Tender Document for Selection of Partner for Design, Supply, Installation, Testing and Commissioning for Comprehensive Upgradation of Wired and Wireless Campus LAN of Prospective Client, Jaipur

EdCIL (India) Limited
Corporate Office:
A Govt. of India, Mini Ratna Category-I CPSE
EdCIL House, Plot No. 18A, Sector 16A,
Noida-201301 (U.P.) India

Registered Office:
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7th Floor, 14 K.G Marg,
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NIT No: EdCIL/DES/ICT/2024-25/01

Dated: 06.03.2025

This document is serially numbered from page number 01 to 141

DISCLAIMER

The information contained in this Request for Proposal document (the "RFP") or subsequently provided to Bidder(s), whether verbally or in documentary or any other form by or on behalf of the EdCIL (India) Limited or any of its employees or advisors, is provided to Bidder(s) on the terms and conditions set out in this RFP and such other terms and conditions subject to which such information is provided.

This RFP is not an Agreement and is neither an offer nor invitation by EdCIL to the prospective Bidders or any other person. The purpose of this RFP is to provide interested parties with information that may be useful to them in making their financial offers (BIDs) pursuant to this RFP. This RFP includes statements, which reflect various assumptions and assessments arrived at by EdCIL in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This RFP may not be appropriate for all persons, and it is not possible for the EdCIL, its employees or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this RFP. The assumptions, assessments, statements and information contained in the Bidding Documents may not be complete, accurate, adequate or correct. Each Bidder should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this RFP and obtain independent advice from appropriate sources.

Information provided in this RFP to the Bidder(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The EdCIL accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

EdCIL, its employees and advisors make no representation or warranty and shall have no liability to any person, including any Bidder under any law, statute, 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 RFP or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way for participation in this BID Stage.

EdCIL also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this

RFP. EdCIL may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this RFP. The issue of this RFP does not imply that EdCIL is bound to select a Bidder or to appoint the Selected Bidder, as the case may be, for the Project and EdCIL reserves the right to reject all or any of the Bidders or BIDs without assigning any reason whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its BID including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by EdCIL, site visits, investigations, studies or any other costs incurred in connection with or relating to its BID. All such costs and expenses will remain with the Bidder and EdCIL 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 Bidding Process.

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Section-1

Introduction

EdCIL (India) Limited is a Government of India Mini-Ratna Category-I CPSE under Ministry of Education. It is the only CPSE offering project and consultancy management services in all areas of education and human resource development within India and overseas. EdCIL also works on nomination basis for implementing the ICT Networking solutions and providing its services.

Bids are invited from all eligible bidders through open tender for Pre-Tender Tie-up with EdCIL for Selection of Partner for Design, Supply, Installation, Testing and Commissioning for Comprehensive Upgradation of Wired and Wireless Campus LAN of prospective client at Jaipur.

This tender is floated for Selection of Partner ready to work in the above project for EdCIL on an exclusive basis.

Submission of Online Bids is mandatory for this TENDER. Prospective bidders need to submit their bids with the most competitive Techno-commercial double packet offer for the aforesaid work. Govt. Guidelines/ EdCIL Guidelines if applicable may be followed. TENDER document is available on Tender Wizard, http://www.tenderwizard.com/EDCIL. The important dates are as given below:

1. Important Dates

Date of Posting of TENDER	06/03/2025
Start Date of downloading/viewing TENDER	06/03/2025
Functional queries should reach by	11/03/2025 till 12:00Hrs Functional queries received later than the date and time as mentioned above shall not be entertained. Functional Queries should be emailed to destenders@edcil.co.in & kssahni@edcil.co.in. Technical queries will not be entertained as this is completely in purview of end client.
Last date & time for Offline and Online submission of Bids	27/03/2025 up to 13:00 Hrs. In case a Holiday is declared on the day of the event, the same will be held on the next working day at the same time & venue.
Online Opening of Technical Bid **(Dual Packet)**	27/03/2025

Bids shall be submitted on Tender Wizard,http://www.tenderwizard.com/EDCIL. Bidders are advised to visit Tender Wizard regularly for updates/amendments, if any.

Evaluation (Financial Evaluation):

a. The financial evaluation will be on the basis of the Grand total cost as specified in the price bid (Section - 13)
b. The least cost proposal/lowest quoting bidder will be ranked as L1 and the next higher and so on will be ranked as L2, L3 etc.
c. The least cost proposal/lowest quoting bidder (L1) will be considered for award of contract.
d. The price discovered by all the bidders will not be disclosed in public till the time the ultimate bid by prospective client at Jaipur is not opened.

Additional Clauses:

a. This is a open tender. Bid by consortium is not allowed.
b. The bidder needs to submit un-priced BOQ mentioning make and model of all the equipment being quoted along with their technical bid.

2. The bidder should give an undertaking on the company's letterhead that all the documents/certificates/information submitted by them against this TENDER are genuine. In case any of the documents/certificates/information submitted by the bidder is found to be false or forged, EdCIL shall immediately reject the bid of such bidder(s) or cancel/terminate the contract and forfeit bid security / Performance Security submitted by the bidder and debar them from participation in future TENDERs/tenders of EdCIL for a period upto 2 years.

3. A statement showing Clause-by-Clause compliance to all Terms & Conditions of all the Sections of this TENDER as well as client's tender (which forms part of this TENDER),duly Signed and Stamped on the Letter Head of their Organization. The bidder shall submit No-Deviation Certificate along with above.

4. Bidder shall submit technical data sheet by highlighting each complied specification. Wherever technical specifications and operational/functional requirements not mentioned in datasheet, OEM compliance shall be submitted.

5. The tender and forthcoming Addendums /Corrigendum in Prospective Client's Tender forms an integral part of this TENDER.

6. Earnest Money Deposit (EMD):

The bidder should enclose EMD of Rs. 23,00,000/- (Rupees Twenty Three Lakhs only) in form of Bank Guarantee/ Demand Draft/ Direct Bank Transfer as mentioned below:-

- In case of Direct Bank Transfer, NEFT/RTGS to the bank details for the transfer of funds is as below:
  Bank Name - BANK-SBI-DELHI 36830596465
  A/c No.- 36830596465
  Branch & IFS Code - New Delhi & SBIN0000691

- In case of Demand Draft, The Bidder should submit EMD through Demand Draft drawn in favour of "EdCIL (India) Limited" payable at Noida from any Scheduled Commercial Bank as per Section-27.

- In case of BG, EMD to be submitted as per Section-14 from Scheduled Commercial Banks (Section-27). The BG should be valid till 90 days after the bid validity date.

Note:

- The Bid sent without EMD would be considered UNRESPONSIVE and will not be considered.
- Bidders registered with MSME/Startup and having valid registration certificate issued by NSIC/MSME are exempted for submission of EMD. However, MSMEs/Startup are advised to submit their financial solvency certificate issued not earlier than 6 months from the last date of bid submission.
- The EMD/Bid Security may be forfeited if:

  i. If the Bidder withdraws his bid during the period of bid validity specifiedby the Bidder on the Bid form or
  ii. fails or refuses to execute the Contract, if required; or
  iii. The successful bidder fails to submit performance security within the prescribed time. or The proceed of EMD shall be payable to EdCIL in case of breach of any of the terms and conditions of the contract/PO/tenderby the vendor.

7. Evaluation

a. EdCIL shall evaluate bids in respect to substantive responsiveness of the bid or otherwise. EdCIL shall carry out detailed evaluation of the substantially responsive bids only.

b. A bid determined as substantially non-responsive technically/financially shall be rejected, even after opening the price bid.

c. EdCIL may waive any minor infirmity or non-conformity or irregularity in thebid which does not constitute a material deviation.

d. Among all technically qualified bids, the lowest bid will be termed as L1 (excluding taxes) derived from Price Bid Schedule.

e. If there is a discrepancy between the unit price and total price that is obtained multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected.

8. Validity Period Of Bid

Bid shall remain valid for 180 days after the date of bid opening of the end clients tender. The bid valid for a shorter period shall be rejected as non-responsive.
In exceptional circumstances, EdCIL may request the bidder for an extension to the period of bid validity if same is extended by end client and accordingly, the bid security shall also be suitably extended by the bidder.

9. Authorization Letter/ Board Resolution:

The bidders need to submit board resolution along with authorization Letter in Online mode authorizing the signatory to act on behalf of the bidder. The Authorized person should be either authorized by Board or a employee authorized by one of the following person who has the Board Resolution to delegate authorization to other:

a. Managing director
b. The Chief Executive Officer
c. The Manager
d. The Company Secretary
e. The Whole-time director
f. The Chief Financial Officer

The bidder should ensure that the Digital Signature used for uploading the tender document in e tender portal should be of the authorized signatory.

10. Submission Of Forged Documents

Bidders should note that EdCIL may verify authenticity of all the documents/certificate/information submitted by them against the TENDER. In case at any stage of this process, if it is established that bidder has submitted forged documents/certificates/information towards fulfilment of any of the TENDER/contract conditions, EdCIL shall immediately reject the bid of such bidder(s) or cancel/terminate the contract and forfeit bid security / Performance Security submitted by the bidder and debar them from participation in future tenders of EdCIL for a period upto 2 years.

11. Clarification From Bidders

- The queries may be asked from bidders for submitting shortfall to be submitted within specified date and time. Also, every document submitted against following queries should be signed by the person authorized as per Authorization letter / Board Resolution submitted by bidder against tender, without which the documents will not be accepted as valid.
- The bidder must ensure that their bid is complete in all respects and conforms to TENDER terms and conditions, TENDER specifications etc. including client specifications, failing which the bids are liable to be rejected without seeking any clarifications on any exception/deviation taken by the bidder in their bid.
- EdCIL reserves the right to accept or reject any or all the TENDERs without assigning any reason.

End Of Section

Section- 2

Instructions for e-Tendering

Instructions for Online Bid Submission:

1. E-tendering is new technology for conducting public procurement in a transparent and secured manner. As per Government of India's directives, EdCIL (India) Limited has adopted E-tendering.

2. For conducting electronic tendering, EdCIL (India) Limited has decided to use Electronic tender portal link available with detailed information on e-tendering process. This portal built using Electronic tender's software is referred to as http://www.tenderwizard.com/EDCIL.

3. The bidders are required to submit soft copies of their bids electronically on http://www.tenderwizard.com/EDCIL e-tendering website, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the Tender Wizard E-Tendering Portal, prepare their bids in accordance with the requirements and submitting their bids online on the Tender Wizard E-Tendering Portal.

4. The scope of work to be tendered is available in the complete bid documents which can be viewed /downloaded from Tender Wizard E-Tendering Portal of http://www.tenderwizard.com/EDCIL. Both Technical Bid and Financial Bid will be submitted concurrently duly digitally signed in the website http://www.tenderwizard.com/EDCIL. No claim shall be entertained on account of disruptions of internet service being used by bidders. Bidders are advised to upload their bids well in advance to avoid last minute technical snags.

5. All Corrigendum/Amendment/Corrections, if any, will be published on the website http://www.tenderwizard.com/EDCIL as well as on EdCIL's website.

6. It is mandatory for all the applicants to have class-III Digital Signature Certificate (in the name of person who will sign the bid document) from any of the licensed certifying agency (Bidders can see the list of licensed Certifying Agencies from the link www.cca.gov.in) to participate in e-Procurement of EdCIL.

7. It is mandatory for the bidders to get their firm/company registered with e-procurement portal of EdCIL, i.e. www.tenderwizard.com/EDCIL to have user ID & passwordby submitting a non-refundable annual registration charge as follows:

1	Registration charges for 1 year	Rs. 2000/-

(exclusive of taxes, levies, etc.) which can be paid online using the e-payment gateway to KEONICS through the portal address mentioned above. The registration so obtained

by the prospective bidder shall be valid for one year from the date of its issue and shall be subsequently renewed.

a. Participant shall safely keep their User ID and password, which will be issued by the service provider i.e. KEONICS Ltd. upon registration, and which is necessary for e- tendering.
b. Bidders are advised to change the password immediately on receipt of activation mail.
c. Bidders shall not disclose their User ID as well as password and other material information relating to the e-tendering to any one and safeguard its secrecy.

8. Submit your tender well in advance by relevant documents along with copy of EMD of tender submission deadline on Tender Wizard E-Tendering Portal http://www.tenderwizard.com/EDCIL, as there could be last minute problems due to internet timeout, breakdown, etc.

9. Tenders should be submitted only through Tender Wizard E-Tendering Portal and obtain the Tender Acknowledgement copy as a proof of successful submission.

10. Vendors are requested to contact at Tender wizard Helpdesk for any information regarding E-tendering / training.

EdCIL / Tender Wizard E-Tendering Portal Helpdesk
Customer Support: 080-49352000 (Multiple Telephone lines) Emergency Mobile Numbers: 9686115318/ 8800496478/ 8800445981 (Please contact in case of emergency during non-working hours.)
To Tender Wizard harishkumar.kb@etenderwizard.com ambasa@etenderwizard.com arijeet@etenderwizard.com twhelpdesk963@gmail.com sandeep.g@etenderwizard.com & cc to: destenders@edcil.co.in & kssahni@edcil.co.in

Preparation Of Bids

a. Bidder should take into account any corrigendum/addendum published onthe portal before submitting their bids.
b. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents-including the names and content of each of the document that need to be submitted. Any deviations from thesemay lead to rejection of the bid.
c. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/ schedule and generally, they can be in PDF format.

d. Bid documents may be scanned with 100dpi with black and white option.

Submission Of Bids

a. Bidder should log into the site well in advance for bid submission and complete all formalities of registration (at least two days in advance of the closing date) so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be sole responsible for any delay in uploading of bid within the stipulated time.
b. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
c. Bidder has to pay EMD as applicable through demand draft/BG as per tender condition in favour of "EdCIL (India) Ltd" payable at Noida and enter details of the instruments. Original copies of demand draft/BG for EMD are required to be submitted.
d. A standard Financial Bid form has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the financial bid format is found to be modified by the bidder, the bid will be rejected.
e. The server time will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
f. Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.

Assistance To Bidders

Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority. For any other tender related queries bidders are requested to contact on below given numbers/email.

EdCIL / Tender Wizard E-Tendering Portal Helpdesk
Customer Support: 080-49352000 (Multiple Telephone lines) Emergency Mobile Numbers: 9686115318/ 8800496478/ 8800445981 (Please contact in case of emergency during non-working hours.)
To Tender Wizard harishkumar.kb@etenderwizard.com ambasa@etenderwizard.com arijeet@etenderwizard.com twhelpdesk963@gmail.com sandeep.g@etenderwizard.com & cc to: destenders@edcil.co.in & kssahni@edcil.co.in

Minimum Requirements At Bidder's End

a. Computer System having configuration with minimum Windows7 or above, and Broadband connectivity
b. Digital Certificate(s)

End Of Section

Section- 3

General Conditions of Contract

1. Bid Evaluation Process

The bid evaluation shall consist of the following phases:

1) Phase I– Evaluation of Technical bid in accordance to the Pre-Qualification criteria and other tender compliances. Evaluation of the Technical Bid of Pre- Qualified Bidder as per eligibility criteria mentioned in the bid document.
2) Phase II - Evaluation of Financial bid

Note: - It is mandatory for the bidder to qualify all the Pre – qualification stages to be eligible for further evaluation. Only technically qualified bidders shall be considered for opening of their Financial Bids and evaluation thereof.

Phase I: Evaluation of Technical Bid:
Bidder has to upload all documentary evidences in support of the following mentioned Eligibility Criteria. In the absence of such supporting documents, as mentioned against each criterion, the bid will be rejected summarily. The financial bid opening will be carried out for only those bidders who qualify in the Technical bid.

2. Pre-Qualification/Eligibility Criteria

The minimum pre-qualification criteria for the bidders to be eligible for this RFP process are specified below. Responses not meeting the minimum pre-qualification criteria will be rejected as soon as such proposals are received and will not be considered for Technical evaluation.

S. No.	Pre-Qualification/Eligibility Criteria	Supporting Document
1	The Bidder should be either a firm or a company registered under Companies Act, 1956 or 2013 in India and should have been in operation in India for at least last 5 years as on the date of submission of the bid. Consortium of companies/ firms is not allowed. Copies of VAT/CST/ GST registration certificates of the Firm should be submitted to establish the date of start of business.	Certificate of Incorporation issued by Registrar of Companies/Ministry of Corporate Affairs
2	The bidder shall be in IT & ITES business for the last 5 years and shall have 5 years of experience as on date of floating of tender in all of the following areas: Supply and maintenance of servers, storage Supply and maintenance of networking devices like wireless Access Points with controllers/ switches/ routers/NGFW etc.	Work Order + Satisfactory Certificate of Completion

3	The Bidder should have satisfactorily completed at least one work order for similar type of works each costing not less than Rs. 34 Cr. in any Govt. department/ institutes in the last five years. However, for MSME AND START-UPS duly registered with government of India, this amount shall be Rs. 27 Cr. (executed as on date of submission of bid). OR The Bidder should have satisfactorily completed at least two work orders for similar type of work each costing not less than Rs. 21 Cr. in any Govt. department/ institutes in the last five years. However, for MSME AND START-UPS duly registered with government of India, this amount shall be Rs 17 Cr. (executed as on date of submission of bid). OR The Bidder should have satisfactorily completed at least three work order for similar type of work costing not less than Rs. 17 Cr. in any Govt. department/ institutes in the last five years. However, for MSME AND START-UPS duly registered with government of India, this amount shall be 13 Cr. (executed as on date of submission of bid).	Work Order + Satisfactory Certificate of Completion
4	The bidder should be a certified ISO 9000/9001 certified company. Relevant Organizational Level Certificates to be provided	Copy of the valid ISO Certificate issued from the accreditation organization to be submitted as documentary proof.
5	The bidder shall be a registered firm or company in India with valid GST Registration and PAN number allotted by the respective authorities.	GST Registration Certificate and PAN number
6	The bidder should not have been debarred by any Central Government/ State Government/ PSU/ Government Bodies/Autonomous Bodies/Private Sector	The bidder shall furnish an undertaking duly attested by notary on a non-judicial stamp paper of value INR100/- (Rupees One Hundred Only)
7	The firm should be a profit-making concern for each of the last three consecutive financial years (FY 2021-22, 2022-23, 2023-24).	Audited and CA Certified financial statements.
8	Solvency certificate issued from bank of bidder for minimum value of Rs. 34 crores; not more than 6 months old.	Solvency certificate issued by bidder's bank (scheduled commercial bank as mentioned in Annexure).

- Technical bids will also be reviewed for compliance with the necessary Instructions, terms and conditions, scope of work, formats etc. as outlined in this tender.
- Notwithstanding anything stated above, the EdCIL reserves the right to assess bidder's capability and capacity to perform the contract, should circumstances warrant such an assessment in the overall interest of the EdCIL/Prospective client.

3. Evaluation of Financial bids

The Financial bid of only those Bidders who are found technically eligible shall be opened.

- The bid open price shall be kept as secret for all the bidders and will not be disclosed in the open market till the end client's price is disclosed in the market.
- Financial bids will be inspected to ensure their conformity to the format provided in the tender document.
- If there is any discrepancy between words and figures in any part of the financial bid, the amount indicated in words will prevail.

4. Risk Purchase

a. In case, the sub-contractor/ Supplier is not performing its obligations under the contract, the notice shall be sent as per law to the sub-contractor informing that in case of non-performance by a particular date/period, the contract shall be terminated and the work/project will be executed(through a third party) at the risk and cost of the said sub-contractor/ supplier as per the terms of the contract.

b. On completion of the specified period/date, the notice of termination shall be issued clearly specifying that the remaining work shall be executed (through a third party) at the risk and cost of the sub-contractor/supplier. Along with this notice of termination, intimation shall be sent to the said sub-contractor/supplier for joint preparation of inventory of the works performed/ supplies already undertaken by him. If the sub- contractor/supplier fails to turn up on anappointed date for joint preparation of inventory, in that situation he shall be proceeded ex parte and the inventory shall be prepared by EdCIL/Employer and the same be sent to the sub-contractor/supplier.

c. Demand notices may be sent to the original sub-contractor/ Supplier from time to time.

5. General Lien / Set-Off

a. Whenever under this contract, any sum of money is recoverable from and payable by the supplier, the purchaser shall be entitled to recover such sum byappropriating in part or in whole the security deposit of the supplier, if a securityis taken from the supplier. In the event of the security being insufficient or if nosecurity has been taken from the supplier, the balance or the total sum recoverable, as the case may be, shall be deducted from any sum due to the supplier or which at anytime thereafter may become due to the supplier under this or any other contract with the purchaser. Should this sum be not sufficient to cover the full amount recoverable, the supplier, shall pay to the purchaser ondemand the remaining balance due.

b. Any some of money (including refundable security deposit) due and payable tothe supplier, under this contract or any other contract entered between the parties herein whether continuing or completed may be appropriated by EdCIL and setoff against any claim of EdCIL of any nature whatsoever, arising under this contract or any other contract entered into between the parties, herein whether continuing or completed.

6. Purchasers Right To Vary Quantities

EdCIL will have the right to increase or decrease up to 25% of the value of goods and services specified in the schedule of requirements without any change in the unit price or other terms and conditions at the time of award of contract.

7. Force Majeure

The supplier shall be exempted from the responsibility for any non-performance arising from a case of force majeure or act of God, hereinafter called force majeure (a) war and (b) earthquake. If such circumstances should arise, the supplier shall inform the purchaser within 72 hours in writing of the existence of the fact before suspending work without penalty on either side from the period of such suspension not exceeding 3 months.

Likewise, it must proceed to inform the end of such fact. As soon as the facts constituting a force majeure cease in their effects, the supplier shall restart or continue the fulfilment of its obligations agreed upon. Should suspension of work as explained above exceed three months, the contract shall be violable at the option of either party without penalty on either side.

8. Arbitration

a. Any dispute arising out of or in connection with this contract, including any question regarding its existence, validity or termination, shall be referred to and finally resolved by arbitration administered by the India International Arbitration Centre ("IIAC") in accordance with the India International Arbitration Centre (Conduct of Arbitration) Regulations ("IIAC Regulations") for the time being in force, which regulations are deemed to be incorporated by reference in this clause.
b. The place/seat of the arbitration shall be New Delhi, India.
c. The Tribunal shall consist of one arbitrator.
d. The law governing the arbitration agreement shall be Indian Law.
e. The language of the arbitration shall be English.
f. The governing law of the Contract shall be Indian Law.
g. Arbitration cost to be borne by the Supplier.

9. Fall Clause

a. The prices once fixed will remain valid during the scheduled delivery period. Further, if at any time during the contract
    i. It comes to the notice of purchaser regarding reduction of price for the same or similar equipment/ service; And/or
    ii. The prices received in a new tender for the same or similar equipment/service are less than the prices chargeable under the contract.

The purchaser, for the purpose of delivery period extension/during rate contract, if any, will determine and intimate the new price, taking into account various related aspects such as quantity, geographical location etc., and the date of its effect for the balance quantity/ service to the vendor.

In case the vendor does not accept the new price to be made applicable during the extended delivery period and the date of its effect, the purchaser shall have the right to terminate the contract without accepting any further supplies. This termination of the contract shall be at the risk and responsibility of the supplier and the purchaser reserves the right to purchase the balance unsupplied quantity/ service at the risk and cost of the defaulting vendor besides considering the forfeiture of his performance security.

b. The vendor while applying for extension of time for delivery of equipment/services, if any, shall have to provide an undertaking as "We have not reduced the sale price, and/ or offered to sell the same or similar equipment/ service to any person/organization including Department of central/state Government or any central/state PSU at a price lower than the price chargeable under the contract for scheduled delivery period."

In case under taking as in (b) above is not applicable, the vendor will give the details of prices, the name(s) of purchaser, quantity etc. to the purchaser, while applying extension of delivery period.

10. Offline Documents

The Bidder is requested to submit the hardcopy of the below mentioned documents in a Sealed Envelope and the proposed services in the bid to the under mentioned address before the start of Public Online Tender Opening Event.

EdCIL (India) Limited
EdCIL House, Plot No. 18A, Sector 16A,
Noida-201301 (U.P.) India

The envelope shall bear the project name, the tender number and the words 'DO NOT OPEN BEFORE' (due date & time).

- Original copy of the EMD Security in the format as applicable/ in the form of Demand Draft/BG or Scanned copy of NEFT or RTGS payment receipt (UTR number).
- Original copy of Bidder's Authorization Certificate

Note: The Bidder should also upload the scanned copies of all the above-mentioned original documents during Online Bid-Submission. Documents submitted in online mode should be uploaded using DSC of person authorized as per Authorization letter /Board Resolution for signing bid documents.

11. Banning Of Non-Performing Vendor

In case any of the vendor's work/PO/agreement is cancelled/terminated by EdCIL after award, due to non-performance, the vendor may be banned/blacklisted upto 2 years or action as deemed fit may be taken by EdCIL

12. Amendment To Bid Documents

a. At any time, prior to the date of submission of bids, EdCIL may for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bid documents by amendments, which shall be available on e-tendering portal.

b. In order to give required time to the prospective bidders, in which to take the amendments into action in preparing their bid, EdCIL may at its discretion extend the deadline for submission of bid suitably.

13. Bid Price

The prices quoted by the bidder shall remain firm during the entire period of the contract and shall not be subject to variation (unless asked by EdCIL). Clauses such as "at actual", "extra', "to be given later" etc. shall also be treated as non-responsive & are liable for rejection.

14. Modification And Withdrawal Of Bids

Bid withdrawal/modification shall not be allowed after end date and time of bid submission. Withdrawal of a bid between the deadline for submission of bids and the expiration of the period of bid validity specified in the tender or as extended, may result in the forfeiture of the bid security. Such defaulting vendor is liable to be debarred from participating in future bids for a period of upto 2 years.

15. Clarification Of Bids

During evaluation of bids, EdCIL may at its discretion ask the Bidder for clarifications/ confirmations/ deficient documents of its bid. The request for clarification and the response shall be in writing and no change in the price of substance of the bid shall be sought or permitted.

16. Manpower

a. Whatever be the assignment, the responsibility of effective and efficient delivery of service by the staff deployed shall rest with the selected bidder. The bidder must ensure to deploy appropriate experienced resources as desired from time to time.

b. The selected bidder shall ensure that all the Labor Law regulations of the Government are fully complied with, in matters of deployment of manpower to prospective client at Jaipur.

c. The salary allocated to the resource should include the EPF (Employer and Employee Contribution), ESI, retirement benefit component, any other statutory payments applicable, Medical Insurance and accidental insurance etc. which

should be paid/accounted for in full to the deployed resource by the selected bidder.

d. Rules and regulations of the main tender inviting authority will prevail.

17. Termination For Default

EdCIL may, without prejudice to any other remedy for breach of contract, by written notice of default, sent to the supplier, terminate this contract in whole or in part.

a. if the supplier fails to deliver any or all the services/goods within the time period specified in the contract, or any extension thereof granted by EdCIL.

b. if the supplier fails to perform any other obligation(s) under the contract;

c. if the supplier, in either of the above circumstances, does not remedy his failure within a period of 15 days (or such longer period as EdCIL may authorize in writing) after receipt of the default notice from EdCIL.

d. Failure of the successful bidder to comply with the requirement of submission of performance security shall constitute sufficient ground for cancellation of the award of work and forfeiture of the bid security.

In the event EdCIL terminates the contract in whole or in part pursuant to above clause, EdCIL may procure, upon such terms and in such manner as it deems appropriate, goods/services similar to those undelivered and the supplier shall be liable to EdCIL for any excess cost for such similar goods/services. However, the supplier shall continue the performance of the contract to the extent not terminated.

18. Termination For Insolvency:

EdCIL may at any time terminate the contract by giving written notice to the supplier, without compensation to the supplier, if the supplier becomes bankrupt or otherwise insolvent as declared by the competent court; provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to EdCIL.

19. At any time, in case it comes to the knowledge of EdCIL any of wrong information related with eligibility of the bidder or non-compliance to any terms and conditions of tender, then EdCIL reserves the right to cancel or reject the bid of such bidder, cancel the tender or take any other action as deemed fit in accordance with tender terms and conditions.

20. EdCIL reserves the right to cancel the TENDER at any time without assigning any reason thereof.

21. Additional Clauses For Debarment:

a. A bidder or any of its successor, shall be debarred from participating in any procurement process undertaken by EdCIL for a period not exceeding three (3) years if he has been convicted of an offence as under:

   i. under the Prevention of Corruption Act, 1988; or

   ii. the Indian Penal Code or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.

b. A bidder or any of its successor, shall be debarred from participating in any procurement process undertaken by EdCIL for a period not exceeding two (2) years if the following code of integrity as per rule 175 of GFRs 2017, is breached:

   i. prohibition of

   - making offer, solicitation or acceptance of bribe, reward or gift or any material benefit, either directly or indirectly, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process.
   - any omission, or misrepresentation that may mislead or attempt to mislead so that financial or other benefit may be obtained or an obligation avoided.
   - any collusion, bid rigging or anticompetitive behavior that may impair the transparency, fairness and the progress of the procurement process.
   - improper use of information provided by the procuring entity to the bidder with an intent to gain unfair advantage in the procurement process or for personal gain.
   - any financial or business transactions between the bidder and any official of the procuring entity related to tender or execution process of contract; which can affect the decision of the procuring entity directly or indirectly.
   - any coercion or any threat to impair or harm, directly or indirectly, any party or its property to influence the procurement process.
   - Obstruction of any investigation or auditing of a procurement process.
   - making false declaration or providing false information for participation in a tender process or to secure a contract;

ii. disclosure of conflict of interest.

iii. Disclosure by the bidder of any previous transgressions made in respect of the provisions of sub-clause (i) with any entity in any country during the last three years or of being debarred by any other procuring entity.

c. A bidder or any of its successor, shall be debarred from participating in any procurement process undertaken by EdCIL for a period not exceeding two (2) years if the following is breached:

i. If a Bidder withdraws the proposal or increases the quoted prices after opening of the Proposal and during the period of Bid validity period or its extended period, if any.

ii. In case of a successful Bidder, if the Bidder fails to sign the Agreement in accordance with the terms and conditions (including timelines for execution of the Agreement) of this tender or fails to furnish the Performance Bank Guarantee in accordance with the terms and conditions (including timelines for furnishing PBG) of this tender.

iii. During the Bid process, if a Bidder indulges in any act as would jeopardize or unnecessarily delay the process of bid evaluation and finalization.

d. The debarment in all cases shall be automatically extended to all its allied firms. In case of Joint ventures/Consortium is debarred all partners shall also stands debarred for a period specified in debarment order. The names of partnersshould be clearly specified in the debarment order.

End Of Section

Section – 4

Special Conditions of Contract

Note: In case clauses/sub-clauses have any difference mentioned in this TENDER at different places, the conditions mentioned in the client main tender shall prevail. The terms and conditions of this section shall be on back to-back basis based on end client's tender.

1. Payment Terms

a. Payment terms are on back-to-back basis and the payment shall be released to subcontractor/vendor/supplier by EdCIL only if and when received by EdCIL from the client and subject to submission of complete documents and invoices, supporting proof documents for supply & services.
b. Payment shall be made on satisfaction of the client and receipt of funds from client.
c. Sub-contractor/vendor/supplier will not demand or make any claim under any law with respect to the pending payment till the time corresponding payment is received by EdCIL from the client. EdCIL shall not be responsible in any manner whatsoever for any delay in releasing the payments or withholding of payments by the client.
d. The payment terms will be on a back-to-back basis as per the end client except advance.
e. All payment shall be made after deduction of applicable penalties (if any) and deduction of taxes(if applicable).

2. Performance Security

a. The successful bidder should be required to deposit Performance Bank Guarantee equivalent to 10% of contract value to EdCIL within 7 days from the date of receipt of Work Order. The Performance Bank Guarantee (PBG) should be issued by a scheduled commercial bank (as per Section-27) in favor of "EdCIL (India) Limited" to be valid for a period of 90 days beyond the date of completion of Contract period. This Performance Bank Guarantee should be retained throughout the currency of the contract and should be extended by the bidder from time to time, as required by EdCIL.
b. PBG shall be returned to the successful bidder only after 90 days of the successful completion of the Contract. In case of any shortfall of any activity/ specification/ other terms and conditions of the contract, EdCIL reserves the right to recover damages or loss from the due the payment or by the encashment of PBG.
c. Security deposit in this tender shall be in accordance to the security deposit vis-à-vis to the conditions mentioned in the main tender of end customer.

3. Price Basis

Shall be on a back-to-back basis based on the end client's tender. Prices shall be quoted in Indian rupees and shall be inclusive of GST. The GST/ taxes will be shown separately. TDS deduction shall be made as per the prevailing Govt. Laws /notification. The bidders are requested to quote the price for complete BOQ.

Price will not be disclosed in public till the time the ultimate bid by prospective bidder is not opened. Prices is taken for the purpose of bidding in the main client tender i.e. prospective client at Jaipur.

4. Notification Of Award

Prior to the expiration of the validity period, EdCIL will notify the successful Bidder in writing or by fax or email, that its proposal has been accepted.

5. The winner of RFP will be disclosed after EdCIL stands winner in the tender.

6. Tender has been floated as replica as per end client. EdCIL shall not bear any responsibility regarding BOM related issues.

7. This tender has been prepared vis-à-vis the tender floated by prospective client at Jaipur. Though this tender shall fulfill all the requisite terms & conditions; however in the case of any conflict the terms dictated in the main tender of prospective client at Jaipur shall prevail for all the contractual and legal purpose.

8. It is mandatory to submit OEM MAF (Manufacturer's Authorization Form) as per Section-6.

9. EdCIL reserves every right to cancel the bid before opening of tender without any prior intimation.

10. Insurance: Back-to-back. As per Client Tender.

11. Project Deliverables, Milestones & Time Schedule: Back-to-back. As per Client Tender.

12. Scope of work and Timelines: Back-to-back. As per Client Tender.

13. Warranty: Back-to-back. As per Client Tender.

14. Period Of Contract: Back-to-back. As per Client Tender.

15. Termination: Back-to-back. As per Client Tender.

16. Service Levels and Penalty Terms: Back-to-back. As per Client Tender.

17. Extension in Delivery Period and Liquidated Damages: Back-to-back. As per Client Tender.

18. General Rules and Direction: Back-to-back. As per Client Tender.

19. General Conditions to the Contract: Back-to-back. As per Client Tender

End Of Section

Section-5

Scope of Work & Technical Specifications

The detailed scope can be referred from the client tender document which is an integral part of this TENDER and shall be on back-to-back basis with scope as in client's Tender. The Client Tender is attached with TENDER.

Further Corrigendum in Client Tender, if any, may be downloaded from e tenderwizard.

1. The successful bidder shall setup its own service and call support centre with toll free number or may authorize a local partner to operate the same in at least one (1) centralized location in Jaipur. In case the Bidder has no presence in above mentioned locations, he/she shall establish the same within 12 weeks from the date of award of contract. As soon as the service centres are set up, the successful bidder shall get it certified by EdCIL officials. However, the responsibility of providing satisfactory services solely remains with the successful bidder.
2. Records of all calls/emails/visits made to the service centre shall be kept in a computerised system for easy tracking of complaints and calculating SLA. The successful bidder shall provide access to their computerised complaint log in portal to EdCIL for live reviewing of complaints.
3. Bidders may have to give a demonstration of the proposed IT Solution. Bidder may have to submit Proof of Concept/ System Design Document as per the client need.
4. The bidder has to quote for complete BOQ.
5. Bidders should provide technical literature, brochures, methodology and project implementation timeline for the Complete Solution along with all the other requisite documents as per End Client's tender in their bid.
6. Bidder has to submit OEM Authorization (MAF) as per End Client Tender in the name of EdCIL along with their technical bid.
7. Bidder has to submit technical compliance and datasheets from OEM of all the specifications for all the items.
8. Bidder should submit unconditional acceptance of NIT conditions of EdCIL TENDER as well as end client tender
9. Bidder should submit dully signed copies of minutes of meeting and other corrigendum (if any) of EdCIL TENDER as well as end client tender
10. Bidder has to submit all the documents required and stated in the End Client Tender and EdCIL TENDER.
11. Bidders who do not submit all the documents which are required as per End Client tender and EdCIL TENDER shall be liable for rejection.

End Of Section

Section-6

Manufacturer's Authorization Form (MAF)

{to be filled by OEM}

To,
Chief General Manager (DES)
EdCIL (India) Limited (EdCIL)
EdCIL House, 18 A, Sector-16 A, NOIDA – 201301 (U.P.)
NIT No._____Dated

Sub: OEM Authorization Letter for Design, Supply, Installation, Testing and Commissioning for Comprehensive Upgradation of Wired and Wireless Campus LAN.

Dear Sir,

We [.....], who are official manufacturers of [.....], having factories at [.....], do hereby authorize [.....]to submit a bid the purpose of which is to provide the following Goods, manufactured by us [ ].

As principals, we commit ourselves to extend our full support for warranty obligations, as applicable as per the Tender Document, for the Goods and incidental Works/ Services offered for supply by the above firm against this Tender Document.

We are committed to communicating important milestones throughout the EOL period, including the initial EOL notification, the LOD for a product, End of Support ("EOS") milestone dates, as well as other key information found in(OEM) EOL Policy at……

(Name)

Seal

Note: MAF on the bidders and back to back for EdCIL as EdCIL is the true front bidder for the ultimate tender of prospective client at Jaipur. This letter of authority should be on the letterhead of the OEM and should be signed by a person competent and having the power of attorney to bind the manufacturer.

End Of Section

Section-7

Undertaking Of Non-Blacklisting

This is to confirm that we M/s_____(give full address) have not been declared neither failed to perform on any Agreement, nor have been expelled from any project or Agreement nor any Agreement terminated for breach by the us (Agency) in any of the government department and public sector undertaking /enterprise or by any other Client in India, in last five year before release of advertisement.

If the above information found false at any stage after the placement of Work Order / Agreement, EdCIL (India) Limited (EdCIL), 18-A, Sector 16-A, Noida will have full right to cancel the Contact and forfeit the Performance Guarantee. All the direct and indirect cost related to the cancellation of the order will be borne by us besides any legal action by EdCIL which shall be deemed fit at that point of time.

Authorized Signatory

Note: ***The undertaking regarding the non-blacklisting of firm is to be submitted on a non-judicial stamp paper of Rs. 100/- (Rupees Hundred only).***

End Of Section

Section-8

Certificate of Conformity/ No Deviation

{To be filled by the bidder}

To,
Chief General Manager (DES)
EdCIL (India) Limited (EdCIL)
EdCIL House, 18 A, Sector-16 A, NOIDA – 201301 (U.P.)
NIT No._____Dated

CERTIFICATE

This is to certify that, the specifications of Hardware & Software which I/ We have mentioned in the technical bid, and which I/ We shall supply if I/ We am/ are awarded with the work, are in conformity with the minimum specifications of the Tender/ bidding document and that there are no deviations of any kind from the requirement specifications.

Also, I/ we have thoroughly read the tender/ bidding document and by signing this certificate, we hereby submit our token of acceptance to all the tender terms & conditions without any deviations. I/We also certify that the price I/ we have quoted is inclusive of all the cost factors involved in the end-to-end implementation and execution of the project, to meet the desired Standards set out in the Tender/ bidding Document.

Thanking You,

Name of the Bidder:

Authorized Signatory:

Seal of the Organization:

Date: _____

Place: _____

End Of Section

Section-9

Bidder's Authorization Certificate

{to be filled by the bidder}

To,
The Chief General Manager (DES)
EdCIL (India) Limited, 18 A, Sector-16A,
Noida-201301 Uttar Pradesh

I/ We {Name/ Designation} hereby declare/ certify that {Name/ Designation} is hereby authorized to sign relevant documents on behalf of the company/ firm in dealing with reference No._____dated_____. He/ She is also authorized to attend meetings & submit technical & commercial information/ clarifications as may be required by you in the course of processing the Bid. For the purpose of validation, his/ her verified signatures are as under.

Thanking you,

Name of the Bidder: - Verified Signature:

Authorized Signatory: -

Seal of the Organization: -

Date:

Place

End Of Section

Section-10

Declaration by the Bidder

{to signed by selected bidder}

I/ We declare that I am/we are Bonafede/ Manufacturers/ Whole Sellers/ Sole distributor/ Authorised dealer/ dealers/ sole selling/ Marketing agent/System Integrator in the goods/ stores/ equipment for which I/ We have quoted.

If this declaration is found to be incorrect then without prejudice to any other action that may be taken, my/ our EMD/SD/BG may be forfeited in full and the bid, if any, to the extent accepted may be cancelled.

Name of the Bidder: -
Authorized Signatory: -
Seal of the Organization: -
Date: _____
Place: _____

End Of Section

Section-11

Undertaking On Authenticity Of Equipments

{To be filled by the bidder (On Rs. 100/- Non-judicial stamp paper)}

To.
Chief General Manager (DES)
EdCIL (India) Limited (EdCIL)
EdCIL House, 18 A, Sector-16 A,
NOIDA – 201301 (U.P.)

Reference: ……..……. Dated: ……

This has reference to the items being supplied/ quoted to you vide our bed ref. no. _____dated_____.

We hereby undertake that all the components/ parts/ assembly/ software used inthe equipment shall be genuine, original, and new components /parts/ assembly/ software from respective OEMs of the products and that no refurbished/ duplicate/ second hand components/ parts/ assembly/ software are being used or shall be used. In respect of licensed certificate system, we undertake that the same shall be supplied along with the authorized license operating system with our name/logo. Also, that it shall be sourced from theauthorized source for use in India.

In case, we are found not complying with above at the time of delivery or during installation, for the equipment already billed, we agree to take back the equipment already supplied at our cost and return any amount paid to us by you in this regard and that you will have the right to forfeit our EMD/ SD for this bid or debar/ black list or take suitable action against us.

Note: Undertaking on Authenticity of Equipments will be on back to back basis for EdCIL as EdCIL is the true front bidder for the ultimate tender of prospective client at Jaipur.

Authorized Signatory

Name:

Designation:

Note: Undertaking on back to back for EdCIL as EdCIL is the true front bidder for the ultimate tender of prospective client at Jaipur.

End Of Section

Section-12

Financial Bid Submission Sheet

To,
Chief General Manager (DES)
EdCIL (India) Limited (EdCIL)
EdCIL House, 18 A, Sector-16 A,
NOIDA – 201301 (U.P.)

Reference: No._____Dated: _____

Dear Sir,

We, the undersigned bidder, having read & examined in detail, the Bidding Document, the receipt of which is hereby duly acknowledged, I/ we, the undersigned, offer to supply/ work as mentioned in the Scope of the work, Bill of Material, Technical specifications, Service Level Standards & in conformity with the said bidding document for the same.

I/ We undertake that the prices are in conformity with the specifications prescribed. The quote/ price are inclusive of all cost likely to be incurred for executing this work. The prices are inclusive of all type of govt. taxes/ duties as mentioned in the financial bid (BoQ).

I/We undertake, is our bid is accepted, to deliver the goods in accordance with the delivery schedule specified in the schedule of Requirements.

I/We hereby declare that in case the contract is awarded to us, we shall submit the contract performance guarantee as prescribed in the bidding document.

I/We agree to abide by this bid for a period of days after the last date fixed for bid submission and it shall remain binding upon us and may be accepted at any time before the expiry of that period.

Until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and your notification of award shall constitute a binding Contract between us.

I/We hereby declare that our bid is made in good faith, without collusion or fraud and the information contained in the bid is true and correct to the best of our knowledge and belief.
We understand that you are not bound to accept the lowest or any bid you may receive.

Date:

Authorized Signatory:

Name:

Designation:

End Of Section

Section-13

Price Bid

Name of Work: "Selection of Partner for Design, Supply, Installation, Testing and Commissioning for Comprehensive Upgradation of Wired and Wireless Campus LAN.

NIT No:_____Dated: _____

Bidder Name:

Price Schedule

S/N	Name	Quantity	Unit Cost (in ₹.) (b)	Taxes (in ₹.) (c)	Total Cost (in ₹.) (d= b+ c)	Total Amount (in ₹.) (e = a x d)
1	Security Solution	1 Nos				
2	Link Load balancer	1 Nos				
3	WAN Router	1 Nos				
4	AAA Solution	1 Nos				
5	Core Switch	2 Nos				
6	Distribution Switch	15 Nos				
7	Access switch type 1	70 Nos				
8	Access switch type 2	180 Nos				
9	Access switch type 3	80 Nos				
10	Access switch Type 4	20 Nos				
11	Wireless Controller	1 Nos				
12	Access point type 1	200 Nos				
13	Access point type 2	450 Nos				
14	Access point type 3	100 Nos				
15	Access Point Type 4	300 Nos				
16	XGSPON OLT	3 Nos				
17	ONU type 1	400 Nos				
18	ONU type 2	1400 Nos				
19	Smart rack	1 Nos				
20	Outdoor Racks/ Street Cabinet 42 U rack Size	20 Nos				
21	Outdoor Racks/ Street Cabinet 15 U rack Size	20 Nos				

22	Indoor Network racks 42 U	20 Nos				
23	Indoor Network racks 15 U	40 Nos				
24	Indoor Network racks 6 U	30 Nos				
25	144 Port rack mounted LIU with single mode pigtail and coupler	8 Nos				
26	24 Port rack mounted LIU with single mode pigtail and coupler	450 Nos				
27	6 Port rack mounted LIU with single mode pigtail and coupler	130 Nos				
28	2 Port Joint Closer box/ Home termination box with pigtails and couplers	1900 Nos				
29	Joint Closer bamboo Type suitable for 144-core fiber	50 Nos				
30	144 cores armoured Single-mode fiber cable, multi-tube, 12 cores per tube	17000 Meter				
31	24 Core armoured single-mode fiber cable	5000 Meter				
32	12 Core armoured single-mode fiber cable	15000 Meter				
33	6 Core armoured single-mode fiber cable	45000 Meter				
34	2 Core single-mode fiber cable	150000 Meter				
35	Fibre patch cord SC-LC 2-meter Duplex	2000 Nos				
36	Fibre patch cord SC-LC 10-meter Duplex	100 Nos				
37	Fibre patch cord LC-LC 2-meter Duplex	50 Nos				
38	Fibre patch cord LC-LC 10-meter Duplex	50 Nos				

39	Fibre patch cord SC-SC 2-meter simplex	10000 Nos				
40	Fibre patch cord SC-SC 10-meter simplex	200 Nos				
41	2X2 Splitter box type	40 Nos				
42	2X8 Splitter box type	130 Nos				
43	1X16 Splitter box type	270 Nos				
44	CAT6A UTP cable	140000 Meter				
45	24 port jack panel CAT6A	200 Nos				
46	1-meter UTP patch cord CAT6A	5000 Nos				
47	CAT6A Information outlet with faceplate and gang box	3000 Nos				
48	RJ 45 Termination plug	300 Nos				
49	8” DWC duct pipe	13000 Meter				
50	1” PVC conduit	200000 Meter				
51	32mm HDPE duct pipe	4000 Meter				
52	100X50 ISI casing	2000 Meter				
53	Route Marker	2000 Nos				
54	3X3 feet Chamber	400 Nos				
55	Moiling/ Digging/Recarpeting	14000 Meter				
56	Fiber fusion splicing	15000 Nos				
57	Fibre Tags	3000 Nos				
58	Buyback of existing infra	1 Time as per BOQ				
59	Network lab using existing infra	1 Nos				
60	Any other accessories	1 Nos				
		Total Cost Including GST for 5 years [A]				
		Manpower cost including GST for period of 5 years [B]				
		Grand Total [A]+[B]				

Note: -

- All the above prices would be in INR only with applicable item wise GST.
- All active components must have a 5-year warranty and support.
- All passive components must have a 20 years warranty.
- The above price would include Compressive OEM Warranty Support as per scope of work.
- The bidder has to compulsorily quote for all items mentioned in the Commercial- bid Tables. In case bidder fails to quote for any of this stage, the bid would be summarily rejected.
- No Component of Financial bid should have "ZERO" value.
- Above is indicative, however the quantity may increase or decrease at the time of placing the purchase order as per actual.
- The Tax rates will be mentioned as per standards.
- If manpower cost is non-exclusive of any statutory stipulation it will be treated as non-responsive bid.

End Of Section

Section-14

Bank Guarantee towards Bid Security (EMD)

Bank Guarantee No. _____

To,
Chief General Manager (DES)
EdCIL (India) Limited
EdCIL House, 18 A,
Sector-16 A NOIDA – 201301 (U.P.), India

Whereas..... (here in after called "the Bidder") has submitted its Bid dated .....(Date) in response to the RFP No for " Name of the Tender" (here in after called "the Bid")

KNOW ALL MEN by these presents that We..... having our registered office at. (hereinafter called the "Bank") are bound onto EdCIL India Limited, Noida (hereinafter called "EdCIL") in the sum of for which payment well and truly to be made to the said EdCIL itself, its successors and assignees by these presents.

The conditions of these obligations are:

1. If the Bidder withdraws its Bid during the period of Bid validity or
2. If the Bidder, having been notified of the acceptance of its Bid by EdCIL

during the period of Bid validity:

1. fails or refuses to execute the Agreement form if required; or
2. fails or refuses to furnish the performance security, in accordance with the Bid requirement

We undertake to pay EdCIL up to the above amount upon receipt of its first written demand, without EdCIL having to substantiate its demand, provided that in its demand EdCIL will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to (Date) and any demand in respect thereof should reach the Bank not later than the above date.

Dated: the Day of for
(indicate the name of bank)

Signature of Banks Authorized official

Witness (Name)_____

Designation with Code No. ---------

Full Address----------

End Of Section

Section-15

Service Level Agreement (SLA)

Service Level	Description- one or more of the following	Priority of the bidder/SI
Critical (May be called Severity-1)	Complete loss of a core organizational or business process where work cannot reasonably continue. Catastrophic impact on business. Workflow cannot move forward until the issue is resolved. The issue may be caused by a critical failure that causes data failure or precludes the use of the function of the product. e.g., the Whole network is down due to a failure.	The bidder/SI's priority should be service restoration and not debugging the problem.
Major (May be called Severity-2)	High impact on organizational or business processes. Operation of an existing network is severely degraded, or significant aspects of a customer's business operation are negatively impacted by inadequate performance of the products. Inability to deploy a key feature or function. Network/Internet usage is affected but can continue for a reasonable amount of time before the problem becomes catastrophic. e.g., the network in a department/ building/ block network is down	The bidder/SI's priority should be to restore/ improve the service, not debug the problem.
Minor (May be called Severity-3)	Minimal organizational or business impact. Anything which is not out of service or Major is classified as Minor. e.g., at least one user/one Lab is affected due to network down, etc.	The bidder/SI's priority should be to restore/ improve the service, not to debug the problem.

a. Escalations and Notifications:

The bidder/SI ensures that all the stakeholders are notified in a timely manner on the status of the event/ ticket. The bidder/SI's IT-based Services Desk system notifies users during the following events:

Logging of tickets with the ticket number.

Status change of ticket.

Support/ Resident engineers-initiated notifications.

b. In order to ensure that issues are resolved within SLA, contractors will have to use defined escalation mechanisms. The bidder/SI must provide escalation names and contact numbers.

c. Below is the standard Functional Escalation process followed for different severity calls:

Severity of Call	Type of Call(Call logging)	First Escalation (Tier-II)	Second Escalation (Tier-III)
Severity-1: Critical	incident	6th Hour	12th Hour
Severity-2: Major	incident	12th Hour	24th Hour
Severity-3: Minor	incident	24th Hour	48th Hour

d. The bidder/SI shall ensure that the escalation process is implemented in his/her IT-based Service Desk system, provide escalation contact numbers, and update the status to prospective client at Jaipur at every escalation.

e. Penalty for a branch of SLA:

S. No.	Incident/Fault Resolution - SLA	Time Allotted	Penalty
1	Call/Ticket/Incident Resolution for Critical, Severity- 1 incident	<6 Hrs.	0%
		>6 Hrs. and <12 Hrs.	0.5 % of Performance bank guarantee each time
		>12 Hrs. and <24 Hrs.	1.0 % of Performance bank guarantee each time
		>24 Hrs. and <48 Hrs.	2.0 % of Performance bank guarantee each time
		>48 Hrs.	2.0 % of Performance bank guarantee each time +1 % for each day beyond 48 Hrs.
2	Call/Ticket/Incident Resolution for Critical, Severity- 2 incident	<12 Hrs.	0%
		>12 Hrs. and <24 Hrs.	0.5 % of Performance bank guarantee each time
		>24 Hrs. and <48 Hrs.	1.0 % of Performance bank guarantee each time
		>48 Hrs.	1.0 % of Performance bank guarantee of each time +0.5 % for each day beyond 48 Hrs.

3	Call/Ticket/Incident Resolution for Critical, Severity- 3 incident	<24 Hrs.	0%
		>24 Hrs. and <48 Hrs.	0.1 % of Performance bank guarantee each time
		>48 Hrs. and <72 Hrs.	0.2 % of Performance bank guarantee each time
		>72 Hrs.	0.5 % of Performance bank guarantee each time.

The Maximum penalty at a time is capped at 10% of the total performance bank guarantee value.

f. SLA Review Process and disputes resolution:

Prospective client at Jaipur or the selected Bidder may raise an issue by documenting the business or technical problem, presenting a reasonably objective summary of both points of view, and identifying specific points of disagreement with possible solutions.

A meeting or conference call will be conducted to resolve the issue in a timely manner. The documented issues will be distributed to the participants at least 24 hours prior to the discussion if the issue is not an emergency requiring immediate attention.

Prospective client at Jaipur and the selected Bidder shall develop an interim solution if required and, subsequently, the permanent solution for the problem at hand. The selected Bidder will then communicate the resolution to all interested parties.

In case the issue is still unresolved, the decision of Prospective client at Jaipur or its representatives shall be final, and the successful bidder shall be bound to follow the directions.

The bidder/SI must provide printed technical catalogs/ brochures/ technical datasheets containing technical specifications and features for the quoted models.

All services registered by the bidder/SI with the OEM must use email addresses for registration.

g. Resident engineer: -

i. The bidder/SI will provide a resident engineer for a period of five years or a contractual period.

ii. The working shift of the resident engineer will be at least 9 hours per day, six days a week.

iii. The resident engineer must have minimum technical qualifications such as a Degree/ Diploma in a relevant Engineering discipline and at least two years of experience handling a network of more than 1000 nodes with similar OEM equipment.

iv. The cost of the resident engineer is to be included in the tender cost only. Prospective client at Jaipur will not be responsible for the salary of the resident engineer.

The bidder/ SI must provide an alternate in case the resident engineer is on leave/absence.

Section-16

Warranty Terms and Conditions

The warranty should satisfy the below-mentioned conditions.

- All active components must have at least a 5-year warranty and support.
- All the proposed active components should have at least five years of support bundled with 24x7x365 days TAC support, Return Merchant Authorization (RMA), software updates, and subscription update support.
- OEM should not have announced the “End of Sale” and “End of Life” for all the proposed active components when bidding.
- All passive components must have at least a 20-year warranty.
- All the active components should be in the Next Business Day (NBD) replacement/ repair warranty.
- Cover any defects in materials used to manufacture your product.
- Cover any defects in workmanship.
- Cover any broken components.
- The company will repair/ replace the defective product at no cost if the product is still under warranty.
- The company will repair/ replace any broken product parts using new or replacement parts.
- The product will be exchanged for a new product
- The price of the product will be refunded
- Conditions during the process. This can include things like:
- The product would be returned in the advance replacement package packaging.
- If an RMA is required, it should be generated by the Resident Engineer.
- Any additional charges, i.e., shipping, handling, etc., will be borne by the OEM/SI only.
- Any active storage components (SSD/ HDD) will not be returned due to privacy issues.

Section-17

Acceptance Protocol

The completion certificate shall be signed after the below mentioned checks are completed.

1. Objectives
    - Define the goals of the LAN implementation, WiFi system installation, etc.
    - Identify key performance indicators (KPIs) for network performance.
2. Documentation Review
    - Ensure all network design documents, specifications, and configurations are complete and accurate.
    - Review network diagrams and device placements.
3. Testing Procedures
    - **Connectivity Tests:**
        - Check connections between devices (switches, routers, PCs).
        - Ensure all devices can communicate on the network.
    - **Performance Tests:**
        - Measure bandwidth and latency under different load conditions.
        - Test network throughput and response times.
    - **Reliability Tests:**
        - Simulate failure scenarios (e.g., device or link failure) and check failover processes.
    - **Security Tests:**
        - Conduct vulnerability scans.
        - Verify firewall settings and access controls.
4. User Acceptance Testing (UAT)
    - Engage end-users to validate the network's functionality.
    - Gather feedback on usability and performance.
5. Compliance Checks
    - Ensure compliance with relevant standards and regulations.
    - Verify that all software and hardware meet vendor specifications.
6. Training and Support
    - Provide training for staff on network usage and troubleshooting.
    - Establish a support plan for ongoing issues and maintenance.
7. Sign-off Procedure
    - Create a formal sign-off document for stakeholders to approve the network.
    - Include criteria for what constitutes successful implementation.
8. Post-Implementation Review
    - Schedule a review meeting to discuss the implementation process and any issues encountered.
    - Document lessons learned for future projects.
9. Monitoring and Maintenance Plan
    - Set up ongoing monitoring for performance and security.
    - Develop a maintenance schedule for hardware and software updates.

Section -18

PPP MII Certificate by Bidder

It is certified that we have complied with/will comply with PPP MII's latest policies of the Government of India, declared through various OMs/orders from DP-IIT, Ministries (Electronics, Telecom, Petroleum, Finance etc.) and GeM[3].

Signatures
(Bidder)

Designation & Seal

Contact including email/phone-

Purchase Preference: It is mandatory for all the bidders to comply with PPP and Make In India (MII) provisions, applicable as on date. (As per https://www.meity.gov.in/esdm/ppo) Government has issued Public Procurement (Preference to Make in India) [PPP-MII] Order 2017 vide the Department for Promotion of Industry and Internal Trade (DPIIT) Order No.P-45021/2/2017-B.E.-II dated 15.06.2017 and subsequent revisions vide Order No. 45021/2/2017-PP(BE-II) dated 28.05.2018, 29.05.2019, 04.06.2020, 16.09.2020 and **other latest ones till date** to encourage 'Make in India' and to promote manufacturing and production of goods, services and works in India with a view to enhancing income and employment. The relevant orders from other Ministries **till date**

i.e. Electronics & IT, DoT etc. should also be considered. This Order is issued pursuant to Rule 153

(iii) of the General Financial Rules 2017. The salient features of the aforesaid Orders are as follows.

a) The Order is applicable for procurement by the Ministry / Department / attached / subordinate office of, or autonomous body controlled by, the Government of India and includes Government companies as defined in the Companies Act.
b) In the procurement of all goods, services, or works in respect of which the Nodal Ministry/ Department has communicated that there is sufficient local capacity and local competition, only 'Class-I local supplier', as defined under the Order, shall be eligible to bid irrespective of purchase value.
c) The margin of purchase preference shall be 20%. 'margin of purchase preference' means the maximum extent to which the price quoted by a local supplier may be above the L1 for the purpose of purchase preference.
d) Ministry of Electronics and Information Technology is the Nodal Ministry for implementation of the Electronic Product Notifications issued in furtherance of PPP-MII Order 2017.
e) Classes of Local Suppliers based on local content as per the revised PPP-MII Order dated 19.07.2024 issued by the Department for Promotion of Industry and Internal Trade (DPIIT) are as under
f) Class-I Local supplier - a supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 50%.
g) Class-II Local supplier - a supplier or service provider, whose goods, services, or works offered for procurement, have local content of more than 20% but less than 50%.
h) Non-Local supplier - a supplier or service provider, whose goods, services, or works offered for procurement, has local content less than or equal to 20%.

i) Only 'Class-I local supplier' and 'Class-II local supplier' shall be eligible to bid in theprocurement of all goods, services, or works, and with an estimated value of purchases less than Rs. 200 crores.

j) Various select OMs relevant to PPP-MII are as follows.
   - All such relevant OMs/notices issued till date by DP-IIT (Sep-2020, Mar-2021, Dec-2022, May-2023, Apr-2024, July-2024),
   - Dept of Telecom (Aug-2018, gazette notification 21-Oct-2024),
   - Ministry of Electronics & IT (Sept-2017, 7-Sep-2020 gazette notification, Mar-2021, Mar- 2022, Aug-2022),
   - All other OMs/notofications till date should be considered.

[3] Please see para 5.(j) of Section II, of this bid-document:
Various OMs till date but not limited to-

OMs- All such relevant OMs/notices issued till date by DP-IIT (Sep-2020, Mar-2021, Dec-2022, May-2023, Apr-2024, July-2024), Dept of Telecom (Aug-2018, gazette notification 21-Oct-2024), Ministry of Electronics & IT (Sept-2017, Mar-2021, Mar-2022, Aug-2022), Ministry of PNG (Apr-2022);

And also refer to GeM document-
https://fulfilment.gem.gov.in/contract/slafds?fileDownloadPath=SLA_UPLOAD_PATH/2024/Jan/GEM_2024_B_4429570/CLM0014/MII_e21c80a6-49d0-4e48-956e1704438778496_buycon3.ongc.delhi.pdf

Section -19

DECLARATION OF LOCAL CONTENT

[For Local Content of Products, Services or Works]
(To be given on Company Letter Head – For a tender value below Rs.10 Crores)
(**To be given by Statutory Auditor/Cost Auditor/Cost Accountant/CA for tender value above Rs.10 Crores**)

To,
The Registrar

Subject: Declaration of Local Content
Tender reference No.

1. Country of Origin of Goods being offered:
2. With reference to Order No. P- 45021/2/2017-PP(BE-II) dated 16-09-2020 read with OM No. P- 45021//102/2019-BE-II-Part(1) (E-50310) Dt. 04.03.2021 of DPIIT, Ministry of Commerce and Industry, Govt. of India, and OMs from other relevant ministries[2], Govt. of India, we fall under the following category of supplier (please tick the correct category) for the items for which this tender has been floated and being bided.
   - Class I local supplier – has local content equal to more than 50%. Local contents added at……..(name of location).
   - Class II local supplier – has local content of more than or equal to 20% but less than 50%. Local content added at…….(name of location).
   - Non-local supplier – has local content less than 20%. Local contents added at…….(name of location).
3. Details of value addition in India:

	Particulars	Content (In %)
(a)	Addition of indigenous items (manufactured in India) inclusive of taxes	
(b)	Addition of Locally sourced imported items inclusive of taxes	
(c)	License/Royalty paid/Technical expertise etc.	

4. Certificate from OEM for Country of Origin has been attached (mandatory if bidder is reseller) (Strike down if not applicable).
5. We are solely responsible for the above mentioned declaration in respect of category of supplier. False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which we may be debarred for up to 2 years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.

Signature of OEM/Supplier/~~Bidder/~~ Agent Name:.....
Designation: .....
Organization Name: .....
Contact No. : .....
Seal of the Firm

Section -20

Detailed BOM

Technical Compliance sheet						
S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/ Remarks**
1.	Security Solution	Supply, configuration, integration, and installation of next-generation security solutions with software firewall as a backup as per the following specification. **Type** 1. The proposed security solution should be Next Generation Enterprise Firewall. 2. The proposed security solution should be certified by any accredited lab endorsed by Government of India i.e. TEC/TSEC, SQTC, BIS, EAL 3. NDcPP, ICSA Labs, IC3S. **Architecture**: 1. The proposed security solution should be based on multi-core CPUs to protect & scale against the latest dynamic security threats. 2. The proposed security solution architecture must enable complete, contextual traffic classification, followed by a rich set of enforcement and threat prevention options. 3. The proposed security solution should support multiple internet links in Active-Active, load balancing, and active-standby failover modes. **Storage** 1. The proposed security solution must have 2 TB or more of usable space for logging (SSD drive in RAID). **Power Supply, deamination, and FAN** 1. The proposed security solution must have internal hot-swappable redundant Power Supplies from day 1. 2. The proposed security solution must have (i) redundant fans or (ii) hot-swappable fans from day one. **Interface Requirement** 1.The proposed security solution should have a minimum of 4 x 1/10G SFP/SFP+ Interfaces.				

		2.The proposed security solution should have a minimum of 4 x 100G QSFP28 Interfaces populated with 4X100G SR transceivers of the same OEM.				
		Technical Compliance sheet				
S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/ Remarks**
		3.The proposed security solution should have dedicated ports of high availability. 4.The proposed security solution should have a dedicated console, management, and USB port. **Performance Capacity** 1. The proposed security solution must have 50 Gbps or more Next Gen Firewall application throughput. 2. The performance should be in the real world/ production environment (enabling and measuring with application ID/ AVC, user-ID/ Agent-ID, and application traffic mixes such as HTTPS, SMTP, and other protocols) logging enabled. 3. The proposed security solution should have 25 Gbps or more threat prevention/protection throughput. 4. Threat prevention throughput should be measured in the real world/production environment with Application Control, IPS, antivirus, anti-spyware, zero-day, file blocking, and all (traffic and threats) with logging enabled 5. The proposed security solution must support IPSec & SSL VPN. 6. The proposed security solution should support 5 Gbps Minimum VPN throughput 7. The proposed security solution must support at least 100 SSL VPN users from day 1. 8. The proposed security solution should support 5 million concurrent sessions. 9. The proposed security solution should support 200K new sessions per second. 10. The proposed security solution should support stateful inspection. **High Availability** 1. The proposed security solution should support high availability. 2. The proposed security solution shall support stateful session maintenance in the event of a fail-over to a standby unit.				

		3. The proposed security solution should support high availability configurations in active/active and active/ passive modes.				

Technical Compliance sheet

S. No	Name of Item	Detailed Specifications	Compliance (Y/N)	PART/ Model No.	Support/Doc Pg. No.	Deviation/ Remarks
		Next-Generation Firewall Features 1. The proposed security solution should be able to handle (alert, block, or allow) unknown/unidentified applications like unknown UDP & TCP. 2. The proposed security solution should have network traffic classification which identifies applications across all ports irrespective of port/protocol/evasive tactic 3. The proposed security solution should be able to create custom application signatures without any third-party tool. 4. The proposed security solution should be able to implement zones, IP addresses, port numbers, user-id, application-id, and threat protection profiles under the same firewall rule or policy configuration. 5. The proposed security solution must support creating a policy based on wildcard addresses to match multiple objects for easy deployment. 6. The proposed security solution must support policy-based forwarding based on zone, source or destination address and port, application, AD/ LDAP user or user group, and services or ports. 7. The proposed security solution should delineate different parts of the application (i.e., allowing Facebook chat but blocking its file-transfer capability inside the chat application) based on the content. 8. The proposed security solution should be able to protect the user from malicious content upload or download by applications (i.e., Facebook chat or any other file sharing) by enforcing the total threat protection for known and unknown malicious content such as viruses, malware, bad URLs. 9. The proposed security solution should be able to identify, decrypt, and evaluate SSL traffic in an outbound and inbound connection (forward proxy). 10. The proposed security solution should be able to identify, decrypt, and evaluate SSH Tunnel traffic in inbound and outbound connections.				

Technical Compliance sheet						
S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/ Remarks**
		11. The proposed security solution should be able to identify port- based rules/ policies so the admin/ security team can convert them to application-based allowlist rules or add applications to existing rules without compromising application availability. 12. The proposed security solution should be able to identify rules configured with unused applications and prioritize which rules to migrate or clean up first. 13. The proposed security solution should be able to restrict application traffic to its default ports to prevent evasive applications from running on non-standard ports. 14. The proposed security solution must have the capability to create a DOS prevention policy to prevent DOS attacks on per zone basis (outbound to inbound, inbound to inbound, and inbound to outbound) and the ability to create and define DOS policy based on attacks like UDP flood, ICMP flood, SYN flood (random early drop and SYN cookie), IP address sweeps, IP address spoofs, port scan, ping of death, teardrop attacks, unknown protocol protection, etc. 15. The proposed security solution's IPS system shall have at least 6000 + signatures. 16. The proposed security solution should have a sandboxing capability. **Threat Protection** 1. The proposed security solution should support protocol decoder-based analysis, state fully decodes the protocol, and then intelligently apply signatures to detect network and application exploits. 2. The proposed security solution's Intrusion prevention signatures should be built based on the vulnerability for a single signature should stop multiple exploit attempts on a known system or application vulnerability. 3. The proposed security solution should block known network and application-layer vulnerability exploits. 4. The proposed security solution should perform content-based				

		signature matching beyond the traditional hash-based signatures.				
Technical Compliance sheet						
S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/ Remarks**
		5. The proposed security solution should have local (on-device) Anti-Virus/ Malware Anti Spyware signatures, updated at least every hour. 6. OEM should create all the protection signatures based on their threat intelligence. They should not use any 3rd party IPS or AV engines. 7. The proposed security solution should perform stream-based antivirus inspection and not store-and-forward traffic inspection to maximize security solution performance. Stream-based antivirus scanning should scan the contents of the files being transferred over the network for viruses/malware and block the file transfer when a virus or malware signature is triggered. 8. The proposed security solution should be able to perform anti-virus scans for SMB traffic. 9. The proposed security solution should support DNS sink holding for malicious DNS requests from inside hosts to outside bad domains. It should be able to integrate and query third-party external threat intelligence databases to block or sinkhole bad IP addresses, domains, and URLs. 10. The proposed security solution should support DNS security. 11. The proposed security solution should have a dynamic response to find infected machines and respond immediately. There should be provision for administrators to automate the process of sinkhole malicious domains to cut off command and control and quickly identify infected users. 12. The proposed security solution should be able to call 3rd party threat intelligence data on malicious IPs, URLs, and domains to the same firewall policy to block those malicious attributes, and the list should get updated dynamically with the latest data. 13. The OEM should automatically push a dynamic block list with the latest threat intelligence data based on malicious IPs, URLs, and domains to the firewall policy as an additional protection service. **URL Filtering and Web Protection**				

Technical Compliance sheet						
S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/ Remarks**
		1. The proposed security solution should be scalable to provide URL filtering, web protection and maintain the same performance/ throughputs mentioned in the performance capacity. 2. The proposed security solution should have the URL filtering and web protection database locally on the device. 3. The proposed security solution should provide a web filtering inspection based on a real-time URL categorization database of at least 100+ million URLs with 70+ categories. 4. The proposed security solution should have custom URL categorization. 5. The proposed security solution must have at least 2500+ application signatures and be able to understand well-known applications like P2P, Voice, etc., without any dependency on the ports. 6. The proposed security solution should display custom block pages. 7. The proposed security solution must have an authentication portal. 8. The proposed security solution should block and continue (i.e., allowing a user to access a website that potentially violates policy by displaying a block page with a warning and continue option allowing them to proceed for a certain time) 9. The proposed security solution should have logs populated with end-user activity reports for site monitoring within the local security solution. 10. The proposed security solution should have URL filtering policies by AD user, group, machines, and IP address/ range. 11. The proposed security solution should have a full-path categorization of URLs only to block the malicious malware path, not the full domain or website. 12. The proposed security solution should have a zero-day malicious website or URL blocking update of fewer than 60 minutes for URL database update for zero-day malware command and control, spyware, and phishing website access protection. 13. The proposed security solution should protect against never-				

Technical Compliance sheet						
S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/ Remarks**
		before-seen phishing and JavaScript attacks. 14. The proposed security solution should be capable of using signature and ML-based signature-less technology. 15. The URL filtering service should be able to categorize a site by multiple categories, not just a single and custom category. 16. The proposed security solution should prevent credential theft attacks (without the need for endpoint agents). 17. The OEM should provide features that can prevent the theft and abuse of stolen credentials, one of the most common methods cyber adversaries use to successfully compromise and maneuver within an organization to steal valuable assets. It should also complement additional malware, threat prevention, and secure application enablement functionality to extend customer organizations' ability to prevent cyber breaches. 18. The proposed security solution should support automatically identifying and blocking phishing sites. 19. The proposed security solution should prevent users from submitting credentials to phishing sites. 20. The proposed security solution should prevent the use of stolen credentials. 21. The proposed security solution shall allow the administrator to prevent sensitive data based on file type and extensions from the network. The administrator shall be able to define sensitive data patterns and data matching these patterns that will be blocked and logged when passing through the unit. **SSL/SSH Decryption** 1. The proposed security solution should be able to identify, decrypt, and evaluate SSL traffic in an outbound connection and inbound connection. 2. The proposed security solution shall be able to identify, decrypt, and evaluate SSH tunnel traffic in inbound and outbound connections.				

		3. The proposed security solution shall support the ability to have an				

Technical Compliance sheet

S. No	Name of Item	Detailed Specifications	Compliance (Y/N)	PART/ Model No.	Support/Doc Pg. No.	Deviation/ Remarks
		SSL inspection policy that differentiates personal SSL connections, i.e., banking, shopping, health, and non-personal traffic. 4. The proposed security solution should support SSL decryption on non-standard ports. **Network Address Translation (NAT)** 1. The proposed security solution should support NAT and PAT. 2. The proposed security solution should support Dual Stack IPv4 / IPv6. 3. The proposed security solution should support Dynamic IP reservation, tunable dynamic IP and port oversubscription, IPv6 Support L2, L3, tap, and transparent mode. **Routing and Multicast support** 1. The proposed security solution should support static routing. 2. The proposed security solution should support routing protocols like OSPF v2/ v3, BGP v4, Policy-based forwarding, PIM-SM, PIM- SSM, IGMP v1, v2, and v3, Bidirectional Forwarding Detection (BFD), MPLS, etc. **Authentication** 1. The proposed security solution should support authentication protocols like LDAP, Radius, Token-based solutions (i.e., Secure-ID), Kerberos, and any combination above. 2. The proposed security solution's SSL VPN should support authentication protocols like LDAP, Radius, Token- based solutions (i.e., Secure-ID), Kerberos, and any combination above. **Monitoring, Management, and Reporting** 1. The proposed security solution should keep six months' logs for future analysis and report generation.The proposed security solution should have separate real-time logging based on all traffic, threats, user IDs, URL filtering, data filtering, content filtering, unknown malware analysis, authentication, tunneled traffic, and correlated log view based on other logging activities.				

		2. The proposed security solution should support report generation on				

Technical Compliance sheet						
S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/Remarks**
		a manual or scheduled (daily, weekly, monthly, etc.) basis. 3. The proposed security solution should allow the report to be exported into other formats such as PDF, HTML, CSV, XML, etc. 4. The proposed security solution should have built-in report templates based on applications, users, threats, traffic, and URLs. 5. The proposed security solution should be able to create reports based on user activity. 6. The proposed security solution should be able to create a custom report based on a custom query from logging attributes. 7. The proposed security solution's on-device management service should be able to provide all the mentioned features in case of central management server failure. 8. The proposed security solution must be able to identify unused security policies. 9. To optimize configuration, the proposed security solution must provide detailed information regarding individual security policies' first-hit counts, last-hit counts, and total hit counts. **Support & Warranty** 1. The proposed security solution should have five years of support bundled with 24x7x365 days TAC support, RMA, software updates, and subscription update support. 2. The proposed security solution should be proposed with five years subscription licenses for NGFW, NGIPS, Anti-Virus, URL Filtering, Anti Spyware, Anti Botnet and SSL VPN, sandboxing, etc. 3. OEM should not have announced the "End of Sale" and "End of Life" for the proposed product at the time of bidding				

Technical Compliance sheet						
S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/Remarks**
2.	Link load balancer	Supply, configuration, integration, and installation of link load balancer per the following specifications. 1. The proposed LLB must be a dedicated appliance-based solution with purpose-built hardware for high performance. 2. The proposed LLB should not be a part of the router or UTM. 3. The proposed LLB should be supplied with a minimum of 128GB or more RAM and 500GB or more SSD drives. 4. The proposed LLB should have a minimum L4 throughput of 80 Gbps. 5. The proposed LLB should have a minimum L7 throughput of 70 Gbps. 6. The proposed LLB should have a minimum of 4 x 10/25G ports populated with 4 x 10G SFP+ SR transceivers and be upgraded to 25G by changing transceivers only. 7. The proposed LLB should have a minimum of 2 x 40G QSFP+ / 100G QSFP28 ports populated with 2 x 100G QSFP28 SR transceivers. 8. The proposed LLB should have a hot-swappable redundant power supply from day one. 9. The proposed LLB should have a 1RU/2RU form factor for a 19”-inch rack-mountable. 10. The proposed LLB should support multiple internet links in Active-Active, load balancing, and active standby failover modes. 11. The proposed LLB should support inbound, and outbound load balancing algorithms like round robin, weighted round robin, shortest response, target proximity, and dynamic detection 12. The proposed LLB should support Static NAT, Port-based NAT, and advanced NAT for the transparent use of multiple WAN / Internet links. 13. The proposed LLB should provide full ipv6 support, and OEM should be IPv6 certified 14. The proposed LLB should have L3/L4 DDOS protection with a network, DNS, and SIP levels with a predefined attack vector.				

Technical Compliance sheet						
S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/Remarks**
		15. The proposed LLB should generate dynamic DOS/DDOS protection signatures based on changing traffic patterns over time. 16. In case of link failure, the proposed LLB should detect it in less than 30 seconds and divert the traffic to other available links. 17. The proposed LLB should support a proven scheme-based health checks for intelligent traffic routing and failover. (i.e., dynamic detect (DD)/Proximity-based etc.) 18. The proposed LLB should provide individual link health checks based on physical ports, ICMP Protocols, user- defined l4 ports, and destination path health checks. 19. The proposed LLB should provide a mechanism to bind multiple health checks, support application-specific VIP health checks and subsequent gateway health checks. 20. The proposed LLB should support persistence features, including RTS (return to sender) and IP flow persistence. 21. The proposed LLB should support an authoritative name server, DNS proxy/ DNS NAT, a full DNS server with DNSSEC, DNS DDOS, and application load balancing. 22. The proposed LLB should be capable of handling complete DNS bind records, including A and AAAA. 23. The proposed LLB should support global server load balancing algorithms, including - round robin, least connections, geography, proximity, response, network, QoS, and minimization. 24. The proposed LLB should provide comprehensive and reliable support for high availability. 25. The proposed LLB should support L2-L7 Load balancing, server persistence, content routing, content switching, SSL offload, L7 application scripting, and route L4 routing. 26. The proposed LLB should support application, server, and link health checks based on ARP, ICMP, TCP, HTTP/HTTPS, DNS, Radius, RTSP, SIP single port/ protocol, multi-port, physical port, ICMP, and user-defined L4, Next gateway health checks. 27. The proposed LLB must support multiple bootable Images for better				

Technical Compliance sheet						
S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/Remarks**
		availability and easy upgrade/fallback. 28. The proposed LLB should be certified by EAL 2/NDcPP, ICSA Labs, TEC/TSEC, STQC, IC3S or any accredited lab by governemnt of India. **Warranty** 1. The proposed LLB should be supplied with a five-year warranty. The OEM should have a 24x7 support center. OEM should have an India toll-free number reflected on the official website. The vendor will provide documentary proof regarding support and warranty directly from the OEM. 2. OEM should not have announced the "End of Sale" and "End of Life" for the proposed product at the time of bidding.				
3	WAN Router	Supply, configuration, integration, and installation of WAN router per the following specifications. **Architecture** 1. The proposed router shall facilitate all applications like voice, video, and data to run over an IP infrastructure. **Interface** 1. The proposed router should have at least 4 x 10 G SFP+ ports with 2 X 10G SFP+ SR transceivers and 2 X 10G SFP+ ER (up to 40 KM distance) transceivers of the same OEM. 2. The proposed router should support 4 x 40 G/100 G ports for future upgradation. **Features and Scalability** 1. The proposed router should have a minimum of 180 Gbps system throughput. 2. The proposed router should have a minimum of 64K multicast routes. 3. The proposed router should have a minimum of 16 GB RAM. 4. The proposed router should have a minimum of 32 GB flash memory/storage 5. The proposed router should have a minimum 4M routing information base.				

Technical Compliance sheet						
S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/Remarks**
		6. The proposed router should have a minimum 4M forwarding information base **Protocol supported** 1. The proposed router should support static routing. 2. The proposed router should support OSPF, BGP, LDP, Multiprotocol BGP, MPLS, and segment routing. **Security** 1. The proposed router should support an inbuilt firewall or access control list for control plane protection 2. The proposed router should support load balancing/sharing for multiple ISPs. 3. The proposed router should support access list and QoS. 4. The proposed router should support 128 K hardware queues. 5. The proposed router should be certified by any accredited lab endorsed by Government of India i.e. TEC/TSEC, SQTC, BIS, EAL 2 NDcPP, ICSA Labs, IC3S. 6. The proposed router should have Federal Information Processing Standards (FIPS 140-2) FIPS or equivalent Indian standards. 7. The proposed router should support NAT (2 million NAT Sessions) and 2K IPsec tunnels. **Dimension and Environmental** 1. The proposed router should be 8 U or fewer rack units in size (1 U height = 4.4cm). 2. The proposed router should support operating temperatures 0º to 40 ºC. 3. The proposed router should support operating relative humidity of 10% to 85%. **Power Supply and FAN** 1. The proposed router should have a hot-swappable redundant power supply 2. The proposed router should have at least one field-replaceable fan unit/module.				

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		Management 1. The proposed router should have a console port. 2. The proposed router should have a management port. 3. The proposed router should support management protocols like SSH, telnet, SNMPv1, v2, v3, RADIUS, etc. **Warranty** 1. The proposed router should be supplied with a five-year comprehensive warranty. The OEM should have a 24x7 support center. OEM should have an India toll-free number reflected on the official website. The vendor will provide documentary proof regarding support and warranty directly from the OEM. 2. OEM should not have announced the "End of Sale" and "End of Life" for the proposed product at the time of bidding.				
4.	AAA Solution	Installation and configuration of AAA solution per the following specifications. 1. The proposed AAA should provide an easy-to-use BYOD-ready granular secure access control solution that is context-aware, identity-enabled, location and device-based 2. The proposed AAA must combine authentication, authorization, accounting (AAA), posture, profiling, and guest access management services onto a single platform with a minimum endpoint footprint and support the ability to be managed from a single management console. 3. The proposed AAA should be deployed in out-of-band mode. 4. The proposed AAA should support centralized deployment and must be deployed in High Availability Active-Standby mode. 5. The proposed AAA must have built-in TACACS+ and Radius along with 802.1x and MAB capabilities. 6. The proposed AAA can be provided with an HW/Virtual machine and Perpetual Licenses, supporting a minimum of 10000 devices for AAA (Radius & TACACS+) from Day 1. 7. The solution must be provided with a 10,000 Profiler license from day 1 for device visibility.				

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		8. The proposed AAA should be vendor-agnostic and support integration with any network infrastructure device that supports standard AAA protocols. 9. The proposed AAA should support configuration migration from third-party AAA solutions through CSV and other standard methods. 10. The proposed AAA should be able to detect both new and existing endpoints and categorize them based on the type of endpoint (e.g., Switch, Router, Firewall, Windows, Network Device, etc.) 11. The proposed AAA should be able to detect and profile IoT devices. 12. The proposed AAA should support network-based profiling by targeting specific endpoints (based on policy) for specific attribute device scans, resulting in higher accuracy and comprehensive visibility of what is on your network 13. The proposed AAA should support profiling devices automatically based on their Category, OS, MAC address, etc. 14. The proposed AAA should provide support for the discovery, profiling, policy-based placement, and monitoring of endpoint devices on the network, all within the same appliance. 15. The proposed AAA must support Profiling via Passive and Active Collectors using various methods like SNMP, DHCP fingerprinting, HTTP-agent, NMAP, WMI, SSH, TCP-IP, etc. 16. The proposed AAA should support sponsored-based device management for network access. For example, if a new system is introduced in the network, AAA should send an email alert to the IT admin to approve network access from that device. 17. The proposed AAA should provide the ability to create custom profiling rules and groups for enforcement 18. The proposed AAA should provide flexible filtering capabilities to sort out device information based on different attributes (e.g., MAC address, Manufacturer name, hostname, IP address, etc.) 19. The proposed AAA should produce a real-time endpoint discovery with detailed information, including which switch port the device is connected to.				

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		20. The proposed AAA must provide device inventory in both CSV and PDF exportable format. 21. The proposed AAA must provide the capability to import/export device inventory via CSV and encrypted binary files. 22. The proposed AAA must provide information on how many devices are not profiled, how many devices are newly seen in day/week/month, etc. 23. The proposed AAA solution shall include the following key components that are out of the box. The solution should not act as a proxy and should not be dependent on an external solution for the following capabilities. a) Radius server b) TACACS+ server c) Local Profiler 24. Authentication - The proposed solution should support different options for user authentication. It should be able to support the following authentication servers: Local Authentication, Active Directory, LDAP, External Radius, RSA/SecureID, and Certificate. 25. Authorization - The solution should provide fine-grained control over user capabilities for the duration of the user's session, which includes idle time-out and session duration. It should allow enforcing restrictions on what commands a user/admin may execute by configuring the privilege level for administrators. Within the privilege level, further control can be forced by specifying a command or regex match. 26. The solution should support Exec authorization, which determines a user's privilege level when they are authenticated. The admins can run the commands that are allowed at the user's privilege level. 27.The solution should support Command authorization, which provides centralized control of the commands available to AAA admin users. Every command must be sent to the AAA server for authorization, and the command is permitted after getting authorized by AAA. 28. Accounting - The solution should collect information on the AAA server for auditing. Network device administrators should be able to use the accounting facility to track user activity for a security audit				

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		or to provide information for user billing. Accounting records should include user identities, start and stop, and executed commands. 29. The solution should have a built-in Radius server with Authentication, Authorization, and Accounting capabilities available out-of-the-box without any dependency on an external server. 30. The built-in local Radius server should support 802.1x for user and device authentication. 31. The solution should support TACACS+ as a built-in capability to simplify device administration and enhance security through flexible, granular control of access to network devices. 32. TACACS+ device administration should support role-based access control and command-level authorization with detailed logs for auditing 33. The solution should be able to create a TACACS+ authorization policy for the device administrator containing specific lists of commands a device admin can execute. Command sets should support the exact match, case sensitive, (any character), * (matches any), etc., and support stacking as well. 34. The proposed AAA solution must support authenticating protocols like PAP, MS-CHAP, MS-CHAP-V2, EAP-MD5-Challenge, EAP-MS-CHAP-V2, (EAP)-MD5, Protected EAP (PEAP), EAP-Transport Layer Security (TLS), EAP Tunneled Transport Layer Security (EAP-TTLS), and EAP Generic Token Card (EAP-GTC). 35. The solution should support role-based access control and allow the creation of different admin roles to define granular administrative access privileges. For example, an organization would require multiple admin roles with different privilege levels to ensure protection from sensitive company information. 36. The AAA solution should support Idle Time-out for TACACS+ user sessions so that if no input is received or sent in the period specified, the session is disconnected. 37. The AAA solution should support the Max session length option to specify the maximum length of time that the session can exist. After this value has expired, the session should get disconnected.				

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		38. The solution should allow network devices to be associated with specific device groups to be easily managed. In a heterogeneous network where there are devices from multiple vendors, the device group helps to manage devices easily, as each vendor device has a different command syntax and command set. 39. The proposed solution must be capable of supporting 802.1X authentication and shall work with endpoint devices (supplicant) and network devices (authenticator) that are enabled for IEEE 802.1X authentication. 40. The proposed solution must make use of alternate authentication methods, such as MAC address authentication, to authenticate endpoint devices that do not support 802.1X authentication 41. The proposed AAA should support built-in monitoring, reporting, and troubleshooting console to assist helpdesk operators and administrators in streamlining operations 42. AAA GUI should support the Dashboard with contextual information 43. AAA GUI should support historical data on contextual information 44. The solution should support integration with the Syslog server for log retention. 45. The solution should support an archiving option to automatically back up and save device/user logs and system configurations on the external machines. It should support scheduling the backup activity. 46. The proposed Port Probe option is to check specific TCP and UDP port status on the network devices for troubleshooting integration or connectivity issues. 47. The proposed solution must provide the options of RTF (Return to Factory), ND (Next Day), and SD (Same Day) to be supported directly by the manufacturer as part of its general support offerings. 48. The proposed solution should be certified by EAL 2/NDcPP, ICSA Labs, TEC/TSEC, STQC, IC3S or any accredited lab by government of India.				

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		49. The proposed AAA should be supplied with a five-year comprehensive warranty. The OEM should have a 24x7 support center. OEM should have an India toll-free number reflected on the official website. The vendor will provide documentary proof regarding support and warranty directly from the OEM. 50. OEM should not have announced the "End of Sale" and "End of Life" for the proposed product at the time of bidding.				
5	Core Switch	Supply, configuration, integration, and installation of L3 core switches in high availability mode as per the following specification. **Interface.** 1. The proposed core switch should have a non-blocking architecture 2. The proposed core switch should have at least 32 x 40/100G (QSFP+/QSFP28) ports populated with 20 QSFP28 (100G) long-range transceivers and 12 X QSFP28 (100G) SR transceivers of the same OEM with each switch. **Dimension and Environmental** 1. The proposed core switch should be 19" Rack Mountable. 2. The proposed distribution switch should be a 1U/2U/3U/4U rack unit in size (height = 4.4cm) 3. The proposed distribution switch should support operating temperatures 0º to 40ºC. 4. The proposed distribution switch should support operating relative humidity of 10% to 85%. **Power Supply and FAN** 1. The proposed core switch should have a Hot-swappable internal redundant power supply. 2. The proposed core switch should have at least two front-to-back airflow fan units/modules. **Performance and Scalability** 1. The proposed core switch should have a minimum of 6.4 Tbps switching bandwidth/capacity. 2. The proposed core switch should have a minimum of 2 Bpps				

		forwarding rate/ Throughput. 3. The proposed core switch should have a minimum of 64 GB flash memory/SSD. 4. The proposed core switch should have a minimum of 16 GB RAM. 5. The proposed distribution switch should support the jumbo frame of a minimum size of 9K. 6. The proposed distribution switch should support Fabric Management/SDN integration using open flow/ OpenStack/ Rest				
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		API. 7. The proposed core switch should support the VXLAN feature. **High Availability** 1. The proposed core switch should support high availability in Active-Active, and Active-Passive modes. **L2 L3 Features** 1. The proposed core switch should support a minimum of 250K MAC addresses. 2. The proposed core switch should have a minimum of 32 MB packet buffers. 3. The proposed core switch should support a minimum of 4k VLANs. 4. The proposed core switch should support static routing for both IPv4 and IPv6. 5. The proposed core switch should support IEEE 802.1Q VLAN tagging. 6. The proposed core switch should support a minimum of 200K IPv4 and 100K IPv6 routes/ entries. 7. The proposed core switch should support a minimum of 40K IPV4 and 40K IPV6 multicast routes/ entries 8. The proposed core switch should support STP, RSTP, MSTP, STP root guard, and IGMP v1/v2/v3 snooping. 9. The proposed core switch should support OSPF, OSPFv3, PIM SM, and MLD V1/V2. **Security** 1. The proposed core switch should support ACL based on L2/ L3 headers.				

		2. The proposed core switch should support Dynamic VLAN assignment and DHCP snooping. 3. The proposed core switch should support management ACL. 4. The proposed core switch should support authentication (MAC and IEEE 802.1x), Radius, and TACACS+. 5. The proposed core switch should support sflow, LAG, loop detection, and Loop protection. 6. The proposed core switch /switch's operating system should be				

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		certified by any accredited lab endorsed by Government of India i.e. TEC/TSEC, SQTC, BIS, EAL 2 NDcPP, ICSA Labs, IC3S. 7. The proposed core switch should follow safety and EMC standards, including UL60950, CAN/CSA 22.2 No.60950, EN 60950, IEC60950, FCC 47CFR Part 15, EN 55022/55032, VCCI, CISPR 22 or 24, EN 55024, Reduction of Hazardous Substances (ROHS) 6, or equivalent Indian standards. **Management** 1. The proposed core switch should have a console port. 2. The proposed core switch should have a management port. 3. The proposed core switch should support management through CLI, ssh, telnet, RMON 4 groups, SNMPv3, and LLDP. 4. The proposed distribution switch should support Layer 2 traceroute to ease troubleshooting by identifying the physical path a packet takes from source to destination, or the switch should support Layer 3 Traceroute. 5. The proposed distribution switch should support Trivial File Transfer Protocol (TFTP) for software upgrades. **Quality of Services** 1. The proposed core switch should support eight priority queues per port. 2. The proposed core switch should support policy-based QoS based on VLAN, port, and MAC. 3. The proposed core switch should support IEEE 802.1Q VLAN Tagging.				

		4. The proposed core switch should support Generic VLAN Registration Protocol (GVRP)/MVRP or equivalent. **Warranty** 1. The proposed core switch should be supplied with a five-year comprehensive warranty. The OEM should have a 24x7 support center. OEM should have an India toll-free number reflected on the official website. The vendor will provide documentary proof regarding support and warranty directly from the OEM.				
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		2. OEM should not have announced the "End of Sale" and "End of Life" for the proposed product at the time of bidding.				
6	Distribution Switch	Supply, configuration, and installation of the distribution switch per the following specification. **General Features** 1. The proposed distribution switch should have a non-blocking architecture. 2. The proposed distribution switch should have a minimum of 48 no's of 25G/10G/1G downlink fiber ports with 10 X 25G SFP28 LR transceivers of the same OEM. 3. The proposed distribution switch should have a minimum of 8 no's of 100G (QSFP28)/40G (QSFP+) ports populated with 2X100G QSFP28 SM LR transceivers of the same OEM. 4. The proposed distribution switch should have at least 56 Ports (48 SFP+ ports and 8 QSFP28 ports). **Performance and Scalability** 1. The proposed distribution switch should have a minimum of 4 Tbps switching bandwidth/ capacity. 2. The proposed distribution switch should have a minimum of 2 Bpps forwarding rate/ throughput. 3. The proposed distribution switch should have a minimum of 32 GB flash memory/storage. 4. The proposed distribution switch should have a minimum of 16 GB RAM 5. The proposed distribution switch should support a minimum of 4K VLANs.				

		6. The proposed distribution switch should support the VXLAN feature. 7. The proposed distribution switch should support a jumbo frame of a minimum 9K size. **8.** The proposed distribution switch should support Fabric Management/SDN integration using open flow/ OpenStack/ Rest API.				
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S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/Remarks**
		Dimension and Environmental 1. The proposed distribution switch should be one rack unit in size (height = 4.4cm). 2. The proposed distribution switch should support operating temperatures 0º to 40ºC. 3. The proposed distribution switch should support operating relative humidity of 10% to 85%. **Power Supply and FAN** 1. The proposed distribution switch should have a Hot-swappable internal redundant power supply. 2. The proposed distribution switch should have at least two airflow fan units/modules. **Industry Standards** 1. The proposed distribution switch should support IEEE 802.1D spanning tree protocol (STP). 2. The proposed distribution switch should support IEEE 802.1p multicasting. 3. The proposed distribution switch should support IEEE 802.1Q trunking. 4. The proposed distribution switch should support IEEE 802.1s multiple spanning tree protocol (MSTP). 5. The proposed distribution switch should support IEEE 802.1w rapid spanning tree protocol (RSTP). 6. The proposed distribution switch should support IEEE 802.1x port-based network access control (PNAC) or Port-based traffic group/QoS. 7. The proposed distribution switch should support IEEE 802.1AB link				

		layer discovery protocol (LLDP). 8. The proposed distribution switch should support IEEE 802.3ad link aggregation control protocol (LACP). 9. The proposed distribution switch should support SNMP v1, v2, and v3. 10. The proposed distribution switch /switch's operating system should be certified by EAL 2/NDcPP, ICSA Labs, TEC/TSEC, STQC, IC3S or any accredited lab by governemnt of India.				
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S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/Remarks**
		11. The proposed distribution switch should follow safety and EMC standards, including UL-60950, CAN/CSA 22.2 No.60950, EN 60950, IEC60950, FCC 47CFR Part 15, EN 55022/55032, VCCI, CISPR 22 or 24, EN 55024, Reduction of Hazardous Substances (ROHS) 6, or equivalent Indian standards. **Layer-3 Features** 1. The proposed distribution switch should support IPv4/IPv6 static routing. 2. The proposed distribution switch should support Virtual Router Redundancy Protocol (VRRP). 3. The proposed distribution switch should support the OSPF protocol. 4. The proposed distribution switch should support policy-based switching/ routing. 5. The proposed distribution switch must support a minimum of 100K IPv4 and 100K IPv6 routes. 6. The proposed distribution switch should support a minimum of 32K IPv4 and 32K IPv6 multicast routes. 7. The proposed distribution switch should support Multicast Routing Protocols for IPv4 and IPv6. 8. The proposed distribution switch must support IP Source Guard/Source IP Lockdown, DHCP snooping, and Dynamic ARP				

		Inspection. **Layer-2 Features** 1. The proposed distribution switch should have a minimum of 200K MAC address support. 2. The proposed distribution switch should support IGMP filtering/IGMP snooping filters. 3. The proposed distribution switch should support the discovery of the same vendor's neighboring device to help troubleshoot connectivity problems. 4. The proposed distribution switch should support per-port broadcast storm control to prevent faulty end stations from degrading overall system performance, or it should support flood				

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		rate limitation or storm control to minimize the network impact of ingress flooding traffic. 5. The proposed distribution switch should support IGMP v1, v2 & v3 Snooping. 6. The proposed distribution switch should support eight egress queues per port. 7. The proposed distribution switch should support stacking/ Virtual Chassis Technology. **Quality of Service (QoS) & Control** 1. The proposed distribution switch should support Command Line Interface (CLI). 2. The proposed distribution switch system should support 802.1P classification and the mark of packet QoS, DSCP, etc. 3. The proposed distribution switch should support flow control of ethernet ports to control traffic rates during congestion by allowing congested nodes to pause link operation at the other end for receiving traffic as per IEEE 802.3x **Management** 1. The proposed distribution switch should support Layer 2 traceroute to ease troubleshooting by identifying the physical path a packet takes from source to destination, or the switch should support Layer 3 Traceroute.				

		2. The proposed distribution switch should support Trivial File Transfer Protocol (TFTP) for software upgrades. 3. The proposed distribution switch should have an out-of-band management. 4. The proposed distribution switch should have a console port. 5. The proposed distribution switch should support SNMPv1, SNMPv2, and SNMPv3. 6. The proposed distribution switch should support Port security to secure access to an access or trunk port based on MAC address. 7. The proposed distribution switch should support Simple Network Time Protocol (SNTP) for time synchronization.				
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S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/Remarks**
		Warranty 1. The product should be supplied with a five-year warranty. The OEM should have a 24x7 support center. OEM should have an India toll-free number reflected on the official website. The vendor will provide documentary proof regarding support and warranty directly from the OEM. 2. OEM should not have announced the "End of Sale" and "End of Life" for the proposed product at the time of bidding.				
7	Access switch type 1	Supply, configuration, and installation of an access switch per the following specifications. **General Features** 1. The proposed access switch should have a non-blocking architecture. 2. The proposed access switch should have a minimum of 24 nos. 10/100/1000 base T Ethernet Ports. 3. The proposed access switch should have a minimum of 4 SFP+ ports. 4. The proposed access switch should have two separate stacking/VC ports. The port should be populated with 1 meter Stack/DAC cable and all necessary licenses and accessories required for stacking with at least 80 Gbps stacking/VC bandwidth.				

		5. The proposed access switch should have at least 30 Ports (4 SFP+ ports, 2 X stacking ports, and 24 copper ports). **Performance and Scalability** 1. The proposed access switch should have a minimum of 128 Gbps switching bandwidth/capacity excluding stacking bandwidth. 2. The proposed access switch should have a minimum of 95 Mpps forwarding rate/ Throughput, excluding stacking bandwidth. 3. The proposed access switch should have a minimum of 2GB flash memory. 4. The proposed access switch should have a minimum of 2GB DRAM. 5. The proposed access switch should support a minimum of 4K VLANs. 6. The proposed access switch should support a minimum of 9 K frame size. **Dimension and Environmental** 1. The proposed access switch should be one rack unit in size (height = 4.4cm). 2. The proposed access switch should support Operating temperatures 0ºC to 40ºC. 3. The proposed access switch should support operating relative humidity of 10 % to 85%.				

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		Power Supply and Fan 1. The proposed access switch should support a hot-swappable internal redundant power supply. 2. The proposed access switch should have at least one field-replaceable fan unit/module. **Industry Standards** 1. The proposed access switch should support IEEE 802.1D spanning tree protocol (STP). 2. The proposed access switch should support IEEE 802.1p multicasting. 3. The proposed access switch should support IEEE 802.1Q trunking.				

		4. The proposed access switch should support IEEE 802.1s multiple spanning tree protocol (MSTP). 5. The proposed access switch should support IEEE 802.1w rapid spanning tree protocol (RSTP). 6. The proposed access switch should support IEEE 802.1x port-based network access control (PNAC) or Port-based traffic group/QoS. 7. The proposed access switch should support IEEE 802.1AB link layer discovery protocol (LLDP). 8. The proposed access switch should support IEEE 802.3ad link aggregation control protocol (LACP). 9. The proposed access switch should support SNMP v1, v2, and v3. 10. The proposed access switch /switch's operating system should be certified by any accredited lab endorsed by Government of India i.e. TEC/TSEC, SQTC, BIS, EAL 2 NDcPP, ICSA Labs, IC3S. 11.The proposed access switch should follow safety and EMC standards, including UL-UL60950, CAN/CSA 22.2 No.60950, EN 60950, IEC60950, FCC 47CFR Part 15, EN 55022/55032, VCCI, CISPR 22 or 24, EN 55024, Reduction of Hazardous Substances (ROHS) 6, or better. **Basic Layer-3 Protocol** 1. The proposed access switch should support Ipv4/Ipv6 static routing. 2. The proposed access switch should support a minimum of 8K IPv4 and 8K IPv6 routes.				

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		3. The proposed access switch should support multicast routes/entries with a minimum of 2K for both IPv4 and IPv6. **Layer-2 Features** 1. The proposed access switch should have a minimum of 32K MAC address support. 2. The proposed access switch should support IGMP filtering/ IGMP snooping filters. 3. The proposed access switch should support the discovery of the neighbouring device of the same vendor to help troubleshoot connectivity problems.				

		4. The proposed access switch should support Voice VLAN to simplify IP telephony installations by keeping voice traffic on a separate VLAN. 5. The proposed access switch should support stacking/ Virtual chassis Technology to allow at least six switches (Same model or with a higher model of the same OEM) as a single logical device. **Quality of Service (QoS) & Control** 1. The proposed access switch should support Command Line Interface (CLI). 2. The proposed access switch should have a management port. 3. The proposed access switch should support 802.1P classification and the mark of packet QoS, DHCP, etc. 4. The proposed access switch should support flow control of ethernet ports to control traffic rates during congestion by allowing congested nodes to pause link operation at the other end for receiving traffic as per IEEE 802.3x. **Management** 1. The proposed access switch should support software upgrades. 2. The proposed access switch should have a console port. 3. The proposed access switch should support port security to secure access to an access or trunk port based on the MAC address. 4. The proposed access switch should support a Simple Network Time Protocol (SNTP) for synchronization.				
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S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/Remarks**
		Warranty 1. The proposed access switch should be supplied with a five-year comprehensive warranty. The OEM should have a 24x7 support center. OEM should have an India toll-free number reflected on the official website. The vendor will provide documentary proof regarding support and warranty directly from the OEM. 2. OEM should not have announced the "End of Sale" and "End of Life" for the proposed product at the time of bidding.				

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8	Access switch type 2	Supply, configuration, and installation of an access switch as per the following specification. **General Features** 1. The proposed access switch should have a non-blocking architecture. 2. The proposed access switch should have a minimum of 48 nos. 10/100/1000 base T Ethernet Ports. 3. The proposed access switch should have a minimum of 4 SFP+ ports. 4. The proposed access switch should have two separate stacking/VC ports. The port should be populated with one meter Stack/DAC cable, licenses, and accessories required for stacking with at least 80 Gbps stacking/VC bandwidth. 5. The proposed access switch should have at least 54 Ports (4 SFP+ ports, 2 X stacking ports, and 48 copper ports). **Performance and Scalability** 1. The proposed access switch should have a minimum of 176 Gbps switching bandwidth/capacity excluding stacking bandwidth. 2. The proposed access switch should have a minimum of 130 Mpps forwarding rate/ throughput excluding stacking bandwidth. 3. The proposed access switch should have a minimum of 2GB flash memory. 4. The proposed access switch should have a minimum of 2GB or more DRAM. 5. The proposed access switch should support a minimum of 4K VLANs 6. The proposed access switch should support a minimum of 9K jumbo frame size. **Dimension and Environmental** 1. The proposed access switch should be one rack unit in size (height = 4.4cm).				

		2. The proposed access switch should support Operating temperatures 0º to 40ºC. 3. The proposed access switch should support operating relative humidity of 10% to 85%.				

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S. No	Name of Item	Detailed Specifications	Compliance (Y/N)	PART/ Model No.	Support/Doc Pg. No.	Deviation/Remarks
		Power Supply and Fan 1. The proposed access switch should support Hot swappable internal redundant power supply. 2. The proposed access switch should have at least one field-replaceable fan unit/module. **Industry Standards** 1. The proposed access switch should support IEEE 802.1D spanning tree protocol (STP). 2. The proposed access switch should support IEEE 802.1p multicasting. 3. The proposed access switch should support IEEE 802.1Q trunking. 4. The proposed access switch should support IEEE 802.1s multiple spanning tree protocol (MSTP). 5. The proposed access switch should support IEEE 802.1w rapid spanning tree protocol (RSTP). 6. The proposed access switch should support IEEE 802.1x port-based network access control (PNAC) or port-based traffic group/QoS. 7. The proposed access switch should support IEEE 802.1AB link layer discovery protocol (LLDP). 8. The proposed access switch should support IEEE 802.3ad link aggregation control protocol (LACP). 9. The proposed access switch should support SNMP v1, v2, and v3. 10. The proposed access switch /switch's operating system should be certified by EAL 2/NDcPP, ICSA Labs, TEC/TSEC, STQC, IC3S or any accredited lab by governemnt of India. 11. The proposed access switch should follow safety and EMC				

		standards, including UL-60950, CAN/CSA 22.2 No.60950, EN 60950, IEC60950, FCC 47CFR Part 15, EN 55022/55032, VCCI, CISPR 22 or 24, EN 55024, Reduction of Hazardous Substances (ROHS) 6, or equivalent Indian standards. **Basic Layer-3 Protocol** 1. The proposed access switch should support Ipv4/Ipv6 static routing. 2. The proposed access switch should support a minimum of 8K IPv4				

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		and 8K IPv6 routes. 3. The proposed access switch should support multicast routes/entries with a minimum of 2K for both IPv4 and IPv6. **Layer-2 Features** 1. The proposed access switch should have a minimum of 32K MAC address support. 2. The proposed access switch should support IGMP filtering 3. The proposed access switch should support the discovery of the neighbouring device of the same vendor to help troubleshoot connectivity problems. 4. The proposed access switch should support Voice VLAN to simplify IP telephony installations by keeping voice traffic on a separate VLAN. 5. The proposed access switch should support stacking/ virtual chassis technology to allow at least six switches (Same model or with a higher model of the same OEM) as a single logical device. **Quality of Service (QoS) & Control** 1. The proposed access switch should support a command line interface (CLI). 2. The proposed access switch should have a management port. 3. The proposed access switch should support 802.1P classification and the mark of packet QoS, DSCP, etc. 4. The proposed access switch should support Flow control of Ethernet				

		ports to control traffic rates during congestion by allowing congested nodes to pause link operation at the other end for receiving traffic as per IEEE 802.3x. **Management** 1. The proposed access switch should support software upgrades. 2. The proposed access switch should have a serial console port 3. The proposed access switch should support Port security to secure access to an access or trunk port based on MAC address. 4. The proposed access switch should support a Simple Network Time Protocol (SNTP) for synchronization.				
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		Warranty 1. The proposed access switch should be supplied with a five-year comprehensive warranty. The OEM should have a 24x7 support center. OEM should have an India toll-free number reflected on the official website. The vendor will provide documentary proof regarding support and warranty directly from the OEM. 2. OEM should not have announced the "End of Sale" and "End of Life" for the proposed access switch.				
9	Access Switch type 3	Supply, configuration, and installation of a POE switch as per the following specifications. **General Features** 1. The proposed POE switch should have a non-blocking architecture. 2. The proposed POE switch should have a minimum of 24 x 100M/1/2.5/5/10GbE PoE access port. 3. The proposed POE switch should have a minimum of 4 SFP28 ports (25G port) populated with 2X25G SFP28 SM LR transceivers of the same OEM. 4. The proposed POE switch should have two separate stacking/VC ports. The stacking ports should be populated with one meter Stack/DAC cable, licenses, and accessories with at least 160 Gbps stacking/VC bandwidth. 5. The proposed POE switch should have at least 30 Ports (4 SFP28 ports, 2X stacking ports, and 24 copper ports).				

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		6. The proposed POE switch should have an overall PoE power budget of 1700W with a dual power supply. **Performance and Scalability** 1. The proposed POE switch should have a minimum of 680 Gbps switching bandwidth/ capacity excluding stacking bandwidth 2. The proposed POE switch should have a minimum of 505 Mpps forwarding rate/ throughput excluding stacking bandwidth. 3. The proposed POE switch should have a minimum of 8 GB flash memory. 4. The proposed POE switch should have a minimum of 4 GB RAM. 5. The proposed POE switch should support a minimum of 4K VLANs. 6. The proposed POE switch should support a minimum of 9K jumbo frame size. **Dimension and Environmental** 1. The proposed POE switch should be one rack unit in size (height = 4.4cm). 2. The proposed POE switch should support operating temperatures of 0ºC to 40ºC. 3. The proposed POE switch should support 10% to 85% operating humidity. **Power Supply and FAN** 1. The proposed POE switch should have a hot-swappable internal redundant power supply. 2. The proposed POE switch should have hot-swappable field-replaceable redundant fans. **Industry Standards** 1. The proposed POE switch should support IEEE 802.1D spanning tree protocol (STP). 2. The proposed POE switch should support IEEE 802.1p multicasting. 3. The proposed POE switch should support IEEE 802.1Q trunking. 4. The proposed POE switch should support IEEE 802.1s multiple spanning tree protocol (MSTP). 5. The proposed POE switch should support IEEE 802.1w				

		rapid spanning tree protocol (RSTP).				

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		6. The proposed POE switch should support IEEE 802.1x port-based network access control (PNAC) or port-based traffic groups/QoS. 7. The proposed POE switch should support IEEE 802.1AB link layer discovery protocol (LLDP). 8. The proposed POE switch should support IEEE 802.3ad link aggregation control protocol (LACP). 9. The proposed POE switch should support SNMP v1, v2, and v3. 10. The proposed POE switch /switch's operating system should be certified by any accredited lab endorsed by Government of India i.e. TEC/TSEC, SQTC, BIS, EAL 2 NDcPP, ICSA Labs, IC3S. 11. The proposed POE switch should follow safety and EMC standards, including UL-UL60950, CAN/CSA 22.2No.60950, EN 60950, IEC60950, FCC 47CFR Part 15, EN 55022/55032, VCCI, CISPR 22 or 24, EN 55024, Reduction of Hazardous Substances (ROHS) 6, or better. 12. The proposed POE switch should support IEEE 802.3af: PoE. 13. The proposed POE switch should support IEEE 802.3at: PoE+. 14. The proposed POE switch should support IEEE 802.3bt: PoE++. **Basic Layer-3 Protocol** 1. The proposed POE switch should support Ipv4/Ipv6 static routing. 2. The proposed POE switch should support a minimum of 16K IPv4 and 16K IPv6 routes. 3. The proposed POE switch should support multicast routes/entries of 8K for IPV4 and 8K for IPV6. **Layer-2 Features** 1. The proposed POE switch should have a minimum of 64K MAC address support. 2. The proposed POE switch should support IGMP filtering. 3. The proposed POE switch should support the discovery of the neighbouring device of the same vendor to help troubleshoot connectivity problems. 4. The proposed POE switch should support Voice VLAN to simplify IP telephony installations by keeping voice traffic on a separate				

		VLAN. 5. The proposed POE switch should support stacking/ Virtual chassis				
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		Technology to allow at least six switches (Same modal or with a higher modal of the same OEM) as a single logical device. **Quality of Service (QoS) & Control** 1. The proposed POE switch should support a command line interface (CLI). 2. The proposed POE switch should have a management port. **Management** 1. The proposed POE switch should support software upgrades. 2. The proposed POE switch should have a console port 3. The proposed POE switch should support Port security to secure access to an access or trunk port based on MAC address. 4. The proposed POE switch should support synchronization with a Simple Network Time protocol (SNTP). **Warranty** 1. The proposed POE switch should be supplied with a five-year comprehensive warranty. The OEM should have a 24x7 support center. OEM should have an India toll-free number reflected on the official website. The vendor will provide documentary proof regarding support and warranty directly from the OEM. 2. OEM should not have announced the "End of Sale" and "End of Life" for the proposed POE switch at the time of bidding.				
10	Access switch type 4	Supply, configuration, and installation of an access switch per the following specifications. **General Features** 1. The proposed access switch should have a non-blocking architecture. 2. The proposed access switch should have a minimum of 24 nos. 10/100/1000 base T POE Ethernet Ports. 3. The proposed access switch should have a minimum of 4 SFP+ ports. 4. The proposed access switch should have two separate stacking/VC ports. The port should be populated with a 1-meter Stack/DAC cable and all necessary licenses and accessories required for stacking with				

		at least 80 Gbps stacking/VC bandwidth. 5. The proposed access switch should have at least 30 Ports (4 SFP+ ports, 2 X stacking ports, and 24 copper ports).				
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S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/Remarks**
		6. The proposed POE switch should have an overall PoE power budget of 700 W with a dual power supply. **Performance and Scalability** 1. The proposed access switch should have a minimum of 128 Gbps switching bandwidth/capacity, excluding stacking bandwidth. 2. The proposed access switch should have a minimum of 95 Mpps forwarding rate/ Throughput, excluding stacking bandwidth. 3. The proposed access switch should have a minimum of 2GB flash memory. 4. The proposed access switch should have a minimum of 2GB DRAM. 5. The proposed access switch should support a minimum of 4K VLANs. 6. The proposed access switch should support a minimum of 9K frame size. **Dimension and Environmental** 1. The proposed access switch should be one rack unit in size (height = 4.4cm). 2. The proposed access switch should support Operating temperatures 0º to 40ºC. 3. The proposed access switch should support Operating relative humidity of 10% to 85%. **Power Supply and Fan** 1. The proposed access switch should support a hot-swappable internal redundant power supply. 2. The proposed access switch should have at least one field-replaceable fan unit/module. **Industry Standards** 1. The proposed access switch should support IEEE 802.1D spanning tree protocol (STP). 2. The proposed access switch should support IEEE 802.1p				

		multicasting. 3. The proposed access switch should support IEEE 802.1Q trunking. 4. The proposed access switch should support IEEE 802.1s multiple spanning tree protocol (MSTP). 5. The proposed access switch should support IEEE 802.1w rapid spanning tree protocol (RSTP).				
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S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/Remarks**
		6. The proposed access switch should support IEEE 802.1x port-based network access control (PNAC) or Port-based traffic group/QoS. 7. The proposed access switch should support IEEE 802.1AB link layer discovery protocol (LLDP). 8. The proposed access switch should support IEEE 802.3ad link aggregation control protocol (LACP). 9. The proposed access switch should support SNMP v1, v2, and v3. 10. The proposed access switch /switch's operating system should be certified by any accredited lab endorsed by Government of India i.e. TEC/TSEC, SQTC, BIS, EAL 2 NDcPP, ICSA Labs, IC3S. 11. The proposed core switch should follow safety and EMC standards, including UL60950, CAN/CSA 22.2 No.60950, EN 60950, IEC60950, FCC 47CFR Part 15, EN 55022/55032, VCCI, CISPR 22 or 24, EN 55024, Reduction of Hazardous Substances (ROHS), or equivalent Indian standards. 12. The proposed POE switch should support IEEE 802.3af: PoE. 13. The proposed POE switch should support IEEE 802.3at: PoE+. **Basic Layer-3 Protocol** 1. The proposed access switch should support Ipv4/Ipv6 static routing. 2. The proposed access switch should support a minimum of 8K IPv4 and 8K IPv6 routes. 3. The proposed access switch should support multicast routes/entries with a minimum of 2K for IPV4 and 2K for IPV6. **Layer-2 Features** 1. The proposed access switch should have a minimum of 32K MAC address support.				

		2. The proposed access switch should support IGMP filtering/ IGMP snooping filters. 3. The proposed access switch should support the discovery of the neighbouring device of the same vendor to help troubleshoot connectivity problems. 4. The proposed access switch should support Voice VLAN to simplify IP telephony installations by keeping voice traffic on a separate VLAN.				

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		5. The proposed access switch should support stacking/ Virtual chassis Technology to allow at least six switches (Same model or with a higher model of the same OEM) as a single logical device. **Quality of Service (QoS) & Control** 1. The proposed access switch should support the Command Line Interface (CLI). 2. The proposed access switch should have a management port. 3. The proposed access switch should support 802.1P classification and the mark of packet QoS, DHCP, etc. 4. The proposed access switch should support flow control of ethernet ports to control traffic rates during congestion by allowing congested nodes to pause link operation at the other end for receiving traffic as per IEEE 802.3x. **Management** 1. The proposed access switch should support software upgrades. 2. The proposed access switch should have a console port. 3. The proposed access switch should support port security to secure access to an access or trunk port based on the MAC address. 4. The proposed access switch should support a Simple Network Time Protocol (SNTP) for synchronization. **Warranty** 1. The proposed access switch should be supplied with a five-year comprehensive warranty. The OEM should have a 24x7 support center. OEM should have an India toll-free number reflected on the official website. The vendor will provide documentary proof				

		regarding support and warranty directly from the OEM 2. OEM should not have announced the "End of Sale" and "End of Life" for the proposed product at the time of bidding.				
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11	Wireless Controller	Supply, configuration, and installation of a wireless controller as per the following specifications. **Essential Features** 1. The proposed wireless controller can be on-premises or cloud- based as well. 2. The proposed on-premises wireless controller should have 10Gbps of throughput dedicated hardware appliance, purpose-built for Wi- Fi control and management. 3. The proposed on-premises wireless controller should have a minimum of 2x 10/100/1000 RJ45 Ethernet Ports and 2 x 10G ports populated with 2 X 10G SFP+ SR transceivers. 4. The proposed on-premises wireless controller should have a redundant power supply and redundant fans. 5. The proposed wireless controller should have an easy setup through PnP/ZTP network discovery and the installation wizard. 6. The proposed wireless controller should support 1000 APs from day one and be scalable up to 2000 APs. 7. The proposed wireless controller should handle at least 32,000 concurrent devices. **Redundancy Features:** 1. The proposed on-premises wireless controller should provide active/active or active/passive with 1+1 redundancy. 2. The proposed wireless controller should provide air-time fairness between these different speed clients, the faster clients should not starve slower clients, and faster clients should not be adversely affected by slower clients. 3. The proposed wireless controller should be able to map SSID to VLAN and dynamic VLAN support for the same SSID. 4. The proposed wireless controller should support automatic channel selection for interference avoidance.				

		5. The proposed wireless controller should support a client troubleshooting feature that allows an administrator to focus on a				

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		specific client device and its connectivity status. 6. The proposed wireless controller should support the ability to create different zones in which AP can be grouped logically or physically based on location, e.g., different buildings on campus can be configured as different zones so that each zone will have different configurations and policies. 7. The proposed wireless controller should support hotspot 2.0 (passport). 8. The proposed on-premises wireless controller should support the auto-deployment of APs at different locations. 9. Access points can discover the proposed wireless controllers across the Layer-2/Layer-3 network through DHCP or DNS. **Security & Monitoring** 1. The proposed wireless controller should support open, 802.1x/EAP, PSK, EPSK/DPSK/MPSK/PPSK/IPSK, WPA, WPA2-AES, WPA-TKIP, WEP, EAP-SIM, EAP-AKA for security. 2. The proposed wireless controller should support authentication through the external radius /directory services. 3. The proposed wireless controller should support WIDS/WIPS for security, including rogue AP detection and prevention. 4. The proposed wireless controller should support L2 Client Isolation so users cannot access each other's devices. Isolation should have the option to apply on AP or SSIDs. 5. The proposed on-premises architecture should be a controller- based Architecture with thin/thick AP deployment and able to perform encryption/decryption of 802.11 packets at the AP. 6. The proposed wireless controller should support operating system/device fingerprinting, bandwidth rate limit, and VLAN mapping.				

		7. The proposed wireless controller should be able to present a suitable dashboard with information on the status of the wireless network. 8. The proposed wireless controller should be able to raise critical				
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		alarms/alerts by emailing. 9. The proposed wireless controller should provide customized reporting with at least seven days or more of historical wireless LAN information. 10. The proposed wireless controller should filter the alarms and event Logs based on APs, SSID, or zones. 11. The proposed wireless controller should support the syslog towards the external syslog server. 12. The proposed wireless controller should support access point locations on floor plans and visual indication of AP online & offline/heat-map. **QoS features** 1. The proposed wireless controller should support per-SSID or per-user bandwidth rate limiting. 2. The proposed wireless controller must support band steering where 5 GHz clients are forced to connect to over 5 GHz radio to provide better load balancing among 2.4 GHz and 5 GHz radios. 3. The proposed wireless controller should support quality of service features like 802.11e-based QoS enhancements, WMM, or equivalent. **Client/ Guest Management** 1. The proposed wireless controller should provide a guest login portal to authenticate users outside the organization. 2. The proposed wireless controller should support guest access. 3. The proposed wireless controller should be able to provide a web- based application that allows the administrator to create guest accounts with validity for a fixed duration, like hours or days. **Management Features** 1. The proposed wireless controller should have administration access through HTTPS GUI. 2. The proposed wireless controller should have security features				

		for administrative users. 3. The proposed wireless controller should have a library of well- documented REST APIs to allow integration with 3rd party apps.				
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		4. The proposed wireless controller should have all the necessary licenses for the above-mentioned features. **Warranty** 1. The proposed wireless controller should be supplied with a five- year warranty. The OEM should have a 24x7 support center. OEM should have an India toll-free number reflected on the official website. The vendor will provide documentary proof regarding support and warranty directly from the OEM. 2. OEM should not have announced the "End of Sale" and "End of Life" for the proposed product at the time of bidding.				
12	Access point type 1	Supply, configuration, and installation of 4:4X4 Wi-Fi indoor access point as per the following specifications. **Radio Specifications** 1. The proposed access point should be a dual-band, dual-radio indoor access point. The minimum data rate supported shall be 2400 Mbps in 5 GHz and 570 Mbps in 2.4 GHz. 2. The proposed access point should have 4x4:4 MU-MIMO antennas for transmission in 5 GHz and 2X2:2 MU- MIMO in 2.4 GHz. 3. The proposed access point must have MU-MIMO antennas. 4. The proposed access point should have at least a 3 dBi antenna gain for 5GHz and 3 dBi for 2.4GHz radio. 5. The proposed access point should support a minimum of 2.9 Gbps aggregate data rates. 6. The proposed access point should support the latest amendments of IEEE 802.11 a/b/g/n/ac/ax. 7. The proposed access point should provide at least 18 dBm transmit power on both radios. 8. The proposed access point should support at least 16 SSID. 9. The proposed access point should have adaptive antenna				

		technology/beam forming technology for performance optimization and interference mitigation features. **Interface and Power Requirements** 1. The proposed access point should have at least one 100/1000/2500				
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		Mbps RJ-45-based Ethernet PoE port 2. The proposed access point should have at least one 100/1000 Mbps RJ-45-based Ethernet port, preferably PoE. 3. The proposed access point should have a maximum of 35 Watts of power consumption for full functionality. 4. The proposed access point should have IoT/BLE radio. **Networking Requirements** 1. The proposed access point should handle a minimum of 100 concurrent devices. 2. The proposed access point should be flexible hardware that can be deployed standalone, or controller based. 3. The proposed access point should support IPv6, IEEE 802.1Q, band balancing, airtime fairness, QoS, and ACL features. 4. The proposed access point should be able to act as WIDs/WIPS. 5. The proposed access point should provide zero service interruption and handle client traffic if the controller goes down. **Security & Monitoring** 1. The proposed access point should support auth/encryption methods for wireless, i.e., Open, WEP, WPA2-AES, WPA3-SAE, IEEE 802.1X/EAP, and AAA. 2. The proposed access point should follow Wi-Fi alliance standards WMM, 802.11d, 802.11h, and 802.11e. 3. The proposed access point should support role-based access control, rate-limiting, device fingerprinting, 802.11w MFP, and 802.11r fast roaming. 4. The proposed access point should support management frame protection. **Management Features** 1. The proposed access point should have administration access through				

		a secure graphic user interface 2. Apart from controller-based configuration, the proposed access point should provide standalone operation without changing AP				

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		hardware. If the controller configuration disallows GUI/CLI access, it should follow the same. **Mandatory Compliance:** 1. The proposed access point should be plenum-rated (UL 2043). 2. The proposed access point should have an operating temperature of 0-40 ºC. 3. The proposed access point should have been approved by the Wireless Planning Commission (TRAI, Govt of India). ETA certificates or Wi-Fi alliance certificates are also mandatory. **Warranty** 1. The proposed access point, all licenses, and accessories should be supplied with a five-year warranty. The OEM should have a 24x7 support center. OEM should have an India toll-free number reflected on the official website. The vendor will provide documentary proof regarding support and warranty directly from the OEM. 2. OEM should not have announced the "End of Sale" and "End of Life" for the proposed product at the time of bidding.				
13	Access point type 2	Supply, configuration, and installation of 8:8X8 Wi-Fi indoor access point as per the following specifications. **Radio Specifications** 1. The proposed access point should be a dual-band, dual-radio indoor access point. The minimum data rate supported shall be 4800 Mbps in 5 GHz and 1140 Mbps in 2.4 GHz. 2. The proposed access point should have 8x8:8 MU-MIMO antennas for transmission in 5 GHz and 4X4:4 MU- MIMO in 2.4 GHz. 3. The proposed access point should have at least a 2 dBi antenna gain for both radios. 4. The proposed access point must have MU-MIMO antennas. 5. The proposed access point should support the latest amendments of	1			

		IEEE 802.11 a/b/g/n/ac/ax. 6. The proposed access point should provide at least 18 dBm transmit power on both radios.				
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		7. The proposed access point should have adaptive antenna technology/beam forming technology for performance optimization and interference mitigation features. **Interface and Power Requirements** 1. The proposed access point should have at least one 100/1000/2500/5000 Mbps RJ-45-based ethernet PoE port. 2. The proposed access point should have at least one 100/1000 Mbps RJ-45-based ethernet port. 3. The proposed access point should have a maximum power consumption of 35 Watts for full functionality. 4. The proposed access point should have IoT /BLE Radio. **Networking Requirements** 1. The proposed access point should handle a minimum of 200 concurrent devices. 2. The proposed access point should be flexible hardware to be deployed as standalone and controller based. 3. The proposed access point should support IPv6, IEEE 802.1Q, band balancing, airtime fairness, QoS, and ACL features. 4. The proposed access point should be able to act as WIDs/WIPS. 5. The proposed access point should provide zero service interruption and handle client traffic if the controller goes down. **Security & Monitoring** 1. The proposed access point should support auth/encryption methods for wireless, i.e., Open, WEP, WPA2-AES, WPA3-SAE, IEEE 802.1X/EAP, and AAA. 2. The proposed access point should follow Wi-Fi alliance standards WMM, 802.11d, 802.11h, and 802.11e. 3. The proposed access point should support role-based access control, rate-limiting, device fingerprinting, 802.11w MFP, and 802.11r fast roaming.	2.			

		4. The proposed access point should support management frame protection.				
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		Management Features 1. The proposed access point should have administration access through a secure graphic user interface. 2. Apart from a controller-based configuration, the proposed access point should provide standalone operation without changing the AP hardware. If the controller configuration disallows GUI/CLI access, it should follow the same. **Mandatory Compliance:** 1. The proposed access point should be plenum-rated (UL 2043). 2. The proposed access point should have an operating temperature of 0-40 ºC. 3. The proposed access point should have been approved by the Wireless Planning Commission (TRAI, Govt of India). ETA certificate or Wi-Fi alliance certificate is also mandatory. **Warranty** 1. The proposed access point should be supplied with a five-year warranty. The OEM should have a 24x7 support center. OEM should have an India toll-free number reflected on the official website. The vendor will provide documentary proof regarding support and warranty directly from the OEM. 2. OEM should not have announced the "End of Sale" and "End of Life" for the proposed product at the time of bidding.				
14.	Access point type 3	Supply, configuration, and installation of 2:2X2 Wi-Fi outdoor access point per the following specifications. 1. The proposed access point should be a dual-band, dual-radio outdoor. The minimum data rate supported shall be 1150 Mbps in 5 GHz and 570 Mbps in 2.4 GHz. 2. The proposed access point should have 2x2:2 MU-MIMO antennas for transmission in both bands. 3. The proposed access point must have MU-MIMO antennas. 4. The proposed access point should support the latest amendments of				

		IEEE 802.11 a/b/g/n/ac/ax. 5. The proposed access point should have a 1 X 10/100/1000/2500 Mbps RJ-45 POE port. 6. The proposed access point should be centrally managed and able to				
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		work as a standalone. 7. The proposed access point should operate in full MU-MIMO mode with 802.3af/at POE. 8. The proposed access point must be supplied with a POE Injector from the same OEM 9. The proposed access point should support security mechanisms to protect the communication between the wireless controller and the access point. 10. The proposed access point should detect clients with dual-band capability and automatically steer such clients to use the 5 GHz band instead of the 2.4 GHz band. 11. The proposed access point should have dual-polarized antennas, which should be integrated inside the access point enclosure to minimize damage and create a low-profile unit that does not stand out visually. 12. The proposed access point should have omnidirectional antennas. 13. The proposed access point should support 802.1q VLAN tagging. 14. The proposed access point should support authentication/encryption methods for wireless, i.e., Open, WEP, WPA2-AES, IEEE 802.1X/EAP, and AAA. 15. The proposed access point should support role-based access control, rate-limiting, device fingerprinting, 802.11w MFP, and 802.11r fast roaming. 16. The proposed access point should support management frame protection. 17. The proposed access point should follow Wi-Fi alliance standards WMM, 802.11d, 802.11h, and 802.11e. 18. The proposed access point should select channels based on measuring throughput capacity in real-time. 19. The proposed access point should support transmit power tuning in 1dB increments to reduce interference and RF hazards.				

		20. The proposed access point should have at least a 5 dBi antenna gain for both radios. 21. The proposed access point should support 8 BSSIDs on both radios				

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		for multiple differentiated user services. 22. The proposed access point should support 250 or more clients. 23. The proposed access point should support 16 SSID. 24. The proposed access point should support IPv6 clients. 25. The proposed access point should support remote capture of 802.11 and/or 802.3 frames without disrupting client access. 26. The proposed access point should have an operating temperature of -10°C to 60°C. 27. The proposed access point should have an operating humidity of 5% to 90%. 28. The proposed access point should have been approved by the Wireless Planning Commission (TRAI, Govt of India). ETA certificate or Wi-Fi alliance certificate is also mandatory. 29. The proposed access point must be IP67 rated and have a minimum of 100 km/h wind survivability. 30. The proposed access point should have a mechanism for physical device locking using a padlock /Kensington lock/equivalent. This mechanism could be used with metallic mounts, if required. **Warranty** 1. The proposed access point should be supplied with a five-year warranty. The OEM should have a 24x7 support center. OEM should have an India toll-free number reflected on the official website. The vendor will provide documentary proof regarding support and warranty directly from the OEM. 2. OEM should not have announced the "End of Sale" and "End of Life" for the proposed product at the time of bidding.				

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15	Access Point Type 4	Supply, configuration, and installation of 2:2X2 Wi-Fi indoor access point per the following specifications. **Radio Specifications** 1. The proposed access point should be a dual-band, dual-radio indoor access point. The minimum data rate supported shall be 1200 Mbps in 5 GHz and 570 Mbps in 2.4 GHz. 2. The proposed access point should have 2x2:2 MU-MIMO antennas for transmission on both bands. 3. The proposed access point must have MU-MIMO antennas. 4. The proposed access point should have at least a 3 dBi antenna gain for 5GHz and 3 dBi for 2.4GHz radio. 5. The proposed access point should support a minimum of 1.7 Gbps aggregate data rates. 6. The proposed access point should support the latest amendments of IEEE 802.11 a/b/g/n/ac/ax. 7. The proposed access point should provide at least 18 dBm transmit power on both radios. 8. The proposed access point should support at least 16 SSIDs. 9. The proposed access point should have adaptive antenna technology/beam forming technology for performance optimization and interference mitigation features. **Interface and Power Requirements** 1. The proposed access point should have at least one 100/1000 Mbps RJ-45-based Ethernet PoE port 2. The proposed access point should have a maximum of 35 Watts of power consumption for full functionality. 3. The proposed access point should have IoT /BLE Radio. **Networking Requirements** 1. The proposed access point should handle a minimum of 100 concurrent devices. 2. The proposed access point should be flexible hardware that can be deployed standalone, and controller based.The proposed access point should support IPv6, IEEE 802.1Q, band balancing, airtime fairness, QoS, and ACL features.				

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		3. The proposed access point should be able to act as WIDs/WIPS. 4. The proposed access point should provide zero service interruption and handle client traffic if the controller goes down. **Security & Monitoring** 1. The proposed access point should support auth/encryption methods for wireless, i.e., Open, WEP, WPA2-AES, WPA3-SAE, IEEE 802.1X/EAP, and AAA. 2. The proposed access point should follow Wi-Fi alliance standards WMM, 802.11d, 802.11h, and 802.11e. 3. The proposed access point should support role-based access control, rate-limiting, device fingerprinting, 802.11w MFP, and 802.11r fast roaming. 4. The proposed access point should support management frame protection. **Management Features** 1. The proposed access point should have administration access through a secure graphic user interface. 2. Apart from controller-based configuration, the proposed access point should provide standalone operation without changing AP hardware. If the controller configuration disallows GUI/CLI access, it should follow the same. **Mandatory Compliance:** 1. The proposed access point should be plenum-rated (UL 2043). 2. The proposed access point should have an operating temperature of 0-40 ºC. 3. The proposed access point should have been approved by the Wireless Planning Commission (TRAI, Govt of India). ETA certificate or Wi-Fi alliance certificate is also mandatory. **Warranty** 1. The proposed access point, all licenses, and accessories should be supplied with a five-year warranty. The OEM should have a 24x7 support center. OEM should have an India toll-free number reflected on the official website. The vendor will provide documentary proof regarding support and warranty directly from the OEM.				

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		2. OEM should not have announced the "End of Sale" and "End of Life" for the proposed product when bidding.				
16	XGS-PON OLT	Supply, installation, and configuration of fully populated/ loaded OLT device with EMS per the following specifications- **ITU-T standard:** 1. The proposed XGS-PON OLT should support G.984.1 (General Characteristics). 2. The proposed XGS-PON OLT should support G.984.2 (Physical Media Dependent (PMD) layer). 3. The proposed XGS-PON OLT should support G.984.3 (Transmission convergence layer specification). 4. The proposed XGS-PON OLT should support G.984.4 (ONT management and control interface specification). 5. The proposed XGS-PON OLT should support G.9807.1 (10-Gigabit-capable symmetric passive optical network). 6. The proposed XGS-PON OLT should support GPON cards with an upstream rate of 1.244 Gbps and a downstream rate of 2.488 Gbps. 7. The proposed XGS-PON OLT should support XGS-PON cards with an upstream rate of 9.95 Gbps and a downstream rate of 9.95 Gbps. **Features:** 1. The proposed XGS-PON OLT should support dynamic bandwidth allocation (DBA) for upstream traffic. 2. The proposed XGS-PON OLT should support advanced encryption standards (AES) for downstream traffic. 3. The proposed XGS-PON OLT should support forward error correction (FEC) for upstream and downstream traffic.				

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		4. The proposed XGS-PON OLT should support IP telephony. **Chassis:** 1. The proposed XGS-PON OLT should be Pizza Box with a minimum of 16P combo supported. 2. The proposed XGS-PON OLT should have 16 no's XGS-PON ports populated with 16 no's XGS-PON transceivers of the same OEM. 3. The proposed XGS-PON OLT should have a redundant power supply. 4. The proposed XGS-PON OLT should support 128 ONTs per XGS-PON/ GPON port. 5. The proposed XGS-PON OLT should support Class B+, C+, and C++ PON transceivers. 6. The proposed XGS-PON OLT should support XGS-PON and GPON ports at the same time. **Switching:** 1. The proposed XGS-PON OLT should support a minimum of 4K VLAN. 2. The proposed XGS-PON OLT should support VLAN models per ONT, XGS-pon port, and VLAN Translation. 3. The proposed XGS-PON OLT should support a minimum of 64K MAC addresses. 4. The proposed XGS-PON OLT should support spanning tree protocols like STP, MSTP, etc. 5. The proposed XGS-PON OLT should support 1K multicast groups. 6. The proposed XGS-PON OLT should support VLAN Mapping as untagged, port-based, 802.1Q tagged, and QinQ VLAN. 7. The proposed XGS-PON OLT should support IGMPv2 and IGMPv3 snooping. 8. The proposed XGS-PON OLT should support static routing for IPv4 and IPv6. 9. The proposed XGS-PON OLT should support ONU remote loop detection and prevention. 10. The proposed XGS-PON OLT should support security mechanisms for DOS attacks such as ARP, Syn flood, Smurf, and ICMP attacks.				

		11. The proposed XGS-PON OLT should support SNI and XGS-PON port mirroring.				

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		Network card: 1. The proposed XGS-PON OLT should support a 100G uplink port. 2. The proposed XGS-PON OLT should have at least 2 x 100G optical uplink interfaces. 3. The proposed XGS-PON OLT should have two no's QSFP28 SR transceivers of the same OEM. **Voice:** 1. The proposed XGS-PON OLT should support Asterisk-based IP telephony. **Security:** 1. The proposed XGS-PON OLT should support DHCP snooping, filtering, and relay. 2. The proposed XGS-PON OLT should support port MAC-based IP binding. 3. The proposed XGS-PON OLT should support broadcast/ Multicast protection/ IP anti-spoofing protection, MAC spoofing prevention, IP source guard, and uplink loop detection. 4. The proposed XGS-PON OLT should support rogue ONU/ONT detection, isolation, and mitigation, ONU auto registration & ONU auto-discovery. 5. The proposed XGS-PON OLT should support ACL based on packet filtering, QoS policing (IPv4 & Ipv6), and CLI access control. **Management:** 1. The proposed XGS-PON OLT should have a management and console port. 2. The proposed XGS-PON OLT should support CLI with multiple privileges. 3. The proposed XGS-PON OLT should support remote management using SNMP v1/v2/v3, telnet, and SSH. 4. The proposed XGS-PON OLT should support RADIUS, TACACS+ server for authentication. 5. The proposed XGS-PON OLT should support monitoring using				

		RMON for temperature, humidity, fan speed, and CPU. 6. The proposed XGS-PON OLT should generate alarms with different				

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		categories, i.e., critical/major/minor severity. 7. The proposed XGS-PON OLT should support local and remote syslog logging. 8. The proposed XGS-PON OLT should support NTPv4 for time synchronization. **Operating Requirements:** 1. The proposed XGS-PON OLT should support operating temperatures from 0º to 45ºC. 2. The proposed XGS-PON OLT should support operating humidity from 10% to 85%. **Physical Requirements:** 1. The proposed XGS-PON OLT should be 1 RU 19" standard rack mountable. 2. The proposed XGS-PON OLT must have full front access only. 3. The proposed XGS-PON OLT should have a field-replaceable fan module/tray. **Power Supply:** 1. The proposed XGS-PON OLT should have a redundant power supply with a 6/16 Amp Indian power socket. 2. The proposed XGS-PON OLT should have an AC power supply. **XGS-PON transceiver specifications:** 1. The proposed XGS-PON OLT should have 16 no XGS-PON transceivers. 2. The proposed XGS-PON transceiver should be ITU-TG.9807.1 single fiber bi-directional optical transceiver. 3. The proposed XGS-PON transceiver should be a single-mode, single-fiber transceiver. 4. The proposed XGS-PON transceiver should be a 1577nm 9.95 Gbps transmitter and a 1270nm 9.95 Gbps receiver. 5. The proposed XGS-PON transceiver should be hot-swappable. 6. The proposed XGS-PON transceiver should be SC simplex receptacle				

		form factor 7. The proposed XGS-PON transceiver should have transmitter power from 1.5 dBm to 7 dBm.				
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		8. The proposed XGS-PON transceiver should have a receiver sensitivity of less than or equal to -28dBm. **Element Management Systems.** 1. The proposed XGS-PON OLT must be supplied with EMS (element management system). 2. The EMS should be supplied with compatible hardware and operating systems. 3. The EMS should support OLT remote software upgrades. 4. The EMS should be able to manage the uplink and PON interface. 5. The EMS should be able to manage the service profile (ONU profile). 6. The EMS should be able to manage the VLAN profile. 7. The EMS should be able to manage ONU's subscriber interface. 8. The EMS should be able to manage ONU's service management. 9. The EMS should be able to create, activate, deactivate, and delete ONT. 10. The EMS should be able to ONT remote software upgrades. 11. The EMS should be able to manage ONT Profile. 12. The EMS should be able to monitor current and historical alarms. 13. The EMS should be able to monitor events. 14. The EMS should be able to filter alarms. 15. The EMS should be able to monitor the equipment's (OLT, ONT) performance. 16. The EMS should be able to monitor interface performance. 17. The EMS should be able to export performance reports. 18. The EMS should be able to view topology based on graphical and hierarchical based. 19. The EMS should discover ONT automatically and manually. 20. The EMS should support multiple user accounts. 21. The EMS should support user group management. 22. The EMS should support role-based access controls. 23. The EMS should support manual and scheduled backups of all types				

		of equipment configuration. 24. The EMS should support manual and scheduled backups of the EMS database.				
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		25. The EMS should support EMS log management. 26. The EMS should support inventory management Warranty 27. The proposed XGS-PON OLT and all components should be supplied with a five-year warranty. The OEM should have a 24x7 support center. OEM should have an India toll-free number reflected on the official website. The vendor will provide documentary proof regarding support and warranty directly from the OEM. 28. OEM should not have announced the "End of Sale" and "End of Life" for the proposed product at the time of bidding.				
17	ONU type 1	Supply, installation, and configuration of XGS-PON ONU device per the following specifications- 1. The Proposed XGS ONU should have at least 4 Gigabit Ethernet ports. 2. The Proposed XGS ONU should have one XGS-PON port 3. The Proposed XGS ONU should have dual-band wireless. 4. The Proposed XGS ONU should support the IEEE 802.1D bridge. 5. The Proposed XGS ONU should support IEEE 802.1p QoS. 6. The Proposed XGS ONU should support ITU-T G.987. 7. The Proposed XGS ONU should support IGMP Snooping v2/v3. 8. The Proposed XGS ONU should support a 1K MAC address. 9. The Proposed XGS ONU should support the MAC address limit. 10. The Proposed XGS ONU should support IEEE 802.1Q (VLAN). 11. The Proposed XGS ONU should support VLAN Translation. 12. The Proposed XGS ONU should have a 1x RJ-11 port for a traditional landline phone. 13. The Proposed XGS ONU should have an operating temperature of 0 to 45 ºC. 14. The Proposed XGS ONU should have 10% to 85% operating humidity. 15. The Proposed XGS ONU should be wall or table mountable.				

		16. The Proposed XGS ONU should support the band starting. 17. The Proposed XGS ONU should support 802.11 b/g/n/ac with integrated antennas. 18. The Proposed XGS ONU should have a power supply with input 100-				
Technical Compliance sheet						
S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/Remarks**
		240VAC, 50/60Hz with a 6 Amp Indian socket. **Warranty** 1. The proposed XGS-PON ONU should be supplied with a five-year warranty. The OEM should have a 24x7 support center. OEM should have an India toll-free number reflected on the official website. The vendor will provide documentary proof regarding support and warranty directly from the OEM 2. OEM should not have announced the "End of Sale" and "End of Life" for the proposed product at the time of bidding.				
18	ONU type 2	Supply, installation, and configuration of XGS-PON ONU device as per the following specifications- 1. The Proposed XGS ONU should have at least one Gigabit Ethernet port. 2. The Proposed XGS ONU should have one XGS-PON port. 3. The Proposed XGS ONU should have wireless. 4. The Proposed XGS ONU should support the IEEE 802.1D bridge. 5. The Proposed XGS ONU should support IEEE 802.1p QoS. 6. The Proposed XGS ONU should support ITU-T G.987. 7. The Proposed XGS ONU should support IGMP Snooping v2/v3. 8. The Proposed XGS ONU should support a 1K MAC address. 9. The Proposed XGS ONU should support the MAC address limit. 10. The Proposed XGS ONU should support IEEE 802.1Q (VLAN). 11. The Proposed XGS ONU should support VLAN Translation. 12. The Proposed XGS ONU should have an operating temperature of 0 to 45 ºC. 13. The Proposed XGS ONU should have operating humidity from 10% to 85%. 14. The Proposed XGS ONU should be wall or table mountable.				

		15. The Proposed XGS ONU should support 802.11 b/g/n with integrated antennas. 16. The Proposed XGS ONU should have a power supply with input 100-240VAC, 50/60Hz with a 6 Amp Indian socket.				

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		Warranty 1. The proposed XGS-PON ONU should be supplied with a five-year warranty. The OEM should have a 24x7 support center. OEM should have an India toll-free number reflected on the official website. The vendor will provide documentary proof regarding support and warranty directly from the OEM. 2. OEM should not have announced the "End of Sale" and "End of Life" for the proposed product at the time of bidding.				
19	Smart Rack	Supply, installation, and configuration of smart rack as per the following specifications- **General Requirements** 1. The proposed smart racks should be self-contained. 2. The proposed smart rack should have proper air circulation within the rack. 3. The proposed smart rack should have 100% assured compatibility with all equipment conforming to DIN 41494 (General Industrial Standard for equipment) or Equivalent EIA /ISO / EN Standard. 4. The proposed smart racks should be at least 42U in height with 800X1200 for Network/ Server applications. **Physical Specifications** 1. The proposed smart rack should support a static load of at least 1,500 kg. 2. The proposed smart rack should have a front glass door and a back metal door. 3. The proposed smart rack should have two side panels, a top Cover, four vertical frame posts, four adjustable 19" verticals, and grounding and bonding accessories pre-installed by the manufacturer. **Equipment Access & Installation** 1. The proposed smart rack should have 42U usable Space. 2. The proposed smart rack should have 4 No's adjustable, 19" verticals				

		with punched 10mm square hole and Universal 12.7mm-15.875mm-				

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		15.875mm alternating hole pattern that offers greater mounting flexibility, with Numbered U positions. 3. The proposed smart rack should include mounting hardware for equipment fixing. 4. The proposed smart rack's front and back doors should be easily detachable. 5. The proposed smart rack's side panels should flush with the frame so the overall width of the unit does not change with the side panels installed. **Material Requirements** 1. The proposed smart rack's weight-bearing components should be made from steel with a thickness not less than 2.0 mm, the 19" equipment mounting angle should be 2.5MM, and other parts not less than 1mm. 2. The proposed smart rack's sheet metal parts should be pre-treated and powder-coated to meet ASTM standards. **Grounding Requirements** 1. The proposed smart rack's enclosure components, i.e., frame and door, should be bonded together and to the rack ground point. 2. The proposed smart rack should be provided with a rack ground point to further ground the telecom ground bus bar system. 3. The proposed smart rack should be provided with all grounding and bonding as per UL Standards. 4. The proposed smart rack should have horizontal or vertical ground bus bars for equipment grounding. **Certifications, Environmental and Safety Requirements** 1. The proposed smart rack should be manufactured by ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 & ISO 27001:2013 certified companies and should have proper EHS Policy. 2. The proposed smart rack must be UL Certified. 3. The proposed smart rack must be RoHS Compliance 4. The proposed smart rack must comply with DIN41494 and Equivalent EIA/ISO/EN /CEA Standards.				

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		5. The proposed smart rack should comply with a minimum IP 50 rating for protection against touch, ingress of foreign bodies, and ingress of water. 6. The proposed smart rack should protect the user from mechanical hazards and generally meet the requirements for a mechanical enclosure (stability, mechanical strength, aperture sizes, etc.) as defined in IEC 60950 Third Edition. **Ventilation and Thermal Management** 1. The proposed smart rack should have no ventilation on the front & rear doors to avoid cold air leakage. 2. The proposed smart rack should provide the means to mount optional cooling accessories for high-density. 3. The proposed smart rack should provide a blanking panel kit to prevent the Recirculation of hot exhaust air. 4. The proposed smart rack should provide an air seal kit to seal all gaps to prevent the recirculation of hot air. 5. The proposed smart rack should have PG gland entry and exit cutouts to avoid cold air leakage. **Rack AC Unit** 1. The proposed smart rack‘s AC unit should be in rack cooling type. 2. The proposed smart rack’s AC should be able to deliver a cooling capacity of 7kW. 3. The proposed smart rack’s AC unit should be provided with a fixed scroll compressor. 4. The proposed smart rack’s AC unit should be running on R 407C Refrigerant. 5. The proposed smart rack’s indoor unit should not exceed 900mm D x 483 mm W x 268 mm H. 6. The proposed smart rack’s outdoor unit should not exceed 450mm D x 900mm W x 700mm H. **Intelligent Power Distribution Units** 1. The proposed smart rack’s iPDU should have UL-based busbar architecture to minimize downtime.				

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		2. The proposed smart rack's iPDU should have a 1-phase 16A load as per site requirements. 3. The proposed smart rack's iPDU should have an MTBF minimum of 1 million hours. 4. The proposed smart rack's iPDU should have 24 Outlets: IEC C13 X 20 and IEC C19 X 4 sockets. 5. The proposed smart rack's iPDU controller should have a minimum configuration of 128MB DDR2 RAM, ARM Cortex A5 536 MHz, and 16MB SPI Flash. 6. The proposed smart rack's iPDU should have a field-replaceable controller to avoid downtime during maintenance. 7. The proposed smart rack's iPDU should provide data on billing grade accuracy, i.e., +/- 1%. 8. The proposed smart rack's iPDU controller should have two nos x 1G network ports for network redundancy or access from different networks, thereby differentiating external and internal networks 9. The proposed smart rack's iPDU should support USB or Ethernet Cascading up to 16 PDUs. 10. The proposed smart rack's iPDU should support multiple sensors like Temperature & Humidity, Water Leakage Detection, Proximity, Differential Air Pressure, Smoke detection, contact closure, Airflow, Web Camera, and Asset Management System, i.e., iPDU should support connecting up to 32 Sensors using appropriate Hardware / Hubs. 11. The proposed smart rack's iPDU should support a smart lock door system, asset management tags & sensors. 12. The proposed smart rack's iPDU should have dual USB ports, supporting auto mass & independent configuration, Wi-Fi, Webcam, and cascading between PDUs. 13. The proposed smart rack's iPDU should support sending/recording alerts to users via SNMP, SMTP, GSM SMS, Syslog, etc. 14. The proposed smart rack's iPDU should support a variety of access protocols, including HTTP, HTTPS, NTP, SMTP, SSH, Telnet, SSL, SNMP v1, v2 and v3, SNMP INFORMS, and JSON-RPC.				

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		15. The proposed smart rack's iPDU should support integration with LDAP/LDAPS and AD for secure authentication, support setting Password Policies, and strong encryption **UPS** 1. The proposed smart rack's UPS capacity shall be 6 KVA Online Double Conversion UPS with 1 Ph I/P & 1 Ph output. 2. The proposed smart rack's UPS shall be mounted on a 19-inch Rack through proper Rack support brackets as required. 3. The proposed smart rack's UPS shall have an input voltage range of 305-480 V AC. 4. The proposed smart rack's UPS should have a noise level of less than 50 Dba. 5. The proposed smart rack's UPS Input Current harmonic distortion shall be less than 3%. 6. The proposed smart rack's UPS shall be supplied with an SNMP Card to monitor all vital parameters. 7. The proposed smart rack's UPS should have an operating temperature of 40 deg C for Continuous operation without any derating. 8. The proposed smart rack's UPS model/capacity offered shall have EN 62040-1, 62040-2, 62040-3 & PEP certifications. 9. The proposed smart rack's UPS battery backup shall comprise 20 blocks of 12V, 5 AH VRLA SMF Batteries. **Warranty** 1. The proposed smart rack should be supplied with a five-year warranty. The OEM should have a 24x7 support center. OEM should have an India toll-free number reflected on the official website. The vendor will provide documentary proof regarding support and warranty directly from the OEM. 2. OEM should not have announced the "End of Sale" and "End of Life" for the proposed product at the time of bidding				

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20	Outdoor Racks/ Street Cabinet 42 U rack Size	Supply, installation, and configuration of network rack as per the following specifications- Usable Rack Size: - 42U Robust steel sheet welded construction consisting of top, bottom, and side panels equipped with base plinth. Front metal door with gasket protection and provided with IP 55 compatible multi-point lock. The door is equipped with a filter and hood. The hood is provided with louvers for ventilation. Ventilation and protection are provided through an IP 54/IP 55 compatible filter. Rear metal door with gasket protection and provided with IP 55 compatible multi-point lock. The door is equipped with a filter and hood. The hood is provided with louvers for ventilation. Ventilation and protection are provided through an IP 54/IP 55 compatible filter. The fan is fitted along with the filter at the top cover. Applicable Standard: IS 9606-1980, IP 54/IP 55 certified product according to IEC 60529:2013, ISO 9001:2008, ISO 14001: 2015. Corrosion Resistance: Salt spray test according to ISO 9227 (NSS test) and IEC EN 60068-2-11 (Ka test) for 168 hours: degree of Rusting Ri1 according to ISO 4628-3, propagation ≤1 mm according to ISO 4628-8 Rack Type: - Floor mount rack Depth: -800 mm width: - 600 mm Degree of protection: - IP 54 4 Cable Manager Installation: - floor mount as per requirement.				
21	Outdoor Racks/ Street Cabinet 15 U rack Size	Supply, installation, and configuration of network rack as per the following specifications- Usable Rack Size: - 15U. Robust steel sheet welded construction consisting of top, bottom, rear, and side panels. Front metal door with gasket protection and double-bit lock. The door is equipped with a filter and hood. The hood is provided with louvers for ventilation. Ventilation and protection are provided through an IP 54/IP 55 compatible filter. The fan is fitted along with the filter at the top cover. Ventilation and protection are provided through an IP 54/IP 55 compatible filter. Applicable Standard: IS 9606-1980, IP54/IP55 certified product according to				

		IEC 60529:2013, ISO 9001:2008, ISO 14001: 2015				
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		Usable Depth: -600 mm Usable width: - 600 mm Degree of protection: - IP 54 4 Cable Manager Corrosion Resistance: Salt spray test according to ISO 9227 (NSS test) and IEC EN 60068-2-11 (Ka test) for 168 hours: degree of Rusting Ri1 according to ISO 4628-3, propagation ≤1 mm according to ISO 4628-8. Installation: - wall mount, pole mount, or as per requirement.				
22	Indoor Network racks 42 U	Supply and installation of network rack with the following specifications. Rack Size: - 42U modular construction of the rack made of 4 vertical, 4 horizontal & 4 depth extruded aluminum alloy multi-hollow profiles bolted and joined together with links and a corner block. 2 or 3 pairs of support channels to equate the load evenly and castor provision at the bottom side. Front perforated door with 3-point lock Rear perforated door with 3-point lock Compliance & standard: IS 9606-1980, UL 2416, IEC EN 60529, IEC EN 62262, ISO 9001:2008, ISO 14001: 2015. Degree of Protection: IP 20 according to IEC 60529:2013, IK 08 according to IEC EN 62262:2002 Weight capacity: Load Capacity of up to 1200 Kg. Corrosion resistance: Salt spray test according to ISO 9227 (NSS test) and IEC EN 60068-2-11 (Ka test) for 168 hours: degree of Rusting Ri1 according to ISO 4628-3, propagation ≤1 mm according to ISO 4628-8. Rack Type: - floor mounted rack Depth: - 1000 mm width: - 800 mm 10 Cable Manager 2 Power distribution unit of 6/16 amp 10 sockets each Installation: - floor Mount only or as per requirement.				

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23	Indoor Network racks 15 U	Supply and installation of network rack with the following specifications Rack Size: - 15U Rack Type: - Wall mount rack single section side openable, 2 side panels are made up of steel sheet with slots for ventilation and equipped with slam latch Compliance & standard: IS 9606-1980, UL 2416, ISO 9001:2008, ISO 14001: 2015 Weight Capacity: Load capacity of up to 50 Kg. Corrosion resistance: Salt spray test according to ISO 9227 (NSS test) and IEC EN 60068-2-11 (Ka test) for 168 hours: degree of Rusting Ri1 according to ISO 4628-3, propagation ≤1 mm according to ISO 4628-8 Depth: - 600 mm width: - 600 mm 4 Nos Cable Managers Installation: - On the wall with the help of fasteners screw or as per requirement.				
24	Indoor Network racks 6 U	Supply and installation of network rack with the following specifications. Rack Size: - 6U Rack Type: - Wall mount rack single section side openable, two side panels are made up of steel sheet with slots for ventilation and equipped with slam latch Compliance & standard: IS 9606-1980, UL 2416, ISO 9001:2008, ISO 14001: 2015 Weight Capacity: Load capacity of up to 50 Kg. Corrosion resistance: Salt spray test according to ISO 9227 (NSS test) and IEC EN 60068-2-11 (Ka test) for 168 hours: degree of Rusting Ri1 according to ISO 4628-3, propagation ≤1 mm according to ISO 4628-8 Depth: - 500 mm width: - 600 mm				

		2 Nos Cable Manager Installation: - On the wall with the help of fasteners screw or as per				

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S. No	Name of Item	Detailed Specifications	Compliance (Y/N)	PART/ Model No.	Support/Doc Pg. No.	Deviation/Remarks
		requirement.				
25	144 Port rack mounted LIU with single mode pigtail and coupler	Supply and installation of fully populated/loaded Fiber LIU with single mode SC APC type pigtails G.657A1 and coupler plate or splice cassette. Hook and loop style features are incorporated in the top and bottom of the rear of the enclosure to assist in cable strain relief and slack management. Accommodates up to 24 universal splice cassettes with a 24-splice capacity. The LIU should have 4 no's cutouts for cable entry. The material used: - Cold rolled steel Pigtails type: - Single-mode connector type: - SC APC Number of Ports: - 144 Size: - 4 Rack unit Suitable for pigtail splicing or IFC Breakout cables				
26	24 Port rack mounted LIU with single mode pigtail and coupler	Supply and installation of fully populated/loaded Fiber LIU with single mode SC APC type pigtails G.657A1 and coupler. The material used: - Cold rolled steel Pigtail type: - Single-mode connector type: - SC APC duplex Number of Ports: - 24 Size: - 1 Rack unit Suitable for pigtail splicing or IFC Breakout cables				

27	6 Port rack mounted LIU with single mode pigtail	Supply and installation of fully populated/loaded Fiber LIU with single mode SC APC type pigtails G.657A1 and coupler. The material used: - Cold rolled steel Pigtail type: - Single-mode connector type: - SC APC simplex Number of Ports: - 6 Size: - 1 Rack unit Suitable for pigtail splicing or IFC Breakout cables				

Technical Compliance sheet

S. No	Name of Item	Detailed Specifications	Compliance (Y/N)	PART/ Model No.	Support/Doc Pg. No.	Deviation/Remarks
	and coupler					
28	2 Port Joint Closer box/ Home termination box with pigtails and couplers	Supply and installation of fully populated/loaded Fiber joint closure box rectangular type with single mode SC APC type pigtails and couplers. Pigtail type: - Single-mode G.657A1 connector type: - SC APC Number of Ports: - 2 Installation: - On the wall or as per requirement.				

29	Joint Closer bamboo Type suitable for 144-core fiber	Supply and installation of IP68 mechanical type, waterproof fiber optic splice closure box. The enclosure box must have 4 round ports and six trays suitable for 144 core fiber cable (8-17mm diameter cable). Used for aerial, wall- mounted, pole-mounted, manhole, and duct mounting.				
30	144 cores armored Single-mode fiber cable, multi-tube, 12	Supply and laying of 144 core single-mode armored fiber cable as per the following specifications. Fiber type: Single-mode (SM) G.657A1 Core count: 144 Tube count: 12 tubes Fiber count: 12 fibers per tube Cable Type: Loose Tube Outer jacket material: Water-tight, Flame retardant, Low smoke zero-halogen				

Technical Compliance sheet

S. No	Name of Item	Detailed Specifications	Compliance (Y/N)	PART/ Model No.	Support/Doc Pg. No.	Deviation/Remarks
	cores per tube	Armour: Corrugated steel tape-armored of greater than 0.15mm thickness. Cable overall diameter: 16.0 mm or more Conductor type: loose tube, gel-filled Cable minimum tensile strength of the installation should be more than 3200 N Cable minimum crush resistance of the installation should be more than 21 kN/km Industry Standard: - With the latest amendments of IEC 60794/Telcordia (BELLCORE) GR 20, IEC 60793. IEC Flammability: IEC 60332-1-2/IEC 60332- 3-22 Laying: On the wall, underground with the help of GI saddle clips, in the DWC pipe, or as per requirement.				

31	24 Core armored single-mode fiber cable	Supply and laying of 24-core single-mode armored fiber cable as per the following specifications. Fiber type: Single-mode (SM) G.657A1 Core count: 24 cores Cable Type: Loose tube Outer jacket material: Water-tight, Flame retardant, Low smoke zero halogen Armour: Corrugated steel tape-armored Cable overall diameter: 15.0 mm or more Conductor type: loose tube, gel-filled Cable minimum tensile strength of the installation should be more than 3500 N Cable minimum crush resistance of the installation should be more than 21 kN/km Industry Standard: - With the latest amendments of IEC 60794/Telcordia (BELLCORE) GR 20, IEC 60793. IEC Flammability: IEC 60332-1-2/IEC 60332- 3-22 Laying: On the wall, underground with the help of GI saddle clips, in the DWC pipe, or as per requirement.				

Technical Compliance sheet

S. No	Name of Item	Detailed Specifications	Compliance (Y/N)	PART/ Model No.	Support/Doc Pg. No.	Deviation/Remarks
32	12 Core armored single-mode fiber cable	Supply and laying of 12-core single-mode armored fiber cable per the following specifications. Fiber type: Single-mode (SM) G.657A1 Core count: 12 cores Cable Type: Loose Tube Outer jacket material: Water-tight, Flame retardant, Low smoke zero halogen Armor: Corrugated steel tape armored Cable overall diameter: 12.0 mm or more Conductor type: loose tube, gel-filled Cable minimum tensile strength of the installation should be more than 2200 N Cable minimum crush resistance of the installation should be more than 21 kN/km				

		Industry Standard: - With the latest amendments of IEC 60794/Telcordia (BELLCORE) GR 20, IEC 60793. IEC Flammability: IEC 60332-1-2/IEC 60332- 3-22 Laying: On the wall and underground with the help of GI saddle clips or in HDPE pipe.				
33	6 Core armored single-mode fiber cable	Supply and laying of 6-core single-mode armored fiber cable per the following specifications. Fiber type: Single-mode (SM) G.657A1 Core count: 6 cores Cable Type: Loose Tube Outer jacket material: Water-tight, Flame retardant, Low smoke zero halogen Armor: Corrugated steel tape armored Cable overall diameter: 8.5 mm or more Conductor type: loose tube, gel-filled Cable minimum tensile strength of the installation should be more than 2200 N Cable minimum crush resistance of the installation should be more than 21 kN/km				

Technical Compliance sheet

S. No	Name of Item	Detailed Specifications	Compliance (Y/N)	PART/ Model No.	Support/Doc Pg. No.	Deviation/Remarks
		Industry Standard: - With the latest amendments of IEC 60794/Telcordia (BELLCORE) GR 20, IEC 60793. IEC Flammability: IEC 60332-1-2/IEC 60332- 3-22 Laying: On the wall and underground with the help of GI saddle clips or in HDPE pipe				
34	2 Core single-mode fiber cable	Supply and laying of 2-core single-mode fiber cable per the following specifications. Fiber type: Single-mode (SM) G.657A1/G.657A2 Core count: 2 cores Cable Type: Tight buffered Outer jacket material: Water-tight, Flame retardant, Low smoke zero halogen Conductor type: Tight buffer, gel-free.				

		The cable minimum tensile strength of the installation should be more than 100 N. Industry Standard: - With the latest amendments of IEC 60794/Telcordia (BELLCORE) GR 20, IEC 60793. IEC Flammability: IEC 60332-1-2/IEC 60332- 3-22 Laying: On the wall and underground with the help of GI saddle clips or in HDPE pipe.				
35	Fiber patch cord SC- LC 2-meter Duplex	Supply and installation of Fiber Patch cord with the following specifications. Fiber type: Single mode (SM) Standard: - G.657A2 Patch cord type: - duplex Jacket material: - Low smoke zero halogens (LSZH) Cable length: - 2 meter/ 7 Feet Connector type (A): - SC APC Connector type (B): - LC APC				

Technical Compliance sheet

S. No	Name of Item	Detailed Specifications	Compliance (Y/N)	PART/ Model No.	Support/Doc Pg. No.	Deviation/Remarks
36	Fiber patch cord SC- LC 10-meter Duplex	Supply and installation of Fiber Patch cord with the following specifications. Fiber type: Single mode (SM) Standard: - G.657A2 Patch cord type: - duplex Jacket material: - Low smoke zero halogens (LSZH) Cable length: - 10 meter/ 33 Feet Connector type (A): - SC APC Connector type (B): - LC APC				

37	Fiber patch cord LC- LC 2-meter Duplex	Supply and installation of Fiber Patch cord with the following specifications. Fiber type: multi-mode (MM) Standard: - G.657A2 Patch cord type: - duplex Jacket material: - Low smoke zero halogens (LSZH) Cable length: - 2 meter/ 7 Feet Connector type (A): - LC APC Connector type (B): - LC APC				
38	Fiber patch cord LC- LC 10-meter Duplex	Supply and installation of Fiber Patch cord with the following specifications. Fiber type: Multi-mode (MM) Standard: - G.657A2 Patch cord type: - duplex Jacket material: - Low smoke zero halogens (LSZH) Cable length: - 10 meter/ 33 Feet Connector type (A): - LC APC Connector type (B): - LC APC				
39	Fiber patch cord SC- SC 2-meter simplex	Supply and installation of Fiber Patch cord with the following specifications. Fiber type: Single mode (SM) Standard: - G.657A2 Patch cord type: - simplex Jacket material: - Low smoke Zero-halogen (LSZH) Cable length: - 2 meters/ 7 Feet Connector type (A): - SC APC Connector type (B): - SC APC				

Technical Compliance sheet						
S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/Remarks**
40	Fiber patch cord SC- SC 2-meter simplex	Supply and installation of Fiber Patch cord with the following specifications. Fiber type: Single mode (SM) Standard: - G.657A2 Patch cord type: - simplex Jacket material: - Low smoke Zero-halogen (LSZH) Cable length: - 10 meters/ 33 Feet Connector type (A): - SC APC simplex Connector type (B): - SC APC simplex				
41	2X2 Splitter box type	Supply and installation of rack mounted fiber splitter box with the following specifications. 2×2 ABS PLC Splitter Box Fiber Mode: Single Mode Corning SMF G.657A1 Typical insertion loss: 5 db 2x Input fiber 2x Output fibers connectorized with SC APC connectors Operating bandwidth: - 1260~1650nm				
42	2X8 Splitter box type	Supply and installation of rack mounted fiber splitter box with the following specifications. 2×8 ABS PLC Splitter Box Fiber Mode: Single Mode Corning SMF G.657A1 Typical insertion loss: 11 dB 2x Input fiber 8x Output fibers connectorized with SC APC connectors Operating bandwidth: -1260~1650 nm				

43	1X16 Splitter box type	Supply and installation of rack mounted fiber splitter box with the following specifications. 1×16 ABS PLC Splitter Box Fiber Mode: Single Mode Corning SMF G.657A1 Typical insertion loss: 14 dB 1x Input Fiber 16x Output Fibers connectorized with SC APC connectors Operating bandwidth: - 1260~1650nm				

Technical Compliance sheet

S. No	Name of Item	Detailed Specifications	Compliance (Y/N)	PART/ Model No.	Support/Doc Pg. No.	Deviation/Remarks
44	CAT6A UTP cable	Supply, Laying and Testing of 4 pair, 23 AWG UTP Cat 6A Cable as per latest amendments of ANSI/TIA-568.2-D specifications with ferruled at both ends for identification with necessary tools for stripping, crimping and testing required. Cable Performance should be tested with the latest standards of ANSI/TIA-568.2-D from Intertek/ETL/3P Reports to be submitted. IEC Flammability: IEC 60332-3-22 Laying: with the help of flexible pipe, in supplied PVC pipe or as per requirement				
45	24 port jack panel CAT6A	Supply, punching, and installation of fully populated/loaded CAT6A jack panel with the following specification Category: CAT-6A Size: 19” rackmount 1 rack unit with rear cable management. Number of ports. 24 Nos Accepts all RJ45 keystone jacks Accepts 23-26 AWG solid or stranded cable copper conductor 50 um gold plated on the plug contact area RJ45 Jack’s Performance should be ETL Verified, cULus listed and tested with the latest standards from Intertek/ETL/3P. Only applicable to RJ45 jacks				

46	1-meter UTP patch cord CAT6A	Supply and installation of CAT6A UTP patch cord with following specifications. Type: - CAT6A Pair: - 4 pair 24/26 AWG Stranded wire pre-terminated with RJ45 plugs with slim clear anti-snag slip-on boots Suitable for EIA 568A or 568B wiring applications Sheath LSZH sheath Length 3 feet/1.0 meter				

Technical Compliance sheet

S. No	Name of Item	Detailed Specifications	Compliance (Y/N)	PART/ Model No.	Support/Doc Pg. No.	Deviation/Remarks
47	CAT6A Information outlet with faceplate and gang box	Supply, punching, and installation of single port CAT6A information outlet with faceplate/wall plate of 86 X 86 mm size with gang box of following specifications: - The information outlet should meet or exceed channel specifications of the latest amendments of ANSI/TIA/EIA-568-C.2 Category 6A and ISO/IEC 11801 2nd edition (2002). The information outlet should be tested for performance to the latest amendments of ANSI/TIA/EIA-568-C.2 at a minimum of 250 MHz or higher frequency for 10Gbps bandwidth at 328 feet cable length. The information outlet should have contact material with 50µ" gold/100µ" nickel plating. The information outlet must comply with the latest standards of ANSI/TIA/EIA-568, ISO/IEC: 11801, and ETL/UL/3P. The test reports of the same should be attached. The information outlet should have the durability of more than 700 plugin cycles. The faceplate should be made of ABS plastic. The faceplate should be white color only. The faceplate should accept CAT6/CAT6A information outlets. The faceplate should be RoHS approved and have a flame rating of UL-94 V0.				

48	RJ 45 Termination plugs	Supply installation and testing of RJ45 Termination plugs as per the following specifications: - CAT6A UTP/STP Field Mount Plug, TIA Category 6A, ISO Class E, Front Connection RJ 45: Copper Clad Flexible PCB, Gold plated contacts over Palladium/Nickel, Rear Connection Copper Clad PCB, Gold plated contacts over Nickel, Connector Body Polycarbonate - UL94V-0, Category 6A - TIA 568.C.2, Category 6A - ISO/IEC 11801:2002 Ed.2, 250 MHz or Better Guaranteed 10 Gbps bandwidth for 100 meters Channel Link, c(UL)us Listed. The termination plug should suit IEEE 802.3af, 802.3at, and 802.3bt PoE applications. -40 Deg C to +70 Deg C operating temperature The transmission plug performance should be CAT 6A/Class EA and must be IP 20. The termination plug should have a wiring label for TIA 568A/B. The termination plug should have the capability for the solid wire of 22~26				

Technical Compliance sheet						
S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/Remarks**
		AWG and support a cable diameter of 6~9 mm.				
49	8” DWC duct pipe	Supply and laying of ISI marked double wall Corrugated pipe with the following specifications along with accessories in Trench/surface/recessed using saddles, clamps, fastener as required, including cutting the wall, covering DWC and making good the same as required. Inner Diameter: - 200mm +- 5 Outer Diameter: - 230mm +-5 Wall Thickness E4 & E5 min: - 1.5 & 1.1 Bar length: - 6 Meter Stiffness Class: - SN8 Standard: - IS-16098 Laying: - Underground. The Vendor/SI also needs to put a stainless-steel wire (1mm or more in diameter) for pulling fiber cables in the future				

50	1” PVC conduit	Supply and laying of ISI marked medium duty PVC conduit/casing capping (25mm or more with Construction - Both the surfaces should be smooth and free from burrs, Maximum OD - 25.00 MM, Minimum OD - 24.60 MM, Minimum ID - 21.40 MM, Wall Thickness - 1.6 MM, Electrical Strength - Shall withstand 2000V for 15 Minutes, Insulation Resistance - Min 100 Mega Ohm, ISI Marked) along with accessories in surface / recessed using saddles, clamps, fasteners as required including cutting the wall, covering conduit and making goods the same as required. Laying: - On the wall with the help of GI saddle clip or as per requirement.				
51	32mm HDPE duct pipe	Supply and laying of ISI-marked HDPE (High-Density Polyethylene) telecom ducts for use as Optical Fiber Cable ducts. The surface of the HDPE duct should be smooth inside and outside, free from blisters, shrinkage, holes, scratches & roughness. Outer diameter: 32 + 0.4 / - 0.0 mm, Wall Thickness: 3.0 +/- 0.2 mm, Inner diameter: 26 + 0.4 / - 0.0 mm, Thickness of Permanent lubricant: > 0.2 mm, Pressure Rating: 6 kg/sq cm, Length - 500 Meter Roll, minimum weight 240-260 gm /meter with accessories like coupler, end plug, end cap shall be included, Suitable for direct burial applications. Laying: - In Trench, underground, on the wall with the help of GI saddle clip or as required.				

Technical Compliance sheet

S. No	Name of Item	Detailed Specifications	Compliance (Y/N)	PART/ Model No.	Support/Doc Pg. No.	Deviation/Remarks
52	100X50 ISI casing	Supply and laying of ISI marked medium duty PVC casing capping/ trunking with the following specifications. Size - 100 X 50 mm, Wall thickness 2mm or more, Electrical strength – No breakdown at 2KV x 50 Hz for 15 Minutes, Insulation resistance - min 100 Mega Ohm, ISI marked, Dielectric constant 1.7 - 3.00 ASTM D150, Flammability – UL94V-0, Hardness 70-75 D Duro ASTM D2240) along with accessories in surface / recessed using saddles, clamps, fasteners as required including cutting the wall, covering CMS and making goods the same as required				

53	Route Marker	Supplying and making cable route marker with cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) of size 60cm X 60 cm at the bottom and 50 cm X 50 cm at the top with a thickness of 10cm including OFC inscription duly engraved as required				
54	3X3 feet Chamber	Making a 3X3 feet chamber/Manhole with 6" or more wall thickness of concrete and cement and steel structure with 6 feet depth. The chamber should be installed with a removable concrete cover. The bottom of the chamber should also be made of concrete. Manholes shall be provided at every proposed and future joint location to house the joint box and the extra length of optical fiber cable (service loops). The location for Joint boxes shall be decided during the installation, and the maximum distance between 2 chambers cannot exceed 50 meters in any circumstances.				
55	Moiling/ Digging/ Recarpeting	Moiling/boring, refiling, and re-carpeting of soil, road, and footpath at a minimum 1524 mm depth from natural ground level and at least 10 feet distance between two man-holes or hand-holes with the help of manual labor or machinery. The Contractor may use the following trench/trench digging methods to install the DWC duct pipes: 3. Manual/hand augering (recommended up to 10 meters between manholes) 4. Impact Moling (recommended for 10-30 meters between manholes) Caution:- The contractor shall be responsible for any mishap or accident due to negligence or proper protection of open trenches, and all claims				

Technical Compliance sheet						
S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/Remarks**
		arising from such accidents shall be settled by the contractor without any liabilities to prospective client. The contractor shall ensure that no damage is caused to any underground or surface installations belonging to other public utility services and/or private parties. The contractor shall remove all bushes, undergrowth, stems, rocks, and other obstacles, etc., ensuring the minimum amount of bushes and shrubs are removed to clear the way. The contractor shall consider preserving trees within the right of way. Machines can be used for clearing small bushes along the route. However, trees shall not be cut or uprooted for the purpose of the movement of excavating machines. Where such necessity arises, permission from prospective client authorities must be obtained in writing to cut such trees partially.				
56	Fiber fusion Splicing	Making fiber connectorization/ termination using the fusion splicing method with the following specification Coupling/Termination losses less than 0.2 dB Termination should use a fusion splicing mechanism Termination should meet EIA and IEC standards for repeatability. Operating Temperature: -40 deg C. to +85 deg C.				
57	Fiber Tags	Supply and installation of fiber tags to identify fiber cable or fiber patch cord.				
58	Buyback of existing infra	Buyback of existing non-functional Wi-Fi access points, network switches, UPS, racks, and jack panels. The SI should share an item-wise price list as mentioned in section XXI.				
59	Network lab using existing infra	Creating a network lab using existing working infra to demonstrate network equipment to CSE and ECE students.				

Technical Compliance sheet						
S. No	**Name of Item**	**Detailed Specifications**	**Compliance (Y/N)**	**PART/ Model No.**	**Support/Doc Pg. No.**	**Deviation/Remarks**
60	Any other accessories	Supply and installation of any other accessories required at the time of installation, i.e., power cable, screw, fastener, patch cord, etc.				

Section-21

Buyback items

S. No	Name of items	Qty.
1	24 port managed Access Switch	20
2	48 port managed Access Switch	19
3	24 port managed POE Switch	34
4	24 port Semi-managed Access Switch	11
5	48 port Semi-managed Access Switch	4
6	24 port unmanaged Access Switch	20
7	16 port unmanaged Access Switch	2
8	8 port unmanaged Access Switch	5
9	24 port managed Distribution Switch	3
10	24 port CAT6 Jack Panel	78
11	24 port fiber LIU	10
12	12 port fiber LIU	8
13	10/100 Mbps Media Converter	24
14	KVM Switch	1
15	Router	2
16	Server	2
17	Server RAM	2
18	WiFi Controller	2
19	Outdoor Wi-Fi Access Point	29
20	Indoor Wi-Fi Access Point	13
21	Wi-Fi access point 150 Mbps	10
22	Wi-Fi access point 300 Mbps	31
23	6 U rack	3
24	UPS 1 KVA	2
25	UPS 2 KVA	5
26	UPS 5 KVA	1

Section-22

Technical Bid Submission Letter

To,
Chief General Manager (DES)
EdCIL (India) Limited
EdCIL House, 18 A,
Sector-16 A NOIDA – 201301 (U.P.), India

Subject: Technical Proposal for Selection of Partner for Design, Supply, Installation, Testing and Commissioning for Comprehensive Upgradation of Wired and Wireless Campus LAN.

Dear Sir,

We, the undersigned, offer to provide our services against your RFP enquiry no. <Insert RFP no> dated <insert date>. We are hereby submitting our Proposal, which includes this Technical Bid sealed in the envelope.

We hereby declare that all the information and statements made in this Technical bid are true and accept that any misinterpretation contained in it may lead to our disqualification.

We agree to abide by all the terms and conditions of the tender document. We would hold the terms of our bid valid for 180 days as stipulated in the RFP document.

We also agree that you reserve the right in absolute sense to reject all or any of the products / services specified in the bid response without assigning any reason whatsoever.

It is hereby confirmed that I/We are entitled to act on behalf of our corporation/company /firm/organization and empowered to sign this document as well as such other documents which may be required in this connection.

Thanking you,

Name of the Bidder: .....

Authorized Signatory: .....

Signature: Seal: Date: Place:

End Of Section

Section-23

Letter of Undertaking

(On The Letter Head Of The Bidder)

To,
Chief General Manager (DES)
EdCIL (India) Limited (EdCIL)
EdCIL House, 18 A, Sector-16 A,
NOIDA – 201301 (U.P.)

Sir,

NIB No.

This bears reference to above referred Bid No._____.We, hereby, accept all the terms and conditions for submitting bid as mentioned in this Bid Document.

We hereby certify that no terms and conditions have been stipulated by us in the Financial Bid.

We warrant that the services do not violate or infringe upon any patent, copyright, trade secret or other property right of any other person or other entity. We agree that we shall not prevent EdCIL from any claim or demand, action or proceeding, directly or indirectly resultingfrom or arising out of any breach or alleged breach of any of the terms & conditions of bid document and contract.

The above document is executed on _____at (place)_____and we accept that if anything out of the information provided by us is found wrong, our bid/ work order shall be liable for rejection.

Thanking you,

Yours faithfully,

Name of the Bidder _____

Authorized Signatory _____

Seal of the Organization _____

Date:

Place:

End Of Section

Section-24

Proforma Pre Contract Integrity Pact

General

This pre-bid pre-contract Agreement (hereinafter called the Integrity Pact) is made on day of the month of …. 2025, between, on one hand, acting through Shri/Smt._____, Designation, EdCIL (India) Limited (hereinafter called the "BUYER"/ "EdCIL" interchangeably, which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Part

AND

M/s_____represented by Shri_____, Chief Executive Officer (hereinafter called the "BIDDER/Seller" which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

WHEREAS the EdCIL proposes to procure services towards "Selection of Partner for Design, Supply, Installation, Testing and Commissioning for Comprehensive Upgradation of Wired and Wireless Campus LAN**".**

For its clients and BIDDER/Seller is willing to offer the said services and related items as referred to in the Bid document No. EdCIL/DES/ICT/2024-25/01 Dated_____2025.

WHEREAS the BIDDER is a private company /public company / Government undertaking / partnership / registered expert agency, constituted in accordance with the relevant law in the matter and the EdCIL is a Public Sector Undertaking under Ministry of Education performing its functions.

NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence / prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:

Enabling the EdCIL to obtain the desired services as referred to in the Bid document No. EdCIL/DES/ICT/2024-25/01 Dated _____2025 at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement and Enabling BIDDERs to abstain from bribing orindulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the EdCILwill commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

1. **Commitments of the EdCIL**

    a. The EdCIL undertakes that no official of the EdCIL, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favor or any

material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.

b. The BUYER will, during the pre-contract stage, treat all BIDDERs alike, and will provide to all BIDDERs the same information and will not provide any such information to any particular BIDDER which could afford an advantage tothat particular BIDDER in comparison to other BIDDERs.
c. All the officials of the EdCIL will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.

2. In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to the EdCIL with full and verifiable facts and the same is prima facie found to be correct by the EdCIL, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings shall be initiated by the EdCIL and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the EdCIL the proceedings under the contract would not be stalled.

3. Commitments of Bidders

The BIDDER commits itself to take all measures necessary to prevent corruptpractices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:

a. The BIDDER will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the EdCIL, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
b. The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the EdCIL or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the Government for showing or forbearing to show favour or disfavor to any person in relation to the contract or any other contract with the Government.
c. Bidders shall disclose the name and address of agents and representatives and Indian BIDDERs shall disclose their foreign principals or associates.
d. BIDDERS shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract.

e. The BIDDER further confirms and declares to the EdCIL that the BIDDERis the original manufacturer/integrator/authorized government sponsored export entity and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the EdCIL or any of its functionaries, whether officially or unofficially to the award to the contract to the BIDDER, nor has any amount been paid, promisedor intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation, as the case shall be for satisfactory performance of the proposed terms of Bidder.

f. The BIDDER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the EdCIL or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.

g. The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.

h. The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.

i. The BIDDER shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the EdCIL as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.

j. The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.

k. The BIDDER shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.

l. If the BIDDER or any employee of the BIDDER or any person acting on behalf of the BIDDER, either directly or indirectly, is a relative of any of the officers of the EdCIL, or alternatively, if any relative of an officer of the EdCIL has financial interest / stake in the BIDDER's firm, the same shall be disclosed by the BIDDER at the time of filing of Bid.

m. The BIDDER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the EdCIL.

4. Previous Transgression

a. The BIDDER declares that no previous transgression occurred in the last three years immediately before signing of this integrity pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify BIDDER's exclusion from the bid process.

b. The BIDDER agrees that if it makes incorrect statement on this subject. BIDDER can be disqualified from the Bid process or the contract, if already awarded, can be terminated for such reason.

5. Earnest Money Deposit

a. While submitting Technical bid, the BIDDER shall deposit Earnest Money with the EdCIL.
b. The instrument for Security Deposit made shall be valid up to the specified period and the bidder shall be liable to keep the said instrument valid for such extended period as the case shall be for satisfactory performance of the terms of Bidder above referred till the complete conclusion of the contractual obligations to the complete satisfaction of both the BIDDER and the EdCIL, including O&M period, whichever is later.
c. In case of the successful BIDDER a clause would also be incorporated in the Article pertaining of Performance Bond in the corresponding Contract governing such agreement that the provisions of Sanctions for Violation shall be applicable for encashment of Performance Bank Guarantee deposited towards forfeiture of said amount in case of a decision by the EdCIL to forfeit the same without assigning any reason for imposing such sanction.
d. No interest shall be payable by the EdCIL to the BIDDER on Earnest Money Deposit for the period of its currency.

6. Sanctions For Violations

a. Any breach of the aforesaid provisions by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle the EdCIL to take all or any one of the following actions, wherever required:
    i. To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.
    ii. The Earnest Money Deposit (in pre-contract stage) and/or Security Deposit / Performance Bond (Bank Guarantee) (after the contract is signed) shall stand forfeited either fully or partially, as decided by the EdCIL and the BUYER (EdCIL) shall not be required to assign any reason therefore.
    iii. To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.
    iv. To encash the advance bank guarantee and performance bond/warranty bond, if furnished by the BIDDER, in order to recover the payments, already made by the EdCIL, along with interest.
    v. To cancel all or any other Contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the EdCIL resulting from such cancellation/rescission and the EdCIL shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.

vi. To debar the BIDDER from participating in future bidding processes of the Government of India for a minimum period of five years, which shall be further extended at the discretion of the EdCIL.

vii. To recover all sums paid in violation of this Pact by BIDDER(s) to any middleman or agent or broker with a view to securing the contract.

viii. In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the EdCIL with the BIDDER, the same shall not be opened.

ix. Forfeiture by way of encashment of Performance Bond in case of a decision by the EdCIL to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.

b. The EdCIL will be entitled to take all or any of the actions mentioned at Para 6.1(i) to (x) of this Pact also on the Commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER), of any offence as defined in Chapter IX of the Indian Penal code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.

c. The decision of the EdCIL to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, an Independent Monitor(s) shall be appointed by EdCIL, in case of breach of the provisions of the pact.

7. Facilitation Of Investigation

In case of any allegation of violation of any provisions of this Pact or payment of commission, the EdCIL or its agencies shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

8. Other Legal Actions

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that shall follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

9. Validity

a. The validity of this Integrity Pact shall be governed by the terms of the Bid No. EdCIL/DES/ICT/2024-25/01 towards complete execution of the contract to the satisfaction of boththe EdCIL and the BIDDER/Seller, including O&M period, whichever is later. In case BIDDER is unsuccessful, this Integrity Pact shall expire after sixmonths from the date of the signing of the contract awarding the Bidder with successful bidder.

b. Shall one or several provisions of this Pact turn out to be invalid; the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

10. The parties hereby sign this Integrity Pact at on .

EdCIL (India) Limited	BIDDER
Name of the Officer:	CHIEF EXECUTIVE OFFICER
Designation:	
Witness:	Witness:
_____	1. _____
_____	2. _____

(The Pre-Contract Integrity Pact shall be modified based in line with the conditions of the Bid Documents)

End Of Section

Section-25

Name of the Bank:_____

To,
Chief General Manager (DES)
EdCIL (India) Limited
EdCIL House, 18 A, Sector-16A
NOIDA – 201301 (U.P.)

Performance Bank Guarantee Format

THIS DEED OF GUARANTEE made on this day of ……..between EdCIL (India) Ltd (hereinafter called the "EdCIL" which expression shall unless excluded by or repugnant to the context includes its successors and assignees) of the one part and the (hereinafter called the "Bank" which expression shall unless excluded by or repugnant to the context include its successors and assignees) of the other part.

AND WHEREAS as per clause of the purchase order in question the supplier shall furnish a Performance Bank Guarantee of 10% of P.O. Value i.e. Rs. ……..only) valid for the period of two months beyond the warranty period as and by way of security for the satisfactory working of the ……..... .....

.....AND WHEREAS at the request of the supplier, the Bank executes these presents.

THIS DEED WITNESSETH AND IT IS HEREBY AGREED AND DECLARED BY AND BETWEEN PARTIES HERETO AS FOLLOWS:

The Bank hereby guarantees to the prospective client at Jaipur that the equipment/service contracted is capable of performing the work as demanded by the prospective client at Jaipur. In the event of equipment/service failing to perform to the satisfaction of the prospective client at Jaipur, which shall be final and conclusive of the factum of non-performance, the Bank shall indemnify and keep the indemnified to the extent of ..... of P.O. Value i.e. Rs. ..... (Rupees .....) valid for the period of two months beyond the warranty period against any loss or damage that may be caused to or suffered by the PROSPECTIVE CLIENT Jaipur consequent to non-performance of the contracted equipment/services to be supplied by the supplier.

In consideration of the aforesaid premise and at the request of the supplier, we the Bank hereby irrevocably and unconditionally guarantee that the supplier shall perform in an orderly manner their contractual obligations in accordance with the terms and conditions set forth in the Purchase order dated ..... and in the event of the supplier's failure to do so, the Bank unconditionally pay to the PROSPECTIVE CLIENT Jaipur on demand, any amount up to the value mentioned in Clause above without any reference to the supplier and without questioning the claim.

The guarantee herein shall remain in full force for a period of two months beyond the warranty period from the date of certification by the PROSPECTIVE CLIENT Jaipur of successful installation and commissioning of the equipment/ service contracted. The date of start of the warranty period will be notified by PROSPECTIVE CLIENT Jaipur to the Bank.

The decision of the prospective client at Jaipur regarding the liability of the Bank under the guarantee and the amount payable there shall be final and conclusive, and binding on us without question. The Bank shall pay forthwith the amount demanded by the prospective client at Jaipur notwithstanding any dispute, if any, between the prospective client at Jaipur, and the supplier.

The Bank further agrees that the guarantee herein shall remain in full force during the pendency of the aforesaid period mentioned in Clause above and also any extension of the guarantee which has been provided by the Bank for this purpose beyond the aforesaid period provided, further, that if any claim accrues or against the Bank by virtue of this guarantee, should be lodged with us within a period of 60 days from the date of expiry of the guarantee period.

This Guarantee shall not be affected by any change in the constitution of the supplier, prospective client at Jaipur, or us nor shall it be affected by any change in the constitution or by any amalgamation or absorption or reconstruction thereof otherwise, but will ensure for and be available to and endorsable by the absorbing amalgamated company or concern.

The prospective client at Jaipur has the fullest liberty without affecting the guarantee to postpone at any time or from the time any of the powers exercisable by it against the supplier, either to enforce or forbear the clause governing guarantee in the terms and conditions of the said contract and Bank shall not be released from its liabilities under the guarantee by any matter referred to or by reason of time being given to the supplier or any other forbearance, act or omission on the part of the prospective client at Jaipur or any material or things whatsoever which under the law relating to sureties shall but for the provisions hereof have the effect of so releasing the Bank from its liabilities.

We further agree that the prospective client at Jaipur shall have the fullest liberty without affecting in any way our obligations hereunder with or without our consent or knowledge to vary any of the terms and conditions of the said contract or to extend the time of delivery from time to time.

The Bank undertakes not to revoke this guarantee during its currency except with the previous consent in writing of the prospective client Jaipur.

We further agree that in order to give full effect to the guarantee herein contained prospective client at Jaipur shall be entitled to act as if we were its principal debtors in respect of its claim against the Supplier hereby guaranteed by us as aforesaid and we hereby expressly waive all our rights of suretyship and other rights if any which are in any way inconsistent with the above provision of this Guarantee.

Notwithstanding anything herein before, the liability of the Bank under this guarantee is restricted to Rs. ..... (Rupees .....…. only) and it will remain in force up to the period specified in unless a suit to enforce any claim under the Guarantee is filed against the Bank before the period specified. All your rights under this Guarantee shall be forfeited and we shall be relieved and discharged from all liabilities thereunder.

Dated:	The	Day of	For
		(indicate the name of bank) Signature of Banks Authorized official	
Witness		(Name)_____	
		Designation with Code No. ---------	
1		Full Address----------	
2.			

End Of Section

Section- 26

Performa For Declaration On Proceedings Under Insolvency And Bankruptcy Code, 2016

Tender No. : .....
Name of Work : .....
Bidder 's Name : ..... .

I/ We, M/s._____ declare that:-

a. I /We am / are not undergoing insolvency resolution Process or liquidation or bankruptcy proceeding as on date.
b. I /We am / are undergoing insolvency resolution process or liquidation or bankruptcy proceeding as on date as per Details mentioned below. (Attached detail with technical bid)

Note: Strike out one of above which is not applicable.

It is understood that if this declaration is found to be false, EdCIL (India) Ltd. shall have the right to reject my / our bid, and forfeit the EMD, if the bid has resulted in a contract, the contract will be liable for termination without prejudice to any other right or remedy (including holiday listing) available to EdCIL (India) Ltd.

Place:

Date:

Signature of Bidder

Name of Signatory

End Of Section

Section- 27

List of Authorized Banks for BG

Following banks are permissible for accepting Bank Guarantees:

I- SCHEDULED PUBLIC SECTOR BANKS

Sr. No	Name of the Bank
1	Bank of Baroda
2	Bank of India
3	Bank of Maharashtra
4	Canara Bank
5	Central Bank of India
6	Indian Bank
7	Indian Overseas Bank
8	Punjab & Sind Bank
9	Punjab National Bank
10	State Bank of India
11	UCO Bank
12	Union Bank of India

II- SCHEDULED PRIVATE SECTOR BANKS

Sr. No	Name of the Bank
1	HDFC Bank Ltd
2	ICICI Bank Ltd
3	Axis Bank Ltd
4	Kotak Mahindra Bank Ltd
5	Induslnd Bank Ltd