the e-tender.

E-Tender Processing Fee – Rs (As given in the e-portal) pay to "ITI LTD. Through e-payment gateway.

For participating in the e-Tendering process of IIM Bodh Gaya (Bihar), the Firm/Agency shall have to get them registered on the site https://mhrd.euniwizarde.com by making required payment through only online payment mode so that they will get user ID and Password. This will enable them to access the website, https://mhrd.euniwizarde.com with the help of Class-III (Signing + Encryption) Digital Signature by which they can participate in e-Tender of IIM Bodh Gaya.

For this intending Consultancy Firm/ Consultant may contact following e-Wizard Helpdesk numbers.

1. **E-Wizard Helpdesk Patna**
   1st floor, M-23, Road No. - 25,
   Near SBI Sri Krishna Nagar, Patna-800001.
   Phone No.: 0612-2520545, 8448288986, 8448288984, 8448288982.
   MAIL ID – ewizardhelpdeskpatna@gmail.com

2. **E-Wizard Helpdesk**
   New Delhi -110001, Phone No. 011-49606060
   Mail id: ewizardhelpdesk@gmail.com

Disclaimer

The information contained in this Tender or subsequently provided to bidders, whether verbally or in documentary or any other form by or on behalf of IIMBG or any of its employees or advisers, is provided to bidders on the terms and conditions set out in this Tender and such other terms and conditions subject to which such information is provided. This Tender is issued by IIMBG. This Tender is not an agreement and is neither an offer nor invitation by IIMBG to the prospective bidders or any other person. The purpose of this Tender is to provide interested parties with information that may be useful to them in the formulation of their Bid pursuant to this Tender. This Tender includes statements, which reflect various assumptions and assessments arrived at by IIMBG in relation to the Wired & Wireless and LAN Project for Indian Institute of Management Bodh Gaya. Such assumptions, assessments and statements do not purport to contain all the information that each Applicant may require. This Tender may not be appropriate for all persons, and it is not possible for IIMBG, its employees or advisers to consider the objectives, technical expertise and particular needs of each party who reads or uses this Tender. The assumptions, assessments, statements, and information contained in this Tender, may not be complete, accurate, adequate or correct. Each Applicant should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments and information contained in this Tender and obtains independent advice from appropriate sources. Information provided in this Tender to the bidders is on a wide range of matters, some of which depends upon interpretation of law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The IIMBG accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on the law expressed herein. IIMBG and its employees and advisers make no representation or warranty and shall have no liability to any person including any Applicant under any law, statute, and rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this Tender or otherwise, including the accuracy, adequacy, correctness, reliability or completeness of the Tender and any assessment, assumption, statement or information contained therein or deemed to form part of this Tender or arising in any way in this Selection Process. IIMBG also accepts no liability of any nature whether resulting from negligence or otherwise however caused arising from reliance of any Bidder upon the statements contained in this Tender. IIMBG may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumption contained in this Tender. The issue of this Tender does not imply that IIMBG is bound to select a Bidder or bidders, as the case may be, for the selection of System Integrator for Wired & Wireless LAN and IIMBG reserves the right to reject all or any of the Proposals without assigning any reasons whatsoever. The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Proposal including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by IIMBG or any other costs incurred in connection with or relating to its Proposal. All such costs and expenses will remain with the Bidder and IIMBG shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Selection Process.

INDIAN INSTITUTE OF MANAGEMENT BODH GAYA
Uruvela, Prabandh Vihar
Bodh Gaya – 824234, India

Tender No: IIMBG/NIT/2020-21/ Campus LAN/18 Date: 12 February 2021

NOTICE INVITING TENDER FOR SUPPLY, INSTALLATION & COMMISSIONING OF CAMPUS WIDE WIRED AND WIRELESS LOCAL AREA NETWORK" FOR IIM BODH GAYA

Indian Institute of Management Bodhgaya (IIM Bodhgaya) invites bids in two bid systems from reputed, experienced and financially sound IT Firm for the following IT Services:-

Brief Details of Tender:

Item Description	*Estimated Volume of contract (Rs.)*	*EMD (Rs.)*
Notice Inviting Tender For "Supply, Installation & Commissioning Of Campus wide Wired And Wireless Local Area Network" For IIM Bodh Gaya	**90,00,000/-**	**2,50,000/-**

The tender document along with all forms are available on the Institute website: **http://www.iimbg.ac.in** and https://mhrd.euniwizarde.com at the e-publishing window of the Central Public Procurement portal (CPPP) http://eprocure.gov.in/epublish/app and bid is to be submitted through online mode only.

Important Information on Tender:

S/N	Particulars	Date	Time
1.	Date and Time of Online Publication / Download of Tender	12-02-2021	1800 Hrs.
2.	Bid Submission Start Date and Time	12-02-2021	1800 Hrs.
3.	Bid Submission Close Date and Time	05-03-2021	1800 Hrs.
4.	Opening of Technical Bids	08-03-2021	1200 Hrs.
5.	Opening of Financial Bids	Will be informed later	
6.	Contact details for general queries	Email: cao@iimbg.ac.in Mobile: +91-70334-39192	
7.	Contact details for technical queries	Email: system.manager@iimbg.ac.in Mobile: +91-99717-59398	

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1. Introduction

Indian Institute of Management Bodh Gaya (IIMBG) is one of the new five IIMs set up under the Union Budget of 2014, India; established in 2015. IIMBG come under Higher Education Institutes (HEIs) and Institutions of National Importance (INI) in the Ministry of Education (MoE), Government of India.

IIMBG is having one Academic/Administrative block and three hostels namely, Aryabhata, Bhaskara and Gargi. Currently, the institute is a part of the National Knowledge Network (NKN) of the Government of India and has 1Gbps internet bandwidth. All the hostels are connected through internet however, the existing IT infrastructure is inadequate to provide reliable connectivity to the hostel residents. Hence, strengthening the IT infrastructure and providing the uninterrupted internet connection, IIMBG is planning to implement IT infrastructure for wired & wireless LAN at all the buildings. This set up implementation meant to ensure seamless connectivity, faster data transfer throughout the IIMBG campus.

2. Scope of Work

The Institute invites proposals in a tender format from bidders, who have the capability to provide a TOTAL TURNKEY solution which covers design/development of a suitable architecture/layout of the proposed networking system, pre-dispatch inspection / testing, packing and forwarding, transportation, insurance and carrying out further activities at sites viz. unloading, storage, (space to be provided by the owner) further handling, erection, testing and commissioning including successful completion of acceptance tests and any other services specified.

Scope of Work for bidder shall include:

1. Supply of Rack, Controller, Wireless Access Point, L3 & L2 managed Switches etc. as mentioned in tender document.
2. Transit insurance and Transportation to the site.
3. Laying of OFC cable through HDPE pipe by manual trenching & micro tunneling as per site requirement.
4. Laying of Cat6 UTP & power cable through PVC conduit by wall mounting
5. Powering on active equipment after ensuring correctness of terminations interfaces and access point supply and making the system ready for testing and commissioning.
6. Testing of LAN Cables after laying, terminations and ferruling at both the ends. All testing tools and instruments shall be brought by the bidder and taken back after the testing.
7. Configuration of the equipment as per the requirements of IIMBG including Network segmentation and Network Monitoring.
8. Field testing and commissioning of system, including integration with existing Network of IIMBG.
9. Site acceptance tests to establish satisfactory performance of the equipment's as per specifications.
10. Maintenance support for all Hardware delivered and LAN nodes & access point at IIMBG for three years.
11. Installation, including necessary cabling, testing, commissioning, training, and documentation.
12. Integration and interoperability with the existing network.

13. Indian Institute of Management Bodh Gaya or its representatives shall have the right to inspect or evaluate the hardware, software etc., to confirm their conformity to the ordered specifications. The supplier shall provide all reasonable facilities and assistance to the inspector at no charge to Indian Institute of Management Bodh Gaya. In case inspected tested features fail to confirm to the specifications, IIMBG may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet specifications required, free of cost to Indian Institute of Management Bodh Gaya.
14. Three years of comprehensive warranty.

3. Site Visit

It is the responsibility of the bidder to visit the proposed sites at their own cost and assessing the feasibility before submitting their technical solution and offer to get a clear idea about the work and preparation of requirement across the sites. IIMBG will facilitate bidders to get access to the sites upon prior intimation between 9:30 AM to 5:30 PM on all working days if required.

4. Deliverables & Timelines

The project is to be completed within the overall proposed timelines of sixteen weeks. The activity wise timeline is as mentioned below:

#	Activities	Baseline Timeline (in Week) T= Date of issue of Letter of Intent (LOI)
1	Supply of Cables, Passive Components, Laying and termination	T+5 Week
2	Delivery of remaining hardware (100% as per site requirement)	T+6 Week
3	Installation and commissioning of the required Hardware and Software on all sites	T+12 Weeks
4	Final Acceptance Test (FAT)	T + 14 Week
5	Warranty & Maintenance	3 Years from Date of FAT

5. Clarification:

The Bidders will have to ensure that their queries should reach to the Tender Inviting Authority on or before **19 February 2021** by email only in editable excel format. Any queries/clarification/letter etc. sent after scheduled timeline will not be entertained.

The queries should necessarily be submitted in the following format in editable excels. Submit all your queries in one email only. The sender should be employees of the Bidding Company and the query need to send through official email ID.

Sl No.	Page Number(s) & Section of NIT	Content of NIT requiring Clarification(s)	Points of clarification	Justification

IIMBG shall not be responsible for ensuring that the bidders' queries have been received and / or addressed by them. Any requests for clarifications after the indicated date and time may not be entertained by the IIMBG. Also queries other than specified format (in editable excel) will not be entertained by IIMBG.

5.1 Responses to Queries and Issue of Corrigendum

Tenderer reserves the right not to respond to any/all queries raised or clarifications sought if, in their opinion and at their sole discretion, they consider that it would be inappropriate to do so or do not find any merit in it. The corrigendum shall be uploaded on the website http://iimbg.ac.in , https://mhrd.euniwizarde.com ,& CPP Portal website: http://eprocure.gov.in/epublish/app .
IIMBG will endeavor to provide timely response to all queries. However, IIMBG makes no representation or warranty as to the completeness or accuracy of any response; nor does IIMBG undertake to answer all the queries that have been posed by the bidders.

At any time prior to the last date for receipt of bids, IIMBG may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the RFP Document through a corrigendum. The Corrigendum (if any) & clarifications to the queries from all bidders will be posted on the website http://iimbg.ac.in, https://mhrd.euniwizarde.com, & CPP Portal website: http://eprocure.gov.in/epublish/app

Any such corrigendum shall be deemed to be incorporated into this RFP. In order to provide prospective Bidders reasonable time for taking the corrigendum into account, may, at its discretion, extend the last date for the receipt of Proposals.

6. Bidder's Eligibility Criteria

6.1 Eligibility Criteria of the Bidder

1. Bidders (OEM /Authorized Distributors/SI) in India are allowed to bid for the items as mentioned in the tender document. Manufacturer's authorization letter (MAL) from OEM(s) clearly indicating that the bidder is competent to sell & provide services for the items for this tender.
2. Bidder should have experience of at least 10 years in the field of Information Technology business/wired and wireless LAN, MAN, WAN. Joint venture or consortium are not permitted.
3. Last 3 years turnover should not be less than 3 Crore in each year & Overall 10 Crore.
4. Bidder should submit the relevant experience documents of similar field in Central Govt. /State Govt./PSUs/ Govt Educational Institute/University/Govt Research Institutions in every items/

technology. They need to submit copies of the P.O's, clearly stating the duration of contract, value, and scope.

- One order of similar work above 72 Lakh on similar field within last 3 Years. Or
- Two order of similar work above 54 Lakh on similar field within last 3 Years Or
- Three order of similar work above 36 Lakh on similar field within last 3 Years

5. Bidder should have office at Kolkata/Patna/Dhanbad/Ranchi/Gaya with Service/Support Engineers posted at these locations.
6. Bidder should have to submit all OEM certificate (MAF letter) along with the technical bid .
7. Bidder should be ISO Certified.
8. Bidder must have dedicated/toll free telephone numbers for 24X7 service support.
9. Bidder should have to provide their escalation matrix at the time of bidding. The bidder has to confirm the availability of local engineer, to attend the call within 24 hours after receipt of the complaint.
10. The bidder must not be blacklisted by Central Govt. /State Govt./PSUs/Other Govt. Agency/ Govt Educational Institute/University.
11. Any Consortium bidding should not acceptable.

6.2 Eligibility Criteria of the OEM

Mandatory Eligibility Criteria for Active Components OEM	
No.	**Eligibility Criteria**
1	OEMs of proposed equipment/components should have their own registered office in India as per the prevalent/ applicable laws of India and be in operation in India for last five years as on the bid issuance date.
2	**Active Component's OEM** offered must be in steady profitable business in India for more than at-least 6 years.
3	Registered offices by way of Joint ventures, Franchise, agency, distribution partners will not consider.
4	OEM should have quality standard certifications like ISO 9001-2008/ISO 14001/ ISO 27001, wherever applicable to ensure only quality OEM participation, as on date of RFP release
5	Proposed OEM for any technology should not have filed for bankruptcy.
6	The proposed OEM should not have been blacklisted by any State / Central Government Department or Central /State PSUs
7	OEM should have minimum 1 spare depots in India for hardware replacement and dedicated TAC Support center in India.

Mandatory Eligibility Criteria for Passive Components OEM:	
No.	**Eligibility Criteria**
1	**Passive Component's OEM** offered must be in steady profitable business in India for more than at-least 6 years.

2	OEM should have members participating in Telecommunications Industry Association (TIA) committee. Membership should be available for validation at www.tiaonline.org
3	OEM should have ISO 9001:2015 and ISO 14001 certified manufacturing facility in India.
4	OEM shall have at least 2 RCDD certified technical staff based out of India.
5	All offered components must be ROHS compliant. ROHS compliance shall be mentioned in datasheets.

7. Earnest Money Deposit (EMD) Details

1. **EMD of Rs. 2,50,000/- (Rupees Two Lakh Fifty Thousand only)** to be deposited through online mode only (RTGS/NEFT). The bank details are given below:

   Account Name: - IIM BODHGAYA
   Account No.-35289661031
   Bank Name: - State Bank of India
   Branch: - Bodh Gaya
   IFS Code:-SBIN0002739

   The proof of payment must be enclosed with Technical Bid.

2. The firms registered with Directorate General of Supply and Disposal (DGS&D)/ National Small Industries Corporation (NSIC)/ Ministry of Micro, Small and Medium Enterprises (MSMEs) Startups for these services are exempted from EMD. However, they have to enclose valid self-attested registration certificate(s) with their tender to this effect.

3. EMD of all unsuccessful Consultancy Firm/ Consultant will be returned after finalization of the tender. EMD of the successful Consultancy Firm/ Consultant will be returned only after receipt of Security Deposit towards Performance Guarantee.

4. The amount of EMD is liable to be forfeited if the tenderer withdraws from the offer after submission of the tender or after the acceptance of the offer and fails to remit the Performance Bank Guarantee.

5. No interest will be paid on the EMD / Performance Guarantee.

6. The details pertaining to EMD.

8. Evaluation Criteria

8.1 Pre-qualification criteria:

SL. No.	Checklist Item Description	Criteria	Proof/Documents Required
1	Bidder company Registration	The Company should be registered under Companies Act, 1956 since last Ten years.	Valid copy of Certificate of incorporation and Registration Certificates
2	Incorporation Certificate	Bidder should have experience of at least 10 years (as on end date of tender) in the field of Information Technology business /LAN, MAN, WAN.	Valid copy of Certificate of incorporation and Registration Certificates
3	Bidder's Average Annual Turnover	Last 3 years (FY 2019-20, 2018-19, 2017-18) turnover should not be less than 3 Crore in each year & Overall Rs 10 Crore for provisioning of IT Services.	CA Certificate with CA's Registration Number/ Seal for annual turnover. Copy of the audited profit and loss account of the company-showing turnover of the company during last three years.
4	Bidder's Net worth	The net worth of the Bidder should be Positive in last two financial year.	CA Certificate with CA's Registration Number/ Seal for Net worth. Copy of the audited profit and loss account of the company-showing net worth of the company for last two years.
5	Non-Blacklisting	The bidder shall not be under a Declaration of Ineligibility for corrupt or fraudulent practices or blacklisted with any of the Central Govt. /State Govt./PSUs/Other Govt. Agency/ Govt Educational Institute/University.	Self-Declaration in this regard by the authorized signatory.
6	PAN	Registration with Income Tax Authorities.	Copy of PAN Card.
7	GST	Registered with the GST	Copy of GST Registration Certification.

8	Bidder Experience	As mentioned in Eligibility Criteria of the Bidder	Copy of the workorder / P.O's, clearly stating the duration of contract, value, and scope.
9	Proposed schematic diagram	Bidder has to do passive Survey and submit a proposed schematic diagram along with the bid	Diagram of proposed work need to enclose with bid.
10	Authorization letter	Bidder should be an OEM/Authorized Partner of OEMs (for WiFi, Active & Passive components). Tender Specific Authorization Letter from OEMs must be submitted.	Authorization letter from OEMs.
11	Signed Tender Document	Copy of the Tender document duly signed & stamped on all pages	Signed and stamped Tender document (All pages)
12	Complete Acceptance of Technical Specifications (Compliance sheet) as per Tender documents	As per Technical Specifications (Compliance sheet). If any of the specification/s is different, then mention in the remark column. The competent committee will decide the acceptance or rejection.	Compliance statement on OEM's letterhead with seal-stamp to be furnished

Copy of the document listed above should be attested by authorized signatory.

8.2 Technical Bid Evaluations Criteria

After Checking of submitted "Mandatary Papers", only eligible bidder will be enlisted for next steps/ Evaluation System.
Next Criteria is Technical Score Sheet, which are: -

Sl. No.	Evaluation Criteria	Max Points/Marks	Points Distribution	Points Obtained by bidder
1	Bidder's Operational Criteria in the Information Technology business/ IT System Integration in India **(establishment certificate / registration certificate to be furnished)**	20	10 Years: 10 Marks, >10 Years: 10 + completed number above 10 years.	

2.	Financial Strength (Bidder's Average Annual Turnover of last 3 year) **(Audited Balance sheet to furnish)**	20	Average Turnover >= 3 Crores and < 5 Crores: 10 Marks, Average Turnover >=5 Crores and <10 Crores = 15 Marks, Average Turnover >=10 Crores = 20 Marks	
3	Project Experience: Wired and Wireless LAN, MAN, WAN implementation experience in Central Govt. /State Govt./PSUs/ Govt Educational Institute/Govt University/Govt Research Institutions since 1st April 2010 **(PO with Completion Certificate to furnish)**	35	Each Project worth >=36 Lakh and <72 Lakh: 5 Points, Each Project worth >=72 Lakh and <100 Lakh: 10 Points, Each Project worth >=100 Lakh: 15 Points, Maximum 35 marks	
4	Wired and Wireless LAN, MAN, WAN implementation experience in IITs/IIMs/AIIMSs/NITs and other Institute of National Importance/ Government research institutions since 1st April 2010 **(PO with Completion Certificate to furnish)**	25	Each Project worth >=50 Lakh and < 70 Lakh: 5 points, Each Project worth >=70 Lakh: 10 points, Maximum 25 marks	
	Total:-	**100**		

The decision of the tender committee is final and binding on all the bidders.

The Technical Evaluation Committee may call the responsive bidders for discussion or presentation to facilitate and assess their understanding of the scope of work and its execution. However, the committee shall have sole discretion to call for discussion/presentation.

8.3 Financial Bid Evaluations:

All the bidders who will achieve 60 points or more points in the technical evaluation would be eligible for the next stage, i.e., Financial Bid opening. In case, at least 3 bidders not scoring 60 or more points, then cut off marks may go down up to 50 points. Bidders who score below 60 marks shall not be eligible for the next stage of bid processing.

Technically qualified/successful bidder(s)/Tenderer(s) shall be called for opening of the Financial Proposal(s). The Financial Proposals will be opened in the presence (who wish to attend) of the Bidders at the time and venue indicated by the institute accordingly. The technically Eligible/Successful

Bidder(s)/Tenderer(s) or their authorized representatives may be allowed to take part in the Financial Proposal(s) opening.
The Institute will communicate the date and time of opening of the financial bids through portal.

8.4. Award of Contract:

Bidder quoting the lowest price (L1) will be declared as the successful bidder. The lowest evaluated bid price will be the sum of the quoted cost of Material and Service (inclusive of all applicable taxes).

The Institute shall consider placement of order for the tender to the bidder who has been found technically, commercially, and financially acceptable. The Institute reserves the right to counteroffer price(s) against price(s) quoted by any bidder.

In case any bidder does not agree to take order then subsequently the next lowest bidder(s) will be given chance to execute the order provided they match the L1 bidder price.

Any figures (price) if left blank by the bidder in Financial form will be taken '0' (zero) by IIMBG.
The successful bidder should execute an agreement in the non-judicial stamp of Rs. 1000/- incorporating the tender terms and conditions. In the event of bidder backing out before actual award of execution of agreement, IIMBG will have right to forfeit the earnest money deposit.

9. Terms & Conditions of Contract

9.1 Arbitration:

All disputes arising out of this contract shall be referred to the Director, IIMBG. whose decision shall be final and binding on both parties.

9.2 Jurisdiction of Dispute:

It is agreed and declared by and between the parties hereto that so far it concerns the jurisdiction of any court in enforcing any of the rights or remedies of the parties hereto against each other or one another, a court in the city of Gaya alone shall have jurisdiction to the exclusion of all other courts in any place in the Union of India so that none of the parties hereto shall be entitled to any proceedings whatsoever in respect of any matters touching or relating to or in connection with or arising under agreement and the terms and conditions thereof in any court except the court or courts having jurisdiction in the city of Gaya.

9.3 Special terms and Condition:

In view of office memorandum F.No.6/18/2019-PPD dated 23rd July 2020 issued by Public Procurement Division, Department of Expenditure, Ministry of Finance, all tenderers, vendors or service provider should comply to the restrictions under rule 144 (xi) of General Financial Rules (GFRs). If any of the bidder fail to comply then their bids shall be rejected. Bidders to provide certificate regarding compliance as per Annex III of the above order.

9.4 Right to Accept Any Offer and to Reject Any or All Offers:

IIMBG, reserves the right to accept or reject any tender offer, and to annul the tendering process and reject all tenders at any time prior to award of contract, without thereby incurring any liability to the affected vendor(s) or any obligation to inform the affected vendor(s) of the grounds for such action.

9.5 Clarification of Offers:

To assist in the scrutiny, evaluation and comparison of offers, IIMBG may, at its discretion, ask (by email) some or all vendors for clarifications with regards to their offer. The request for such clarifications and the response will necessarily be in writing (by email). Failure of a Bidder to submit additional information or clarification as sought by IIMBG within the prescribed period will be considered as a non-compliance and the proposal may get evaluated based on the limited information furnished along with the bid proposal.

9.6 Right to vary the scope of the work at the time of Award:

IIMBG reserves its right to make changes to the scope of the work at the time of execution of the resultant Agreement. If any such change causes an increase or decrease in the cost of, or the time required for the IIMBG performance of any part of the work under the resultant Agreement, whether changed or not changed by the order, an equitable adjustment (if required) shall be made in the Contract Value or time schedule, or both, and the Agreement shall accordingly be amended. Any claims by the IIMBG for adjustment under this Clause must be asserted within thirty (30) days from the date of the receipt of IIMBG's change order.

9.7 Force Majeure

The Vendor 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.

For purposes of this clause, ―Force Majeure means an event beyond the control of the vendor and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of the IIMBG in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

If a Force Majeure situation arises, the Vendor shall promptly notify the IIMBG in writing of such condition within 3 days of such situation and the cause thereof. Unless otherwise directed by the IIMBG in writing, the vendor 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

9.8 Intellectual Property Rights

All intellectual property rights for the work performed under this Tender as far as data is concerned shall lie with IIMBG. This clause is applicable to all data in any form or format designed and developed for IIMBG under this Tender by the vendor. The vendor shall not use such data for any other purpose during and after the term of contract.

10. Payment Terms

1. The total project cost will consist of two parts
    1.1 Equipment supplies part (Supply).
    1.2 Installation, testing, commissioning, documentation, training and warranty services part (referred to as "Services" in short).

2. Payment Terms: - Payment will be released as follows:

2.1 All the costing and transaction will be in INR currency. Payment to the extent of 80% only of the total order value of the supply part will be released after delivery of all such items on site at IIM Bodh Gaya, followed by inspection and auditing by the IIMBG officials and submission of report by the official regarding delivery of correct items. Rest of the amount (20% of the order value of Supply) will be paid only after completion of installation, commissioning, Acceptance Test Plan (ATP) and acceptance by the IIMBG, followed by submission of a report by the concern regarding satisfactory completion of the work. Payments will be released.

2.2 Services part of the project is payable in Indian Rupees only after completion of installation, commissioning, Acceptance Test Plan (ATP) and acceptance by the IIMBG.

2.3 At the time of installation, additional requirement of Supply or Services, if any, over and above the quantity mentioned in the attached BOQ must be supported at the same rate as originally quoted.

2.4 At the time of installation, if additional or less quantity of various items of Supply or Services are needed, then payment will be released for actual Supply and Services only. Final payment will be adjusted accordingly.

2.5 Payment will be released subject to deduction of TDS as per rules/laws prevalent at that time.

3. Performance Security / Performance Bank Guarantee (PBG):

The successful bidder must submit Performance Security / Performance Bank Guarantee (PBG) within two weeks of the issue date of the order, failing which order may be cancelled. The PBG will be 3% of the total order value. The performance security must be valid for three years and six months from the date of acceptance of successful installation by IIMBG. Performance security may be furnished in the form of Bank Guarantee issued by a scheduled commercial bank in India (preferably nationalized bank) in favour of "IIM BODHGAYA" or payment through RTGS / NEFT in the following bank details:

Account Name: - IIM BODHGAYA
Account No.-35289661031
Bank Name: - State Bank of India
Branch: - Bodh Gaya
IFS Code:-SBIN0002739

No interest will be payable by IIMBG on the Performance Security deposited. The Earnest Money Deposit (EMD) of the successful bidder shall be returned on receipt of Performance Security (Performance Bank Guarantee / PBG). If the successful bidder fails to furnish as per terms and conditions of the order, the performance security or fails to deliver/provide the item/installation/service, within the stipulated period, the EMD shall be liable to be forfeited. The Performance Security will be forfeited and credited to IIMBG account in the event of a breach of contract by the successful bidder. An undertaking to this effect must be submitted by the bidder. If there is delay in supply and installation of wireless LAN Access, the bidder may extend the validity of PBG.

11. Service Level Agreement (SLA) And Warranty

1. Pre-implementation SLAs:

If the Successful bidder fails to complete the execution of works or any section by the time for completion, within the relevant time prescribed, then the Successful bidder shall pay liquidated damages to IIMBG at the rate of the 0.5 % of contract value for per week of delay or part thereof subject to maximum of 10% of the contract value. IIMBG may, without prejudice to any other method of recovery, deduct the amount of such damages from any monies due or to become due to the Successful bidder. The payment or deduction of such damages shall not relieve the Successful bidder from his obligation to complete the Works, or from any other of his obligations and liabilities under the contract.

2. Post-implementation SLAs

i. In the event of failure of any of the sub-systems or components of the proposed solution, the bidder must ensure that defects are rectified within 24 hours, or the equipment is replaced with necessary configuration free of cost within 48 hours from the time it was reported.

ii. The bidder must maintain a suitable stock of necessary spare equipment during the contract period.

iii. The bidder must provide 3 years' warranty for all the hardware and software components of the solution, from the date on which the solution is accepted, as per the Acceptance Test Plan. During the warranty period, the bidder must undertake comprehensive maintenance of all the equipment, hardware components, support and accessories. The bidder must also perform periodic software upgrades, updates, and patches, as well as preventive maintenance.

iv. Collecting of faulty hardware from the site and provisioning the replacement hardware during the contract period (warranty) on the site shall be the responsibility of the bidder.

v. IIMBG reserves the right to invoke the Performance Bank Guarantee submitted by bidder in case:-

   a. Supplied equipment, hardware & software components fail to achieve the performance as stipulated in this document.
   b. The bidder fails to provide satisfactory service in the scheduled time frame, during the contract period, as stipulated in this document.

12. Termination of Agreement:-

1. After giving opportunity of being heard to the successful Bidder, Institute may terminate/cancel the agreement on the following grounds: -

   i. Breach of any or all terms and conditions of agreement.

   ii. Non-performance or unsatisfactory performance of work executed by the successful Bidder.

iii. At any time, document or information furnished with tender is found forged or fabricated during the subsistence of the contract.

2. Notwithstanding to any provision of the contract, if the contract is terminated by the Institute, and the Institute has to award the work to other party on higher rate, the successful bidder has to compensate the difference of cost to the Institute.

13. Acceptance Criteria For The Proposed Solution (Applicable Only During And Post Implementation)

1. Coverage and Capacity Planning
   1.1. On-site site survey by the bidder is required to plan LAN and Wi-Fi deployment in each floor of each building.
   1.2. The bidder should provide the location of LAN and Access Points on the floor plan for all buildings.

2. Physical Installation:
   2.1. Inspect installation of network racks, OFC, UPS, power cables, UTP cables, and network switches.
   2.2. Configuration check on controller including the policies.
   2.3. Test the physical mounting of each access point.
   2.4. Test each access point connectivity to the wireless controller.

3. Wired Network Test
   3.1. Perform OTDR/RFC 2544 tests for all OFC links and submit reports.
   3.2. Perform end-to-end connectivity test of all UTP links and submit reports.
   3.3. Check reachability and latency test on all network switches and submit reports.

4. Wi-Fi Controller Configuration Test:
   4.1. Check authorized Wi-Fi set up for each subnet, VLAN, and location, as the case may be.
   4.2. Check both authorized user and guest user policies.
   4.3. Test each access point if it has the right authorized and guest policy.
   4.4. Check Wi-Fi prevention policy for each subnet, VLAN, and location.
   4.5. Check the configured alerts and alert delivery methods.
   4.6. Check the administrative users and their access rights.
   4.7. Check the configured reports (content, delivery frequency, recipient list).
   4.8. Check the automatic backup and archival parameters.
   4.9. Check archival of logs.

5. Commissioning Test:
   5.1. Test for all access points connectivity to the wireless controller.
   5.2. Test and verify authorized access points inventory and authorized client inventory.
   5.3. Verify external access points list and verify uncategorized / unauthorized client list.
   5.4. Verify if all authorized wireless devices are tagged to right location.

5.5. Test for authorized client connection to authorized access point and respective SSID as per the set authentication policy.
5.6. Test for guest client connection to authorized access points and respective SSID as per the set authentication policy.
5.7. Test if the access points are operational after shutting down the controller.
5.8. Test if automatic rogue access points prevention is working on all types of rogue APs.
5.9. Test if unauthorized client association to authorized access point is automatically prevented.
5.10. Test if automatic client Mis-association prevention is working.
5.11. Test if ad-hoc networks are detected and automatically prevented.
5.12. Test if MAC-spoofing is detected.
5.13. Test if automatic prevention of Honeypot (with Multipot) is functional.
5.14. Test is Denial of Service (DoS) attack is detected.
5.15. Testing of deployment of policies, firmware updating remotely through the controller.
5.16. Testing WIPS functionality across the subnet.
5.17. The entire testing exercise should complete in stipulated time.

6. Documentation and Reports:
6.1. Documentation of the entire project along with testing reports must be submitted to IIMBG.
6.2. Documentation must include complete network diagram which clearly depicts switch management IP Address, switch location, AP location, and switch port to each AP etc.
6.3. Documentation must include complete configuration in a step-by-step manner.

7. Solution fine tuning and handover to operations team of IIMBG.
7.1. Fine tune Wi-Fi Access policies and security policies.
7.2. Rebuild authorized device inventory and remediate mis-configured APs.
7.3. Fine tune events, alerts, reports and other parameters.

14. Documents Need to be Submitted With Technical Bid

Sl No.	Details Documents need to submit along with BID documents	
1.	EMD / E-receipt as a proof of EMD submission : *Annexure - I*	
2.	Copy of PAN	
3.	Copy of GST	
4.	Copy of Trade License	
5.	Establishment Certificate / registration certificate to furnish	
6.	Copy of Last 3 Years Balance Sheet (Audited Balance sheet to furnish) : *Annexure – II*	
7.	Copy of ISO Certificate(s)	
8.	Copy of Bank Details : *Annexure – III*	
9.	Certificate of registered office at Kolkata/Patna/Dhanbad/Ranchi/Gaya : *Annexure - IV*	
10.	Declaration of Non-Blacklist at Central Govt. /State Govt./PSUs/Other Govt. Agency/ Govt Educational	

	Institute/University. : *Annexure - V*	
11.	Credential (As per eligibility criteria)	
12.	Escalation Matrix document.	
13.	Manufacturing Authorization Certificate (As applicable) : *Annexure – VI*	
14.	Declaration of experience (PO with Completion Certificate to furnish) : *Annexure – VII*	
15.	Working experience in IITs/IIMs/AIIMSs/NITs/ Government research institutions/Institute of National Importance (not below Rs 50 Lakh) (PO with Completion Certificate to furnish)	
16.	Authorization letter. Tender Specific Authorization Letter from OEMs must be submitted.	
17.	OEM declarations (As per OEM eligibility)	
18.	Project Execution Plan & Mitigation Plan	
19.	Service Level Agreement	
20.	Schematic Diagram of the entire system (Based on site survey, Experience & BOQ) 1) Tentative Structured Networking System 2) Tentative Campus FO Backbone System 3) Tentative Wi-Fi installation 4) SLD of the Power Management System	
21.	Seal & Sign at Tender Bid (As per Instructions)	
22.	Technical Compliance Sheet (Compliance statement on OEM's letterhead with seal-stamp to furnish)	
23.	Data Sheet of all products	
24.	Undertakings : *Annexure – VIII*	
25.	Details Impressed Materials List (Bidder Choice for proper SLD)	
26.	All other documents, as required in terms of the tender, to claim eligibility.	

Note: Institute may ask the bidder to submit any other certificate/document as it may deem fit.

15. Documents Need to be Submitted With Finance Bid

COVER – 2 FINANCIAL BIDS (PRICE-BID)			
Sr. No.	**Types**	**Content**	
1.	Financial Bid	Price Bid in given format as per *Complete BOQ & BOM (Price Bid)*	

The prices once accepted by the Institute shall remain valid till the successful execution of the order and till supplies is fully effected and accepted or 12 months from the date of acceptance of tender whichever is later. The Institute shall not entertain any increase in the rates during the period. However, in the event there is a reduction or increase in Government taxes during the period of execution of the order, the rates shall be suitably adjusted with effect from the date notifying the said reduction or increase in the Government taxes, if any.

16. Bill of Materials & Service Part

1. BOQ of Materials Part

S/No.	Items	Items Descriptions	Qty.	UoM
1	Layer 3 Switch	24 Port 10/100/1000 Base T with 8 x 10G SFP slot, RPS	1	Nos.
2	Layer 2 Switch -Type 1	24 Port 10/100/1000 Base T with 4 x 1G SFP slot	13	Nos.
3	Layer 2 Switch -Type 2	24 Port 10/100/1000 Base T with 4 x 10G SFP slot	3	Nos.
4	Layer 2 Switch - PoE+	24 Port 10/100/1000 Base T PoE+ with 4 x 1G SFP slot, 370w or Higher Power budget	4	Nos.
5	1G SFP Transceiver	1G Single mode SFP Transceiver	2	Nos.
6	10G SFP Transceiver	10G Single mode SFP Transceiver	8	Nos.
7	Wireless Controller	Wireless Controller with 70AP license from day 1 expendable upto 150AP with license upgrade	1	Nos.
8	Wireless Access Points	Dual Band AC wave 2 Indoor access points, PoE Supportable	50	Nos.
9	Wireless Access Points	Dual Band AC wave 2 Outdoor access points, PoE Supportable	1	Nos.
10	Fiber Cables	12 Core single mode Armored Fiber Cables	2000	Meters
11	Fiber Patch Cord	3M single mode Fiber Patch Cord LC-SC	10	Nos.
12	24 Port LIU	24Port Loaded LIU, Loaded with SC type coupler panel, adaptor and splice tray	6	Nos.
13	UTP Cable	CAT6 UTP Cable	9835	Meters
14	UTP Patch Cords	CAT6 UTP Patch cord 1M length	400	Nos.
15	UTP Patch Cords 2M	CAT6 UTP Patch cord 2M length	338	Nos.
16	UTP Jack Panel	24Port Loaded Jack Panel, Loaded with CAT6 Keystone	22	Nos.
17	UTP Keystone	CAT6 UTP Keystone with Single Faceplate & SMB	400	Nos.
18	HDPE Pipes	32mm HDPE Pipe	1800	Meters
19	PVC Pipes	25MM PVC Pipes/Casing Capping ISI Marked	3500	Meters
20	Network Rack	12U Wall mount network enclosure with PDU, Fan, Cable Manager & H/w	8	Nos.
21	Online ups	3KVA online UPS with 30Min+ backup	3	Nos.

2. BOQ for Service Part

S/No.	Items	Qty.	UoM
1	Installation, Commissioning & Testing Charges for Layer 3 Switch as per site requirements	1	Nos.
2	Installation, Commissioning & Testing for Layer 2 Switches as per site requirements	20	Nos.
3	Installation, Commissioning & Testing for wireless controller as per site requirements	1	Nos.
4	Installation, Commissioning & Testing s for Indoor/Outdoor wireless Access Points as per site requirements	55	Nos.
5	Laying charges of OFC cables (indoor/Outdoor) Including Digging/cutting of Soft/Hard soil and proper refilling the same, Installation of route marker	2500	Meters
6	Installation & Termination of LIU including Splicing and Fiber testing of All cores	16	Nos.
7	Laying charges of UTP cables (indoor/Outdoor) Including Digging/cutting of Soft/Hard soil and proper refilling the same, through PVC/HDPE pipes	9835	Meters
8	Installation & Termination of UTP Patch Panels including Termination Testing & commissioning and marking of each point.	22	Nos.
9	Termination & testing of UTP Information outlet including fixing of back box and proper marking of each points	400	Nos.
10	Laying of HDPE pipes Underground/Over the surface	2000	Meters
11	Installation commissioning & dressing of wall mount racks	8	Nos.
12	Installation & commissioning of Online UPS including Power Points terminations and electric cable laying from nearby row power source to UPS end, Mounting and connectivity of 16AMP Socket & Switch with MCB box at end and 5/15AMP socket & Switch with MCB at each rack points (All the cabling works for power connectivity of each wall mount racks should be included). Required items like Electrical cables, PVC Box, Switch & Socket etc. shall be supplied by the bidder.	3	Job
13	SITC of overall project including documentations and required training.	1	Job

17. Technical Specifications

Item no. 1 : Minimum technical specifications for Layer 3 Switch			
Sr No	**Specifications**	**Compliance (Yes/No)**	**Remarks**
1	**Performance Features**		
1.1	The Switch should have 24 x 10/100/1000 Base-T ports and 8 x 10G SFP+ slots		
1.2	The switch should support 2 x 40G QSFP+ ports in future by adding or replacing any interface card		
1.3	The switch should be able to support different interface types like 1G, 10G, 40G, 25G, MultiGig by adding or replacing any interface card		
1.4	The switch should support Following 200Gbps switching capacity and 150 Mpps Forwarding rate.		
1.5	Switch should have 8 GB RAM and 12 GB Flash.		

1.6	The switch should support 32K MAC Addresses and 4000 VLAN IDs.		
1.7	Switch should have slot/ports (excluding uplinks ports) for minimum 400 Gbps of stacking bandwidth with dedicated stacking ports and cables with minimum 8 switch in stack		
1.8	Switch should be able to support 32000 IPV4 & 16000 IPV6 routing entries from day-1		
1.9	Switch should be able to support 8000 Multicast routing entries from day-1		
1.10	Switch should support minimum 1000 Switched Virtual Interfaces.		
1.11	The switch should support Jumbo frames of 9216 bytes		
2	**General Features**		
2.1	Proposed switch should be enterprise grade switch with x86 based CPU architecture		
2.2	Proposed switch should have a capability to add modular uplinks of varied speeds between 10G and 1G.		
2.3	The Switch should support Layer 2 features, Routed Access (RIP, OSPF - 800 routes), Policy Based Routing, PIM Stub Multicast (800 routes), PVLAN, VRRP, QoS, FHS, 802.1X, CoPP, SXP, IP SLA Responder from day-1		
2.4	The Switch should support HSRP, IS-IS, BSR, MSDP, IP SLA, OSPF, VRF, VXLAN, LISP from day-1		
2.5	The Switch should support Macsec-256		
2.6	The proposed switch should be software defined networking capable and be able to at least integrate easily with the SDN controller from the same OEM.		
2.7	Switch shall support application visibility and traffic monitoring with minimum 60K netFlow/sflow/jflow entries.		
2.8	Switche should support both front and back beacon LEDs for easy identification of the switch being accessed.		
2.9	Switches should have hardware support to connect a Bluetooth dongle to your switch, enabling you to use this wireless interface as an IP management port interface.		
3	**High availability & Resiliency**		
3.1	Switch should support redundant field replaceable power supplies.		
3.2	Switch should support redundant field replaceable fans.		
3.3	Switch should support cross-stack EtherChannel.		
3.4	Switch should support embedded event manager scripts		
3.5	After a reboot when power is restored to a switch, switch should start delivering power to endpoints without waiting for the operating system to fully load.		
4	**L2 Features**		
4.1	The switch should support Automatic Negotiation of Trunking Protocol, to help minimize the configuration & errors		
4.2	The switch should support IEEE 802.1Q VLAN encapsulation		
4.3	The switch should support Spanning-tree PortFast and PortFast guard for fast convergence		
4.4	The switch should support UplinkFast & Backbone Fast technologies to help ensure quick failover recovery, enhancing overall network stability and reliability		
4.5	The switch should support Spanning-tree root guard to prevent other edge switches becoming the root bridge.		

4.6	The switch should support Voice VLAN to simplify IP telephony installations by keeping voice traffic on a separate VLAN		
4.7	The switch should support Auto-negotiation on all ports to automatically selects half- or full-duplex transmission mode to optimize bandwidth		
4.8	The switch should support Automatic media-dependent interface crossover (MDIX) to automatically adjusts transmit and receive pairs if an incorrect cable type (crossover or straight-through) is installed.		
4.9	The switch should support Unidirectional Link Detection Protocol (UDLD) and Aggressive UDLD to allow for unidirectional links caused by incorrect fiber-optic wiring or port faults to be detected and disabled on fiber-optic interfaces.		
4.10	The switch should support IGMP v1, v2 Snooping		
4.11	Switch should support IPv4 and IPv6The Switch should be able to discover (on both IPv4 & IPv6 Network) the neighboring device giving the details about the platform, IP Address, Link connected through etc, thus helping in troubleshooting connectivity problems.		
5	**Network security features**		
5.1	The switch should support IEEE 802.1x providing user authentication, authorization and CoA.		
5.2	The switch should support SSHv2 and SNMPv3 to provide network security by encrypting administrator traffic during Telnet and SNMP sessions.		
5.3	The switch should support TACACS+ and RADIUS authentication enable centralized control of the switch and restrict unauthorized users from altering the configuration.		
5.4	The switch should support MAC address notification to allow administrators to be notified of users added to or removed from the network.		
5.5	The switch should support MACSec-256		
5.6	The switch should support 5000 ACL Entries		
6	**Quality of Service**		
6.1	Switch should support 802.1p Class of Service (CoS) and Differentiated Services Code Point (DSCP) field classification, Shaped Round Robin (SRR) scheduling, Committed Information Rate (CIR), and eight egress queues per port.		
7	**Layer-3 Features should be supported from day-1**		
7.1	The Switch should support routing protocols such OSPF, BSR, IS-ISv4, LISP, VXLAN, VRF.		
7.2	The Switch should support IPv6 Routing capable protocols such as OSPFv3 in hardware.		
7.3	The Switch should support IP Multicast and PIM, PIM Sparse Mode & Source-Specific Multicast for Wired and Wireless Clients.		
7.4	The Switch should support basic IP Unicast routing protocols (static, RIPv1 & RIPv2).		
7.5	The Switch should support IPv6 & IPv4 Policy Based Routing (PBR)		
7.6	The Switch should support Inter-VLAN routing.		
7.7	The Switch should support HSRP for IPv4 & IPv6.		
7.8	The Switch should support VRRPv3.		
7.9	The Switch should support uRPF for IPv4 and IPv6.		

Item no. 2 : Minimum technical specifications for Layer 2 Switch -Type 1			
Sr No	**Specifications**	**Compliance (Yes/No)**	**Remarks**
1	**Interface**		
1.1	Mimimum 24 x 10/100/1000 Base-T ports and additional 4 x 1G SFP uplinks ports.		
1.2	Uplink ports can be used to connect up to eight switches and manage them via a single IP address.		
2	**General Features :**		
2.1	Switch must be enterprise grade in 1 RU form-factor with internal power supply and fanless model.		
2.2	Switch Should have minimum 512 MB RAM		
2.3	Switch Should have minimum 256 MB Flash		
3	**Performance :**		
3.1	**Switch shall have minimum 56 Gbps of switching fabric and 40Mpps of forwarding rate.**		
3.2	Shall have minimum 15 K MAC Addresses and 256 Active VLANs.		
3.3	Shall have minimum IPv4 and IPv6 multicast routes and 1024 IGMP groups		
3.4	Should have minimum 64 STP instances		
3.5	Shall have 512 IPv4 and 512 IPv6 security access list entries		
3.6	Switch should support 1024 IPv4 multicast routes, IGMP groups and IPv6 multicast groups		
3.7	Switch Need to support 600 IPv4/MAC security ACEs and IPv6 security ACEs		
3.8	Switch will support 10240 byte Jumbo Ethernet frame from day 1		
3.9	Switch need to support. 9198 bytes MTU-L3 packet		
4	**Functionality :**		
4.1	Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3az.		
4.2	Switch must have features like static routing 16 for IPv4 and 16 for IPv6		
4.3	Shall have 802.1p class of service, marking and classification & eight egress queues.		
4.4	Switch should support QoS through Differentiated Services Code Point (DSCP) mapping and filtering.		
4.5	Switch should support Shaped Round Robin (SRR) scheduling and Weighted Tail Drop (WTD) congestion avoidance.		
4.6	Switch should support management features like SNMPv3, NTP, RADIUS and TACACS+ .		
4.7	Switch should support advance mechanism to handling link failures and improving convergence time in ring topologies with industry standard like Resilient Protocol or equivalent.		
4.8	Switch should support DHCP, Auto Negotiation, DTP, LACP, UDLD, MDIX, VTP, TFTP, NTP, Per-port broadcast, multicast, Static routing, Layer 2 trace route and unicast storm control.		

4.9	Must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.		
4.10	Should support management CLI and web UI over SNMP, RJ-45, Bluetooth or USB console access		
4.11	Should have trunk failover capabilities to ensure server NIC adapters teamup to provide redundancy in the network so that in case of the link is lost on the primary interface, network connectivity is transparently changed to the secondary interface.		
4.12	Security with 802.1X support for connected devices, Switched Port Analyzer (SPAN), and Bridge Protocol Data Unit (BPDU) Guard		
4.13	**Industry Standard :** 60950-1, CISPR22 Class A, EN55024, RoHS and IPv6 Ready Logo		
4.14	**Switch should support enhanced QoS like**, egress queues, Ingress policing to, QoS through Differentiated Services Code Point (DSCP) mapping and filtering, QoS through traffic classification, Trust boundary, AutoQoS, Shaped Round Robin (SRR) scheduling and Weighted Tail Drop (WTD) congestion avoidance, 802.1p Class of Service (CoS) ,		
4.15	Switch should have intelligent power management, allows flexible power allocation across all ports. With Perpetual PoE, the PoE+ power is maintained during a switch reload. So that there is no power disruption during a switch reboot.		
4.16	**Operating Temperature range :** -5 to +50 degC		
5	**Certification:**		
5.1	OEM should be listed in Gartner Leader Quadrant for Wired and Wireless LAN Infrastructure from last 5 years.		
6	**Safety and compliance**		
6.1	Safety certification UL 60950-1 Second Edition, CAN/CSA-C22.2 No. 60950-1 Second Edition, EN 60950-1 Second Edition, IEC 60950-1 Second Edition, AS/NZS 60950-1		
6.2	EMC: Emissions certification 47CFR Part 15 (CFR 47) Class A, AS/NZS CISPR22 Class A, CISPR22 Class A, EN55022 Class A, ICES003 Class A, VCCI Class A, EN61000-3-2, EN61000-3-3, KN22 Class A, CNS13438 Class A		
6.3	EMC: Immunity, certification EN55024 (including EN 61000-4-5), CISPR24, EN300386, KN24		
6.4	Environmental Reduction of Hazardous Substances (RoHS) including Directive 2011/65/EU		
7	**Security Features**		
7.1	Switch should support 802.1X features to control access to the network, including flexible authentication, 802.1X monitor mode, and RADIUS change of authorization		
7.2	Switch support 802.1X with Network Edge Access Topology (NEAT), which extends identity and user distribution, which enables you to load-balance users with the same group name across multiple different VLANs.		
7.3	Switch should have capability to disable per-VLAN MAC learning to allow you to manage the available MAC address table space by controlling which interface or		

	VLANs learn MAC addresses		
7.4	Switch should support Multidomain authentication to allow an IP phone and a PC to authenticate on the same switch port while being placed on the appropriate voice and data VLANs.		
7.5	Switch need to support Access Control Lists (ACLS) for IPv6 and IPv4 security and Quality-of-Service (QoS) ACL elements (ACEs).		
7.6	Switch should have features like Port-based ACLs, SSH, Kerberos, and SNMP v3, TACACS+ and RADIUS authentication, Web authentication redirection, Multilevel security on console access, Spanning Tree Root Guard (STRG), Internet Group Management Protocol (IGMP) filtering,		
7.7	Switch should support SPAN, with bidirectional data support, to allow the OEM Intrusion Detection System (IDS) to take action when an intruder is detected.		

Item no. 3 : Minimum technical specifications for Layer 2 Switch -Type 2			
Sr No	**Specifications**	**Compliance (Yes/No)**	**Remarks**
1	**Interface**		
1.1	Minimum 24 x 10/100/1000 Base-T ports and additional 4 x 10G SFP+ uplinks ports.		
1.2	Uplink ports can be used to connect up to eight switches and manage them via a single IP address.		
2	**General Features :**		
2.1	Switch must be enterprise grade in 1 RU form-factor with internal power supply and fanless model.		
2.2	Switch Should have minimum 512 MB RAM		
2.3	Switch Should have minimum 256 MB Flash		
3	**Performance :**		
3.1	Switch shall have minimum 128 Gbps of switching fabric and 90Mpps of forwarding rate.		
3.2	Shall have minimum 15K MAC Addresses and 256 Active VLANs.		
3.3	Shall have minimum IPv4 and IPv6 multicast routes and 1024 IGMP groups		
3.4	Should have minimum 64 STP instances		
3.5	Shall have 512 IPv4 and 512 IPv6 security access list entries		
3.6	Switch should support 1024 IPv4 multicast routes, IGMP groups and IPv6 multicast groups		
3.7	Switch Need to support 600 IPv4/MAC security ACEs and IPv6 security ACEs		
3.8	Switch will support 10240 byte Jumbo Ethernet frame from day 1		
3.9	Switch need to support. 9198 bytes MTU-L3 packet		
4	**Functionality :**		
4.1	Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3az.		
4.2	Switch must have features like static routing 16 for IPv4 and 16 for IPv6		

4.3	Shall have 802.1p class of service, marking and classification & eight egress queues.		
4.4	Switch should support QoS through Differentiated Services Code Point (DSCP) mapping and filtering.		
4.5	Switch should support Shaped Round Robin (SRR) scheduling and Weighted Tail Drop (WTD) congestion avoidance.		
4.6	Switch should support management features like SNMPv3, NTP, RADIUS and TACACS+ .		
4.7	Switch should support advance mechanism to handling link failures and improving convergence time in ring topologies with industry standard like Resilient Protocol or equivalent.		
4.8	Switch should support DHCP, Auto Negotiation, DTP, LACP, UDLD, MDIX, VTP, TFTP, NTP, Per-port broadcast, multicast, Static routing, Layer 2 trace route and unicast storm control.		
4.9	Must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.		
4.10	Should support management CLI and web UI over SNMP, RJ-45, Bluetooth or USB console access		
4.11	Should have trunk failover capabilities to ensure server NIC adapters team up to provide redundancy in the network so that in case of the link is lost on the primary interface, network connectivity is transparently changed to the secondary interface.		
4.12	Security with 802.1X support for connected devices, Switched Port Analyzer (SPAN), and Bridge Protocol Data Unit (BPDU) Guard		
4.13	**Industry Standard :** 60950-1, CISPR22 Class A, EN55024, RoHS and IPv6 Ready Logo		
4.14	**Switch should support enhanced QoS like**, egress queues, Ingress policing to, QoS through Differentiated Services Code Point (DSCP) mapping and filtering, QoS through traffic classification, Trust boundary, AutoQoS, Shaped Round Robin (SRR) scheduling and Weighted Tail Drop (WTD) congestion avoidance, 802.1p Class of Service (CoS) ,		
4.15	Switch should have intelligent power management, allows flexible power allocation across all ports. With Perpetual PoE, the PoE+ power is maintained during a switch reload. So that there is no power disruption during a switch reboot.		
4.16	**Operating Temperature range :** -5 to +50 degC		
5	**Certification:**		
5.1	OEM should be listed in Gartner Leader Quadrant for Wired and Wireless LAN Infrastructure from last 5 years.		
6	**Safety and compliance**		
6.1	Safety certification UL 60950-1 Second Edition, CAN/CSA-C22.2 No. 60950-1 Second Edition, EN 60950-1 Second Edition, IEC 60950-1 Second Edition, AS/NZS 60950-1		
6.2	EMC: Emissions certification 47CFR Part 15 (CFR 47) Class A, AS/NZS CISPR22 Class A, CISPR22 Class A, EN55022 Class A, ICES003 Class A, VCCI Class A, EN61000-3-2, EN61000-3-3, KN22 Class A, CNS13438 Class A		
6.3	EMC: Immunity, certification EN55024 (including EN 61000-4-5), CISPR24, EN300386, KN24		

6.4	Environmental Reduction of Hazardous Substances (RoHS) including Directive 2011/65/EU		
7	**Security Features**		
7.1	Switch should support 802.1X features to control access to the network, including flexible authentication, 802.1X monitor mode, and RADIUS change of authorization		
7.2	Switch support 802.1X with Network Edge Access Topology (NEAT), which extends identity and user distribution, which enables you to load-balance users with the same group name across multiple different VLANs.		
7.3	Switch should have capability to disable per-VLAN MAC learning to allow you to manage the available MAC address table space by controlling which interface or VLANs learn MAC addresses		
7.4	Switch should support Multidomain authentication to allow an IP phone and a PC to authenticate on the same switch port while being placed on the appropriate voice and data VLANs.		
7.5	Switch need to support Access Control Lists (ACLS) for IPv6 and IPv4 security and Quality-of-Service (QoS) ACL elements (ACEs).		
7.6	Switch should have features like Port-based ACLs, SSH, Kerberos, and SNMP v3, TACACS+ and RADIUS authentication, Web authentication redirection, Multilevel security on console access, Spanning Tree Root Guard (STRG), Internet Group Management Protocol (IGMP) filtering,		
7.7	Switch should support SPAN, with bidirectional data support, to allow the OEM Intrusion Detection System (IDS) to take action when an intruder is detected.		

Item no. 4 : Minimum technical specifications for Layer 2 Switch - PoE+			
Sr No	**Specifications**	**Compliance (Yes/No)**	**Remarks**
1	**Interface**		
1.1	Minimum 24 x 10/100/1000 Base-T POE/POE+ ports and additional 4 x 1G SFP uplinks ports. The switch would support 370W or Higher POE budget.		
1.2	Uplink ports can be used to connect up to eight switches and manage them via a single IP address.		
2	**General Features :**		
2.1	Switch must be enterprise grade in 1 RU form-factor with internal power supply and fanless model.		
2.2	Switch Should have minimum 512 MB RAM		
2.3	Switch Should have minimum 256 MB Flash		
3	**Performance :**		
3.1	Switch shall have minimum 128 Gbps of switching fabric and 90Mpps of forwarding rate.		
3.2	Shall have minimum 15K MAC Addresses and 256 Active VLANs.		
3.3	Shall have minimum IPv4 and IPv6 multicast routes and 1024 IGMP groups		
3.4	Should have minimum 64 STP instances		
3.5	Shall have 512 IPv4 and 512 IPv6 security access list entries		
3.6	Switch should support 1024 IPv4 multicast routes, IGMP groups and IPv6 multicast groups		

3.7	Switch Need to support 600 IPv4/MAC security ACEs and IPv6 security ACEs		
3.8	Switch will support 10240 byte Jumbo Ethernet frame from day 1		
3.9	Switch need to support. 9198 bytes MTU-L3 packet		
4	**Functionality :**		
4.1	Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3az.		
4.2	Switch must have features like static routing 16 for IPv4 and 16 for IPv6		
4.3	Shall have 802.1p class of service, marking and classification & eight egress queues.		
4.4	Switch should support QoS through Differentiated Services Code Point (DSCP) mapping and filtering.		
4.5	Switch should support Shaped Round Robin (SRR) scheduling and Weighted Tail Drop (WTD) congestion avoidance.		
4.6	Switch should support management features like SNMPv3, NTP, RADIUS and TACACS+ .		
4.7	Switch should support advance mechanism to handling link failures and improving convergence time in ring topologies with industry standard like Resilient Protocol or equivalent.		
4.8	Switch should support DHCP, Auto Negotiation, DTP, LACP, UDLD, MDIX, VTP, TFTP, NTP, Per-port broadcast, multicast, Static routing, Layer 2 trace route and unicast storm control.		
4.9	Must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.		
4.10	Should support management CLI and web UI over SNMP, RJ-45, Bluetooth or USB console access		
4.11	Should have trunk failover capabilities to ensure server NIC adapters teamup to provide redundancy in the network so that in case of the link is lost on the primary interface, network connectivity is transparently changed to the secondary interface.		
4.12	Security with 802.1X support for connected devices, Switched Port Analyzer (SPAN), and Bridge Protocol Data Unit (BPDU) Guard		
4.13	**Industry Standard :** 60950-1, CISPR22 Class A, EN55024, RoHS and IPv6 Ready Logo		
4.14	**Switch should support enhanced QoS like**, egress queues, Ingress policing to, QoS through Differentiated Services Code Point (DSCP) mapping and filtering, QoS through traffic classification, Trust boundary, AutoQoS, Shaped Round Robin (SRR) scheduling and Weighted Tail Drop (WTD) congestion avoidance, 802.1p Class of Service (CoS) ,		
4.15	Switch should have intelligent power management, allows flexible power allocation across all ports. With Perpetual PoE, the PoE+ power is maintained during a switch reload. So that there is no power disruption during a switch reboot.		
4.16	**Operating Temperature range :** -5 to +50 degC		
5	**Certification:**		
5.1	OEM should be listed in Gartner Leader Quadrant for Wired and Wireless LAN Infrastructure from last 5 years.		
6	**Safety and compliance**		

6.1	Safety certification UL 60950-1 Second Edition, CAN/CSA-C22.2 No. 60950-1 Second Edition, EN 60950-1 Second Edition, IEC 60950-1 Second Edition, AS/NZS 60950-1		
6.2	EMC: Emissions certification 47CFR Part 15 (CFR 47) Class A, AS/NZS CISPR22 Class A, CISPR22 Class A, EN55022 Class A, ICES003 Class A, VCCI Class A, EN61000-3-2, EN61000-3-3, KN22 Class A, CNS13438 Class A		
6.3	EMC: Immunity, certification EN55024 (including EN 61000-4-5), CISPR24, EN300386, KN24		
6.4	Environmental Reduction of Hazardous Substances (RoHS) including Directive 2011/65/EU		
7	**Security Features**		
7.1	Switch should support 802.1X features to control access to the network, including flexible authentication, 802.1X monitor mode, and RADIUS change of authorization		
7.2	Switch support 802.1X with Network Edge Access Topology (NEAT), which extends identity and user distribution, which enables you to load-balance users with the same group name across multiple different VLANs.		
7.3	Switch should have capability to disable per-VLAN MAC learning to allow you to manage the available MAC address table space by controlling which interface or VLANs learn MAC addresses		
7.4	Switch should support Multidomain authentication to allow an IP phone and a PC to authenticate on the same switch port while being placed on the appropriate voice and data VLANs.		
7.5	Switch need to support Access Control Lists (ACLS) for IPv6 and IPv4 security and Quality-of-Service (QoS) ACL elements (ACEs).		
7.6	Switch should have features like Port-based ACLs, SSH, Kerberos, and SNMP v3, TACACS+ and RADIUS authentication, Web authentication redirection, Multilevel security on console access, Spanning Tree Root Guard (STRG), Internet Group Management Protocol (IGMP) filtering,		
7.7	Switch should support SPAN, with bidirectional data support, to allow the OEM Intrusion Detection System (IDS) to take action when an intruder is detected.		

Item no. 5 : Minimum technical specifications for 1G SFP Transceiver			
Sr No	**Specifications**	**Compliance (Yes/No)**	**Remarks**
1	The 1000BASE-LX/LH SFP, compatible with the IEEE 802.3z 1000BASE-LX standard, operates on standard single-mode fiber-optic link spans of up to 10 km and up to 550 m on any multimode fibers. From the same OEM of the switch.		

Item no. 6 : Minimum technical specifications for 10G SFP Transceiver			
Sr No	**Specifications**	**Compliance (Yes/No)**	**Remarks**
1	The 10G Modules supports a link length of 10 kilometers on standard Single-Mode Fiber (SMF). From the same OEM of the switch.		

Item no. 7 : Minimum technical specifications for Wireless LAN Controller			
Sr No	**Specifications**	**Compliance (Yes/No)**	**Remarks**
1	Wireless controller should support 80 AP and 5000 clients from day 1. The WLC should be scalable to support max 500 Access Points in future.		
2	**Hardware**		
2.1	The controller shall support deployment flexibility without compromising any features		
2.2	The controller shall support 5 Gbps tunneling capacity		
2.3	The wireless controller shall support option to be embedded into switch		
2.4	The controller shall support 4x 2.5G/1G and 2x 10G copper ports		
2.5	Wireless Controller shall support link aggregation and load sharing between Access Point to WLC links		
2.6	The controller shall support hardware encrypted data plane between Access Point and Controller		
2.7	The controller shall be proposed with complete feature set including licensed feature		
3	**High Availability**		
3.1	High Availability mode shall support controller inline data plane mode as well as local switching mode and Mesh mode		
3.2	High Availability mode shall allow geographically dispersed installation between Controllers		
3.3	The controller failover shall not trigger client de-authication and re-association		
3.4	Heartbeat interval shall not be longer than 100msec		
3.5	The controller shall support hot WLC software patching for fixing bugs		
3.6	The controller shall support hot AP software patching for fixing bugs		
3.7	The controller shall support new AP hardware without need for upgrading entire controller software.		
3.8	The controller shall support rolling AP upgrade		
3.9	The controller shall support rolling AP upgrade without need for clustering		
3.10	The redundant Controller shall sync Access Point and Client Status, including DHCP IP lease status		
4	**Software**		
4.1	Access Point shall be able to proactively distributes Client connection before and after association and tracking client condition in real time using data packet RSSI		
4.2	The controller shall support standard-based, secure AP-Controller data & control protocol like CAPWAP. protocol that has known vulnerability like PAPI cannot be used.		
4.3	The controller shall support Inter-Controller Wireless Roaming		
4.4	The controller shall maintain per-user Application usage and shall be able to export it for network analytic.		
4.5	The controller shall support Multi Languages options from embedded GUI Management		
4.6	The controller shall provide per-Client Connection Scoring and provide reasoning of Client Connection Score		

4.7	The controller shall support Cellular offload using IPv6 tunneling to Mobile Core network		
5	**RF Management**		
5.1	The controller shall be able to support multiple RF Management profile per group of APs, including Transmit Power Control		
5.2	and Dynamic Channel Assignment on both 2.4GHz and 5Ghz		
5.3	The controller shall be able to identify and avoid interferers with network performance impact analysis report		
5.4	The controller shall support optimized, automatic channel width (20~160Mhz) selection over 5GHz, 802.11ac		
6	**Mesh**		
6.1	Mesh AP nodes shall provide quick convergence and fast failover to new root mesh node		
6.2	Mesh Backhaul interface shall support full duplex operation using wired daisy chaining		
6.3	Mesh AP shall support fast roaming for Wired-client through wired-to-wireless bridge client		
7	**Application Recognition and Control**		
7.1	The controller shall support per-user and per-WLAN based application recognition and control that throttle usage by rate-limiting		
7.2	The controller application recognition technology shall support exporting to 3rd party compatible format, such as NetFlow v9		
7.3	The controller shall provide policy-based mDNS gateway including Chromecast gateway		
7.4	The controller shall support new application signatures without upgrading controller software		
8	**BYOD & Security**		
8.1	The controller shall provide Device Profiling using multiple profiling methods to reduce false-detection		
8.2	The system shall provide secure onboarding service for both employee and guest based on standard-based security protocol		
8.3	The controller shall be able to be embedded custom web portal page (HTML) to fully customize user experience without additional cost or extra box		
8.4	The controller shall provide rule-based rogue classification and automatically run rogue mitigation action		
8.5	The controller shall be able to detect employee device connection to Rogue Access Point and contain it automatically. It should also support protection from Honeypot or Evil twin.		
8.6	The controller shall support Content Security using DNS integration, Web Classification shall be fully customizable		
8.7	The system shall support control plane encryption on both IPv4 and IPv6		
8.8	The Controller's image upgrade shall be done through secure, encrypted transport		
8.9	The controller shall be able to provide unique pre-shared keys to the devices that do not support the 802.1x security protocol		
8.10	The controller shall support Identity PSK for on boarding		

8.11	The controller shall support identification & mitigation of threats inside encrypted traffic		
9	**Network**		
9.1	The controller shall support mapping of specific VLANs to single SSID, depending on Access Point location and user		
10	**Configuration**		
10	The controller shall support automatic VLAN assignment per SSID to load-balance user connection assigned VLAN pool shall be same as number of available VLAN in the system		
10.1	The controller shall support embedded best practice configuration profile and setup		
10.2	The system shall support monitoring and provisioning from Mobile App, supporting iOS and Android		
10.3	The controller shall support packet fragmentation between Access Point and controller communication		

Item no. 8 : Minimum technical specifications for Indoor Access Point			
Sr No	**General Specifications**	**Compliance (Yes/No)**	**Remarks**
1	Access Point shall support 2x2 MIMO on both radio interfaces		
2	Access Point shall be able to powered up using PoE (.af)		
3	Access Point shall support assurance, packet capture, RF sensing capabilities		
4	Access Point shall support application visibility and control		
5	Access Point shall support encrypted traffic visibility		
6	Access Point should have Bluetooth5 radio to support use cases of location, asset tracking and analytics.		
7	Access Point shall ship with metal-based mounting bracket for durability and reliability		
8	Access Point shall be able to leverage current Access Point mount kit and cable conduit		
9	Access Point shall support Console port that uses Standard Port (RJ-45) type connection		
10	Access Point should have 1x 10/100/1000 Base-T uplink port.		
11	Must have at least 4 dBi Antenna gain on each radios		
12	Must Support data rate upto 1.4 gbps.		
13	Must support minimum of 20 dbm of transmit power in both 2.4Ghz and 5Ghz radios. And should follow the local regulatory Norms.		
14	Must support AP enforced load-balance between 2.4Ghz and 5Ghz band.		
15	Must incorporate radio resource management for power, channel and performance optimization		
16	Must have -97 dB or better Receiver Sensitivity.		

17	Must support Proactive Key Caching and/or other methods for Fast Secure Roaming.		
18	Must support Management Frame Protection.		
19	Should support locally significant certificates on the APs using a Public Key Infrastructure (PKI).		
20	Access Points must support Hardware-based encrypted user data and management traffic between controller and Access point for better security.		
21	Must support the ability to serve clients and monitor the RF environment concurrently.		
22	Same model AP that serves clients must be able to be dedicated to monitoring the RF environment.		
23	Must be plenum-rated (UL2043).		
24	Must support 16 WLANs per AP for SSID deployment flexibility.		
25	Access Point Must continue serving clients when link to controller is down. It should also have option to authenticate user through Radius server directly from Access Point during link unavailability to controller.		
26	Must support telnet and/or SSH login to APs directly for troubleshooting flexibility.		
27	802.11e and WMM		
28	Must support QoS and Video Call Admission Control capabilities.		

Item no. 9 : Minimum technical specifications for Outdoor Access Point			
Sr No	**General Specifications**	**Compliance (Yes/No)**	**Remarks**
1	Must support 2x2 MIMO for both 802.11ac and 802.11n. Should have dual-band internal antenna.		
2	Access Point shall be able to scale Wave-2 MU-MIMO operation up to 160MHz channel bandwidth		
3	Access Point shall be equipped with dedicate Spectrum Analyzer ASIC that expandable to 160MHz width while maintaining 78 KHz RBW (Resolution Bandwidth)		
4	Access Point shall be able to support dedicated, dual-band security monitor mode AP, while simultaneously serves as 802.11ac Wave-2 AP		
5	Hardware-Accelerated Deep Packet Inspection (Application Visibility) and Control to increase overall access point performance		
6	Should have 1x RJ-45 auto-sensing 10/100/1000 Mbps LAN port and 1x Built-in Gigabit SFP port for direct fiber uplink.		
7	Must support minimum of 30 dbm of EIRP in both 2.4Ghz and 5Ghz radios. And should follow the local regulatory Norms. Beamforming gain will not be considered in calculating EIRP.		
8	Must support AP enforced load-balance between 2.4Ghz and 5Ghz band.		
9	Must have at least 4 dBi Antenna gain on each radios		

10	Must incorporate radio resource management for power, channel and performance optimization		
11	Must have -97 dB or better Receiver Sensitivity.		
12	Must support Proactive Key Caching and/or other methods for Fast Secure Roaming.		
13	Must support Management Frame Protection.		
14	Should support locally significant certificates on the APs using a Public Key Infrastructure (PKI).		
15	Access Points must support Hardware-based encrypted user data and management traffic between controller and Access point for better security.		
16	Must support the ability to serve clients and monitor the RF environment concurrently.		
17	Same model AP that serves clients must be able to be dedicated to monitoring the RF environment.		
18	Must be plenum-rated (UL2043).		
19	Must support 16 WLANs per AP for SSID deployment flexibility.		
20	Access Point Must continue serving clients when link to controller is down. It should also have option to authenticate user through Radius server directly from Access Point during link unavailability to controller.		
21	Must support telnet and/or SSH login to APs directly for troubleshooting flexibility.		
22	802.11e and WMM		
23	Must support QoS and Video Call Admission Control capabilities.		
24	The Access point shall be IP67 and NEMA rated		
25	The Access point shall support operating temperature of -40 to 65°C		
26	The equipment shall support up to 100 MPH sustained winds & 165 MPH wind gusts.		

Item no. 10 : Minimum technical specifications for 12 fiber Single Mode, Armoured, Unitube, Gel filled cable				
Sr No	**Required Specification**		**Compliance (Yes/No)**	**Remarks**
1	Cable Type	12 fiber Single Mode, Armored, Unitube, Gel filled cable complying to ISO.IEC 11801 - 2nd Edition, type OS2; AS/ACIF S008; AS/NZS 3080,ITU-T REC G 652D, IEC 60793/60794, TIA 568, EIA 455; suitable for use in direct burial, outdoor ducts and backbone cabling.		
2	Armour	Corrugated Steel Tape Armour -Thickness > 0.125mm		
3	Water Blocking	Thixotropic Gel (Tube), Petroleum Jelly (Interstices)		
4	Attenuation	@ 1310nm <=0.35 db/Km MAX, @1550nm <=0.22 db/Km MAX		
5	Numerical Aperture	0.14		

6	Attenuation Discontinuity	Both Windows <0.10dB		
7	Core/Mode-Field (um)	9		
8	Clad Diameter (um)	125 + - 1		
9	Coat Diameter	245 + - 10		
10	Loose tube material	Single PBTP Loose tube filled with water blocking Thixotropic gel		
11	Jacket material	UV Stabilized Polyethylene (HDPE)		
12	Peripheral Strength Member	Two Steel wires / E-yarns		
13	Tensile Strength	1000N		
14	Crush Resistance	2000N/10 cm		
15	Cable Diameter	9mm		
16	Max. Bending Radius (during installation)	20 X Overall diameter		
17	Max. Bending Radius (during full load)	10 X Overall diameter		
18	Cable weight Kg/Km	80 kg/km		

Item no. 11 : Minimum technical specifications for LC to LC Duplex tuned Fiber Optic Patch Cord 3 Mtr, 9/125 Micron				
Sr No	**Required Specification**		**Compliance (Yes/No)**	**Remarks**
1	Make and Type	LC to LC Duplex tuned Fiber Optic Patch Cord 3 Mtr, 9/125 Micron		
2	Cable Sheath	LSZH		
3	Cable Diameter	1.8 mm twin zip		
4	Ferrule	Ceramic		
5	Buffer	Tight buffered		
6	Insertion Loss	MAX .3 db		
7	Return Loss	> 45 db		
8	Temperature Range	.-10 Degree C to +60 Degree C		
9	ROHS	ROHS Compliant		

Item no. 12 : Minimum technical specifications for Fiber Optic Rackmount LIU, loaded with LC adapter plates, Splice Tray and LC Pigtails			
Sr no	**Required Specification**	**Compliance (Yes/No)**	**Remarks**

1	Fiber Management Shelf	Configurable Fibre drawer is a 1U rack mount unit for storing and terminating incoming fibre cable. Using our vast range of 6 Pak Plates you can configure your fibre system to suit all fibre applications.		
		Configurable. Fits up to four 6 Pak Plates/ Angled 6 Pak plates		
		Management rings within system to accommodate excess fibre cordage behind the trough adapters and maintain fibre bend radius		
		Sliding drawer for ease of reconfiguring fibres		
		Rugged steel construction finished in attractive		
		Accommodates 2 x 12 fibre Splice Trays		
2	Weight	5KG		
3	Compact size (mm)	45mm H x 485mm W x 255mm D		
4	Optical Fibre Adapter Plates Loaded	LC Adapter SM Plate		
5	No of Adapter Plate Req	As per Requirement		
6	Pigtail	LC, Single mode, 9/125 µm - 1.5 mtrs		
7	No of Pigtail Req	As per Requirement		

Item no. 13 : Minimum technical specifications for CAT6 UTP Cable				
Sr no	**Required Specification**		**Compliance (Yes/No)**	**Remarks**
1	Type	Category 6 Unshielded Twisted Pair 4 pair cable shall be compliant with ANSI/TIA/EIA-568-B.2-1 Additional Transmission Performance Specifications for 4-pair Category 6 Cabling. The Cable should be tested by third party upto 700 MHz and report should be submitted along with bid.		
a)	Type	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP.		
b)		Supports ultrahigh speed data networks such as Gigabit Ethernet (1000 Base-T and 1000 Base-TX) and beyond.		
2	Jacket material	Jacket material should be FR-PVC		
3		Incorporates central spine maintaining pair separation during installation to ensure premium performance after installation.		

4	Mechanical Characteristics	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted. Conductor Solid Copper Conductor Diameter 0.56±0.005mm (23 AWG) Insulator Polyolefin Outer Diameter 6.0±0.4mm Max. Temperature 75°C		
5	ROHS/ELV	Compliant		

Item no. 14 & 15 : Minimum technical specifications for CAT6 U/UTP Patch Cord 1M and 2M				
Sr no	**Feature**	**Requirement**	**Compliance (Yes/No)**	**Remarks**
1	Type	Cat 6 U/UTP Patch Cords are key components of Cat 6 U/UTP End-to-End Solution and are designed to support data networks for 10/100BASE-T and 1000BASE-T applications.		
2	Conductor	24 AWG stranded copper wire		
3	Length	1 & 2 Meters		
4	RJ45 plug and boot material	Clear polycarbonate		
5	Outer Sheath	LS0H		
6	RJ45 plug dimensions compliant with	ISO/IEC 60603-7-4 and FCC 47 Part 68		
7	Contact material	0.35mm thick copper alloy		
8	MIN operating life	750 insertion cycles		
9	Sheath Material	LSZH		
10	ROHS/ELV	Compliant		

Item no. 16 : Minimum technical specifications for 24 port CAT6 Patch Panel				
Sr no	**Feature**	**Requirement**	**Compliance (Yes/No)**	**Remarks**
1	Type	19” 24-port, loaded with Jack , A key product used in both Category 6 link and channel gigabit ethernet applications. The IDC section consists of V-shaped contacts that flex not fatigue when terminated. Each port features spring-loaded shutter and can be colour coded to match jack outlets. Offering both front and rear labelling options, the patch panel is constructed of cold-rolled steel for additional strength and durability.		
2	Ports	24		

3	Plastic Housing Jack Connector	Polycarbonate, UL94V-0 rated or equivalent		
4	Contact Plating	50µ" Gold/100µ" Nickel		
5	Front Connector interface	RJ45		
6	Circuit Identification Scheme	Icons on each of 24-ports		
7	Port Identification	9mm or 12mm Labels on each of 24-ports (to be included in supply)		
8	Height 1 U	(1.75 inches)		
9	ROHS/ELV	Compliant		

Item no. 17 : Minimum technical specifications for CAT6 Information Outlet				
Sr no	**Feature**	**Requirement**	**Compliance (Yes/No)**	**Remarks**
1	Type	Cat 6 Jack is designed to maintain clean secure connections. The RJ-45 jack features 'spring-loaded shutter' which protects it from dust and contaminants as well as provides tactile feedback –the spring-loaded shutter pops out an improperly seated patch cord–all with single-handed plug-in and removal.		
2	Wire terminal	200 termination cycles		
3	Modular Jack	750 mating cycles		
4	Plastic Housing	Polycarbonate, UL94V-0 rated or equivalent		
5	IDC Contact Plating	Tin/Lead Plate		
6	Faceplate	Square Plate with 1/2/4 port. 86 x 86 mm		
7	ROHS/ELV	Compliant		

Item no. 18 : Minimum technical specifications for HDPE Pipe			
S. No	**Minimum Technical Specification**	**Compliance (Yes/No)**	**Remarks**
1	HDPE (High Density polyethylene) telecom ducts for use as Optical Fibre Cable ducts. Smooth inside & outside surface free from blisters, shrink, hole, scratches & roughness		
2	Outer diameter: 40 + 0.4 / - 0.0 mm		
3	Wall Thickness: 3.5 +/- 0.2 mm		
4	Ovality: 1.4 mm Max		
5	Thickness of Permanent lubricant: >0.4 mm		
6	ESCR - Sample shall not crack or split		
7	Crush Resistance: deflection shall be less than 10% with 50 kg load for 1 minute and recovery for 5 minutes shall be less than 2%		
8	Impact Strength: There Should be no crack or split when 10 kg load dropped from 1.5 mtr height after conditioning at 0 deg centigrade per hour		
9	Melt Flow Rate: 0.2 to 1.1 g/10 minutes at 190 0C & 5 kg load		
10	Pressure Rating: 8 kg/sq cm		
11	Accessories: Coupler, End Plug, Endcap shall be included		

12	Suitable for direct burial applications		

Item no. 19 : Minimum technical specifications for PVC Conduit			
S. No	**Minimum Technical Specification**	**Compliance (Yes/No)**	**Remarks**
1	Inner diameter: 25 mm +/- 0.4mm		
2	ISI Marked		

Item No. 20 : Minimum Requirements of 12U wall mount enclosure			
Sl. No.	**Description**	**Compliance (Yes/No)**	**Remarks**
1	GENERIC TECHNICAL SPECIFICATION FOR 12U WALL MOUNT RACK		
2	The rack Cabinet should be as per DIN 41494 standards.		
3	Bolted construction. Can be provided in Flat pack condition and also easy to assemble at site.		
4	The rack should have top and bottom cable entry facility Quick release, Front toughened Glass door and lock.		
5	The rack should have minimum load capacity of 40Kg, 12U mounting capacity with 550mm width and 500mm depth.		
6	The rack should have fully adjustable 19" equipment mounting angles.		
7	The rack should have built with Nano Technology process with "Zirconium Coating "with Powder Coating min 80 Microns with scratch resistance properties		
8	The rack should be ROHS Complaint and Manufacturing should be as ISO Company		
9	The rack should include Horizontal cable managers with 1 U plastic loop flexible to accommodate maximum cables		

Item No. 21 : Minimum Specifications for 3KVA On-Line UPS (1PH-1PH)			
Parameters	**Specifications**	**Compliance (Yes/No)**	**Remarks**
Eligible Brand	**Numeric/APC/Vertiv etc.**		
Topology	True Online Double Conversion UPS with inbuilt Isolation Transformer.		
INPUT			
Phase	Single Phase		
Voltage	230V AC		
Voltage Range	160V - 300V AC		
	110V - 300V AC @ 50% Load		
Power Factor	0.99		
Current THD	<10%		
DC Volt	72 VDC		

Battery Backup	30 Min		
Battery VAH	5400 (12V,75AH x 6 Nos. battery)with battery stand		
Battery Charging	Constant Current & Constant Voltage		
OUTPUT			
Nominal Output voltage	220VAC / 230VAC / 240VAC /± 1%		
Frequency	50Hz ± 0.1Hz		
Frequency synchronisation	47.5 to 52.5 Hz		
Voltage THD	<2% Linear Load		
	<5% Non Linear Load		
Efficiency			
AC/AC (Overall efficiency)	Up to 92%		
ECO mode			
Overload capacity			
105 - 110%	3 min		
111 - 130%	30 sec		
Communication			
RS 232	Required RS 232		
Operating Temperature	0 ~ 40°C Continuous		
Electrical			
Input Terminal	Input Breaker +Terminal		
Output Terminal	Terminal		
Features			
Convert Mode	UPS Should have Convert Mode		
Bypass parameters Configurable	Should be available		
Display	LED + LCD Display		
Mechanical			
Ingress Protection	IP 20		
Standards			
Safety	EN 62040 – 1		
EMI / EMC	EN 62040 – 2		
Performance	IEC 62040 – 3		
Certification	UPS Should have Certified with ISO and BS OHSAS 18001 -2007		

18. Price Bid

	Complete BOQ & BOM (Price Bid)							
	Project : Campus Wide wired and wireless local area network setup							
	Project Site : IIM Bodh Gaya							
	Complete Phase Scope Matrix :- "Turn-Key basis"							
	Supply Installation Testing Commissioning + 3 Years Warranty Maintenance							
	Consider: Seamless operations + Easy & Centralized monitoring + integrated with the existing network of the institution							
	BOQ of Materials Part							
Ln. No.	**Name of goods**	**Make & Model**	**Qty**	**UOM**	**Unit Rate (Rs)**	**Applicable GST rate (%)**	**GST amount (Rs)**	**Total Price (Rs)**
A	**Switching & Allied Materials**							
1	Layer 3 Switch		1	Nos.				
2	Layer 2 Switch -Type 1		13	Nos.				
3	Layer 2 Switch -Type 2		3	Nos.				
4	Layer 2 Switch - PoE+		4	Nos.				
5	1G SFP Transceiver		2	Nos.				
6	10G SFP Transceiver		8	Nos.				
B	**Wi-Fi & Allied Materials (Enterprise)**							
1	Wireless Controller		1	Nos.				
2	Wireless Access Points (Indoor)		50	Nos.				
3	Wireless Access Points (Outdoor)		1	Nos.				
C	**Structured Networking Materials**							
1	UTP Cable- CAT 6		9835	Mtrs				
2	UTP Patch Cords - CAT6-1M		400	Nos.				
3	UTP Patch Cords- CAT6-2M		338	Nos.				
4	UTP Jack Panel		22	Nos.				
5	UTP Keystone		400	Nos.				
D	**Outdoor Backbone Networking Materials - Fiber**							
1	Fiber Cables		2000	Mtrs.				
2	24 Port LIU		6	Nos.				
3	Fiber Patch Cord		10	Nos.				
E	**Pipes**							

1	HDPE Pipes		1800	Mtrs.				
2	PVC Pipes		3500	Mtrs.				
F	Network Rack & accessories							
1	Network Rack- 12U		8	Set				
G	**UPS & Power Management with Proper Grounding**							
1	3kVA Online UPS + 30 Mins Battery Backup with Power dist. Wiring		3	Set				
2	Power Management including Power Points terminations and electric cable laying from nearby row power source to UPS end, Mounting and connectivity of 16AMP Socket & Switch with MCB box at end and 5/15AMP socket & Switch with MCB at each rack points (All the cabling works for power connectivity of each wall mount racks should be included). Required items like Electrical cables, MCCB, PVC Box, Switch & Socket etc. shall be supplied by the bidder.		3	Set				
Total Price: BOQ of Material part: *[A]* (Rs)								
Applicable Taxes (GST)- BOQ of Material part- [*B]* (Rs)								

	BOQ for Service Part							
Ln. No.	**Installation, Testing, Commissioning & Training**	**Make & Model**	**Qty (New Purchase)**	**UOM**	**Unit Rate (Rs)**	**Applicable GST rate (%)**	**GST Amount (Rs)**	**Total Price (Rs)**
A	**Switching & Allied**							
1	Installation, Commissioning & Testing & training Charges for Layer 3 Switch as per site requirements	N/A	1	Nos.				
2	Installation, Commissioning & Testing for Layer 2 Switches as per site requirements	N/A	20	Nos.				
B	**Wi-Fi & Allied**							
1	Installation, Commissioning, Testing & Training for wireless controller as per site requirements	N/A	1	Nos.				
2	Installation, Commissioning & Testing s for Indoor/Outdoor wireless Access Points as per site requirements	N/A	51	Nos.				
C	**Structured Networking**							
1	Laying charges of UTP cables (indoor/Outdoor) Including Digging/cutting of Soft/Hard walls and proper refilling the same, through PVC/HDPE pipes	N/A	9835	Mtrs				

2	Installation & Termination of UTP Patch Panels including Termination Testing & commissioning and marking of each point.	N/A	22	Boxes				
3	Termination & testing of UTP Information outlet including fixing of back box and proper marking of each points	N/A	400	Nos.				
D	**Outdoor Backbone Networking Materials - Fiber**							
1	Laying charges of OFC cables (indoor/Outdoor) Including Digging/cutting of Soft/Hard soil and proper refilling the same, Installation of route marker	N/A	2000	Mtrs.				
2	Installation & Termination of LIU including Splicing and Fiber testing of All cores	N/A	6	Nos.				
E	**Pipes**							
1	Laying of HDPE pipes Underground/Over the surface	N/A	1800	Mtrs.				
F	Network Rack & accessories							
1	Installation commissioning & dressing of wall mount racks	N/A	8	Set				
G	**UPS & Power Management with Proper Grounding**							
1	Installation & commissioning of Online UPS including Power Points terminations and electric cable laying from nearby row power source to UPS end, Mounting and connectivity of 16AMP Socket & Switch with MCB box at end and 5/15AMP socket & Switch with MCB at each rack points (All the cabling works for power connectivity of each wall mount racks should be included). Required items like Electrical cables, MCCB, PVC Box, Switch & Socket etc. shall be supplied by the bidder.	N/A	3	Job				
H	**SITC of overall project including documentations and required training.**							
	SITC of overall project including documentations and required training (if required)	N/A	1	Job				
Total Price: BOQ of Service: *[C]* (Rs)								
Applicable Taxes (GST)- BOQ of Service- *[D]* (Rs)								

Price Summary:-		
Items	Price in Rs.	Amount in words (Rs.)
Total Materials Amount (A):-		
Total GST on Material Amount (B):-		

Total Service Amount (C):-		
Total GST on Service Amount (D) :-		
Total Project Quoted Amount (T = A + B + C + D) :-		

Note:

- All rates should be in INR.
- The selected vendor has to rectify all damages occur during the execution of the work at his own cost.
- Prices should be quoted in detail, for all the subsystems given in the Technical Specifications part of the tender.
- The prices once accepted by the Institute shall remain valid till 6 months from the date of the initial placement of purchase order or 4 months from the date of satisfactory installation whichever is later. The Institute shall not entertain any increase in the rates during the period. However, in the event there is a reduction or increase in Government taxes during the period of execution of the order, the rates shall be suitably adjusted with effect from the date notifying the said reduction or increase in the Government taxes, if any.

- IIMBG reserves the right to increase / decrease the quantity or remove any item. The successful bidders shall be paid as per actuals.

Above Prices are inclusive of:-

1) Basic all materials supply
2) Basic all service, installation & commissioning with ***03 years Comprehensive On-Site Warranty Maintenance.***
3) All type of Govt taxes/levies
4) Materials delivery/logistics cost up to the site
5) All type of freight charge
6) Training & documentation
7) Fooding, lodging & conveyance charges of installation team members, throughout the Warranty periods(3Years)
8) All type tools & tackles
09) Need based all Printing
10) Physical support & troubleshoot within 24 Hrs
11) Accidental Insurance or service person's ESI/PF; Any other liabilities, which are related with projects.

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rupees _____ (Amount in figures) [Rupees

_____ (Amount in Words)] within the period specified in the Invitation for Quotations.

We confirm that the normal commercial warranty/guarantee of 36 months shall apply to the offered items and we also confirm to agree with terms and conditions as mentioned in the Invitation Letter.

Signature of Supplier

Name :
Designation :
Address :
Contact No. :
Mail ID :

ANNEXURE – I

To,
Chief Administrative Officer,
Administrative Block,
Indian Institute of Management Bodh Gaya
Uruvela, Prabandh Vihar
Bodh Gaya, Gaya-824234 (Bihar), India
Phone: 0631-2200238
Email: cao@iimbg.ac.in

Sub: - Tender EMD Details.

Ref: - Tender No. IIMBG/NIT/2020-21/ Campus Lan/18 Dated 12 February 2021 For Notice Inviting Tender For Supply, Installation & Commissioning Of Campus Wide Wired And Wireless Local Area Network" For IIM Bodh Gaya

Dear Sir,

The details of the transfer of EMD amount in the IIM Bodh Gaya bank account is tabulated below:

	Amount	**Ref./UTR No. and Date**	**Bank Name**
Earnest Money Deposit	2,50,000		

Thanking you

Yours faithfully,

(Authorised Signatory with Seal)

INDIAN INSTITUTE OF MANAGEMENT BODH GAYA
Uruvela, Prabandh Vihar
Bodh Gaya – 824234, India

ANNEXURE – II

Annual Turnover Details:

Evaluation Criteria			**Remarks**
Bidder Annual Turnover for last three financial years	**Financial Year**	**Turnover in Rs.**	**Supporting Documents (Audited Balance sheet) are to be attached along with this**

Date:

Place:

Seal

Authorized Signatory

Name

Designation:

Contact No.:

INDIAN INSTITUTE OF MANAGEMENT BODH GAYA
Uruvela, Prabandh Vihar
Bodh Gaya – 824234, India

ANNEXURE – III

MANDATE FORM FOR ELECTRONIC FUND TRANSFER/RTGS TRANSFER

Date: / /

The Chief Administrative Officer
Indian Institute of Management
Bodhgaya

Sub: Authorization for release of payment / dues from Indian Institute of Management Bodhgaya through Electronic Fund Transfer/RTGS/ other cashless facilities.

1. Name of the Firm/Agency:
2. **Address of the** Firm/Agency**:**

City_____

Pin Code_____

E-Mail ID_____

Mob No:_____ Permanent Account Number_____

3. Particulars of Bank

Bank Name		Branch Name	
Branch Place		Branch City	
PIN Code		Branch Code	
MICR No			
(9 Digit number appearing on the MICR Bank of the Cheque supplied by the Bank, Please attach a Xerox copy of a cheque of your bank for ensuring accuracy of the bank name , branch name and code number)			
IFS Code:(11 digit alphanumeric code)			
Account Type	Saving	Current	Cash Credit
Account Number:			

DECLARATION

I hereby declare that the particulars given above are correct and complete. If any transaction delayed and not effected for reasons of incomplete or incorrect information I shall not hold Chief Administrative Officer, Indian Institute of Management Bodhgaya responsible. I also undertake to advise any change in the particulars of my account to facilitate updating of records for purpose of credit of amount through NEFT/RTGS/other cashless facilities.

Place: _____

Date: _____

Signature & Seal of the Authorized Signatory of the Firm/Agency

---

Certified that particulars furnished above are correct as per our records

Bankers Stamp: Date: _____

Signature of the Authorized Official from the Bank

N.B : Please fill in the information in CAPITAL LETTERS, computer typed; please TICK wherever it is applicable.

ANNEXURE – IV

REGISTERED OFFICE CERTIFICATE

(to be provided on letterhead of the firm)

This is to certify that << *COMPANY NAME* >> has an office in Kolkata/Ranchi/Dhanbad/ Patna / Gaya. Relevant address proof and supporting documents are enclosed.

Date:

Place:

Seal

Authorized Signatory

Name

Designation:

INDIAN INSTITUTE OF MANAGEMENT BODH GAYA
Uruvela, Prabandh Vihar
Bodh Gaya – 824234, India

ANNEXURE – V

CERTIFICATE

(to be provided on letterhead of the firm)

I hereby certify that the above firm neither blacklisted by any Central/State Government/Public Undertaking/Institute nor is any criminal case registered/pending against the firm or its owner/partners anywhere in India.

I also certify that the above information is true and correct in any every respect and in any case, at a later date it is found that any details provided above are incorrect, any contract given to the above firm may be summarily terminated and the firm blacklisted.

Date:

Place:

Seal

Authorized Signatory

Name

Designation:

Contact No.:

INDIAN INSTITUTE OF MANAGEMENT BODH GAYA
Uruvela, Prabandh Vihar
Bodh Gaya – 824234, India

ANNEXURE – VI

MAF Format for OEM

Tender No: IIMBG/NIT/2020-21/ Campus LAN/18 Date: 12 February 2021

To,

Chief Administrative Officer
Indian Institute of Management Bodh Gaya
Uruvela, Prabandh Vihar, Bodh Gaya,
Gaya-824234 (Bihar), India
Phone: 0631-2200238; Email: cao@iimbg.ac.in

Dear Sir,
*Tender No: IIMBG/NIT/2020-21/Campus LAN/18*_____

We _____ who are established and reputable manufacturers of *(name and description of goods offered)* having factories at _____ (*address of factory)* do hereby authorize M/s _____ *(Name and address of Agent)* to submit a bid, and sign the contract with you for the goods manufactured by us against the above IFB.

We hereby extend our full guarantee and warranty as per clause of the General Conditions of Contract & Special Conditions of Contract for the goods and services offered for supply by the above firm against this IFB.

An authorized representative of the bidding organization and IIMBG can log complaints / open support cases directly with us through phone / email / web during the initial and extended warranty periods. Problems in equipment which cause downtime / degradation of services and resolution of which require development of patches, bug fixes etc. shall be treated by us on urgent basis.

We shall ensure that the warranty and service commitments in the tender are met.

We shall ensure the availability of spares for a period of 3 years for the aforementioned items. If applicable, we shall also ensure the availability of software upgrades, if any.

In case of default in execution of the project as per this tender by our authorized Bidder <*M/s Bidder's Name*>, then we <*M/s Manufacturer's Name*> shall initiate necessary actions for successful execution of this project as per this tender through our authorized partner/partners.

Yours faithfully,

(Name)
(Name of Manufacturer)

Note: This authorization letter should be on the letterhead of the manufacturing concern and should be signed by a competent person not less than the level of regional head/manager, of the Manufacturer Organization.

CAMPUS WIDE WIRED AND WIRELESS LOCAL AREA NETWORK" FOR IIM BODH GAYA

Manufacturers / 'Producers' Authorization Form OEM Details

Bidder Name :

Address of the Bidder :

S/No.	Name of Goods or Related Services	Name of OEM	Authorization letter Attached? (Yes/No)	Technical Compliance approved by the OEM letterhead. Attached? (Yes/No)	Data Sheet of Product Attached? (Yes/No)
1	Layer 3 Switch				
2	Layer 2 Switch -Type 1				
3	Layer 2 Switch -Type 2				
4	Layer 2 Switch - PoE+				
5	1G SFP Transceiver				
6	10G SFP Transceiver				
7	Wireless Controller				
8	Wireless Access Points				
9	Wireless Access Points				
10	Fiber Cables				
11	Fiber Patch Cord				
12	24 Port LIU				
13	UTP Cable				
14	UTP Patch Cords				
15	UTP Patch Cords 2M				
16	UTP Jack Panel				
17	UTP Keystone				
18	HDPE Pipes				
19	PVC Pipes				
20	Network Rack (12 U)				
21	Online UPS				

Seal & Signature of the bidder

Annexure-VII

Work Order Details:

S. No.	*Evaluation Criteria*	*Name of the Client*	*Order No. and Date*	*Amount*	*Remark*
	List of Work Order in the field of Information Technology business/IT System Integration , Wired and Wireless LAN, MAN, WAN implementation experience in Central Govt. /State Govt./PSUs/ Govt Educational Institute/Govt University/Govt Research Institutions since 1st April 2010 (PO with Completion Certificate to furnish)				

Date:

Place:

Seal

Authorized Signatory

Name

Designation:

Contact No.:

Annexure-VIII

Self -Declaration Certificate for Accepting All Terms & Conditions

(On the letterhead of the Bidder)

To,
Chief Administrative Officer
Indian Institute of Management Bodh Gaya
Uruvela, Prabandh Vihar, Bodh Gaya,
Gaya-824234 (Bihar), India
Phone: 0631-2200238; Email: cao@iimbg.ac.in

Ref: - Tender No. IIMBG/NIT/2020-21/ Campus Lan/18 Dated 12 February 2021 For Notice Inviting Tender For Supply, Installation & Commissioning Of Campus Wide Wired And Wireless Local Area Network" For IIM Bodh Gaya

Dear Sir,

This is to undertake that I/We, owner(s) of M/s …….., of …***<name of city>….*** have read all the terms and conditions, specifications etc. of this Tender document and I/We fully understood all of them and I/We are fully aware of their implications. We undertake that if I/We were given the Purchase Order (PO), will abide by all the terms and conditions of the Tender document and provide all the goods/items to the satisfaction of the Institute authorities.

I further undertake that after understanding all and their implications all the pages of this tender document are signed and stamped by the authorized person of the firm. The documents and information furnished by me/firm is correct in all respect and if anything found incorrect, I shall be liable for the action as per the terms and conditions given in this tender document.

Signature: ……

Name & Full Address of Bidder:
M/s …….…….

Phone Nos: ……..……
E-mail: …….

Official seal of the Bidder

INDIAN INSTITUTE OF MANAGEMENT BODH GAYA
Uruvela, Prabandh Vihar
Bodh Gaya – 824234, India

Annexure-IX

Bank Guarantee Format

(To be executed by any scheduled bank, on a non-judicial stamp paper under bank's covering letter mentioning address of the bank)

Ref: Bank Guarantee No.: Date:

To,

Chief Administrative Officer
Indian Institute of Management Bodh Gaya
Uruvela, Prabandh Vihar, Bodh Gaya,
Gaya-824234 (Bihar), India
Phone: 0631-2200238; Email: cao@iimbg.ac.in

Dear Sir,

WHEREAS _____<*Name and address of the Service Provider*>___ (Hereinafter called "the Service provider" has undertaken, in pursuance of LOI vide Memo No…….. dated …….. (Herein after "the contract") for "Campus Wide Wired and Wireless Local Area Network" for IIM Bodh Gaya .
AND WHEREAS it has been stipulated in the said contract that the service provider shall furnish a Bank Guarantee ("the Guarantee") from a scheduled bank for the project/ performance of the "Supply, Installation, Commissioning & Maintenance of Campus Wide Wired and Wireless Local Area Network", as per the contract.
WHEREAS we ("the bank", which expression shall be deemed to include its successors and permitted assigns) have agreed to give the "Indian Institute of Management, Bodh Gaya" the Guarantee:

THEREFORE, the Bank hereby agrees and affirms as follows:

1. The Bank hereby irrevocably and unconditionally guarantees the payment of Rs. ……. (as applicable), to the IIMBG under the terms of the contract, on account of full or partial non-performance/ non-implementation and/or delayed or defective performance/ implementation. Provided, however, that the maximum liability of the Bank towards IIMBG, under this Guarantee shall not, under any circumstances, exceed the aggregate.

2. In pursuance of the Guarantee, the Bank shall, immediately upon the receipt of a written notice from IIMBG, stating full or partial non-implementation and/or delayed and/or defective implementation, which shall not be called in question, in that behalf and without delay/ demur or set-off, pay to IIMBG any and all sums demanded by IIMBG under the said demand notice, subject to the maximum limits specified in Warranty above. A notice from IIMBG to the Bank shall be sent by Registered Post (Acknowledgement Due) at the following address: Attention Mr _____<*Mention the official address of the bidder*>__.

3. The Guarantee shall come into effect immediately upon execution and shall remain in force for a period of 36 months from the date of execution of the contract.

4. The liability of the Bank under the terms of this Guarantee shall not, in any manner whatsoever, be modified, discharged or otherwise affected by:-

4.1 Any change or amendment to the terms and conditions of the contract or the execution of any further contracts/

Agreements.
4.2 Any breach or non-compliance by the bidder with any of the terms and conditions of any contracts/ credit arrangement, present or future, between the bidder and the bank.

5. The Bank also agrees that the IIMBG at its option, shall be entitled to enforce this Guarantee against the Bank as a Principal Debtor, in the first instance without proceeding against agency and not withstanding any security or other guarantee that IIMBG may have in relation to the bidder's liabilities.

6. The Bank shall not be released of its obligations under these presents by reasons of any act of omission or commission on the part of the IIMBG or any other indulgence shown by IIMBG or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank.

7. This guarantee shall be governed by the laws of India and only the courts of Bodh Gaya/Patna, shall have exclusive jurisdiction in the adjudication of any dispute, which may arise hereunder.

Date this the ……. Day of …… 2021.

Witness 1:

Name :
(Signature)

Witness 2:

Name :
(Signature)

Annexure-X

STAMP OF Rs. 1000/-

CONTRACT AGREEMENT

Contract No. ..... Dated.....
This is in continuation this office's Notification of Award No. ..... dated .....

1. Name and Address of the Supplier: - .....
2. Purchaser's Tender Enquiry Document No. ..... dated ..... and subsequent amendments no..... dated ..... (if any) issued by the purchaser.
3. Supplier's Quotation dated ..... and subsequent communications no..... dated ..... exchanged between the supplier and the purchaser in connection with this tender.
4. This agreement is made this day……between ……,Reg office at ..... herein after called " Supplier" the first party which expression shall include his heirs, executors and administrators/ their successors and INDIAN INSTITUTE OF MANAGEMENT BODH GAYA, Gaya, Bihar, herein after called "INDIAN INSTITUTE OF MANAGEMENT BODH GAYA", the second party, acting through Director, INDIAN INSTITUTE OF MANAGEMENT BODH GAYA, Gaya, Bihar, herein after include his successors and assignees, shown as under :-

5. In addition to this Contract Form, the following documents etc, which are included in the documents mentioned under paragraphs 2 and 3 above, shall also be deemed to form and be read and construed as integral part of this contract:
    a) Terms & Conditions of contract
    b) Tender Form furnished by the supplier
    c) Price Schedule (s) furnished by the supplier in its tender
    d) Purchaser's Notification of Award
6. Some terms, conditions, stipulations etc. out of the above-referred documents are reproduced below for ready reference:
    a) Brief particulars of the goods and services which shall be supplied/ provided by the supplier are as under:

Sl No.	Brief description of goods/services	Accounting Unit	Quantity to be supplied	Unit Charges	Total Charges

Any other additional services (if applicable) and cost thereof: _____

b) Total value (in figure) _____ (In words) _____

c) Details of Performance Security_____

7. The Performance Security would be encashed by second party in case first party fails to deliver services and/or breaches terms & condition of the previously mentioned tender document.
8. Any notice/direction given under the terms of this agreement shall be considered to be duly served if the same have been delivered to, left for or dispatched by Registered Post to the Contractor at his last known address. Any notice to be given to the INDIAN INSTITUTE OF MANAGEMENT BODH GAYA shall be considered as duly served if the same is delivered to left or dispatched by the Registered Post by the said to Director, INDIAN INSTITUTE OF MANAGEMENT BODH GAYA, Gaya, Bihar. Any notice so posted shall be prima facie proof of service at the expiration of the time in which in the ordinary course of post it would have reached the address to which it was sent.
9. That all the expenses for the preparation and execution of this deed including the stamp duty and conveyance fee shall be payable by the Contractor.
10. In accordance with the Tender document No. …….. this agreement is effective till ……, as in the bid document as decided upon to do so by the second party on the same terms, conditions and rate.
11. Signature and legal addresses of the contracting parties:

In witness where of the parties here to have hereunder set their respective hands the day and the year above written.

Contractor	**IIM Bodh Gaya**
For & on behalf of M/s_____ _____ Address:…….. (Seal) Witnesses: **1.** **2.**	For & on behalf of IIM Bodh Gaya (Name & Designation) Address:…….. (Seal) Witnesses: **1.** **2.**