

**Request for Proposal (RFP)**  
**for**  
**Supply, Installation, Configuration, Testing and Commissioning Local**  
**Area Network (LAN) at District and Subordinate Courts**  
**in the state of Punjab**

Tender No. **PICTC/ITeG/PRC-HC/2014/004** Version 1.0



**Punjab Information & Communication Technology Corporation Ltd**  
(A State Govt. Undertaking)  
*5<sup>th</sup> & 6<sup>th</sup> Floor, Udyog Bhawan, 18 Himalaya Marg,*  
Sector – 17, Chandigarh – 160 017  
(Tel- 0172-5256400, Fax – 91-172-2702423)

DOCUMENT CONTROL / DATA SHEET		
S. No.	Particulars	Details
1.	Document Reference Number	<b>PICTC/ITeG/PRC-HC/2014/004</b>
2.	Start date for issue of Tender Document	23 <sup>rd</sup> Jun, 2014 (9 AM onwards)
3.	Last Date for Purchase of Tender Document	15 <sup>th</sup> Jul, 2014 (Till 5 PM)
4.	Last date for submission of Queries online through the portal only	04 <sup>th</sup> Jul 2014 (Till 5 PM)
5.	Date of Pre-bid meeting /for consideration of queries submitted by bidders	08 <sup>th</sup> Jul, 2014 (11 AM)
6.	Date of Corrigendum if required as a result of Pre-bid meeting/ queries submitted by bidders	11 <sup>th</sup> Jul, 2014
7.	Last date for submission of bids	18 <sup>th</sup> Jul, 2014 (Till 5 PM)
8.	Date and time of opening of Prequalification documents	21 <sup>st</sup> Jul, 2014 (3 PM onwards)
9.	Date and time of opening of Technical Bids	25 <sup>th</sup> July, 2014 (3 PM onwards)
10.	Date and time of Technical Presentations	31 <sup>st</sup> July, 2014 (2 PM onwards)
11.	Date and time of opening of Commercial Bids	08 <sup>th</sup> Aug, 2014 (11 AM onwards)
12.	Office address, Venue for pre-bid meeting, opening and evaluation of Bids	Punjab Information & Communications Technology Corporation Ltd. (Punjab Infotech), 5 <sup>th</sup> & 6 <sup>th</sup> Floor , Udyog Bhawan, 18 Himalaya Marg, Sector-17, Chandigarh – 160017
13.	Cost of Tender Document	Rs 5, 000/- (Rupees Five Thousand Only)
14.	Bank guarantee towards Earnest Money Deposit valid for six months	Rs 10,00,000/- (Rupees Ten Lacs Only)
15.	Processing Fee	Rs 2247/- (Rupees Two Thousand Two Hundred Forty Seven only)
16.	Contact Details	Email id: <a href="mailto:gagan.sharma@punjabinfotech.gov.in">gagan.sharma@punjabinfotech.gov.in</a> Phone: 0172-5256400, 5256446

		E-Tendering Contact No:-9257209340, 8054628821
17.	e- Tender Website	<a href="http://etender.punjabgovt.gov.in">http://etender.punjabgovt.gov.in</a>
18.	Consortium/ subcontracting	Consortium not permitted. Sub contracting is permitted up to 20% of the total value of the project with no liability to the purchaser.
19.	Method of Selection	Least cost basis
Please note that in case a Central/ State Holiday is declared on any day, the event will be held on the next working day at the same time and same venue.		

## TABLE OF CONTENTS

Table of Contents .....	4
DEFINITIONS .....	7
IMPORTANT NOTICES.....	9
<u>Section 1: Invitation for Bids</u> .....	10
1.1 Background .....	10
1.2 Invitation .....	11
<u>Section 2: Instructions to Bidders</u> .....	13
2.1 Information & Instructions for e-Tendering .....	13
2.2 Conflict of Interest .....	13
2.3 Validity of Bids.....	13
2.4 Right to Accept or Reject Bid(s) .....	13
2.5 Fraud and Corruption .....	14
2.6 Clarifications and Amendments of Tender .....	15
2.7 E-payment Instructions.....	15
2.8 Earnest Money Deposit (EMD) .....	15
2.9 Process for Selection of SI.....	16
2.10 Eligibility Criteria .....	16
2.11 Eligible equipment and Services .....	17
2.12 Disqualifications .....	17
2.13 Pre-Bid Meeting .....	18
2.14 Preparation & Submission of Bids.....	19
2.15 Evaluation of Bids .....	20
2.16 Negotiation Rights.....	23
2.17 Award of Contract .....	23
2.18 Purchaser's right to vary Quantities at Time of Award .....	23
2.19 Confidentiality.....	23
<u>Section 3: General Contract Conditions (GCC)</u> .....	25
3.1 Application .....	25
3.2 Relationship between the Parties.....	25

3.3	Standards of Performance .....	25
3.4	Vendor's Downstream Business Interest.....	25
3.5	Applicable Law .....	25
3.6	Intellectual Property Rights.....	26
3.7	Governing Language .....	26
3.8	Performance Bank Guarantee (PBG) .....	26
3.9	Price fall .....	26
3.10	Supplier Obligations.....	27
3.11	Safety Measures .....	27
3.12	Warranty and Comprehensive AMC (CAMC).....	28
3.13	Insurance .....	28
3.14	Delivery and Installation .....	29
3.15	Performance Assessment.....	29
3.17	Liquidated Damages.....	31
3.18	Termination of Contract.....	31
3.19	Termination for Insolvency, Dissolution etc.....	32
3.20	Termination for Convenience.....	32
3.21	Consequences of Termination.....	32
3.22	Force Majeure .....	33
3.23	Taxes and Duties .....	33
3.24	Resolution of Disputes .....	34
3.25	Notices .....	35
<u>Section 4: Scope Of Work.....</u>		<u>36</u>
4.1.	Objective .....	36
4.2.	Brief Scope of Work.....	36
4.3.	Work Plan .....	38
4.4.	Minimum Desired Specification .....	39
4.5.	Alternate Networking Solution .....	43
4.6.	General Requirements .....	47
4.7.	Inspections and Tests.....	48
4.8.	Packing, Delivery and Documents .....	49

4.9. Training and support.....	50
4.10. Operations and Maintenance (O&M).....	50
4.11. BOQ and Technical Specification.....	54
<u>Section 5: Bid Performa &amp; Attachments</u> .....	69
<u>Performa 1: Bid Sheet</u> .....	69
<u>Performa 2: Checklist of Documents To Be Submitted</u> .....	71
<u>Performa 3 A: Company Details</u> .....	73
<u>Performa 3 B: Bidder’s Turnover from SI Operations</u> .....	74
<u>Performa 3 C: OEM Certificate</u> .....	75
<u>Performa 3 D: Maintenance &amp; Technical Support Facilities</u> .....	77
<u>Performa 4 A: Technical Bid</u> .....	78
<u>Performa 4 B: Technical Deviations</u> .....	80
<u>Performa 4 C: Technical Compliances</u> .....	81
<u>Performa 4 D: After Sale Service Certificate</u> .....	102
<u>Performa 4 E: Experience and Track Record in the Field of System Integration</u> .....	103
<u>Performa 5: Price Schedule (To be filled online)</u> .....	104
<u>Performa 6: Special Power Of Attorney</u> .....	108
<u>Performa 7: Bank Guarantee Performa for Submitting EMD</u> .....	110
<u>Performa 8: Performance Bank Guarantee</u> .....	111
<u>Appendix A - Instructions for e-Tendering</u> .....	113
<u>Appendix B – JCC Locations and status</u> .....	116
<u>Appendix C – Details of Existing LAN at various JCC</u> .....	118
<u>Appendix - D : Tentative Node Distribution Guidelines for District Courts</u> .....	123
<u>Appendix E: Indicative Delivery &amp; Implementation Schedule</u> .....	126
<u>Appendix F: Activities &amp; Guidelines for LAN Enhancement at Court Complexes</u> .....	128
<u>Appendix G: Site Survey Report With Complete Item Wise Bill Of Material</u> .....	131
<u>Annexure 1: Proposed list of items (Active Components) for relocation from One JCC to Another to be submitted by the selected vendor after site survey</u> .....	132
<u>Annexure 2: Performa of certificate to be issued by the purchaser after successful Commissioning</u> .....	133

## DEFINITIONS

Unless the context otherwise requires, the following terms whenever used in this tender have the following meanings:

- a) “**AMC**” means Annual Maintenance Contract
- b) “**Bidder**” means vendor who submits Bid in response to this tender document.
- c) “**Bids**” means Online Bid submitted by bidders in response to the tender issued by the The Purchaser.
- d) “**Committee**” means committee constituted for evaluation of Bids.
- e) “**Contract**” means the Contract entered into by the parties for providing services defined in the tender along with the entire documentation specified in the tender.
- f) “**Corporation**” means Punjab Information & Communication Technology Corporation Ltd (PICTCL) also known as Punjab Infotech.
- g) “**Purchaser**” means Punjab Infotech on behalf of the Honorable Punjab & Haryana High Court (P&H HC), Chandigarh.
- h) “**EMD**” means Earnest Money Deposit/ security money deposit.
- i) “**ICT**” means Information and communication technology
- j) “**JCC**” means Judicial Court Complexes (District and subordinate courts)
- k) “**LAN/ WAN**” means Local Area Network/ Wide Area Network
- l) “**Last Three Financial Years**” means FY 2011-12, 2012-13, and 2013-14.
- m) “**OQR**” means the Online Query Resolution System of the portal.
- n) “**OEM**” means Original Equipment Manufacturer.
- o) “**O&M**” means Operations and Maintenance
- p) “**Parties**” means the Department, Punjab Infotech and the Selected Vendor/ Service Integrator.
- q) “**Personnel**” means professional and support staff provided by the bidders to provide training or perform services to execute an assignment and any part thereof.
- r) “**PBG**” means Performance Bank Guarantee.
- s) “**PRC**” means Project Review Committee.
- t) “**Similar work**” means setting up and maintenance of LAN/ WAN.
- u) “**Portal**” will mean e-tender website <http://etender.punjabgovt.gov.in>

- v) **“PRC”** means Project Review Committee
- w) **“SI”** means Service Integrator
- x) **“Similar Projects”** means ICT engagement(s) involving setting up of Networking (LAN involving at least five sites and minimum 500 nodes per assignment)
- y) **“SP”** means Telecom Service Provider.
- z) **“SNR”** means Site Not Ready.
- aa) **“Services”** means the work to be performed by the bidder pursuant to this tender and to the contract to be signed by the parties in pursuance of any specific assignment awarded by the The Purchaser.
- bb) **“SOW”** means Scope of Work for the selected bidder, specified in Section 4 of this document.
- cc) **“The Term”** means total project contract period of Eight (8) years (which includes onsite warranty for Five (5) years and optional three (3) years comprehensive AMC for the 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> year)
- dd) **“Tender No. or Document Reference No”** means the document or tender No. mentioned in the Document Control Sheet irrespective of whatever may be mentioned in the text of this document.
- ee) **“TEC”** Tender Opening & Evaluation Committee
- ff) **“UAT”** means User Acceptance Testing.



## **IMPORTANT NOTICES**

1. This tender document is not transferable.
2. Bidders are advised to study the document carefully. Submission of response shall be deemed to have been done after careful study and examination of the tender document with full understanding of its implications.
3. The response to this tender document should be full and complete in all respects. Incomplete or partial responses are liable to be rejected.
4. The bidder shall bear all costs associated with the preparation and submission of the response, including cost of demonstration, benchmarking and presentation for the purposes of clarification of the bid. The Purchaser will in no case be responsible or liable for the costs incurred by the bidder, regardless of the conduct or outcome of the tendering process.
5. Further clarifications, corrigendum and any other information related to this tender will be available at the e-tendering website.
6. The Purchaser reserves the right to accept or reject any or all responses without assigning any reason.

## **Section 1: Invitation for Bids**

### **1.1 Background**

Punjab Information & Communication Technology Corporation Limited (Punjab Infotech) earlier known as Punjab State Electronics Development and Production Corporation Limited was incorporated in 1976, as a State undertaking of Punjab, for the promotion and growth of Electronics Industry in the State of Punjab. The Corporation commits itself for creating an enabling ecosystem for transformation of the State from resource based economy to knowledge based economy.

With the increasing need for a Government agency to execute IT and e-Governance projects on behalf of the Government, Punjab Infotech developed capacity for delivering the IT and e-Governance services to a large number of Departments in the State. In order to carry out the role assigned to Punjab Infotech by its Board and the Government of Punjab, the in-house capabilities have been built to provide consultancy/undertake IT/ITES/e-Governance projects for various Government Departments / Boards / commissions/ Corporations/ Agencies. Punjab Infotech can undertake the following IT/ITES/e-Governance projects for the departments:

- a) Providing end to end ICT and e-Governance solutions as per requirements of departments.
- b) Providing networking solutions including procurement, installation and support of hardware related to networking/ telecom/ communications etc.
- c) Development of and maintenance of websites for departments (implementation through third party).
- d) Annual Maintenance contracts for ICT equipment.

## 1.2 Invitation

- a) This invitation for Bids is open to all Bidders (from India only) meeting the eligibility criteria as mentioned at Para 2.10 of this document.
- b) Through this tender, Punjab Infotech on behalf of Honorable Punjab & Haryana High Court, Chandigarh, invites proposals from eligible, reputed and qualified Systems Integrators (SI/ Bidders) for the supply, installation, enhancement of existing LAN, configuration, commissioning and its maintenance at various JCC in Punjab as described in Section 4: Scope of Work of this RFP Document.
- c) OEM or its authorized dealers/ distributors or Service integrators may participate in this tender.
- d) Cover bids are not permitted. Either the OEM or SI (including its authorized distributors/ dealers) in India can submit their bid (both cannot submit two separate bids).
- e) Any contract that may result from this Government procurement competition will be issued for a term of Seven years ("The Term").
- f) The Purchaser reserves the right to extend "the Term" for a period or periods to be mutually decided by the parties, such extension or extensions on the same terms and conditions, subject to The Purchaser obligations at law.
- g) Proposals must be submitted well before the last date and time for submission of bids mentioned in the Document Control Sheet to avoid last minute problems on the portal due to internet access etc. The purchaser will not be responsible for any such problems faced by bidders on the last day. They must take the help of e-procurement staff for any uploading problems faced by them at least one day before the last day for submission of bids.
- h) Tender document can be availed free of cost from the portal from start date till last date for issue of the tender document as prescribed in document control sheet.
- i) Bidders may please note that bid document cost is to be paid online before submission of queries. Subsequently, bidders will be required to pay the processing fee and EMD before submitting their proposals.

- j) The Purchaser may, at its discretion, extend the date for submission of Bids. In such a case all rights and obligations of bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

## **Section 2: Instructions to Bidders**

### **2.1 Information & Instructions for e-Tendering**

- a) For participation in this tender, prospective bidders are required to register themselves on the portal. Bidders will require valid Class-III digital signature certificates for submitting their bids. Bidders may avail training for online tendering as per instructions available on the website.
- b) Bidders shall submit their bids online through the portal.
- c) Bids will not be accepted by any other mode (post/ by hand/ email/ fax etc) except otherwise explicitly specified. Documents uploaded on the portal will only be considered for evaluation.
- d) Bidders must ensure that PDF files uploaded on the portal are not corrupted. Bidders must open all PDF documents and ascertain that these are not corrupted. Corrupted documents will be treated as documents not available.

### **2.2 Conflict of Interest**

The selected bidders should provide professional, objective, and impartial advice and at all times hold the Purchaser's interests paramount, strictly avoid conflicts with other assignments/ jobs or their own corporate interests and act without any consideration for future work. The selected bidder shall not deploy former employees of the Purchaser in any assignment under the tender.

### **2.3 Validity of Bids**

- a) Bids shall remain valid for a period of Ninety (90) days from the date of opening of Bids. The Purchaser reserves the right to reject a Bid valid for a shorter period as non-responsive.
- b) In exceptional circumstances, the Purchaser may solicit the bidder's consent to an extension of the period of validity. The request and the response thereto shall be made in writing. Extension of validity period by the bidder should be unconditional. A bidder may refuse the request without forfeiting the EMD. A bidder granting the request will not be permitted to modify its Bid.

### **2.4 Right to Accept or Reject Bid(s)**

- a) The Purchaser reserves the right to annul the tender process, or to accept or reject any or all the Bids in whole or part at any time without assigning any

reasons and without incurring any liability to the affected bidder(s) or any obligation to inform the affected bidder(s) of the grounds for such decision.

- b) If a Bid is selected, it will be the most advantageous regarding price, quality of service, the Bidder's qualifications and capabilities to provide the specified service, and other factors which The Purchaser may consider.

## 2.5 Fraud and Corruption

- a) It is desirable that the bidders and the successful bidder selected through this tender observe the highest standards of ethics during the bidding process and during the execution of contract. For this purpose, definition of the terms are set forth as follows:
  - i) **"Corrupt practice"** means the offering, giving, receiving or soliciting of anything of value to influence the action of the Purchaser or its personnel in contract executions.
  - ii) **"Fraudulent practice"** means a misrepresentation of facts, in order to influence a selection process or the execution of a contract, and includes collusive practice among bidders (prior to or after Bid submission) designed to establish Bid prices at artificially high or non-competitive levels and to deprive the Purchaser of the benefits of free and open competition;
  - iii) **"Unfair trade practice"** means supply of training services different from what is ordered on, or change in the Scope of Work given in Section 4.
  - iv) **"Coercive practice"** means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the selection process or execution of contract.
- b) The Purchaser will reject a bid if it determines that the Bidder is determined to having been engaged in corrupt, fraudulent or unfair trade practices.
- c) The Purchaser will declare a bidder ineligible, either indefinitely or for a stated period of time, for awarding the contract, if it at any time determines that the selected bidder has engaged in corrupt, fraudulent and unfair trade practice in competing for, or in executing, the contract.

## **2.6 Clarifications and Amendments of Tender**

- a) During the process of evaluation of the bids, the TEC may, at its discretion, ask Bidders for clarifications on their bid and / or to resubmit documents requiring corrections. Bidders are required to respond within the prescribed time frame.
- b) The Purchaser may for any reason, modify the tender from time to time. The amendment(s) to the tender would be clearly spelt out and the bidders may be asked to amend their Bid due to such amendments.

## **2.7 E-payment Instructions**

- a) All payments towards Cost of Tender Document, Earnest Money Deposit and Processing fee shall be deposited online through e-payment gateway of the portal (or any alternate means specified in the RFP). Bids will be rejected if any of the payments are not reflected on the portal. Therefore, payment must be made by either of the modes described in the Instructions for e-payment.
- b) Bidders may submit EMD in the form of a Bank Guarantee valid for a period of six months. Scanned copy of BG must be uploaded through the portal. The original copy must be sent by post/ by hand in a sealed envelope so as to reach Punjab Infotech before the last date of submission of tenders.
- c) Bidders desirous of using NEFT or OTC mode for making payments must download challans from the portal and not use any other challan form.
- d) For detailed information regarding modes of payment etc., please refer to instructions to bidders for e-tendering (Appendix B).

## **2.8 Earnest Money Deposit (EMD)**

- a) The EMD lying with the Purchaser in respect of other tenders/ RFP / Expression of Interest awaiting approval or rejected or on account of contracts being completed will not be adjusted towards EMD for this tender. In case of re-tender bidders will be required to resubmit the EMD.
- b) The EMD may be forfeited on account of one or more of the following reasons:
  - i) Bidder withdraws its Bid during the validity period specified in the tender.
  - ii) Bidder does not respond to requests for clarification of its Bid.
  - iii) Bidder fails to provide required information during the evaluation process or is found to be non-responsive.

- c) The EMD of unsuccessful bidders shall be refunded within one month after final award of contract.
- d) EMD of the successful bidder will be released only after the bidder signs the final agreement and has submitted PBG.

## **2.9 Process for Selection of SI**

The responses received pursuant to this tender will be evaluated as per the criteria specified in this document by a Tender Evaluation Committee (TEC) constituted by the Purchaser. The selected bidder would be required to undertake the assignment as mentioned in the 'Section 4: Scope of Work.'

## **2.10 Eligibility Criteria**

- a) The bidder's company should be either registered under Companies Act or a partnership firm registered under the appropriate Act.
- b) The bidder's company should have been in business for more than 5 years as on 31<sup>st</sup> March, 2014.
- c) The bidder shall have an average annual Sales Turnover of Rs 25 (Twenty five) Cr during the last three financial years. This turnover should be on account of ICT Systems Development and Implementation (i.e. revenue should be on account of System Integration/ Turnkey solutions or projects and their associated maintenance or implementation services, packaged software etc) only.
- d) The bidders company must have successfully implemented at least the following numbers of ICT engagement(s) involving setting up of Networking (LAN involving at least five sites and minimum 500 nodes per assignment) in India of value specified herein in the past five FYs (as on 31<sup>st</sup> March, 2014) in India (Documentary proof with satisfactory installation & acceptance of the same should be attached with offer issued by Purchaser Department):
  - i) One project with total project cost exceeding Rs. (2) Two Cr, or
  - ii) Two projects with each project cost exceeding Rs. (1) One Cr, or
  - iii) Three projects with each project cost exceeding Rs. (50) Fifty Lacs.
- e) The SI shall furnish a certificate from the OEM to provide technical support for the LAN active elements in terms of spares, replacement and repairs/ patches/ upgrades for the next Five years under warranty and/ or AMC clauses.
- f) The Bidder must hold a valid ISO 9001:2008 (or better) Certification.



g) The Bidder should have their own after sales support facilities in at least one place in Chandigarh/ Mohali/ Panchkula tri-city region. The support facilities should be fully owned by the Bidder / OEM and managed by their permanent employees (company payroll) and not through franchisee(s).

h) The Bidder shall not be under declaration of ineligibility for corrupt or fraudulent practices.

### **2.11 Eligible equipment and Services**

- a) All the equipment to be installed must bear reputed brands.
- b) If the Bidder does not manufacture the equipment, proof of authorization from manufacturers must be submitted by him as part of their technical bid.
- c) All accessories bundled by the manufacturer with the equipment and its test reports shall accompany the equipment.
- d) OEM should have been supporting the products under its own name and brand since last 3 years (as on 31<sup>st</sup> March, 2014).
- e) The quoted products should be latest version and should not be end of life for next 5 years. Level -1 support at site is to be provided by the bidder. Level -2 support should be provided by the OEM directly at site. Certificate of OEM for the same should be submitted along with technical bid. Details of OEM support pack should be provided in Performa 3-C for this purpose. OEM support pack should be tune with the SLA for 5 years.

### **2.12 Disqualifications**

The Purchaser may at its sole discretion and at any time during the evaluation of Bid, disqualify any Bidder, if the Bidder has:

- a) Made misleading or false representations in the forms, statements and attachments submitted in proof of the eligibility requirements;
- b) Exhibited a record of poor performance such as abandoning works, not properly completing the contractual obligations, inordinately delaying completion or financial failures etc. in any project in the preceding three years;
- c) Submitted a Bid that is not accompanied by required documentation or is non-responsive;
- d) Failed to provide clarifications related thereto, when sought;

- e) Been declared ineligible by the Government of India/State/UT Government for corrupt and fraudulent practices or blacklisted;
- f) Submitted a Bid with price adjustment/variation provision.
- g) Submitted a cover bid i.e. both OEM and its authorized distributor/ dealer has submitted separate bids, both will be disqualified.

**2.13 Pre-Bid Meeting**

- a) Queries pertaining to this RFP document may be submitted in the following format:

Ser. No.	Reference (Page No./Para/ Sub para No.)	Subject/ existing clause	Clarification Sought	Suggestions / Remarks (if any)
1				
2				
n				

- b) Queries are to be resolved on line through the Portal and, therefore, pre-bid meeting will not be held for this tender. The Purchaser, however, reserves its right to convene a pre-bid meeting, if felt necessary at its discretion, which will be intimated through a notification.
- c) The online query resolution (icon) can be accessed immediately after payment of tender document fee till the “Last date for submission of Tenders”, but **queries will be entertained only till the “Last date and time for submission of Queries”** as mentioned in the Document Control Sheet. Bidders must follow the steps given below:
  - i) Under the Department select “Punjab Information & Communications Technology Corporation Limited”.
  - ii) Click on the tender you want to participate and then take the “**email**” option.
  - iii) Select “**Pre-bid meeting**” option.
  - iv) Fill the information online in the query form and submit (hard copies/ letters/ mails will not be entertained). Alternatively the bidder may upload any document containing his queries using the relevant option from the same page.

- v) **Note:** Bidders shall not mention their company's particulars or their names to maintain confidentiality in support of their queries.
- d) Amendments necessitated as a result of the clarifications issued online or felt necessary by the Purchaser, shall be notified on the portal. It shall be the responsibility of bidders to fine tune their Bids incorporating the amendments, so communicated. The Purchaser shall not be responsible for any oversight or negligence on part of the bidders on the amendments to the tender document notified through the portal.

#### **2.14 Preparation & Submission of Bids**

- a) Bidders are expected to carefully examine all the instructions, guidelines, terms and conditions and formats of the tender. Failure to furnish the necessary information as required by the tender or submission of a bid not substantially responsive to all the requirements of the tender are liable to rejection.
- b) Bids and all associated correspondence shall be written in English and shall conform to prescribed formats. Any interlineations, erasures or over writings must be initialed by the authorized person signing the Bid.
- c) The letter of authorization shall be supported by written power of attorney (as per Performa – 6).
- d) If any document is not submitted by the bidder at the time of submission of bid in support of Bidder's Eligibility Criteria, the evaluation of bids will be based on available documents in the bid and non submission of documents will be treated as non availability of documents. The Purchaser, however, reserves its right to requisition any document at its discretion as per Para 2.6 of this RFP.
- e) Bids received by any other mode except through the portal shall be treated as defective, invalid and rejected. Only detailed complete Bids submitted through the portal shall be taken as valid.
- f) If Bidders choose to submit EMD in the form of a Bank Guarantee (BG), its scanned copy must be uploaded on the portal along with pre-qualification documents as per Performa – 7 and the original copy must be enclosed in the pre qualification envelope.
- g) No bidder is allowed to modify, substitute, or withdraw their bid after its submission on the portal.

## 2.15 Evaluation of Bids

Bids will be opened as per the schedule mentioned in the Document Control Sheet. The Purchaser will constitute an Evaluation Committee to evaluate the Proposals submitted by Bidders. Subject to terms mentioned in the tender, a three-stage process, as explained below, will be adopted for evaluation of proposals.

### a) Pre-qualification Bid Evaluation

- i) **Payment of bid processing fee, bid document fee and EMD:** Payments made by bidders through payment gateway of the portal will be reconciled in the system and only those bids for which payments are found to be reconciled will be opened.
- ii) **Preliminary Scrutiny:** Preliminary scrutiny of the bid for eligibility will be done to determine whether the bids are in order and complete Proposals not conforming to such preliminary requirements may be rejected.
- iii) **Conformance to eligibility criteria:** Proposals/ responses conforming to preliminary scrutiny requirements will be checked for conformance to the eligibility criteria stated above and Non-conforming proposals will be rejected.

### b) Technical Bid Evaluation

- i) Technical bids would be opened for only those bidders who qualify the Pre-qualification evaluation.
- ii) Prior to the detailed technical evaluation, the Purchaser will determine the substantial responsiveness of each bid to the Bidding Documents. For the purpose of this Clause, a substantially responsive bid is one that conforms to all the terms and conditions of the Bidding Documents without material deviations. Deviations from or objections or reservations to critical provisions as may be decided by the TEC will be deemed to be material deviations. The Purchaser's determination of a Bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- iii) A bid determined as not substantially responsive will be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the non-conformity.
- iv) The Purchaser's evaluation of a technical bid will take into account one or more of the following factors:

- A. Superiority of solution offered
  - B. Deviations/superiority in technical specification of supplied equipment as detailed in Technical specification.
  - C. Market standing and acceptability of solution offered
  - D. Detailed project plan covering the following major activities so that project is completed within the set out time for implementation; Delivery, installation, testing, commissioning and training schedule offered in the bid.
  - E. The availability of after-sales support services for the goods/ equipment offered in the bid at the time of bid submission;
  - F. The comprehensive annual maintenance costs during the period of 3 years after completion of warranty period;
  - G. Other specified criteria indicated in the Technical Specification;
  - H. Financial strength and market standing of the bidder;
  - I. Bidding qualification of the bidder;
- v) TEC may, at its discretion, call for additional information from bidders. Such information has to be supplied within the set out time frame. Otherwise TEC shall take decisions based on reasonable assumptions and proposal may be rejected due to being non-responsive. Merely seeking clarifications cannot be treated as acceptance of the proposal. Bidders shall provide necessary documents, samples and reference information as desired by the committee. Bidders shall also assist the committee in getting relevant information from the bidders' references.
- vi) The supplier must submit the sample of all the passive components with technical bid except UPS, Rack & Conduit with proper details mentioned in components.
- vii) Bidders short-listed by the TEC based on evaluation of their technical bids may be called for detailed discussions including presentation of their Networking solution to a team selected by the purchaser for the purpose as specified in the data sheet.
- viii) Bidders who are found responsive will qualify for the commercial evaluation.

**c) Commercial Bid Evaluation**

- i) Commercial bids would be examined by the Evaluation Committee on the basis of responsiveness to documents submitted as part of the commercial bid.

- ii) The bidders shall provide separate pricing for CAMC of all newly installed components of LAN for their 6th, 7th and 8th year after expiry of 5 years OEM warranty for each site. The grant of CAMC for each site with respect to newly installed equipments/components for 6th, 7th and 8th year on the price quoted by the vendor shall be subject to final decision to be taken by the High Court.
- iii) The prices should be all inclusive of Taxes, Transportation, Transit Insurance, Out of Pocket Expenses (OPE) and license fees.
- iv) Bidders shall state their bid price for the payment schedule outlined in the payment clause. Bids will be evaluated on the basis of this base price.
- v) Bidders may attach a scanned document and suggest an alternative payment schedule and indicate the percentage reduction in bid price (without mentioning the amount) they wish to offer for such alternate payment schedule. **If the price bid amount is found mentioned in any document other than the Price Bid, the bid may be outrightly rejected.** The Purchaser may consider the alternative payment schedule offered by the selected Bidder but it may not be binding on the purchaser to accept the same.
- vi) To order to obtain the best solution at the right price or acceptable premium, purchaser may assign weightage to different parameters of solutions offered and prices by adopting a transparent criterion before opening of commercial bids.
- vii) Bidders are advised not to indicate any separate discount. Discount, if any, should be merged with the quoted prices. Discount of any type, indicated separately, will not be taken into account for evaluation purpose. However, in the event of such an offer, without considering discount, is found to be the lowest, the Purchaser shall avail such discount at the time of award of contract.
- viii) Least cost commercial proposal of the technically eligible bidder will be designated as L1. In case there are two or more bidders having the same 'L1' price in the Commercial bid the Purchaser reserves its right to place order on any one of the bidders.

**d) Revised Commercial Bids**

- i) If the purchaser considers necessary, it may ask for revised commercial bids from the technically qualified bidders. The revised bids shall be submitted in

sealed envelopes within a specified time of intimation to this effect. The revised bids shall not be for amounts more than the one quoted earlier for an item by the respective bidder, unless the specifications are for higher configuration. Any bidder quoting higher rates in their revised commercial bid for the same item quoted earlier shall be disqualified for further consideration and the bid security may be forfeited.

ii) Technical Evaluation Committee reserves its right to change the specifications before opening of the commercial offers for the betterment of the project. In case the specifications are changed then the bidders will be required to submit their revised offer.

iii) Final Price shall remain valid for the minimum period of 1 year from the date of purchase order for other similar and / or small value networking projects for repeat order.

## **2.16 Negotiation Rights**

Hon'ble Computer Committee of Punjab & Haryana High Court, Chandigarh reserves the right to call all or any selected parties for negotiations before issuing of work order.

## **2.17 Award of Contract**

The Purchaser will notify the successful bidder in writing that its proposal has been accepted. The selected bidder will be required to sign a contract within Ten (10) working days of issue of LOI.

## **2.18 Purchaser's right to vary Quantities at Time of Award**

At the time of awarding the contract, the Purchaser reserves its right to increase or decrease the quantity of goods (as per actual requirement) and services originally specified in the schedule of requirement, without any change in unit price or other terms and conditions. Purchaser may also decide not to buy a good or service or part of it at all.

## **2.19 Confidentiality**

a) Information relating to the examination, clarification and comparison of the Bids shall not be disclosed to any Bidder or any other persons not officially concerned with such process until the selection process is over. The undue use by any

Bidder of confidential information related to the process may result in rejection of its Bid.

- b) During the execution of the project except with the prior written consent of the Purchaser, the selected bidder or its personnel shall not at any time communicate to any person or entity any confidential information acquired in the course of the Contract.
- c) Confidential information shall mean and include any and all confidential or proprietary information furnished, in whatever form or medium, or disclosed verbally or otherwise by the Bidder/ selected bidder and/ or the Purchaser to each other including, but not limited to, the services, plans, financial data and personnel statistics, whether or not marked as confidential or proprietary by the parties.



### **Section 3: General Contract Conditions (GCC)**

#### **3.1 Application**

These general conditions shall apply to the extent that provisions in other parts of the Contract do not supersede them. For interpretation of any clause in the tender or Contract Agreement, the interpretation of the Purchaser shall be final and binding.

#### **3.2 Relationship between the Parties**

Nothing mentioned herein shall be constructed as relationship of master and servant or of principal and agent as between the Purchaser and the Vendor. The Vendor subject to this contract for selection has complete charge of its personnel in performing the services under the Project from time to time. The Vendor shall be fully responsible for the services performed by it or any of its personnel on behalf of the Vendor hereunder.

#### **3.3 Standards of Performance**

The Vendor shall perform the services and carry out its obligations under the Contract with due diligence, efficiency and economy in accordance with generally accepted professional standards and practices. The Vendor shall always act in respect of any matter relating to this contract as faithful advisor to the Purchaser. The Vendor shall always support and safeguard the legitimate interests of the Purchaser, in any dealings with the third party. The Vendor shall abide by all the provisions/Acts/Rules etc. of Information Technology prevalent in the country. The Vendor shall conform to the standards laid down in the tender in totality.

#### **3.4 Vendor's Downstream Business Interest**

The Vendor shall not be eligible to bid for the activities relating to the implementation of this project. Further, the Vendor shall give a declaration that they do not have any interest in downstream business, which may ensue from the tender prepared through this assignment.

#### **3.5 Applicable Law**

Applicable Law means the laws and any other instruments having the force of law in India as may be issued and in force from time to time. The Contract shall be interpreted in accordance with the laws of the Union of India and the State of Punjab.

### **3.6 Intellectual Property Rights**

No services covered under the Contract shall be sold or disposed by the Vendor in violation of any right whatsoever of third party, and in particular, but without prejudice to the generality of the foregoing, of any patent right, trademark or similar right, or any charge mortgage or lien. The Vendor shall indemnify the Purchaser from all actions, costs, claims, demands, expenses and liabilities, whatsoever, resulting from any actual or alleged infringement as aforesaid and at the expenses of the Vendor, the Purchaser shall be defended in the defense of such proceedings.

### **3.7 Governing Language**

The Contract shall be written in English Language. All correspondences and other documents pertaining to the contract, which are exchanged between the parties, shall be written in the English Language.

### **3.8 Performance Bank Guarantee (PBG)**

- a) The Vendor shall furnish a Performance Bank Guarantee, as per Performa – 8, for an amount equal to 15% of total project cost valid for five years plus six months as its commitment to perform services under the contract within seven (7) working days of the award of contract.
- b) Failure to sign the contract and submit PBG in time mentioned above shall constitute sufficient grounds for forfeiture of the EMD. Subsequently failure to perform services as per contract shall constitute sufficient grounds for forfeiture of the PBG.
- c) The PBG shall be released immediately after expiry of its validity period provided there is no breach of contract on the part of the Vendor.
- d) No interest will be paid on the PBG.
- e) In the event of any correction of defects or replacement of defective equipment during the warranty period, the warranty for the corrected/replaced equipment shall be extended to a further period of 12 months. The PBG for a proportionate value shall be extended 60 days over and above the extend warranty period.

### **3.9 Price fall**

- a) The vendor shall submit an undertaking regarding price fall as mentioned in Performa 1 that the prices charged for the Goods/ Services supplied under the contract by the vendor shall in no event exceed the lowest price at which the

vendor sells the Goods or offers to sell Goods of identical description to the Department of the Central or State Government or any Statutory undertaking of the central or State Government, as the case may be, during the currency of the contract.

- b) If, at any time during the said period the vendor reduces the sale price, sells, or offers to sell such goods to any person/organization including the purchaser or any Department of State or Central Government or any statutory Undertaking of the Central or State Government as the case may be, at a price lower than the price chargeable under the contract, the Vendor shall forthwith notify such reduction, or sale or offer to sell to the purchaser and the price payable under the contract for the supply of material after the date of coming into force of such reduction or sale or offer to sell shall stand correspondingly reduced.

### **3.10 Supplier Obligations**

- a) The Supplier is obliged to work closely with the Purchasers staff, act within its own authority and abide by directives issued by the Purchaser and implementation activities.
- b) The Supplier will free the Purchaser from all demands or responsibilities arising from accidents or loss of life the cause of which is the Supplier's negligence. The Supplier will pay all indemnities arising from such incidents and will not hold the Purchaser responsible or obligated.
- c) The Supplier will treat as confidential all data and information about the Purchaser, obtained in the execution of his responsibilities, in strict confidence and will not reveal such information to any other party without the prior written approval of the Purchaser.
- d) The Supplier will involve Purchaser(s)' representative in all hardware & software configuration.

### **3.11 Safety Measures**

- a) The supplier shall take all precautionary measures to ensure the safety of their personnel (his representative, agents, sub-vendors or workmen) working in the office while executing the work.
- b) The supplier shall ensure that unauthorized, careless or inadvertent operation of installed equipment, which may result in accident to their staff and or damage to the equipment, does not occur.

- c) The supplier shall assume all liability for and indemnify the Purchaser against all actions, suits claims, demands cost charges or expenses arising out of and in connection with any accident, death or injury, sustained by any of their persons or persons within the office premises and any loss or damage to the Purchaser property sustained due to the act or omissions of the supplier irrespective of whether such liability arises under the workman compensation act or any other statute in force from time to time.

### **3.12 Warranty and Comprehensive AMC (CAMC)**

- a) All the equipment shall carry Five (5) years onsite warranty, except mentioned otherwise, against defective workmanship and materials, faulty designs or inferior quality of materials. It shall be repaired and/or replaced at site free of charges. All OEM warranties shall be extended to the Department. All batteries shall carry three years onsite warranty. The warranty period will commence from the date of go live at each JCC LAN commissioned.
- b) The bidders shall provide Comprehensive Annual Maintenance Contract (CAMC) of all newly installed components of LAN for their 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> year after expiry of 5 years OEM warranty for each site subject to final decision to be taken by the High Court in this regard.
- c) The vendor may called upon to undertake the maintenance of existing components under warranty period and CAMC for additional three years. List of active components attached as per Appendix C may be verified at the time of site survey.
- d) After completion of warranty and CAMC period the supplier shall handover complete network in all working conditions along with all configuration details, IP addresses, passwords and documentation to concerned district court manager.

### **3.13 Insurance**

- a) The equipment supplied under the contract shall be fully insured by the vendor against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery.
- b) The insurance shall be obtained by the vendor for an amount equal to the exact value of goods up to the delivery at site on all risks basis, including war risks and strike clauses etc.

### 3.14 Delivery and Installation

- a) The selected bidder will plan the delivery of all items in such a way that the LAN at all JCC in Punjab is installed within Six (6) months from the date of award of contract as per priority to be decided by Honorable Punjab & Haryana High Court. All items will be physically checked and accepted as delivered by the nominated JCC representatives/ Nodal officers and tested (UAT) by the PRC on completion of installation. The billing will be on the basis of actual material supplied/ installed.
- b) All functionalities will be tested thoroughly in the UAT. The O&M phase will commence from the date of acceptance of UAT report by the PRC.
- c) If the delay in UAT is due to dependencies on Purchaser. Such delays will be properly recorded/ documented and communicated/ escalated by the vendor within reasonable time. The delays will be examined and may be condoned by the PRC on merit.
- d) The vendor will submit delivery challans and installation note completed in all respects within 20 days of scheduled date of delivery and installation or actual date of delivery and installation, whichever is earlier.
- e) Defective/ Partial/ Incomplete items will be treated as undelivered items in total and Penalty (if any) will be applicable.
- f) The Purchaser shall not be responsible for any postal delays about non-receipt/ non- delivery of the documents.
- g) Delivery and installation of LAN equipment would be at various JCC (list attached at Appendix B) in a phased manner.
- h) The vendor will be entirely responsible for the safety and security of material delivered at various sites.

### 3.15 Performance Assessment

The performance of the vendor will be assessed as below:

- a) **Supply and Installation:** If there is an undue delay in supply and installation or unsatisfactory supply, installation or commissioning of equipment, the Purchaser reserves the right to terminate the contract and impose liquidated damages.
- b) If any time during the performance of the Contract, the Supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the

Goods and Performance of the Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and causes.

- c) **Operations & Maintenance (O&M):** During the O&M phase, the vendor is required to ensure that all items supplied as part of the contract are kept functional/ serviceable and that complaints are correctly logged and processed by him. For more/ specific responsibilities please refer to Section 4: Scope of Work.
- d) **Penalties:** After expiry of 'Delivery' period a penalty @ 0.5% per week for the delay of first two weeks and 1% penalty for the delay of next 3 weeks up to a maximum cap of 4% penalty for 5 weeks delay" may be considered. Thereafter, the Purchaser may cancel the order with the consultation of Indenting Department/Organization and suitable action might be taken against the defaulter firm. In case, however, the Purchaser opts for accepting the items beyond 5 weeks delay, than 1% penalty per week or part thereof would be continued for delay till the date of supply. The penalty will be calculated on total contract value.

### **3.16 Payment Schedule**

- a) Payment of 80% cost of items actually delivered and installed at each JCC site will be made on successful integration, testing and go live and receipt of all documents (delivery challans, installation reports, inspection reports, bills/invoices, equipment details and acceptance report from the concerned District & Sessions Judge;
- b) Remaining 20% cost of items actually delivered and installed shall be released in ten equal half yearly installments on production of satisfactory service certificate from the Court Manager or any person authorized by District & Sessions Judge in this regard.
- c) The payment towards salary of to be shall be released quarterly upon receipt of actual attendance and performance certificate from the Nodal Judicial Officer or any person authorized by District & Sessions Judge in this regard.
- d) Payment of the cost for CAMC of the existing usable components/equipment and newly installed components/equipment of LAN for each site will be made at the relevant time as and when the grant of CAMC is approved by the High Court and in the manner and mode as will be specified by the High Court.
- e) Payment shall be made after adjusting penalties (if any) as applicable.

### 3.17 Liquidated Damages

- a) Notwithstanding The Purchaser right to cancel the order, liquidated damages for late delivery and installation as specified at Para 3.15 (d) will be charged subject to a maximum of 10% of the order value. For example, if an active LAN switch or UPS is not delivered, LD at total Order value will be charged.
- b) In case of non submission of the Delivery Challans and Installation Notes within the stipulated period of 20 days, penalty @ 1% per consignment per month or part of a month will be imposed.
- c) The Purchaser reserves its right to recover the amounts on account of LD and other penalties by any mode such as; revoking PBG or adjusting from any payments to be made by The Purchaser to the bidder. The bidder will also have a choice of depositing the amount due towards him on account of penalties by cheque / Demand draft/ OTC/ NEFT in favor of Punjab Information and Communications Technology Corporation Ltd.

### 3.18 Termination of Contract

- a) **Material Breach:** In the event that either Party believes that the other Party is in Material Breach of its obligations under this Agreement, such aggrieved Party may terminate this Agreement upon giving a one month's notice for curing the Material Breach to the other Party. In case the Material Breach continues, after the notice period, the Nodal Agency or Implementation Agency, as the case may be will have the option to terminate the Agreement. Any notice served pursuant to this Clause shall give reasonable details of the Material Breach, which could include the following events and the termination will become effective:
  - i) The selected bidder commits a breach of any of the terms and conditions of the bid.
  - ii) The bidder goes into liquidation, voluntarily or otherwise.
  - iii) An attachment is levied or continues to be levied for a period of seven days upon effects of the bid.
  - iv) If the selected bidder fails to complete the assignment as per the time lines prescribed in the RFP and the extension if any allowed, it will be a breach of contract. The Purchaser reserves its right to cancel the order in the event of delay and forfeit the PBG as liquidated damages for the delay.

- v) In case the selected bidder fails to deliver the quantity as stipulated in the delivery schedule, The Purchaser reserves the right to procure the same or similar product from alternate sources at the risk, cost and responsibility of the selected bidder.
  - vi) After award of the contract, if the selected bidder does not perform satisfactorily or delays execution of the contract, The Purchaser reserves the right to get the balance contract executed by another party of its choice by giving one month's notice for the same. In this event, the selected bidder is bound to make good the additional expenditure, which The Purchaser may have to incur in executing the balance contract. This clause is applicable, if for any reason, the contract is canceled.
- b) The Purchaser reserves the right to recover any dues payable by the selected Bidder / penalties/ LD from any amount outstanding to the credit of the selected bidder, including the pending bills and/or revoking the bank guarantee under this contract.

### **3.19 Termination for Insolvency, Dissolution etc**

The Purchaser may at any time terminate the contract with immediate effect by giving written notice to the Vendor, if the Vendor becomes bankrupt or otherwise insolvent or in case of dissolution of firm/company or winding up of firm/company. In this event termination will be without compensation to the Vendor, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the Purchaser.

### **3.20 Termination for Convenience**

The Purchaser reserves its right to terminate, by prior written notice of one month, the whole or part of the contract, at any time for its convenience. The notice of termination shall specify that termination is for its convenience, the extent to which performance of work under the contract is terminated, and the date upon which such termination becomes effective.

### **3.21 Consequences of Termination**

- a) In the event of termination of the Contract due to any cause whatsoever, [whether consequent to the stipulated term of the Contract or otherwise], The Purchaser shall be entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective business continuity of the Service(s) which the



Vendor shall be obliged to comply with and take all available steps to minimize loss resulting from that termination/ breach, and further allow the next successor Vendor to take over the obligations of the erstwhile Vendor in relation to the execution/ continued execution of the scope of the Contract.

- a) Nothing herein shall restrict the right of The Purchaser to revoke the Performance Bank Guarantee and other guarantees, securities furnished, enforce the Deed of Indemnity and pursue such other rights and/or remedies that may be available to The Purchaser under the law or otherwise.
- b) The termination hereof shall not affect any accrued right or liability of either Party nor affect the operation of the provisions of the Contract that are expressly or by implication intended to come into or continue in force on or after such termination.

### **3.22 Force Majeure**

- a) The Vendor shall not be liable for forfeiture of its PBG or termination of contract for default if and to the extent that it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- b) For purposes of this clause, "Force Majeure" means an event beyond the control of the Vendor and not involving the Vendor's fault or negligence, and not foreseeable. Such events may include, but are not restricted to, acts of the Purchaser in its sovereign capacity, wars or revolutions, riot or commotion, earthquake, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- c) If a Force Majeure situation arises, the Vendor shall promptly notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Vendor shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

### **3.23 Taxes and Duties**

The Vendor shall be entirely responsible for all taxes; duties, etc. incurred.

### 3.24 Resolution of Disputes

If any dispute arises between parties, then these would be resolved in following ways:

**a) Amicable Settlement**

Performance of the Contract is governed by the terms and conditions of the Contract, however at times dispute may arise about any interpretation of any term or condition of Contract including the scope of work, the clauses of payments etc. In such a situation either party of the contract may send a written notice of dispute to the other party. The party receiving the notice of dispute will consider the Notice and respond to it in writing within 30 days after receipt. If that party fails to respond within 30 days, or the dispute cannot be amicably settled within 60 days following the response of that party, then the second Sub-clause of resolution of disputes shall become applicable.

**b) Arbitration**

In case dispute arising between the Purchaser and the Vendor, which has not been settled amicably, the Vendor can request the Purchaser to refer the dispute for Arbitration under Arbitration and Conciliation Act, 1996. The disputes or differences arising shall be referred to the Sole Arbitration. **The Chief Justice, Punjab & Haryana High Court shall appoint the sole Arbitrator.** However, a person who had an opportunity to deal with the matters to which the contract relates or who in the course of his duties had expressed views on all or any of the matters under dispute or difference shall not be appointed as arbitrator. Arbitration proceedings will be held at Chandigarh. The decision of the arbitrator shall be final and binding upon both the parties. All arbitration awards shall be in writing and shall state the reasons for the award. The expenses of the arbitration as determined by the arbitrator shall be borne by the Vendor. However, the expenses incurred by each party in connection with the preparation, presentation shall be borne by the party itself. The cost and expenses of Arbitration proceeding will be paid as determined by the sole arbitrator.

**c) Legal Jurisdiction**

All legal disputes between the parties shall be subject to the jurisdiction of the Courts situated in Chandigarh only.

### **3.25 Notices**

- a) Any notice or other document which may be given by either Party under this Agreement shall be given in writing, in person or by pre-paid recorded delivery post, email or by facsimile transmission.
- b) In relation to a notice given under this Agreement, any such notice or other document shall be addressed to the other Party's principal or registered office address.

## **SECTION 4: SCOPE OF WORK**

### **4.1. Objective**

The objective is to connect, through LAN, all court rooms, Retiring Room, Peshi Room, Steno Room, Display Board, Temil Nazar, Copying Agency Subordinate, Record Room Subordinate, Server Room, JSC, Suvidha Center, Video Conference Room, Conference Hall, Centralized Library, PRO in such a way that the upgraded network reuses most of existing LAN infrastructure while maintaining perfect interoperability with existing Network, NIC Network & PAWAN. LAN should be designed in such a way that it works with existing NICNET, PAWAN routers, switches, VoIP phones, Video Conferencing equipments, Display Systems etc.

### **4.2. Brief Scope of Work**

- a) This section provides details on features and services to be provided by the selected Vendor for the supply, installation, enhancement of existing LAN, testing and commissioning of new LAN points and their maintenance at various District and Sub Divisional courts (JCC) in Punjab (list of JCC and their status is as per Appendix B). Management of the entire network for five year by providing one technical person of agreed qualifications at all District Court sites or by training the existing manpower at the District Courts is also the responsibility of the supplier. Integration of existing network with new network, maintaining entire network during and after expiry of the warranty period of existing network and ensuring the continuity and support for all services running at present on existing network will also be responsibility of the bidder. The desired LAN points at various JCC should be installed in consultation with the Concerned Court Manager and System Officer.
- b) The contract will cover the system design, supply, delivery, implementation, testing & commissioning and have onsite warranty for 5-year, followed by an optional Comprehensive annual maintenance period (CAMC) or multi-year extended warranty period for additional three years if approved by P&H HC.
- c) The network will be monitored and managed through NMS installed at each District JCC. Operating System & Server for NMS shall also be provided by supplier.
- d) Uninterrupted power supply (UPS) will be provided to all active LAN elements to ensure interruption free operations during temporary power failures.

- e) Each switch shall have 10% extra capacity for future requirements for; VC points, IP Surveillance points, Display Systems etc.
- f) The successful bidder shall provide one **Resident Engineer (RE)** who will be responsible for maintenance of LAN in his area of jurisdiction for a period of 5 year. RE will be deployed on full time basis. He must be well qualified & experienced network engineer with following qualifications:
  - i) Diploma in Engineering in IT/CS/Electronics/Electronics & Communication with OEM & CISCO Professional Certification and minimum 3 years post qualification experience of LAN Management. All the documents relate to qualification & experience shall be deposited before joining with a copy to High Court.
  - ii) **Key responsibilities of RE**
    - a. Work under the supervision of concerned District & Session Judge and as per norms, terms & conditions and allotted time (9.00 AM to 6.00 PM, 6 days a week).Ensuring that the system is available 24x7 as prescribed in this RFP.
    - b. Be responsible to configure switches for best performance and checking of unnecessary network traffic for complete network.
    - c. Attending to and resolving system failures and snags
    - d. Support and maintain the overall infrastructure including sub-divisions courts of the district
    - e. Configuration and backup of system data including documentation of all configurations, VLANS, Policies etc.
    - f. 24x7 monitoring of the system to spot the problems immediately.
    - g. Provide L1 support for existing network. L2 support shall be provided by existing systems integrator.
    - h. Operate the NMS.
  - iii) **Penalty for Default & Replacement of RE**
    - a. The bidder will arrange suitable resource in case their deployed RE is not available for more than 3 working days. If he fails to deploy the engineer within allotted time frame than he will be liable to pay the penalty @ Rs. 1000/- per day and arrange suitable resources.

- b. If the service of deployed network engineer is not as per the norms and concerned District & Session Judge feels that the work of deployed engineer is not satisfactory then the bidder will replace the network engineer within seven days with written confirmation to the concerned District & Session Judge.

#### **4.3. Work Plan**

After survey of various sites by the successful bidder, a proposed work plan along with proposed LAN design should be submitted to the High Court wherein all the Sites in a State shall be clubbed in bunches of 5 locations and the work plan should indicate the time line for completion of work for each Bunch. The overall work plan shall be designed in such a manner so as to complete the entire work within the time frame as indicated in the RFP. The work plan shall be finalized after its approval by High Court. Further the High Court reserves its rights to direct prioritization of installation work at certain locations, if need be. Indicative Delivery & Implementation Schedule is attached as per Appendix E. Proposed activities & Guidelines for LAN Enhancement at Court Complexes is as per Appendix F. The work plan must cover the following major activities:

- a) Site Survey
- b) Design assessment
- c) Supply of Passive components
- d) Preparation of network plan with rack wise node details (in form of excel tables) and cable layout diagrams.
- e) Cable laying and testing of the laid cable
- f) Supply of Active Components
- g) Installation, connectivity and testing of the LAN
- h) Integration with already existing Server, Nodes, Power Supply & Peripherals.
- i) NMS configuration for central monitoring and management.
- j) Submission of test reports.
- k) Training of technical staff at District and Sub Divisional courts for Network Operations and management.
- l) Posting of one network engineer for the period of five years from date of first inspection of operational network.
- m) Network Audit by the purchaser.

#### 4.4. Minimum Desired Specification

- a) Objective of the networking is to develop / Up-grade court intranet (LAN) and provide network services (Internet, E-mail, IP-Phone, Video Conference services etc.) through common State Wide Area Network (PAWAN) and NICNET links.
- b) A Court complex may comprise of one or multiple blocks. These blocks may be contiguous or separated by public roads. In case of all Courts there is one computer centre. Core switch is placed in the Computer Centre / Network
- c) Each court has been provided with a video conference room and IP phones. Video conferences will take place on PAWAN and NICNET. IP phones are working on PAWAN. Court Information System (CIS) has been implemented in all courts and requires LAN access for all stake holders. Each court complex has already been provided with a LAN connecting all key stake holders. The purpose of new LAN enhancement is to provide comprehensive LAN connectivity as per High Court / Supreme Court Guidelines in each court complex. Court wise, details of existing LAN (active elements) are as per **Appendix C**.
- d) Tentative Node Distribution Guidelines for District Courts for providing LAN nodes in District Courts and Sub Divisional Courts are attached at **Appendix D**.

#### e) Proposed Solution

- i) **District Courts:** The supplementary network will consist of one Layer 3 core switch which will connect or stack with existing core switch minimum at 10Gbps. Proposed core switch may replace existing core switch which may be used as an edge switch. Each Edge switch (existing and new) will connect to core switch at 1 Gbps on redundant OM-4 fiber or CAT6A cables. New edge switches will provide at least 1 Gbps connectivity to each node on CAT6A cable. NMS provided with Core Switch will discover all LAN switches and nodes up to port level and provide complete manageability. Attempt shall be made to utilize the free ports on the existing switches in such a way that all IO's of a court are terminated on the same edge switch. All redundant backbone cable will terminate on a separate patch panel.
- ii) **Sub Divisional Courts:** Additional requirement shall be met by using free ports on existing switches. In case additional switch requirements uplink port of existing switches and new switches will aggregate on uplink ports of one of

the new (edge configuration) switch using CAT 6A or fiber cable with SFP modules (as the case may be) at 1 Gbps to create a single network.

- iii) Estimated LAN node requirements for various court complexes may change depending on actual requirement. LAN design should provide switches for 10% additional requirements. The features of the Network to be made available to the clients should support the following:
  - a. Access to the shareware on the network and enabling work flow automation,
  - b. Access to all Court applications.
  - c. PAWAN & NICNET integration and VC, IP Phone, Internet browsing.
  - d. Internet browsing from each node supporting standard browsers.
  - e. Management of all switches in the LAN through OEM / third party NMS
  - f. Cabling guidelines and approximate estimated quantity are enclosed at the end of this section.

**f) Intranet Scope**

The successful bidder will be required to supply the equipment, install and commission the Intranet with necessary switches, data communications cables, connectors etc. which include laying conduits, channels, cables, fixing information outlets, configuration and setting up of all other items and providing connectivity between existing nodes and servers wherever applicable.

**g) Specifications and work involved**

- i) After placement of confirmed order, LAN survey should be conducted by supplier for each site to study the exact requirement for LAN enhancement which include existing details, existing layout plan, New / Proposed Network plan, Complete Network Plan along with detailed location of each component like Rack position, VC equipment position, I/O position, existing items to be used, additional bill of material required. All these documents shall be got countersigned by Court Manager after consultation with DIO/NIC. The documents must be submitted in triplicate to High Court and Punjab Infotech.
- ii) **Site Survey:** Visit all sites, prepare site survey reports, get the survey reports counter signed by respective Court Manager in consultation with DIO/NIC. Submit 3 copies of survey report. Details of points to be adhered for survey and LAN design are placed at Annexure –1. The survey report must consist of followings:
  - a. Existing Network Diagram
  - b. New Proposed Network Diagram



- c. Complete Network Flow Diagram with detailed action plan which consists rack/switch locations, I/O locations, Backend connectivity details, open & underground cabling, Uplinks details, Stacking details etc.
  - d. IP scheme for complete network as an extension of existing IP scheme
  - e. Details of existing components to be used
  - f. Complete item wise bill of material (BoM) for new network
- iii) Based upon survey reports, the Selected Bidder will have an option to relocate switches (Annexure 1) from one location to another location for better network management, single point of responsibility and single OEM for all active components. For this purpose, the selected bidder will submit a proposal/report as per Appendix G to high court for its approval with 15 days of completion of all site surveys.
  - iv) Supply, install & commission the network components as per the approved site survey report including rack mounting, configuration and physical connectivity and configuration of switches etc for central manageability through Network Management Software (NMS).

**h) Functional Requirements**

- i) Present cabling to be retained and not to be disturbed at any stage.
- ii) Maximum use to be made of the components like switches, Patch Panels and racks in the existing network.
- iii) Rearrange new and existing switches (if necessary) for better usage and design within the complex.
- iv) Identification of location for placement of additional edge switches and racks for new network.
- v) Preparation of Detailed Network Plan & its approval from High Court.
- vi) Plan extension of UPS power to all switches in the new network.
- vii) Supply, install & commission all the network components supplied. It includes rack mounting, configuration and physical connectivity of switches etc. for central manageability through Network Management Software (NMS). The arrangements of switches are to be finalized in consultation with Nodal Officer/ Court Manager.
- viii) Scope of cabling will include supply, laying, conducting, termination and rack mounting of components wherever applicable.

- ix) The bidder will configure all LAN switches for meeting the all functional requirements and central manageability up to port level from Computer Centre cum server room through supplied NMS with core switch from the same OEM.
- x) Data communication / interlinking of nodes and cabling shall conform to EIA / TIA standards. The adaptation of standard is very essential to certify the cabling guarantee life of longer duration i.e. 20/25 years. The supplier will be required to submit certificate for the network installation on completion of the networking. Switch to switch cabling will be CAT 6A or Fiber only for both existing as well as new switches. CAT 6A will be used for cabling between switches and nodes (Cat 6 in case of existing nodes); to support high-speed data transmission and also for future applications such as IP Camera and large data bases through LAN / WAN.
- xi) Bidder shall be required to train the existing technical staff at District Courts and Sub Divisional courts to operate and manage the network.
- xii) The bidder will provide five years onsite support during operation & maintenance phase.
- xiii) The Punjab & Haryana High Court may also consider entrusting to the successful bidder, at no additional cost, to maintain entire LAN during warranty period of existing components also by transferring remaining OEM warranties of LAN switches at all District and Sub Divisional courts. In that case the bidder will be required to maintain existing LAN components under AMC till the completion date of warranty of items supplied under this contract is over. Bidder will maintain complete network as an integrated network.

**i) Necessary Steps for make new network Operational**

- i) The supplier will identify the switch ports on existing switches that can be used for connecting additional nodes from the existing network. These ports shall be used after providing IO's and laying necessary CAT 6A cable from the patch panel (existing or new) to the IO.
- ii) Existing cabling will not be disturbed throughout the execution of project.
- iii) In District Court Complex, New Core Switch will be placed in the Computer room along with the existing core switch. Two core switches will connect / stack on a minimum 10 Gbps uplink port. Necessary optics and patch chords / stack cables shall be provided by the supplier.

- iv) In a subordinate court all new switches will be of edge switch configuration only. One of the new switches will act as core switch. One uplink port of all other switches will connect to uplink ports of the core switch at 1 Gbps on OM-4 fiber or CAT 6A cables.
- v) Rearrange new and existing switches (if necessary) for better usage and design.
- vi) Identify locations of Edge Switch and racks.
- vii) Prepare Detailed Network Layout plan in form of rack wise cable diagrams and switch port wise excel sheets and get the same approved from court manager.
- viii) Prepare UPS Power extensions plan for all edge switches and get the same approved from court manager.
- ix) Execute cable laying and UPS power extension activity
- x) Provide redundant OM-4 Fiber / CAT6A backbone cable from core switch to each edge switch. If an existing edge switch is connected on CAT 6 backbones it must be replaced with CAT 6A.
- xi) All Uplinks cables to be punched in patch panel with different color code.
- xii) Carry out laying & termination of additional cable requirements in such a way that it does not disturb the existing LAN.
- xiii) Install and configure all switches for best performance of LAN
- xiv) Configure VLAN's as per the requirements.
- xv) Assign IP addresses & user-ids as provided by the court. All users (nodes) shall access the network in a secured manner using assigned user-ids & passwords.
- xvi) Submit all switch configurations, password & cable testing reports to Court Manager & High court.
- xvii) Ensure trouble free operation of new LAN for minimum one month.

#### **4.5. Alternate Networking Solution**

- a) The proposed networking solution give above is indicative. The bidders may propose an alternate solution with recommendations for improving the effectiveness and efficiency of the networking solution along with details of implementing similar solutions in other organizations if any. The bidder shall explain all special features incorporated in the suggested solution clearly indicating the advantages of these features.
- b) Bidder is also required to send a detailed Action Plan for supply of equipment, installation and commissioning of the system along with a network diagram of the

proposed solution. This is required for technical evaluation of the bidders. Punjab & Haryana High Court may ask the selected bidders to make a presentation of their suggested solution to Technical Evaluation Team.

- c) The successful bidder will provide spare switches as mentioned in bill of material. He will stock patch cords and Information Outlets at every district court as spares. In case of failure of active components, the faulty switch will be replaced with the stock (available with High Court store) and replenish the same within a week's time. Faulty passive components will be replaced promptly by the vendor..
- d) Detailed note on the understanding of purpose, objective and scope of the project. The bidder should provide an outline of the solution under the following topics:
  - i) Overview of the Proposed Solution
  - ii) Overall architecture
  - iii) Security architecture
  - iv) Scalability
  - v) Redundancy
  - vi) Operations & Maintenance
  - vii) Training
  - viii) Quality assurance/process
  - ix) Any other additional requirement that the bidder envisages is necessary for the success of the project.
- e) **Notes**
  - i) All LAN switches should be of the same make / same OEM including NMS.
  - ii) All passive components should be from the same OEM except UPS System, Rack & Conduit.
  - iii) All items to be used for the LAN should be compatible with each other including existing components,
  - iv) Necessary Drivers and Software required to run the equipment should be supplied by the supplier during installation without an additional cost.
  - v) Make and Model of the equipment offered shall be mentioned in the bid along with its parameters.
  - vi) The operating conditions for the equipment are; Power: 230V±10%, Frequency: 50 Hz ±3%, Operating Temperature: 0-45°C & Operating RH: 20-90%
- f) **Documents to be submitted by the supplier**

- i) Approved LAN design (for complete network) with rack or switch wise node details (in excel sheets) cabling diagram, cable identification, before commencing of actual cabling work
- ii) Complete set of Technical/Operation and Maintenance Manual for active components and NMS
- iii) An inventory of items delivered as per site requirement
- iv) Comprehensive inventory including additional items
- v) Certification details of all active & passive network equipments.
- vi) Laminated cable diagrams with cable identification no. should be pasted on the racks & copy of the same to be provided to Nodal Officer.
- vii) Laminated Cable Identification no. for I/O.
- viii) Test reports for all cables.
- ix) 20 / 25 years Certification from OEM authorized network integrator
- x) Completion certificate from respective Court Managers.
- xi) The installation report of installed material & acceptance certificate of inspected & verified items is to be issued by District & Session Judge in consultation with concerned District Court Manager / Nodal Officer and DIO/NIC
- xii) Final acceptance certificate from District & Session Judge / Court Manager after trouble free operations from 30 days of installation.
- xiii) The invoices shall be raised by successful bidder in the favor of Concerned District Court and Sub-Divisional Court. The concerned district court manager / nodal officer shall check the same as per installation report and prices approved by Hon'ble Computer Committee of High Court and submit the same to High Court for further processing. High Court shall further instruct Punjab Infotech to release the payment in the favor of supplier.

**g) Installation, Termination and Testing**

- i) The methodology of conducting & cabling and installation to be adopted must ensure minimum damage to the existing infrastructure without any loss to the aesthetic beauty of buildings. Any damage to the existing flooring / walls etc. shall be made good by the bidder.
- ii) CAT6A Cable / FIBER cable laying inside the building must be done neatly. Cable route survey & detailed diagram of cable route map indicating the lengths, termination of cables with connectors, labeling and marking as per

approved labeling plan, crimping of RJ45 connectors, supply and fixing of industry standard PVC cable ducts must be done as per specified standards.

iii) Special attention is required pertaining to OM-4 Fiber/CAT6A cable from Core switch to Edge switches with respect to following points:

- a. Termination of cable on components likes Jack Panel and Information Outlet.
- b. Performance testing of the laid cables as per EIA/TIA TSB-155, standard in particular wire map (Short, Open, Transpose, Reverse, Split), attenuation and Near end cross talk (NEXT) using a proper cable analyzer. Fiber cable as per EIA/TIA TSB-140 standards using OTDR.

iv) **Precautions to be taken during Installation:** The vendor shall be responsible for the timely delivery and installation at various JCC locations at no addition cost. Following precautions will to be taken by the vendor during installation of LAN:

- a. The installation of the equipment shall be done neatly and should not damage any existing equipments or wires.
- b. The wires shall be properly ducted.
- c. There shall be no structural modifications made without the consent of the Department during installation.
- d. The active Net work elements and UPS must be installed at suitable locations within the JCC (preferably in the inner passages accessible only to Judges) to avoid tampering by general public.

**h) Integration and Testing:**

- i) After the individual testing of cabling components, integration of complete network is to be done followed by testing of working of the LAN. After testing of the LAN, certification of the structured cabling is to be done for 20/25 years & should be submitted to the court for verification.
- ii) All test reports should be verified & accepted by courts. Final acceptance certificate from District Court Manager duly approved and countersigned by the District & Session Judge after trouble free operations for 30 days after installation

- iii) Five years onsite support for operation & maintenance of LAN (including switches and cables system) will start after final acceptance.
- iv) All LAN switches will be configured for best LAN performance and central manageability up to port level from Network Control Centre through supplied Network Management Software from the same OEM.
- v) All offered switches should be of the same make / OEM and support perfect inter-operability with existing network, NICNET, Punjab PAWAN router and switches and IP phones , IP Cameras, Video Conferencing Unit etc.
- vi) No failure rates should be considered with reuse of existing networking components.
- vii) All the features mentioned in the switch specifications should be available from day one i.e. from the date of submission of bids. Future enhancement will not be considered at any stage.
- viii) Service support pack details should be provided with core & edge switch as per SLA mentioned in the RFP.

#### **4.6. General Requirements**

- a) Latest version/ model of equipment is to be supplied. Used/ re-manufactured equipment will not be accepted.
- b) The model of the Items already earmarked by OEM for withdrawal from the market / reaching their end of life in next three years and the models which are still under quality testing should not be offered.
- c) The indicative bill of quantities (BOQ) is given in section 4.11. The vendor may include any other item felt necessary for providing the solution. These may be clearly mentioned by the bidder under the heading "other items".
- d) The quantities may be increased or decrease by the purchaser based on actual requirement.
- e) Vendor may be called upon to supply additional quantities under reorder within the bid validity period.

- f) The Models of the Items offered should strictly conform to the specifications given in the product literature and these models should be supported for the entire period of “the Term” of the contract.
- g) **Perpetual Licenses:** The offered software license(s) will not have a termination date. All software licenses will be perpetual, surviving bankruptcy, sale, merger, or dissolution of any of the entities providing software to the High Court. No additional license fee will be payable by High Court for meeting performance requirement / Minor modification / addition during warranty period for 5 years & CAMC.
- h) When the configuration/ feature required is not available in a particular Item model, the next available higher configuration model or equivalent shall be offered. The same should be evidenced with OEM certification.

#### **4.7. Inspections and Tests**

- a) The Purchaser or its representative shall have the right to inspect and/or to test the items regarding their conformity to the Contract specifications at no extra cost to the Purchaser. The Purchaser shall notify the Supplier in writing in a timely manner, of the identity of any representatives retained for these purposes.
- b) Should any inspected or tested items fail to conform to the specifications, the Purchaser may reject them and the Supplier shall either replace the rejected items or make all alterations necessary to meet specification requirements free of cost to the Purchaser.
- c) The Supplier will also test any / all equipment after completion of the installation condition to conform to the specifications, functionality of device. If any inspected or tested items fail to conform to the specifications, the Purchaser may reject them and the Supplier shall either replace the rejected items or make all alterations necessary to meet specification requirements free of cost to the Purchaser.
- d) The Purchaser will test the whole network hardware after completion of the installation and commissioning at the site of the installation. For site preparation, the Supplier should furnish all details to the Purchaser sufficiently in advance so as to get the works completed before receipt of the equipment. Complete hardware and software as specified should be supplied, installed and



commissioned properly by the Supplier prior to commencement of performance tests.

- e) The Purchaser, their consultant or any other person nominated by the Purchaser, at its option, will conduct the acceptance test. The acceptance will involve trouble-free operations for a month. There shall not be any additional charges for carrying out acceptance test. The Supplier shall maintain necessary log in respect of the results of tests to establish to the entire satisfaction of the Purchaser, the successful completion of the test specified. An average uptime efficiency of 98% for the duration of test period shall be considered as satisfactory.
- f) In the event of the equipment and/or software failing to pass the acceptance test, a period not exceeding two weeks will be given to rectify the defects and clear the acceptance test, failing which the Purchaser reserves the rights to get the equipment replaced by the Supplier at no extra cost to the Purchaser.
- g) Successful conduct and conclusion of the acceptance tests for the installed items and equipment shall also be the sole responsibility and at the cost of the Supplier.
- h) The supplier will arrange for 20 years cabling certification from authorized integrator within 3 month of final acceptance.
- i) Nothing in this clause shall in any way relieve the Supplier from any warranty or other obligations under this Contract.

#### **4.8. Packing, Delivery and Documents**

- a) Delivery of the items and commissioning of LAN shall be made by the bidder as per delivery & implementation schedule placed at annexure.
- b) The Supplier shall mail / submit the following documents to the Purchaser on completion of work..
  - i) Two copies of the Supplier invoice showing Contract number, goods description, quantity, unit price and total amount.
  - ii) Acknowledgement of receipt of goods from the consignee;
  - iii) Manufacturer's / Supplier's warranty certificate;
  - iv) Inspection Certificate/ report issued by the persons nominated by Purchaser, and the Manufacturer's Factory Test report and Inspection Report of the Supplied Equipment;

#### **4.9. Training and support**

- a) For all Local Area Network Active Components supplied, the Supplier is required to train the Purchaser's designated technical and end-user personnel to enable them to effectively operate the installed equipment. The training shall be given at P&H HC or on site at District Courts/ subordinate courts as may be decided by P&H HC. The successful bidder shall provide:
  - i) On-site users' training on the operations and maintenance of the SAN and Backup system.
  - ii) At least one copy each of technical and operation manual/ document during training.
- b) Both parties will agree to the training schedule during the performance of the contract as given below:
  - i) General Users' Training - 2 Days
  - ii) Training to selected Groups like Administrator - 3 Days
- c) Training must cover Network Layout, Switch Configuration, Access Control / Security configuration, Management & Administration Tools and reports, Monitoring tools and reports, backup administration, backup and restore tools and reports and Trouble Shooting.
- d) Facilities like venue for training, including training equipment (e.g. LCD, projector, writing board etc.) shall be arranged by P&H HC / District Court wherever required. Training to be conducted at High Court / District Court and/or site as assigned by P&H HC.

#### **4.10. Operations and Maintenance (O&M)**

- a) The successful vendor shall be liable to provide L1 support for all existing/installed usable components at each site at no additional cost and shall work in consonance with the respective vendors/OEMs of said existing usable components for repair/replacement issues as well as L2 support. The Resident Engineers to be provided by the successful vendor at each site shall also look after the existing usable components.
- b) The Punjab & Haryana High Court may also entrust the successful bidder at no additional cost to maintain entire LAN during warranty period of existing

components also by transferring remaining OEM warranties of LAN switches at all District and Sub Divisional courts.

- c) Free onsite comprehensive (including all hardware, software, network cabling for all types of defects and problems) maintenance services shall be provided by the supplier / OEM during the period of warranty and Annual Maintenance Contract (AMC). In case the supplier fails to rectify the problem within 1 working day (i.e. 8 hours) then OEM shall be required to provide second level support, service to rectify the problem or replace the faulty system or part thereof.
- d) On completion of the warranty period, the Purchaser will either enter into Annual Maintenance Contract with the supplier for post warranty maintenance of the items or maintain them in-house. In case the Purchaser opts to maintain the items in-house, the supplier shall make available to the Purchaser all necessary spares (same or equivalent) - without upsetting the compatibility/performance of any part of system, for a period of at least three years after the expiry of the warranty period. This shall be binding on the vendor under the Terms and Conditions of the Purchase Order to be placed on finalization of the evaluation process.
- e) If the Purchaser decides so, after warranty period, the Supplier will do the annual maintenance and repairs of the entire system for next three or five years. This maintenance will be comprehensive i.e. it will include the cost of all spares and services required for proper functioning of Local Area Network. The all inclusive annual cost (after warranty period), which will include cost of spares replaced, shall be paid in equal half yearly installments within thirty days on production of satisfactory service certificate from designated authority at the rate quoted in the price schedule for the concerned year and on receipt of Bank Guarantee valid for one year.
- f) The maximum response & resolution time for a maintenance complaint (i.e. time required for suppliers' maintenance engineers to report to the installations after a request call/fax is made or letter is written) shall not exceed: 6 (six) hours.
- g) In case one or more items are not usable beyond the stipulated maximum downtime of 6 hours, the supplier will be required to arrange for an immediate replacement of the same till it is repaired. Failure to arrange for the immediate repair/replacement will be liable for penalty of Rs. 2000/- or 1% of the cost of items whichever is more per day. The amount of penalty will be recovered from Bank Guarantee and due payment during warranty as the case may be.
- h) The Supplier will accomplish preventive and breakdown maintenance activities to ensure that all hardware execute without defect or interruption for at least 98%

uptime for 24x7 operations of the network worked on a quarterly basis. Failure to arrange for the immediate repair/replacement will be liable for penalty of min Rs. 2000/- per day. The amount of penalty will be recovered from Bank Guarantee and due payment during warranty as the case may be.

- i) If any critical component of the entire configuration is out of service for more than 6 hours, the Supplier shall either immediately repair the defective unit or replace it with a new or equivalent stand by unit at its own cost. All items affected by critical item under down time will also be considered under down time.
- j) The supplier is required to post one network engineer with minimum 3 years hands-on experience in configuration and troubleshooting of offered items with desired qualification & OEM Certification at all District Courts for a period of 5 years from the date of first inspection to ensure trouble free operations, switch configuration, cable maintenance. Network engineer will act as a single point contact for all maintenance related to cabling, information outlets, patch panels, patch chords and switches. He will report to District Court Manager / District Court Nodal officer and submit report on a regular basis in the format finalized / decided by P&H HC with following options: Daily Report, Weekly Report, Monthly Report etc. The period of providing network engineer shall be further extendable by another year on payment basis at the discretion of High Court. He will also be responsible to integrate LAN with various Wide Area Connectivity solutions as may be opted by the High Court in future. Network Engineer shall report to local nodal officer from the court and will get his attendance verified from the nodal officer every month. The verified attendance and satisfactory service certificate from all sites shall be submitted by the system integrator along with the half yearly bills..
- k) Upon failure in maintaining installation schedule subject to maximum of 45 days shall hold the option for cancellation of the order and re-procure the same from any other vendor at the risk and cost of the supplier and forfeit the EMD/Security deposit of the vendor. Penalty will be charged on the full value of the Purchase Order.
- l) The vendor shall mark the newly installed equipment/components by a distinct color code and year of installation & year of expiry of OEM warranty shall be mentioned on each equipment. A detailed list of such components/equipment shall be submitted to the High Court.
- m) Failure to arrange for immediate repair/replacement or to accomplish preventive and breakdown activities shall render the vendor liable for a flat penalty of Rs.

2500/- per day which can also be recovered from the Bank Guarantee of the vendor. The penalty shall be calculated from the time when the vendor or his representative or the Resident Engineer has been informed about the fault by any official/staff of the Court by any means.

- n) After completion of warranty / CAMC period the supplier shall handover complete network in all working conditions along with all configuration details, IP addresses, passwords and documentation to concerned district court manager.

#### 4.11. BOQ and Technical Specification

The section lists the technical details of the equipment and quantities required. The final quantities may vary based on the requirement as per directions from the Purchaser.

a) **BOQ:**

Sr. No.	Item	Qty.
<b>A. Active Components</b>		
1	Aggregation Switch (including one spare)	23
2	Stack modules (spare)	11
3	SFP modules (spare)	30
4	Access Switch (including 8 spare)	310
5	Fiber Transceiver – Multimode	52
6	Network Management software with suitable Server & Operating System only for District Court.	22
<b>B. Passive Components</b>		
7	24 Port Shielded CAT6A STP Jack Panel with rear wire manager	313
8	CAT6A Solid Cable STP Mtrs – (631 Gray Boxes x 305M)	192455
9	CAT6A Jack Keystone STP with Collapsible Shutter - White	6522
10	Universal Face Plate – Single	6522
11	Universal - Single Port SMB	6522
12	CAT6A Shielded STP Patch Cord - 1M	6657
13	CAT6A Shielded STP Patch Cord - 2M	4287
14	CAT6A Shielded Patch Cord STP - 3M	2000
15	OFC Outdoor Unitube CST Armored 50/125 OM4 MM 6 Core (Meters)	3020
16	Fiber Patch Cord MM 50/125 OM4 LC-SC Duplex 3 Mtr	46

17	Fiber Pigtail MM OM4 50/125 SC Type - 1Mtr	270
18	Adaptor Multimode SC Simplex	270
19	LIU 12 Port Rack Mount Unloaded	29
20	LIU 24 Port Rack Mount Unloaded	5
21	1x6 Adapter Panel – SC	43
22	9U Wall Mount Rack	114
23	1U Cable Manager Steel Loop	292
24	Fan Tray with Two Fans	186
25	Power Distribution Unit - 3 Sockets	114
26	Mounting Hardware (Pack of 10 Cage Nuts)	343
27	12U Wall Mount Rack	72
28	Power Distribution Unit - 5 Sockets	106
29	36U Floor Standing Rack	17
30	Fan Tray with Four Fans	17
31	1" PVC Conduit (Meters)	14520
32	1.5" PVC Conduit (Meters)	42680
33	HDPE Pipe 40 mm (Meters)	50
<b>C. UPS</b>		
34	1KVA Online UPS with external battery bank and Rack.	322
35	Replacement of battery bank in the 4 <sup>th</sup> year	322
36	Extension of UPS power to active elements	374
<b>D. Services</b>		

37	Laying of CAT 6A Cable (Meters)	192455
38	Laying of PVC Conduit (Meters)	57200
39	Laying of Fiber Cable (Meters)	3020
40	Laying of HDPE Pipe (Meters)	50
41	Digging of Soft Soil (Meters)	50
42	Digging of Hard Soil (Meters)	50
43	Fixing & Termination of Patch Panel	313
44	Fixing & Termination of Information Outlet	6522
45	Fixing of Rack	203
46	Splicing of OFC	270
47	Testing & Certification of UTP Nodes	6522
48	Testing & Certification of OFC Cores	270
49	Project Management Charges including configuration of switches & Documentation, Per Site	60
50	On-Site Engineer for 5years	22
51	Any other items (attach annexure if required)	1
<b>E. Comprehensive Annual Maintenance (CAMC) will be granted subject to final decision by the Purchaser</b>		
52	On site CAMC ) for the sixth year	1
53	On site CAMC for the seventh year	1
54	On site CAMC for the Eighth year	1
55	On site CAMC for three years for existing usable active components after expiry of warranty period to be proposed after site survey	1



**b. Technical Specifications**

Note: Technical Specifications contains 10 sub tables (Ser 1 to 13)	
<b>1.</b>	<b>24 Port Aggregation/ Core Switch (One per District)</b>
<b>a)</b>	<b>Switch Architecture and Performance</b>
i)	Switch should have 24 Nos. 10/100/1000Base-TX auto-sensing plus 2 x 10G SFP+/SFP uplinks
ii)	Should have internal 1+1 hot swappable AC power supplies and fans with redundancy
iii)	Non – Blocking Architecture minimum of 88 Gbps of switching fabric / Backplane Bandwidth
iv)	Minimum forwarding rate of 60 Mpps for IPv4
v)	Support for up to 11,000 unicast routes
vi)	Should support stacking using dedicated stacking ports with up to 40 Gbps throughput
vii)	Should support stacking of minimum of eight switches
viii)	Maximum supported Flash & SDRAM installed
<b>b)</b>	<b>Layer 2 Features</b>
i)	Should support Centralized VLAN Management with 250 VLANs. VLAN config changes should be automatically communicated to all the other switches in the network.
ii)	Should support dynamic VLANs and trunk configuration across all switches
iii)	Should support STP, Per-VLAN STP
iv)	Support for Unidirectional Link Detection Protocol (UDLD) to detect unidirectional links caused by incorrect fiber-optic wiring or port faults and disable on fiber-optic interfaces / equivalent feature
v)	Should be able to discover the neighboring device of the same vendor giving the details about the platform, IP Address, Link connected through etc,
<b>c)</b>	<b>Layer 3 Features</b>
i)	Basic IP unicast routing protocols (static, RIPv1, and RIPv2)
ii)	Should support IPv6 unicast routing capability (static, RIP, and OSPF protocols)

	to forward IPv6 traffic through configured interfaces
iii)	Should support OSPF, BGPv4, Policy-Based Routing (PBR)
iv)	Should support Protocol Independent Multicast (PIM) - PIM-SM, PIM-DM, PIM sparse-dense mode, IGMP snooping v1, v2 and v3
v)	Should support Distance Vector Multicast Routing Protocol (DVMRP) tunneling to interconnect two multicast-enabled networks across non-multicast networks / equivalent features.
<b>d)</b>	<b>Quality of Service (QoS) Features</b>
i)	Support for eight queues per port
ii)	Granular Rate Limiting function to guarantee bandwidth in increments as low as 8 kbps.
iii)	Rate limiting support based on source and destination IP address, source and destination MAC address, Layer 4 TCP and UDP information, or any combination of these fields
iv)	Strict priority queuing guarantees that the highest-priority packets are serviced ahead of all other traffic.
v)	Support for Automatic Quality of Service (Auto QoS) / EZ QoS / Equivalent for easy configuration of QoS features for critical applications.
<b>e)</b>	<b>Security Features</b>
i)	IEEE 802.1x to allow dynamic, port-based security, providing user authentication.
ii)	VLAN ACLs (VACLs) on all VLANs to prevent unauthorized data flows from being bridged within VLANs. Port-based ACLs (PACLs) for Layer 2 interfaces to allow application of security policies on individual switch ports.
iii)	Standard / Basic and Extended / Advanced IP security router ACLs (RACLs) to define security policies on routed interfaces for control- and data-plane traffic..
iv)	RADIUS authentication to enable centralized control of the switch and restrict unauthorized users from altering the configuration.
v)	The switch should support Web / Port based authentication
vi)	Inbuilt SNMP Module with full v1, v2 & v3 compliance for Network Management

vii)	The switch should support per-session CoA requests like url-redirect, url-redirect-acl, Session re-authentication, Session termination with port shutdown and Session termination with port bounce / Equivalent Support
viii)	Should support DHCP snooping, DHCP Option 82, Dynamic ARP Inspection (DAI)
ix)	Should support a mechanism to shut down Spanning Tree Protocol PortFast-enabled interfaces when BPDUs are received to avoid accidental topology loops / Equivalent Support.
x)	Capability of the switch port to detect intrusion
xi)	Should support a mechanism to prevent edge devices not in the network administrator's control from becoming Spanning Tree Protocol root nodes.
xii)	Should support a mechanism to prevent a malicious user from spoofing or taking over another user's IP address by creating a binding table between client's IP and MAC address, port, and VLAN
xiii)	Should support MAC layer encryption over links between the switch and endpoint devices such as a PC or IP phone / Equivalent Support
<b>f)</b>	<b>Management, Easy-to-Use Deployment and Control Features</b>
i)	Remote Monitoring (RMON) software agent to support four RMON groups (history, statistics, alarms, and events) for enhanced traffic management, monitoring, and analysis.
ii)	Remote port mirroring to remotely monitor ports in a Layer 2 switch network from any other switch in the same network.
iii)	Layer 2 / Layer 3 trace route eases troubleshooting by identifying the physical path that a packet takes from source to destination.
iv)	Capability of network location services to enable tracking of mobile assets and the users of those assets for both wired and wireless devices / Equivalent Support
v)	Should support a mechanism to analyze IP service levels for IP applications and services by using active traffic monitoring (the generation of traffic in a continuous, reliable, and predictable manner) for measuring network performance.
vi)	Multilevel security on console access to prevent unauthorized users from altering the switch configuration.
vii)	Should provide a mechanism to check the health of hardware components and verify proper operation of the system data and control plane at run time and boot time

viii)	Should support DHCP Server feature to enable a convenient deployment option for the assignment of IP addresses in networks that do not have a dedicated DHCP server.
ix)	Switch should have "Zero Turn-Around Time" to configure policies based on device-types. Switches should have "Less than 10-minutes of Remote Software Upgrades". Switch should be able to automatically provision QoS based on traffic type
x)	Switch should be able to update images without bringing down the stack with minimal impact and Switch Stack re-convergence should be less than 200ms
xi)	Switch should be able to "Automatically Raise Fault Notifications" to enable support calls within 10 minutes of a fault detection. Installing Images should not disrupt network connectivity beyond 10minutes
xii)	The switch should support IPv6 RA-Guard, DHCP-Guard, Source-Guard, IPv6 Address Resolution, DAD, NDP inspection, MLD inspection features
xiii)	The switch should be able to profile devices and apply security policies based on device profiles
xiv)	The switch support security of at least 15 user groups by providing segregation using VRF
xv)	The switch & the operating system should be at least EAL2 or NDPP certified under the Common Criteria Evaluation Program
<b>g)</b>	<b>Safety Certifications</b>
i)	UL 60950-1, SE; CAN/CSA 22.2 No. 60950-1
<b>h)</b>	<b>Electromagnetic Emissions Certifications</b>
i)	FCC Part 15 Class A, EN 55022 Class A (CISPR22), EN 55024 (CISPR24), CE
<b>j)</b>	<b>Stacking</b>
	<ul style="list-style-type: none"> <li>• Stacking ready with stack module and cable for stack bandwidth 20 Gbps or higher to stack with existing switches.</li> <li>• Warranty &amp; Service Support Pack Required: as per SLA mentioned in the RFP. In case of failure, the faulty switch should be repaired / replaced on the same day.</li> <li>• Certifications – NDPP</li> </ul>
	<ul style="list-style-type: none"> <li>• Modules for existing switches with necessary cables for stacking it with core switch: <ul style="list-style-type: none"> <li>✓ Spare Stack modules - Approximate Qty – 11</li> <li>✓ Spare SFP modules - Approximate Qty. – 30</li> </ul> </li> </ul>

2.	24 Port Access/ Edge Switch (Approximately 13 Nos. per District)
<b>a)</b>	<b>Switch Architecture and Performance</b>
i)	Switch should have <b>24 port 10/100/1000 Mbps</b> full duplex auto sensing inbuilt copper ports plus <b>4 nos. uplink port with modules, capable of supporting 1000 base SX and 1000 base T modules</b>
ii)	Should support stacking using dedicated stacking ports with minimum stack bandwidth of 80 Gbps
iii)	Switch should support link aggregation across multiple switches in a stack.
iv)	Should support stacking of minimum of four switches
v)	Switch should have non-blocking wire-speed architecture.
vi)	Switch should support IPv4 and IPv6 from day One
vii)	Switch should have Forwarding rate of minimum 60 Mpps.
<b>b)</b>	<b>Layer 2 Features</b>
i)	IEEE 802.1Q VLAN tagging.
ii)	802. 1Q VLAN on all ports with support for minimum 255 active VLANs and 4k VLAN ids
iii)	Support for minimum 8k MAC addresses
iv)	Spanning Tree Protocol as per IEEE 802.1d
v)	Multiple Spanning-Tree Protocol as per IEEE 802.1s
vi)	Rapid Spanning-Tree Protocol as per IEEE 802.1w
vii)	Self learning of unicast & multicast MAC addresses and associated VLANs
viii)	Jumbo frames up to 9000 bytes
ix)	Link Aggregation Control Protocol (LACP) as per IEEE 802.3ad.
x)	Port mirroring functionality for measurements using a network analyzer.
xi)	Switch should support IGMP v1/v2/v3 as well as IGMP v1/v2/v3 snooping.
<b>c)</b>	<b>Quality of Service (QoS) Features</b>

i)	Switch should support classification and scheduling as per IEEE 802.1P on all ports.
ii)	Switch should support DiffServ as per RFC 2474/RFC 2475.
iii)	Switch should support four queues per port.
iv)	Switch should support AutoQoS / EZ QoS / Equivalent support
v)	Switch should support mechanism to simplify QoS configuration in voice-over-IP (VoIP) networks by issuing interface and global switch commands to detect IP phones, classify traffic, and enable egress queue configuration
vi)	Switch should support QoS configuration on per switch port basis.
vii)	Switch should support classification and marking based on IP Type of Service (TOS) and DSCP.
viii)	Switch should provide traffic shaping and rate limiting features (for egress as well as ingress traffic) for specified Host, network, Applications etc.
ix)	Strict priority queuing guarantees that the highest-priority packets are serviced ahead of all other traffic.
<b>d)</b>	<b>Security Features</b>
i)	Switch should support MAC address based filters / access control lists (ACLs) on all switch ports.
ii)	Switch should support Port as well as VLAN based Filters / ACLs.
iii)	Switch should support RADIUS and TACACS+ for access restriction and authentication.
iv)	Secure Shell (SSH) Protocol, HTTP and DoS protection
v)	IP Route Filtering, ARP spoofing, DHCP snooping etc.
vi)	Should support DHCP snooping, DHCP Option 82, Dynamic ARP Inspection (DAI)
vii)	Should support a mechanism to shut down Spanning Tree Protocol PortFast-enabled interfaces when BPDUs are received to avoid accidental topology loops / Equivalent Support.
viii)	Should support a mechanism to prevent edge devices not in the network administrator's control from becoming Spanning Tree Protocol root nodes.
ix)	Switch should support static ARP, Proxy ARP, UDP forwarding and IP sourceguard.
x)	Switch should Support Ipv6 First hop Security

xi)	The switch should support MacSec IEEE 802.1AE
<b>e)</b>	<b>Management, Easy-to-Use Deployment and Control Features</b>
i)	Switch should have a console port with RS-232 / RJ-45 Serial Interface for configuration and diagnostic purposes.
ii)	Switch should be SNMP manageable with support for SNMP Version 1, 2 and 3.
iii)	Switch should support all the standard MIBs (MIB-I & II).
iv)	Switch should support TELNET and SSH Version-2 for Command Line Management.
v)	Switch should support 4 groups of embedded RMON (history, statistics, alarm and events).
vi)	Switch should support system and event logging functions as well as forwarding of these logs to multiple syslog servers.
vii)	Switch should support on-line software reconfiguration to implement changes without rebooting. Any changes in the configuration of switches related to Layer-2 & 3 functions, VLAN, STP, Security, QoS should not require rebooting of the switch.
viii)	Support for Unidirectional Link Detection Protocol (UDLD) to detect unidirectional links caused by incorrect fiber-optic wiring or port faults and disable on fiber-optic interfaces / Equivalent Support
ix)	Switch should have comprehensive debugging features required for software & hardware fault diagnosis.
x)	Should support Layer 2 / Layer 3 trace route or equivalent for the easy troubleshooting by identifying the physical path that a packet takes from source to destination.
xi)	Should support DHCP Client.
xii)	Switch should support Multiple privilege levels to provide different levels of access.
xiii)	Switch should support NTP (Network Time Protocol)
xiv)	The switch support Netflow/ sFLOW / equivalent
xv)	Switch should support FTP/ TFTP
<b>f)</b>	<b>Standards</b>
i)	RoHS Compliant.

ii)	IEEE 802.1x support.
iii)	IEEE 802.1AE
iv)	IEEE 802.3x full duplex on 10BASE-T and 100BASE-TX ports.
v)	IEEE 802.1D Spanning-Tree Protocol.
vi)	IEEE 802.1p class-of-service (CoS) prioritization.
vii)	IEEE 802.1Q VLAN.
viii)	IEEE 802.3u 10 BaseT / 100 Base Tx /1000 Base Tx.
ix)	Energy Efficient Ethernet / Green IT Power
<b>g)</b>	<b>Certification</b>
i)	NDPP
<b>h)</b>	<b>Stacking</b>
	<ul style="list-style-type: none"> <li>Stacking ready with stack module and cable for stack bandwidth min 20 Gbps or higher to stack with existing switches.</li> <li>Option for future upgrade of 1000 Base T uplinks to minimum two 10G uplinks on copper/fiber</li> <li>Warranty &amp; Service Support Pack Required: 8x5xNBD for 5 years. In case of failure, the faulty switch should be repaired / replaced on the next working / business day.</li> <li>Certifications – NDP</li> </ul>

<b>3.</b>	<b>24 Port Shielded Jack Panel with rear wire manager</b>
i)	Should conform to CAT6A (TIA / EIA 568-C.2) Component Compliant with UL / ETL / ROHS verified
ii)	Modular, PCB based Shielded Twisted Pair, Category 6A, TIA / EIA 568-C.2. The module should be fire-retardant, molded plastic modules UL94 VO rated
iii)	Ports should be with individual dust cover & individually replaceable. 19" Rack mountable and confirm to EIA/TIA 568A wiring pattern
iv)	<ul style="list-style-type: none"> <li>Should terminate 24 STP CAT 6A (4 pair) Cables at 110 type wiring block at the rear end and RJ45 jack on the front panel.</li> <li>Should have labeling strips for identification.</li> <li>Should have cable routing rings and ties both at the front and the rear side for cable support</li> <li>Be made of robust sheet metal / aluminum.</li> <li>I/O should have robust zinc alloy connector body housing</li> <li>Housing of I/O: Zinc alloy plated bright Ni/Cu</li> <li>Should have separate earthing provision</li> </ul>



4.	CAT 6A Shielded Twisted 4 pair Cable
i)	Should conform / comply or exceed the TIA / EIA 568-C.2 (10 Gigabit) standards for physical & Electrical specifications / standards
ii)	Sheath Type: Low Smoke Zero Halogen (LSZH) as per IEC norms Conductor Size : 23 AWG, annealed bare solid copper, Copper Cable and should support bandwidth of 500 MHz Min
iii)	Characteristic Impedance: $100 \pm 6 \Omega$ @ 1-500 Mhz. / The cable should have 100ohm impedance for 100 meters length & data transmission frequencies minimum 500 MHz or higher
iv)	The Cable Should be UL/ETL /Rohs certified
v)	<ul style="list-style-type: none"> <li>• Screen: Each pair or all pairs enclosed in laminated Aluminum foil with drain wire</li> <li>• Sheath Type: Low Smoke Zero Halogen (LSZH) as per IEC norms.</li> </ul>

5.	Wire Manager
i)	19" rack mountable, Height 1 U
ii)	Should be able to route wire on both front as well as rear of the jack panel

6.	A. CAT 6A Shielded Information Outlet with Surface Mount Box
i)	Should meet for exceed the TIA/EIA-568-C.2- Component Compliant (10 Gigabit) standard with UL/ETL verified, 750 mating and 200 termination cycle
ii)	Made from high-impact, flame-retardant, UL- RATED 94v 0 thermoplastic – ABS.
iii)	Gold plated contact surface , Provisions for labeling icons and strips.
iv)	Provision for dust cover on face Plate/ jack for protection against dust
v)	Surface mount box / Faceplate with single RJ45 socket to terminate STP CAT 6A Cable
vii)	<ul style="list-style-type: none"> <li>• Provision for anchors for smooth cable entry.</li> <li>• The size of front plate should be 3 inch by 3 inch (3" X 3")</li> <li>• Be made of robust sheet metal / aluminum.</li> <li>• I/O should have robust zinc alloy connector body housing</li> <li>• Housing of I/O: Zinc alloy plated bright Ni/Cu</li> </ul>

7.	CAT6A Shielded Patch Cord 1 mtr (3 feet), 2 mtrs (7 feet) & 3 mtrs (10 feet) with molded plug
i)	Should confirm / comply or exceed the ISO/IEC 11801:2002, TIA-568-C.2 Cat 6A for physical & Electrical specifications / standards.

ii)	Cords in length of 1 /2 / 3 mtrs with transparent slim line clear anti-snag slip on boots and factory molded RJ-45 plugs at both end.
iii)	Patch Cord should be tested on min 500 Mhz performance and it should be UL/ETL/Rohs verified
iv)	<ul style="list-style-type: none"> <li>• Screen material – Aluminum / polyester shield with tinned copper braid / drain wire</li> <li>• Sheath: Low Smoke Zero Halogen (LSZH) as per IEC norms.</li> <li>• Should give 10G Performance when installed as a complete power Cat 6A Shielded System</li> </ul>

8.	6 Core Multi Mode Optical Fiber Cable
i)	6-core, Multi-Mode, Armored, loose-tube, Unitube CST armour, Gel Filled
ii)	50/ 125, ISO.IEC 11801 – 2 <sup>nd</sup> Edition, Type – OM4
iii)	Attenuation: @850nm < = 3.5 dB/Km, @1300nm < = 1.5 dB/Km
iv)	Operating Temperature -40 Degree C to +70 Degree C
v)	Corrugated Steel tape Armor
vi)	Colour : Black
vii)	Jacket: High density polyethylene
viii)	Secondary Buffer Material: Gel filled Loose Tube.
ix)	Min Bend: 20 X Outer Diameter
x)	Marking : Identification marking at regular intervals of 1 meter
xi)	Fiber Core: Fiber Core should be Silica Glass or equivalent
9.	SC-LC Patch Cords 3 Mtrs / SC Pigtail MM 1 mtr
i)	Sheath: Low Smoke Zero Halogen (LSZH) as per IEC norms
ii)	Minimum Cable Retention Strength : 1.6mm: 11.24 lbs (50 N)
iii)	Insertion Loss : Less than 0.5 dB for MM and 0.3 dB for SM

10.	12 / 24 Port LIU
i)	Height: 1 U, 1.75 inches drawer style
ii)	No. of fibers: 6, 12
iii)	Material: Complete Aluminium Alloy housing, fully powder coated  Splice tray and cable spools to be included  Fully cushioned splice holder containing grooves for fixing splice protective sleeves
iv)	Grounding: 2 Nos. of earthing lugs, pre-loaded
v)	Cable Management rings: Front and rear cable management rings, pre-loaded
11.	<b>Network Management software with suitable Server &amp; Operating System only for District Court. – Approximate 22 nos.</b>
	<ul style="list-style-type: none"> <li>• Commercial grade (Licenses) GUI driven, Web based Interface for enterprise network, which can manage proposed network upto node level.</li> <li>• Should offer integrated functions like –               <ul style="list-style-type: none"> <li>➢ Device Monitoring &amp; Management,,</li> <li>➢ Troubleshooting,</li> <li>➢ VLAN management</li> <li>➢ Access Control</li> <li>➢ Complete Topology of network in single window</li> <li>➢ Device software upgrades management,</li> <li>➢ Configuration file management,</li> <li>➢ Fault &amp; performance management &amp;</li> <li>➢ User group-based privilege management.</li> <li>➢ Real-time device status &amp; operational &amp; configuration functions, all from in a standard web browser.</li> <li>➢ NMS should generate alerts in case of various vulnerabilities like a link going down or being reset or coming up and excessive broadcast from a node etc</li> </ul> </li> <li>• Should have capability to discover &amp; trace and add to all new additions in network up to port / node level.</li> <li>• It should provide graphical view of link and device status.</li> <li>• Should interface with switch OS for multiple VLAN &amp; user-id/password access management.</li> <li>• Provide real-time, detailed fault analysis with trap forwarding, trap generation, and email notifications capabilities</li> <li>• Should provide complete switch management up to port level for all switches from single server in Network Control Centre.</li> <li>• Should be capable to view and auto discovers all network devices up to port level.</li> <li>• Should support minimum 250 network devices</li> <li>• The NMS should be capable of managing IPv6 devices.</li> </ul> <p>Note: The Successful bidder is required to supply the latest updates, patches and upgrades of Network / LAN Management Software &amp; Switch OS free of cost during the warranty period and the details of offered server and operating systems should be provided by the bidder. The offered server should be tower/rack.</p>

12.	<b>Line Interactive UPS System</b>
	<ul style="list-style-type: none"> <li>• ISO 9000 certified manufacture</li> <li>• 1000 VA Line Interactive Offline UPS System or higher</li> <li>• Batteries (2x12Vx7AH = 168VAH) or higher with battery rack</li> <li>• Warranty, Service &amp; Support – 5 years onsite including batteries with one battery replacement in the 4<sup>th</sup> year</li> </ul>
13.	<b>Racks</b>
	<ul style="list-style-type: none"> <li>• 19" wall mountable standard racks, height 9U/12U, width min 600 mm and depth min 550 mm with front glass door, closed on all sides, lock and key, min 2 nos. fans, trays and 6 socket dual power supply strip with spike buster, UL@ Listed etc.</li> <li>• The offered power supply strip with spike buster should work with two different individual power sources.</li> </ul>
14.	<b>Notes</b>
1.	<ol style="list-style-type: none"> <li>a. All offered switches should be of the same make / OEM and support perfect interoperability with existing network, NICNET, Punjab SWAN router and switches and IP phones Like Cisco IP Phone, IP Cameras, Video Conferencing Unit etc.</li> <li>b. No failure rates should be considered with reuse of existing networking components.</li> <li>c. All the features mentioned in the switch specifications should be available from day one i.e. from the date of submission of bids. Future enhancement will not be considered at any stage.</li> <li>d. Service support pack details should be provided with core &amp; edge switch as per SLA mentioned in the RFP.</li> </ol>
2.	<ol style="list-style-type: none"> <li>a. All passive components should be from the same manufacture except UPS, Rack &amp; Conduit.</li> <li>b. All network cables and components (both CAT6A and fiber) should be certified and tested to conform 10Gbps performances. (Documents attached with technical bid)</li> <li>c. All CAT 6A copper cable components should be verified by ETL and tested by ETL for minimum frequency of 500 MHz and complete copper solution should be shielded solution.</li> </ol>
3.	<ol style="list-style-type: none"> <li>a. If any term is vendor specific in above mentioned specifications then switches should have capabilities to support equivalent functionality and same should be explained with proper details.</li> </ol>
4.	<ol style="list-style-type: none"> <li>a. Single mode (OS-2) fiber cable and 10G modules are to be used in case distances from core to core switch and core to any distribution switch exceed 500 meters.</li> <li>b. Penta scanning should be done at minimum 500 MHz, report less than 500MHz should not be considered and component should not be accepted. The report should be submitted in .FLW &amp; PDF format in any consumable media like USB Drive, CD/DVD etc.</li> <li>c. The sample of all the passive components along with proper certifications as mentioned above must be submitted with technical bid except UPS, wall mount racks, conduits.</li> <li>d. The Core switch should be of the higher class / family than the edge switch.</li> <li>e. The quoted products should not be end of life for next 2 years and OEM support of the same should be available for next 5 years after end of life.</li> <li>f. The details of offered service support pack should be provided with switch compliance.</li> <li>g. The Successful bidder is required to supply the latest updates, patches and upgrades of Network Management Software &amp; switch OS free of cost during the warranty.</li> </ol>

## **SECTION 5: BID PERFORMA & ATTACHMENTS**

### **Performa 1: Bid Sheet**

(to be scanned and uploaded)

Tenderer's Bid Reference No. & Date :

Tenderer's Name & Address:

Person to be contacted:

Designation:

Telephone No.:

Telex No. :

Fax No.:

To:

**The Managing Director,**

Punjab Information & Communication Technology Corporation,  
Udhyog Bhawan, 5<sup>th</sup> Floor, Sector 17, Chandigarh.

**Subject: Supply, Installation, Enhancement of existing LAN and its Maintenance  
in various Judicial Court Complexes (JCC) in Punjab**

Dear Sir,

1. I, the undersigned Bidder, having read and examined in detail the specifications and all bidding documents in respect of supply of hardware item do hereby propose to provide hardware as specified in the bidding document.
2. **PRICE AND VALIDITY**  
All the prices mentioned in our Bid are in accordance with the terms as specified in bidding documents. All the prices will remain valid for a period of One (1) year from the date of Purchase Order. We agree to supply items at the quoted rates if order/reorder is placed within one year of Purchase Order. We do hereby confirm that our bid prices include all taxes including Income Tax & Professional Tax. We have studied the Clauses relating to valid Indian Income Tax and hereby declare that if any Income Tax, Surcharge on Income Tax and any other Corporate Tax is altered under the law, we shall pay the same.
3. The rates quoted against this tender are lowest possible and as on date we have not quoted lesser rates to any other customer than the rates quoted herein. In case, we quote lesser rates than this tender to any other customer within 1 month of the due date of this tender, then double of the difference in amount will be refunded to Punjab Infotech. We also confirm that in case our Company / Principal officially reduce the price before the delivery or within a week from the date of delivery, then the benefit for the same will be passed to Punjab Infotech.
4. **EARNEST MONEY**  
We understand that earnest money deposit submitted by us is liable to be forfeited in accordance with the provisions of Tender document.
5. **DEVIATIONS**

We declare that all the services shall be performed strictly in accordance with the fine-tuned Technical specifications and other Tender document except the deviations as mentioned in the Technical deviation **Performa** -3 Further we agree that additional conditions, if any, found in the Bid documents, other than those stated in deviations Performa, shall not be given effect to.

**6. QUALIFYING DATA**

We confirm having submitted the qualifying data as required by you in your Tender document. In case you require any further information/documentary proof in this regard before evaluation of our bid, we agree to furnish the same in time to your satisfaction.

**7. CONTRACT PERFORMANCE SECURITY**

We hereby declare that in case the contract is awarded to us, we shall submit the Performance Bank Guarantee (PBG) as per terms of the Tender document.

**8. I hereby declare the following:**

- a) Bid submitted by us is complete in all respect as per tender.
- b) 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 & belief.
- c) Our company has not been debarred / black listed by any Government / Semi Government organizations in India. I further certify that I am competent officer in my company to make this declaration.

9. We understand that you are not bound to accept the lowest or any bid you may receive.

10. For submission of bid, negotiations and for contract we authorize Mr. (Name & Designation of the representative) of our firm.

Thanking you,

Date & Seal

Yours faithfully,

(Signature)

Name, Designation & Address

Performa 2: Checklist of Documents To Be Submitted

(To be filled on line)

Name of Bidder: \_\_\_\_\_

Sr. No	(Documents to be scanned and uploaded or to be filled online on e-tendering website)	Yes / No	Page No.
<b>A. Ser. 1 to 11 will be checked at the time of Pre-qualification evaluation</b>			
1	Bid sheet (Performa - 1) including declarations regarding price validity, price fall, not being ineligibility due to corrupt practices etc.		
2	Check list (Performa -2)		
3	Proof of the bidder's company being either registered under Companies Act or a partnership firm under the appropriate Act (attach incorporation certificate).		
4	Proof of bidder's company being in business for more than 5 years as on 31 <sup>st</sup> March, 2014 (attach Performa - 3 A: Company Details)		
5	Proof of minimum average annual turnover of Rs 25 Cr in the last three FYs. This turnover should be on account of Systems Integration / Turnkey solutions in the field of ICT and their associated maintenance or implementation services, packaged software etc.  (Only certificate from CA is required as per Performa- 3 B).		
6	Proof of successful implementation of similar projects ( as required at para 2.3 (d) of RFP) of specified value during the past five FYs (as on 31 <sup>st</sup> March, 2014) in India (Project should have either completed or phase completed and ongoing in O&M phase - documentary proof; PO and CA certificate showing value etc is required)		
7	Certificate from the OEM as per Performa 3 C		

8	Details of service centers ( including one in Chandigarh, Panchkula and Mohali region - attach Performa - 3 D)		
9	Proof of OEM regarding ISO 9001:2008 certification or better.		
10	Special Power of Attorney (Performa – 6)		
11	Copy of BG (if EMD is submitted through BG)		
<b>B. Ser. 12 to 16 will be checked at the time of Tech Evaluation</b>			
12	Technical Bid (Performa – 4 A)		
13	Technical Deviations (Performa – 4 B)		
14	Technical Compliance (Performa – 4 C)		
15	After Sale Service Certificate (Performa - 4 D)		
16	Experience and Track Record in the Field of System Integration (Performa - 4E)		
<b>C. Ser. 17 will be checked at the time of Commercial evaluation</b>			
17	Price Schedule (Performa – 5)		



Performa 3 A: Company Details

(to be scanned and uploaded -Part of Pre-Qualification Bid )

The Registered name of the company	
Address of Registered office	(Registration Number and Registration authority)
Year of Incorporation	
Legal Status	Public Ltd. Co. / Private Co. / Partnership firm etc.
Technological Collaborations	
Business address for correspondence in India	Location
	Street City
	Pin Code
	Land line : Fax:
	Email
Name of the Contact	
Contact's designation	
Contact addresses if different from above	
Business Structure	
Quality Certifications	(Enclose Certificates copy)
PAN No.	
Income Tax Assessment Jurisdiction	
TIN	
Central Excise Registration	
BANK RTGS Details for online transfer of payment / funds	

Date & Seal

(Signature of Authorized signatory)

Name, Designation & Address

**Performa 3 B: Bidder's Turnover from SI Operations**  
**((to be scanned and uploaded - Part of Pre-Qualification Bid))**

Name of the Bidder:				
Particulars of Turnover in the preceding three financial years as per audited accounts (INR in ` Crores). This turnover should be on account of Systems Integration / Turnkey solutions in the field of ICT and their associated maintenance or implementation services, packaged software etc) only.				
Financial Year	Total Turnover (TO) / Income			
	Govt.	India	Global	Total
2011-12				
2012-13				
2013-14				
Average of last 3 FYs				
<b>Note:</b> To be countersigned by CA (No other document is required as proof).				
Date & Seal		(Signature)		
		Name :		
		Designation: (Authorized signatory)		
		Address:		
Date and Seal		Countersignatures of CA		
		Name and address		

Performa 3 C: OEM Certificate

(to be scanned and uploaded as Part of Technical Bid)

(To be submitted by OEMs on their respective letterheads, signed by persons having the appropriate Power of Attorney – Notarized copy to be submitted)

From

-----  
-----

To

Managing Director,  
Punjab Infotech, Chandigarh

Ref.: Adv. No: -

WHEREAS we \_\_\_\_\_(OEM's Name) are official manufacturer of \_\_\_\_\_(Item Name) and have manufacturing facilities at \_\_\_\_\_(OEM's Manufacturing Site Address), we hereby authorize \_\_\_\_\_(Bidder's Name) located at \_\_\_\_\_(Bidder's Address) to submit the bid for supply & installation of the following items manufactured by us, to meet the requirements associated with your above tender.

List of Items:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

We, do hereby solemnly affirm and declare: -

- (i) That this is to certify that M/s \_\_\_\_\_ is our authorized dealer/distributor/agent and he is authorized to submit tender/quote the rates in the State of Punjab, against tender enquiry No. \_\_\_\_\_ due on \_\_\_\_\_ and to supply the material in original manufactured by us.
- (ii) That we shall have full responsibility of satisfactory supplies against the supply order/rate contract if dealer/distributor/agent against the above mentioned tender inquiry.
- (iii) That I am fully authorized to give this affidavit on behalf of \_\_\_\_\_ and the power of attorney have been executed in my favor (Attested copy enclosed).
- (iv) That if at any stage a dispute arises between dealer/distributor/agent and our manufacturing firm, we will be responsible to arrange supply on the terms and conditions of supply order/rate contract.

- (v) That in case the dealer/distributor/agent fails to supply the goods as per supply order of the contract we, the manufacturer takes the responsibility of the supply and will abide by the terms and conditions of contract, signed by the dealer/distributor/agent.
- (vi) That the delivered products against the supply order shall be latest version and should not be end of life for next 3 years.
- (vii) That the support of delivered products against the supply order shall be available for next 5 years after end of life.
- (viii) Level - 2 support shall be provided by us directly at site incase our authorized agent fails to rectify the problem within allotted time framer including holidays and / or as per the clause mentioned in RFP.
- (ix) We (OEM) shall be responsible to rectify the problem or replace the faulty system or part thereof if it is not fully rectified by our authorized partner.
- (x) We (OEM) assure Punjab & Haryana High Court & Punjab Infotech that in the event of \_\_\_\_\_ (Bidder's Name) not being able to fulfill its obligation as our sales & service provider in respect of this tender, we would continue to meet the obligations stated in the above mentioned tender through alternate arrangements.
- (xi) We (OEM) also confirm that \_\_\_\_\_ is our authorized service provider / agent and can hence provide maintenance and upgrade support for our products during and after the warranty period, the latter being subject to you awarding an AMC to the Bidder, up to \_\_\_\_\_ (no. of years of post-warranty support) years from the date of expiry of the warranty.

DEPONENT

**Verification:**

Verified that the contents of the above affidavit of mine are true and correct to the best of my knowledge and nothing has been concealed therein.

DEPONENT

Performa 3 D: Maintenance & Technical Support Facilities

**(Part of Pre-Qualification to be scanned and uploaded)**

- Name & Designation of the Management contact for support to this project:
- Address:
- e-mail:
- Phone: Office: -----                      Mobile: -----

<b>Bidder's Facility</b>	<b>Address of the Service Centre</b>	<b>Name of the Contact Person with Telephone no., Fax No. and E-mail</b>
<b>CHD / PKL / Mohali</b>		
<b>Others parts of Punjab like Ludhiana, Patiala, Ferozpur etc</b>		

<b>OEM Facility</b>	<b>Address of the Service and Support Centre and Store</b>	<b>Name of the Contact Person with Telephone no., Fax No. and E-mail</b>
<b>CHD / PKL / Mohali</b>		
<b>Others parts of Punjab</b>		

Date & Place:

**Signature of the Bidder**

Name & Designation:

Business Address:

Performa 4 A: Technical Bid

(to be scanned and uploaded - Part of Technical Bid – to be submitted on the firm's letter head and signed by an authorized person)

To

Managing Director,  
Punjab Infotech, Chandigarh.

Ref: Bid document No. /..... dated .....

Sir,

Having examined the bidding documents, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply and deliver goods as per the of given in and in conformity with the said bidding documents.

We undertake, if our bid is accepted, to deliver the goods in accordance with the delivery schedule specified in the bidding documents.

We agree to abide by this bid for a period of 90 days after the date fixed for opening and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

1. We declare:

- i) that we are the manufacturers/ authorized agents/ distributors / dealers of  

---
- ii) that we/our principals are equipped with adequate machinery for production quality control and testing of offered products manufactured/developed and used by us.
- iii) Our annual sales turnover for the last financial year was more than the eligibility amount as mentioned in the bidding document.

2. We hereby offer to supply the Goods / Services at the prices and rates mentioned in the Commercial Bid.
  
3. We enclose herewith the complete Technical Bid as required by you. This includes:
  - Technical details of the goods and services offered
  - Statement of deviation from the technical specifications
  - Details of service centers
  - Copies of relevant work orders with installation & acceptance
  - Product catalogues/other informative material about our products and services
  
4. We have carefully read and understood the terms and conditions of the bid document and the conditions of the contract applicable to the bid document and we do hereby undertake to supply as per these terms and conditions.
  
5. Certified that the bidder is:
  - a sole proprietorship firm and the person signing the bid document is the sole proprietor/constituted attorney of the sole proprietor, or
  
  - a partnership firm, and the person signing the bid document is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement/ by virtue of general power of attorney, or
  
  - a company and the person signing the bid document is the constituted attorney.

*(NOTE: Delete whatever is not applicable. All corrections / deletions should invariably be duly attested by the person authorized to sign the bid document.)*
  
6. We do hereby undertake, that, until a formal work order is prepared and executed, this bid, together with your written acceptance thereof and placement of letter of intent awarding the work order, shall constitute a binding contract between us.

Dated: 2014

Signature of Bidder's authorized signatory

COMPANY SEAL

Address:

Performa 4 B: Technical Deviations

(to be scanned and uploaded - Part of Technical Bid)

Name of Bidder: \_\_\_\_\_

**Subject: Supply, Installation and Maintenance of Local Area Network (LAN) for  
Judicial Court Complexes (JCC) in Punjab**

Following are the Technical deviations & variations from the requirements/ specifications given in Section 4 of the RFP. These deviations and variations are exhaustive. Except these deviations and variations, the entire work shall be provided as per the specifications and requirements given in the RFP document.

S. N.	Clause No	Page No	Statement of deviations and variations

**Date**

**Signature**

**Name**

**Place**

**Seal**



**Performa 4 C: Technical Compliances**

(to be scanned and uploaded - Part of Technical Bid)

Technical Compliances Table consists of Items in 14 sub tables (Ser 1 to 14)			
Name of Bidder: _____			
1.	24 Port Aggregation/ Core Switch (One per District)	Compliance (Yes/No)	Remarks
<b>a)</b>	<b>Switch Architecture and Performance</b>		
i)	Switch should have 24 Nos. 10/100/1000Base-TX auto-sensing plus 2 x 10G SFP+/SFP uplinks		
ii)	Should have Dual redundant, modular power supplies and fans		
iii)	Minimum of 128 Gbps of switching fabric		
iv)	Minimum forwarding rate of 65 Mpps		
v)	Support for up to 11,000 unicast routes		
vi)	Should support stacking using dedicated stacking ports with up to 64Gbps throughput		
vii)	Should support stacking of minimum of eight switches		
viii)	At least 64MB Flash & 128MB SDRAM installed		
<b>b)</b>	<b>Layer 2 Features</b>		
i)	Should support Centralized VLAN Management with 250 VLans. VLAN config changes should be automatically communicated to all the other switches in the network.		
ii)	Should support dynamic VLANs and trunk configuration across all switches		

iii)	Should support STP, Per-VLAN STP		
iv)	Support for Unidirectional Link Detection Protocol (UDLD) to detect unidirectional links caused by incorrect fiber-optic wiring or port faults and disable on fiber-optic interfaces / equivalent feature		
v)	Should be able to discover the neighboring device of the same vendor giving the details about the platform, IP Address, Link connected through etc,		
<b>c)</b>	<b>Layer 3 Features</b>		
i)	Basic IP unicast routing protocols (static, RIPv1, and RIPv2)		
ii)	Should support IPv6 unicast routing capability (static, RIP, and OSPF protocols) to forward IPv6 traffic through configured interfaces		
iii)	Should support OSPF, BGPv4, Policy-Based Routing (PBR)		
iv)	Should support Protocol Independent Multicast (PIM) - PIM-SM, PIM-DM, PIM sparse-dense mode, IGMP snooping v1, v2 and v3		
v)	Should support Distance Vector Multicast Routing Protocol (DVMRP) tunneling to interconnect two multicast-enabled networks across non-multicast networks / equivalent features.		
<b>d)</b>	<b>Quality of Service (QoS) Features</b>		
i)	Support for eight queues per port		
ii)	Granular Rate Limiting function to guarantee bandwidth in increments as low as 8 kbps.		

iii)	Rate limiting support based on source and destination IP address, source and destination MAC address, Layer 4 TCP and UDP information, or any combination of these fields		
iv)	Strict priority queuing guarantees that the highest-priority packets are serviced ahead of all other traffic.		
v)	Support for Automatic Quality of Service (Auto QoS) / EZ QoS / Equivalent for easy configuration of QoS features for critical applications.		
<b>e)</b>	<b>Security Features</b>		
i)	IEEE 802.1x to allow dynamic, port-based security, providing user authentication.		
ii)	VLAN ACLs (VACLs) on all VLANs to prevent unauthorized data flows from being bridged within VLANs. Port-based ACLs (PACLs) for Layer 2 interfaces to allow application of security policies on individual switch ports.		
iii)	Standard / Basic and Extended / Advanced IP security router ACLs (RACLs) to define security policies on routed interfaces for control- and data-plane traffic..		
iv)	RADIUS authentication to enable centralized control of the switch and restrict unauthorized users from altering the configuration.		
v)	The switch should support Web / Port based authentication		
vi)	Inbuilt SNMP Module with full v1, v2 & v3 compliance for Network Management		

vii)	The switch should support per-session CoA requests like url-redirect, url-redirect-acl, Session re-authentication, Session termination with port shutdown and Session termination with port bounce / Equivalent Support		
viii)	Should support DHCP snooping, DHCP Option 82, Dynamic ARP Inspection (DAI)		
ix)	Should support a mechanism to shut down Spanning Tree Protocol PortFast-enabled interfaces when BPDUs are received to avoid accidental topology loops / Equivalent Support.		
x)	Capability of the switch port to detect intrusion		
xi)	Should support a mechanism to prevent edge devices not in the network administrator's control from becoming Spanning Tree Protocol root nodes.		
xii)	Should support a mechanism to prevent a malicious user from spoofing or taking over another user's IP address by creating a binding table between client's IP and MAC address, port, and VLAN		
xiii)	Should support MAC layer encryption over links between the switch and endpoint devices such as a PC or IP phone / Equivalent Support		
<b>f)</b>	<b>Management, Easy-to-Use Deployment and Control Features</b>		
i)	Remote Monitoring (RMON) software agent to support four RMON groups (history, statistics, alarms, and events) for enhanced traffic management, monitoring, and analysis.		
ii)	Remote port mirroring to remotely monitor ports in a Layer 2 switch network from any other switch in the		

	same network.		
iii)	Layer 2 / Layer 3 trace route eases troubleshooting by identifying the physical path that a packet takes from source to destination.		
iv)	Capability of network location services to enable tracking of mobile assets and the users of those assets for both wired and wireless devices / Equivalent Support		
v)	Should support a mechanism to analyze IP service levels for IP applications and services by using active traffic monitoring (the generation of traffic in a continuous, reliable, and predictable manner) for measuring network performance.		
vi)	Multilevel security on console access to prevent unauthorized users from altering the switch configuration.		
vii)	Should provide a mechanism to check the health of hardware components and verify proper operation of the system data and control plane at run time and boot time		
viii)	Should support DHCP Server feature to enable a convenient deployment option for the assignment of IP addresses in networks that do not have a dedicated DHCP server.		
ix)	Switch should have "Zero Turn-Around Time" to configure policies based on device-types. Switches should have "Less than 10-minutes of Remote Software Upgrades". Switch should be able to automatically provision QoS based on traffic type		
x)	Switch should be able to update images without bringing down the stack with minimal impact and Switch Stack re-convergence should be less		

	than 200ms		
x i)	Switch should be able to "Automatically Raise Fault Notifications" to enable support calls within 10 minutes of a fault detection. Installing Images should not disrupt network connectivity beyond 10minutes		
x ii)	The switch should support IPv6 RA-Guard, DHCP-Guard, Source-Guard, IPv6 Address Resolution, DAD, NDP inspection, MLD inspection features		
x iii)	The switch should be able to profile devices and apply security policies based on device profiles		
x iv)	The switch support security of at least 15 user groups by providing segregation using VRF		
x v)	The switch & the operating system should be at least EAL2 or NDPP certified under the Common Criteria Evaluation Program		
<b>g)</b>	<b>Safety Certifications</b>		
i)	UL 60950-1, SE; CAN/CSA 22.2 No. 60950-1		
<b>h)</b>	<b>Electromagnetic Emissions Certifications</b>		
i)	FCC Part 15 Class A, EN 55022 Class A (CISPR22), EN 55024 (CISPR24), CE		
<b>j)</b>	<b>Stacking</b>		
	<ul style="list-style-type: none"> <li>Stacking ready with stack module and cable for stack bandwidth 20 Gbps or higher to stack with existing switches.</li> <li>Warranty &amp; Service Support Pack Required: as per SLA mentioned in</li> </ul>		

	<p>the RFP. In case of failure, the faulty switch should be repaired / replaced on the same day.</p> <ul style="list-style-type: none"> <li>• Certifications – NDPP</li> </ul>		
	<ul style="list-style-type: none"> <li>• Modules for existing switches with necessary cables for stacking it with core switch: <ul style="list-style-type: none"> <li>✓ Spare Stack modules - Approximate Qty – 11</li> <li>✓ Spare SFP modules - Approximate Qty. – 30</li> </ul> </li> </ul>		

2.	24 Port Access/ Edge Switch (Approximately 13 Nos. required per District)	Compliance (Yes/No)	Remarks
a)	<b>Switch Architecture and Performance</b>		
i)	Switch should have <b>24 port 10/100/1000 Mbps</b> full duplex auto sensing inbuilt copper ports plus <b>4 nos. uplink port with modules, capable of supporting 1000 base SX and 1000 base T modules</b>		
ii)	Should support stacking using dedicated stacking ports with minimum stack bandwidth of 80 Gbps		
iii)	Switch should support link aggregation across multiple switches in a stack.		
iv)	Should support stacking of minimum of four switches		
v)	Switch should have non-blocking wire-speed architecture.		
vi)	Switch should support IPv4 and IPv6 from day One		
vii)	Switch should have Forwarding rate of minimum 60 Mpps.		
b)	<b>Layer 2 Features</b>		
i)	IEEE 802.1Q VLAN tagging.		
ii)	802. 1Q VLAN on all ports with support for minimum 255 active VLANs and 4k VLAN ids		
iii)	Support for minimum 8k MAC addresses		
iv)	Spanning Tree Protocol as per IEEE 802.1d		
v)	Multiple Spanning-Tree Protocol as per IEEE 802.1s		
vi)	Rapid Spanning-Tree Protocol as per IEEE 802.1w		
vii)	Self learning of unicast & multicast MAC addresses and associated VLANs		
viii)	Jumbo frames up to 9000 bytes		
ix)	Link Aggregation Control Protocol (LACP) as per IEEE 802.3ad.		
x)	Port mirroring functionality for measurements using		



	a network analyzer.		
xi)	Switch should support IGMP v1/v2/v3 as well as IGMP v1/v2/v3 snooping.		
<b>c)</b>	<b>Quality of Service (QoS) Features</b>		
i)	Switch should support classification and scheduling as per IEEE 802.1P on all ports.		
ii)	Switch should support DiffServ as per RFC 2474/RFC 2475.		
iii)	Switch should support four queues per port.		
iv)	Switch should support AutoQoS / EZ QoS / Equivalent support		
v)	Switch should support mechanism to simplify QoS configuration in voice-over-IP (VoIP) networks by issuing interface and global switch commands to detect IP phones, classify traffic, and enable egress queue configuration		
vi)	Switch should support QoS configuration on per switch port basis.		
vii)	Switch should support classification and marking based on IP Type of Service (TOS) and DSCP.		
viii)	Switch should provide traffic shaping and rate limiting features (for egress as well as ingress traffic) for specified Host, network, Applications etc.		
ix)	Strict priority queuing guarantees that the highest-priority packets are serviced ahead of all other traffic.		
<b>d)</b>	<b>Security Features</b>		
i)	Switch should support MAC address based filters / access control lists (ACLs) on all switch ports.		
ii)	Switch should support Port as well as VLAN based Filters / ACLs.		
iii)	Switch should support RADIUS and TACACS+ for		

	access restriction and authentication.		
iv)	Secure Shell (SSH) Protocol, HTTP and DoS protection		
v)	IP Route Filtering, ARP spoofing, DHCP snooping etc.		
vi)	Should support DHCP snooping, DHCP Option 82, Dynamic ARP Inspection (DAI)		
vii)	Should support a mechanism to shut down Spanning Tree Protocol PortFast-enabled interfaces when BPDUs are received to avoid accidental topology loops / Equivalent Support.		
viii)	Should support a mechanism to prevent edge devices not in the network administrator's control from becoming Spanning Tree Protocol root nodes.		
ix)	Switch should support static ARP, Proxy ARP, UDP forwarding and IP sourceguard.		
x)	Switch should Support Ipv6 First hop Security		
xi)	The switch should support MacSec IEEE 802.1AE		
<b>e)</b>	<b>Management, Easy-to-Use Deployment and Control Features</b>		
i)	Switch should have a console port with RS-232 / RJ-45 Serial Interface for configuration and diagnostic purposes.		
ii)	Switch should be SNMP manageable with support for SNMP Version 1, 2 and 3.		
iii)	Switch should support all the standard MIBs (MIB-I & II).		
iv)	Switch should support TELNET and SSH Version-2 for Command Line Management.		
v)	Switch should support 4 groups of embedded RMON (history, statistics, alarm and events).		
vi)	Switch should support system and event logging functions as well as forwarding of these logs to multiple syslog servers.		

vii)	Switch should support on-line software reconfiguration to implement changes without rebooting. Any changes in the configuration of switches related to Layer-2 & 3 functions, VLAN, STP, Security, QoS should not require rebooting of the switch.		
viii)	Support for Unidirectional Link Detection Protocol (UDLD) to detect unidirectional links caused by incorrect fiber-optic wiring or port faults and disable on fiber-optic interfaces / Equivalent Support		
ix)	Switch should have comprehensive debugging features required for software & hardware fault diagnosis.		
x)	Should support Layer 2 / Layer 3 trace route or equivalent for the easy troubleshooting by identifying the physical path that a packet takes from source to destination.		
xi)	Should support DHCP Client.		
xii)	Switch should support Multiple privilege levels to provide different levels of access.		
xiii)	Switch should support NTP (Network Time Protocol)		
xiv)	The switch support Netflow/ sFLOW / equivalent		
xv)	Switch should support FTP/ TFTP		
<b>f)</b>	<b>Standards</b>		
i)	RoHS Compliant.		
ii)	IEEE 802.1x support.		
iii)	IEEE 802.1AE		
iv)	IEEE 802.3x full duplex on 10BASE-T and 100BASE-TX ports.		
v)	IEEE 802.1D Spanning-Tree Protocol.		
vi)	IEEE 802.1p class-of-service (CoS) prioritization.		
vii)	IEEE 802.1Q VLAN.		

viii)	IEEE 802.3u 10 BaseT / 100 Base Tx /1000 Base Tx.		
ix)	Energy Efficient Ethernet / Green IT Power		
<b>g)</b>	<b>Certification</b>		
i)	NDPP		
<b>h)</b>	<b>Stacking</b>		
	<ul style="list-style-type: none"> <li>• Stacking ready with stack module and cable for stack bandwidth min 20 Gbps or higher to stack with existing switches.</li> <li>• Option for future upgrade of 1000 Base T uplinks to minimum two 10G uplinks on copper/fiber</li> <li>• Warranty &amp; Service Support Pack Required: 8x5xNBD for 5 years. In case of failure, the faulty switch should be repaired / replaced on the next working / business day.</li> <li>• Certifications – NDP</li> </ul>		

3.	24 Port Shielded Jack Panel with rear wire manager	Compliance (Yes/No)	Remarks
i)	Should conform to TIA / EIA 568-C.2 Component Compliant with UL/ETL/Rohs verified		
ii)	Modular, PCB based and Keystone type Unshielded Twisted pair, category 6A, EIA/TIA 568-B.2-10. The keystone modules should be fire-retardant, molded plastic modules UL94 VO rated.		
iii)	Ports should be with individual dust cover & individually replaceable. 19" Rack mountable and confirm to EIA/TIA 568A wiring pattern		
iv)	<ul style="list-style-type: none"> <li>• Should terminate 24 STP CAT 6A (4 pair) Cables at 110 type wiring block at the rear end and RJ45 jack on the front panel.</li> <li>• Ports / Jacks should be with individual dust cover &amp; individually replaceable.</li> <li>• Should have labeling strips for identification.</li> <li>• Should have cable routing rings and ties both at the front and the rear side for cable support</li> <li>• Be made of robust sheet metal / aluminum.</li> <li>• I/O should have robust zinc alloy connector body housing</li> <li>• Housing of I/O: Zinc alloy plated bright Ni/Cu</li> <li>• Should have separate earthing provision</li> </ul>		

4.	CAT 6A Shielded Twisted 4 pair Cable	Compliance (Yes/No)	Remarks
i)	Should conform / comply or exceed the TIA / EIA 568-C.2 (10 Gigabit) standards for physical & Electrical specifications / standards		
ii)	Sheath Fire retardant PVC Compound (FRPVC) Flame Rating : 60 deg. C As per UL 1685 CM , 4 Pair 23 AWG Annealed bare solid copper, Copper Cable with integral cross member pair separator and should support bandwidth of 800 MHz Min		
iii)	Characteristic Impedence : $100 \pm 6 \Omega$ @ 1-600 Mhz , Conductor Diameter 0.65 mm (nominal)		
iv)	The Cable Should be UL/ETL /Rohs certified		
v)	<ul style="list-style-type: none"> <li>Screen: Each pair or all pairs enclosed in laminated Aluminum foil with drain wire</li> <li>Sheath Type: Low Smoke Zero Halogen (LSZH) as per IEC norms.</li> </ul>		

5.	Wire Manager	Compliance (Yes/No)	Remarks
i)	19" rack mountable, Height 1 U		
ii)	Should be able to route wire on both front as well as rear of the jack panel		

6.	B. CAT 6A Shielded Information Outlet with Surface Mount Box	Compliance (Yes/No)	Remarks
i)	Should meet for exceed the TIA/EIA-568-C.2- Component Compliant (10 Gigabit) standard with UL/ETL verified, 750 mating and 200 termination cycle		
ii)	Made from high-impact, flame-retardant, UL- RATED 94v 0 thermoplastic – ABS.		
iii)	Gold plated contact surface , Provisions for labeling icons and strips.		
iv)	Provision for dust cover on face Plate/ jack for protection against dust		
v)	Surface mount box / Faceplate with single RJ45 socket to terminate STP CAT 6A Cable		
vii)	<ul style="list-style-type: none"> <li>• Provision for anchors for smooth cable entry.</li> <li>• The size of front plate should be 3 inch by 3 inch (3" X 3")</li> <li>• Be made of robust sheet metal / aluminum.</li> <li>• I/O should have robust zinc alloy connector body housing</li> <li>• Housing of I/O: Zinc alloy plated bright Ni/Cu</li> </ul>		

7.	CAT6A Shielded Patch Cord 1 mtr (3 feet), 2 mtrs (7 feet) & 3 mtrs (10 feet) with molded plug	Compliance (Yes/No)	Remarks
i)	Should confirm / comply or exceed the ISO/IEC 11801:2002, TIA-568-C.2 Cat 6A for physical & Electrical specifications / standards.		
ii)	Cords in length of 1 /2 / 3 mtrs with transparent slim line clear anti-slag slip on boots and factory molded RJ-45 plugs at both end.		
iii)	Patch Cord should be tested on min 500 Mhz performance and it should be UL/ETL/Rohs verified		
iv)	<ul style="list-style-type: none"> <li>• Screen material – Aluminum / polyester shield with tinned copper braid / drain wire</li> <li>• Sheath: Low Smoke Zero Halogen (LSZH) as per IEC norms.</li> <li>• Should give 10G Performance when installed as a complete power Cat 6A Shielded System</li> </ul>		



8.	6 Core Multi Mode Optical Fiber Cable	Compliance (Yes/No)	Remarks
i)	6-core, Multi-Mode, Armored, loose-tube, Unitube CST armour, Gel Filled		
ii)	50/ 125, ISO.IEC 11801 – 2 <sup>nd</sup> Edition, Type – OM4		
iii)	Attenuation: @850nm < = 3.5 dB/Km, @1300nm < = 1.5 dB/Km		
iv)	Operating Temperature -40 Degree C to +70 Degree C		
v)	Corrugated Steel tape Armor		
vi)	Colour : Black		
vii)	Jacket: High density polyethylene		
viii)	Secondary Buffer Material: Gel filled Loose Tube.		
ix)	Min Bend: 20 X Outer Diameter		
x)	Marking : Identification marking at regular intervals of 1 meter		
xi)	Fiber Core: Fiber Core should be Silica Glass or equivalent		

9.	SC-LC Patch Cords 3 Mtrs / SC Pigtail MM 1 mtr	Compliance (Yes/No)	Remarks
i)	Sheath: Low Smoke Zero Halogen (LSZH) as per IEC norms		
ii)	Minimum Cable Retention Strength : 1.6mm: 11.24 lbs (50 N)		
iii)	Insertion Loss : Less than 0.5 dB for MM and 0.3 dB for SM		

10.	12 / 24 Port LIU	Compliance (Yes/No)	Remarks
i)	Height: 1 U, 1.75 inches drawer style		
ii)	No. of fibers: 6, 12		
iii)	Material: Complete Aluminium Alloy housing, fully powder coated  Splice tray and cable spools to be included  Fully cushioned splice holder containing grooves for fixing splice protective sleeves		
iv)	Grounding: 2 Nos. of earthing lugs, pre-loaded		
v)	Cable Management rings: Front and rear cable management rings, pre-loaded		

11.	Network Management software with suitable Server & Operating System only for District Court. – Approximate 22 nos.	Compliance (Yes/No)	Remarks
	<ul style="list-style-type: none"> <li>• Commercial grade (Licenses) GUI driven, Web based Interface for enterprise network, which can manage proposed network upto node level.</li> <li>• Should offer integrated functions like – <ul style="list-style-type: none"> <li>➤ Device Monitoring &amp; Management,,</li> <li>➤ Troubleshooting,</li> <li>➤ VLAN management</li> <li>➤ Access Control</li> <li>➤ Complete Topology of network in single window</li> <li>➤ Device software upgrades management,</li> <li>➤ Configuration file management,</li> <li>➤ Fault &amp; performance management &amp;</li> <li>➤ User group-based privilege management.</li> <li>➤ Real-time device status &amp; operational &amp; configuration functions, all from in a standard web browser.</li> <li>➤ NMS should generate alerts in case of various vulnerabilities like a link going down or being reset or coming up and excessive broadcast from a node etc</li> </ul> </li> <li>• Should have capability to discover &amp; trace and add to all new additions in network up to port / node level.</li> <li>• It should provide graphical view of link and device status.</li> <li>• Should interface with switch OS for multiple VLAN &amp; user-id/password access management.</li> <li>• Provide real-time, detailed fault analysis with trap forwarding, trap generation, and email notifications capabilities</li> <li>• Should provide complete switch management up to port level for all switches from single server in Network Control Centre.</li> <li>• Should be capable to view and auto discovers all network devices up to port level.</li> <li>• Should support minimum 250 network devices</li> <li>• The NMS should be capable of managing IPv6 devices.</li> </ul> <p>Note: The Successful bidder is required to supply the latest updates, patches and upgrades of Network / LAN Management Software &amp; Switch OS free of cost during the warranty period and the details of offered server and operating systems should be provided by the bidder. The offered server should be tower/rack.</p>		

12.	Line Interactive UPS System	Compliance (Yes/No)	Remarks
	<ul style="list-style-type: none"> <li>• ISO 9000 certified manufacture</li> <li>• 1000 VA Line Interactive Offline UPS System or higher</li> <li>• Batteries (2x12Vx7AH = 168VAH) or higher with battery rack</li> <li>• Warranty, Service &amp; Support – 5 years onsite including batteries with one battery replacement in the 4<sup>th</sup> year</li> </ul>		

13.	Racks	Compliance (Yes/No)	Remarks
	<ul style="list-style-type: none"> <li>• 19" wall mountable standard racks, height 9U/12U, width min 600 mm and depth min 550 mm with front glass door, closed on all sides, lock and key, min 2 nos. fans, trays and 6 socket dual power supply strip with spike buster, UL@ Listed etc.</li> <li>• The offered power supply strip with spike buster should work with two different individual power sources.</li> </ul>		

14.	Notes	Compliance (Yes/No)	Remarks
1.	<ul style="list-style-type: none"> <li>a. All offered switches should be of the same make / OEM and support perfect inter-operability with existing network, NICNET, Punjab SWAN router and switches and IP phones Like Cisco IP Phone, IP Cameras, Video Conferencing Unit etc.</li> <li>b. No failure rates should be considered with reuse of existing networking components.</li> <li>c. All the features mentioned in the switch specifications should be available from day one i.e. from the date of submission of bids. Future enhancement will not be considered at any stage.</li> <li>d. Service support pack details should be provided with core &amp; edge switch as per SLA mentioned in the RFP.</li> </ul>		
2.	<ul style="list-style-type: none"> <li>a. All passive components should be from the same manufacture except UPS, Rack &amp; Conduit.</li> <li>b. All network cables and components (both CAT6A and fiber) should be certified and tested to conform 10Gbps performances. (Documents attached with technical bid)</li> <li>c. All CAT 6A copper cable components should be verified by ETL and tested by ETL for minimum frequency of 500 MHz and complete copper solution should be shielded solution.</li> </ul>		
3.	<ul style="list-style-type: none"> <li>a. If any term is vendor specific in above mentioned specifications then switches should have capabilities to support equivalent functionality and same should be explained with proper details.</li> </ul>		
4.	<ul style="list-style-type: none"> <li>a. Single mode (OS-2) fiber cable and 10G modules are to be used in case distances from core to core switch and core to any distribution switch exceed 500 meters.</li> <li>b. Penta scanning should be done at minimum 500 MHz, report less than 500MHz should not be considered and component should not be accepted. The report should be submitted in .FLW &amp; PDF format in any consumable media like USB Drive, CD/DVD etc.</li> <li>c. The sample of all the passive components along with proper certifications as mentioned above must be submitted with technical bid except UPS, wall mount racks, conduits.</li> <li>d. The Core switch should be of the higher class / family than the edge switch.</li> <li>e. The quoted products should not be end of life for next 3 years and OEM support of the same should be available for next 5 years after end of life.</li> <li>f. The details of offered service support pack should be provided with switch compliance.</li> <li>g. The Successful bidder is required to supply the latest updates, patches and upgrades of Network Management Software &amp; switch OS free of cost during the warranty.</li> </ul>		

Date

Signature of authorized signatory,

Place & Seal

Name

Performa 4 D: After Sale Service Certificate  
(to be scanned and uploaded - Part of Technical Bid)

From:

-----  
-----

To

Managing Director,  
Punjab Infotech, Chandigarh

Whereas, we M/s (Bidder Name) are established & reputable manufacturers/authorized dealer for sales & services of (Make of equipment/accessories) of equipment/accessories having service offices at Panchkula/Mohali/ Chandigarh. Details are as under:

-----

Sr. No.	Address of Service Centre	Phone No.	Number of Engineers
---------	---------------------------	-----------	---------------------

-----

We do hereby confirm that:

Services including repair/replacement of defective parts will be done by us and fully backed by (name of the principal). Replacement of defective Equipments/parts will be done by equivalent or better equipments/parts of the same make. We will attend all the complaints/service calls within 6 hours. Down time will not exceed beyond 6 hours

(Signature)

Name & Designation :

Performa 4 E: Experience and Track Record in the Field of System Integration

(to be scanned and uploaded - Part of Technical Bid)

1. A description of the company's qualifications demonstrating prior Successful Deployments in either public or private sector showing:
  - a) System Integration comparable in size and scope to the requirements of this RFP;
  - b) Deployment of resources/manpower sufficient to respond to implementation within the timeframe stated in this RFP
2. A brief description of the company's experience in providing similar solutions to Government clients in India & abroad, relevant to SI Operations. The details to be provided in this regard are:

Name of the Assignment
Name of the client
Location of the Project and the country
Start date and End Date
Name and contact details of the Key personnel associated with the project for reference
Approximate value of services (desirable)
Narrative description of the project
Support/ Maintenance obligations (if applicable)

3. **Client Reference list:** Bidder must list the names of at least three companies or government organizations for which it has provided similar services of a comparable scale and complexity as outlined in this RFP. The project referred in this context shall be discussed in detail as part of the client's experience.

Reference Site	Please specify the following information:	
	Name and location of the reference site	
	Contact Person/ Designation	
	Contact person's address, telephone number And e-mail	
	Any other relevant information	

Date & Seal

(Signature of Authorized signatory)

Name, Designation & Address:

**Performa 5: Price Schedule (To be filled online)**

Name of Bidder: _____
<p><b>Bidder agrees to the following:-</b></p> <ol style="list-style-type: none"> <li>1. All costs including transportation, transit insurance, delivery, installation cost, Out of Pocket Expenses and taxes have been included in the above quotes.</li> <li>2. The quoted prices are inclusive of all items required for complete system as per detailed specs given in Section 4.4 of the RFP.</li> <li>3. All lengths are in meters unless specified.</li> <li>4. Prices are to be quoted in Indian Rupees.</li> <li>5. In case of discrepancy between unit price and total price, the unit price will prevail.</li> <li>6. Price must be quoted with 5 years onsite warranty.</li> <li>7. That it is mandatory to quote for CAMC for the 6th, 7th &amp; 8th year but these are excluded from the grand total/ overall bid price.</li> <li>8. Provide justification for higher CAMC, if the offered CAMC charges are more than 5%.</li> </ol>



9. We understand that conditional quotes will be out rightly rejected.

Sr. No.	Item	Qty.	Make & Model	Unit Price incl. Taxes (INR)	Total Amount (INR)
<b>A. Active Components</b>					
1	Aggregation Switch (including one spare)	23			
2	Stack modules (spare)	11			
3	SFP modules (spare)	30			
4	Access Switch (including 8 spare)	310			
5	Fiber Transceiver – Multimode	52			
6	Network Management software with suitable Server & Operating System only for District Court.	22			
<b>B. Passive Components</b>					
7	24 Port Shielded CAT6A STP Jack Panel with rear wire manager	313			
8	CAT6A Solid Cable STP Mtrs – (631 Gray Boxes x 305M)	192455			
9	CAT6A Jack Keystone STP with Collapsible Shutter - White	6522			
10	Universal Face Plate – Single	6522			
11	Universal - Single Port SMB	6522			
12	CAT6A Shielded STP Patch Cord - 1M	6657			
13	CAT6A Shielded STP Patch Cord - 2M	4287			
14	CAT6A Shielded Patch Cord STP - 3M	2000			
15	OFC Outdoor Unitube CST Armored 50/125 OM4 MM 6 Core (Meters)	3020			
16	Fiber Patch Cord MM 50/125 OM4 LC-SC Duplex 3 Mtr	46			
17	Fiber Pigtail MM 50/125 SC Type - 1Mtr	270			

18	Adaptor Multimode SC Simplex	270			
19	LIU 12 Port Rack Mount Unloaded	29			
20	LIU 24 Port Rack Mount Unloaded	5			
21	1x6 Adapter Panel – SC	43			
22	9U Wall Mount Rack	114			
23	1U Cable Manager Steel Loop	292			
24	Fan Tray with Two Fans	186			
25	Power Distribution Unit - 3 Sockets	114			
26	Mounting Hardware (Pack of 10 Cage Nuts)	343			
27	12U Wall Mount Rack	72			
28	Power Distribution Unit - 5 Sockets	106			
29	36U Floor Standing Rack	17			
30	Fan Tray with Four Fans	17			
31	1" PVC Conduit (Meters)	14520			
32	1.5" PVC Conduit (Meters)	42680			
33	HDPE Pipe 40 mm (Meters)	50			
<b>C. UPS</b>					
34	1KVA Online UPS with external battery bank and Rack.	322			
35	Replacement of battery bank in the 4 <sup>th</sup> year	322			
36	Extension of UPS power to active elements	374			
<b>D. Services</b>					
37	Laying of CAT 6A Cable (Meters)	192455			

38	Laying of PVC Conduit (Meters)	57200			
39	Laying of Fiber Cable (Meters)	3020			
40	Laying of HDPE Pipe (Meters)	50			
41	Digging of Soft Soil (Meters)	50			
42	Digging of Hard Soil (Meters)	50			
43	Fixing & Termination of Patch Panel	313			
44	Fixing & Termination of Information Outlet	6522			
45	Fixing of Rack	203			
46	Splicing of OFC	270			
47	Testing & Certification of UTP Nodes	6522			
48	Testing & Certification of OFC Cores	270			
49	Project Management Charges including configuration of switches & Documentation, Per Site	60			
50	On-Site Engineer for 5years	22			
51	Any other items (attach annexure if required)	1			
<b>A. Comprehensive Annual Maintenance (CAMC)</b>					
52	Comprehensive on site AMC (CAMC) for the sixth year	1			
53	On site CAMC for the seventh year	1			
54	On site CAMC for the Eighth year	1			
<b>Total project cost excluding CAMC costs (Ser 52, 53 &amp; 54) in figures(INR)</b>					
<b>Total project cost excluding CAMC costs (Ser 52, 53 &amp; 54) in words (INR):</b> _____ _____.					

Performa 6: Special Power Of Attorney

**(Part of Pre-Qualification to be scanned and uploaded)**

Know all me by these presents that we <<insert name of company>> incorporated in India under the Companies Act, 1956 and having its registered office at <<insert registered office address>> (India) (Hereinafter called the "Company") DOTH hereby nominate, constitute and appoint <<insert name of person in whose favor authority is being made under the attorney >>, <<Designation of the person>>, s/d/o <<father's name of the person>>, to be true and lawful attorney in fact and at law of the Company for and in the name and on behalf of the Company, to do, execute and perform all or any of the following acts, deeds, matters and things namely:-

1. To appear for and represent the Company to all intents and purposes in connection with the matters pertaining to signing and submission of tender << Insert Tender No.>> for selection of Vendor for <<insert project name>> and all affairs ancillary or incidental thereto.
2. AND the Company hereby agree that all acts, deeds and things lawfully done by the said attorney shall be construed as acts, deeds and things done by the Company itself on the above matter and the Company hereby undertakes to ratify and confirm all and whatever its attorney shall lawfully do or cause to be done for and on behalf of the Company by virtue of the powers hereby given.

In witness whereof <<insert name of person authorized to execute the attorney on behalf of Company>>, <<Designation of the person>> of the Company acting for and on behalf of the Company under the authority conferred by the <<reference of body/ notification/ authority orders like Board of Directors of the Company>> in its << reference/ number/ meeting held on>> dated <<date of reference>> has signed this Power of Attorney at <<place>> on this day of <<day>> <<month>>, <<year>>.

The signatures of <<name of person in whose favor authority is being made under the attorney >> given below are hereby certified.

<<signature, name & designation of person in executing attorney and name of company>>

WITNESS:

<<signature, name & designation of person witness to this attorney>>

<<signature & name of the person in whose favor authority is being made under the attorney >>

CERTIFIED:

<<signature, name & designation of person executing attorney and name of company>>

Performa 7: Bank Guarantee Performa for Submitting EMD  
(Part of Pre-Qualification to be scanned and uploaded)

<<insert: **Bank's Name, and Address of Issuing Branch or Office**>>

Beneficiary: Punjab Information & Communication Technology Corporation Ltd

5<sup>th</sup> & 6<sup>th</sup> Floor, Udyog Bhawan, 18 Himalaya Marg, Sector – 17,

Chandigarh – 160 017 (Tel- 0172-5256400, Fax – 91-172-2702423)

**Date:** <<insert: **date**>>

**BID GUARANTEE No.:** <<insert: **Bid Guarantee Number**>>

We have been informed that <<insert: **name of the Bidder**>> (hereinafter called "the Bidder") has submitted to you its bid dated <<insert: **bid date**>> (hereinafter called "the Bid") for **selection and appointment of System Integrator for "Supply, installation, enhancement of existing LAN and maintenance of LAN at various Judicial Court Complexes in Punjab"**.

Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee, and that the bid guarantee automatically covers any alternative bids included in the Bid, if the Bidder is permitted to offer alternatives and does so.

At the request of the Bidder, we <<insert: **name of Bank**>> hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of <<insert: **amount in figures**>> (<<insert: **amount in words**>>) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

- a) Has withdrawn the Bid (or any parts of it) during the period of bid validity specified by the Bidder in the Bid Submission Form or any extension of the period of bid validity which the Bidder subsequently agreed to; or
- b) Having been notified of the acceptance of the Bid by you during the period of bid validity,
  - (i) failed or refused to execute the Contract Agreement, or
  - (ii) failed or refused to furnish the performance security, if required, in accordance with the Instructions to Bidders.

This guarantee will expire:

- (a) if the Bidder is the successful bidder, upon our receipt of copies of the contract signed by the Bidder and the performance security issued to you upon the instruction of the Bidder; or
- (b) if the Bidder is not the successful bidder, upon the earlier of (i) our receipt of a copy of your notification to the Bidder of the name of the successful bidder; or (ii) four months from date of signing of this BG.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.

\_\_\_\_\_  
[Signature(s)]

## Performa 8: Performance Bank Guarantee

**(Only for selected bidder)**

*PICTC LTD, 5<sup>th</sup> & 6<sup>th</sup> Floor Udyog Bhawan  
18 Himalaya Marg, Sector 17, Chandigarh - 160017  
Tel- 0172-5256400 Fax – 91-172-5256406*

- This deed of Bank Guarantee made this <<day>> day of <<month>> <<year>> by <<Name of Bank>> having its office at <<office address of the Bank>>, hereinafter referred to as “**The Bank**” which expression shall include their successors, in favour of Punjab Information & Communication Technology Corporation Ltd. situated at *PICTC LTD, 5<sup>th</sup> & 6<sup>th</sup> Floor Udyog Bhawan, 18 Himalaya Marg, Sector 17, Chandigarh – 160017* (hereinafter referred to as “The Department” which expression shall include their successors).
2. Whereas the Department has issued notification no. <<Notification no.>> dated <<date of notification>> to M/s <<Name of the Company>> a company incorporated in India under the Companies Act and having its registered office at <<registered office address>> (India) and place of business at <<business address of company>> hereinafter referred to as “**The Company**” (which term or expression unless excluded by or repugnant to the subject or context shall mean and include its successors-in-office and assigns) for Selection as Vendor <<project name>>.
  3. In consideration the Department selecting the Company as Vendor to <<project name>> as per the terms and conditions of the Agreement entered into between the Department and the Company, we the Bank, hereby irrevocably and unconditionally guarantee to pay the Department on first demand without demur any sum up to Rs <<amount>> (Rupees <<in words>>) merely on claim or demand by telex and/ or writing by the Department by reason of breach by the Company of any of the terms or conditions contained in the said Agreement or by reason of the Company's failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee.
  4. We, the Bank, undertake to pay to the Department any money so demanded notwithstanding any dispute(s) raised by the Company in any suit or proceeding pending before any court or Tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment there under and the Company shall have no claim against us for making such payment.
  5. The Bank's liability herein contained in this guarantee shall not be impaired or discharged by any extension of time or any forbearance of neglect on the part of the Department or any variations or alterations made, considered or agreed to with or without knowledge or consent of the Bank by or between the Department and the Company.

6. The guarantee shall remain in all force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the Department under or by virtue of the said Agreement have been fully paid and its claim satisfied or discharged or up to Seven years and six months from the date of its execution i.e. up to <<day>> day of <<month>> <<year>> , or the Department certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the Company and accordingly discharges this guarantee
7. We, the Bank, further agree with the Department that the Department shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said Company from time to time or to postpone for any time or from time to time any of the powers exercisable by the Department against the Company and to forbear or enforce any terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the Company or for any forbearance, act or omission on the part of the Department or any indulgence by the Department to the said Company or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.
8. The Bank Guarantee shall not be discharged due to any change in the constitution of the Bank or the Company.
9. NOTWITHSTANDING anything contained herein,
  - a. Our liability under this Bank Guarantee is restricted to Rs <<amount>> (Rupees <<in words>>),
  - b. This Bank Guarantee shall be valid up to dd.mm.yyyy inclusive of the claim period, and
  - c. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if the Department serve upon us a written claim or demand on or before dd.mm.yyyy.
10. We, the Bank, undertake not to revoke this Bank Guarantee during its currency except with the previous written consent of the Department in writing and the guarantee shall be continuous and irrevocable up to the sum stated hereinabove.



Place



Date




(Signature of Authorized signatory & Stamp of Bank)



### Appendix A - Instructions for e-Tendering

S.No	Title	Description																														
1	Punjab e-Tendering Website	<a href="http://etender.punjabgovt.gov.in">http://etender.punjabgovt.gov.in</a>																														
2	View and print Tender Documents Free of cost	<p>To Download/ View the tender notifications and corrigendum follow the steps given below:</p> <p>a) Click on "TENDER SEARCH" after opening the e-Procurement website.</p> <p>b) Provide all or any one of the options like "Tender Number", "Region", "Estimated Cost", "Request Dates (from and to)", "Tender Submission date" or "any key words from Tender Description"</p> <p>c) Click "Submit" to view the results. A list of tenders will appear on the screen.</p> <p>d) Click on  to view.</p> <p>e) Click  to print.</p>																														
3	Digital Signatures	The user must be in possession of a valid Digital Signature Certificates (DSC) which may be procured from any of the authorized Certifying Authority (CA), such as; MTNL, TCS, e-mudhra, N-code, Sify etc. In case of any problem in compatibility of DSCs, e-Procurement helpdesk may be contacted.																														
4	e-Payment Options and procedure	<p>Following options are available for making e-Payment:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Mode of payment →</th> <th style="text-align: center;">IPG</th> <th style="text-align: center;">Net Banking</th> <th style="text-align: center;">OTC</th> <th style="text-align: center;">NEFT</th> </tr> </thead> <tbody> <tr> <td style="text-align: left;">Purpose &amp; Amount ↓</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: left;">Registration Fee Rs 2247.00</td> <td style="text-align: center;">Yes</td> <td style="text-align: center;">Yes</td> <td style="text-align: center;">No</td> <td style="text-align: center;">No</td> </tr> <tr> <td style="text-align: left;">Tender Fee (differs for each tenders)</td> <td style="text-align: center;">Yes</td> <td style="text-align: center;">Yes</td> <td style="text-align: center;">Yes</td> <td style="text-align: center;">Yes</td> </tr> <tr> <td style="text-align: left;">Processing Fee (0.1 % of tender estimated value + service tax – Varies between Rs 562.00 to Rs 5618.00) Rs 2247.00 for tenders where estimated value is not known</td> <td style="text-align: center;">Yes</td> <td style="text-align: center;">Yes</td> <td style="text-align: center;">No</td> <td style="text-align: center;">No</td> </tr> <tr> <td style="text-align: left;"><b>EMD</b> (differs for <b>each</b> tenders)</td> <td style="text-align: center;">Yes</td> <td style="text-align: center;">Yes</td> <td style="text-align: center;">Yes</td> <td style="text-align: center;">Yes</td> </tr> </tbody> </table> <p>Procedure for e-Payment through OTC /NEFT:</p> <p>a) Take a print of challan from the e-payment gateway.</p> <p>b) Pay the amount in your bank and collect the receipted copy duly stamped by the bank and note UTR Number.</p> <p>c) Upload the scanned copy of challan and payment details including UTR Number in the e-tendering web site.</p>	Mode of payment →	IPG	Net Banking	OTC	NEFT	Purpose & Amount ↓					Registration Fee Rs 2247.00	Yes	Yes	No	No	Tender Fee (differs for each tenders)	Yes	Yes	Yes	Yes	Processing Fee (0.1 % of tender estimated value + service tax – Varies between Rs 562.00 to Rs 5618.00) Rs 2247.00 for tenders where estimated value is not known	Yes	Yes	No	No	<b>EMD</b> (differs for <b>each</b> tenders)	Yes	Yes	Yes	Yes
Mode of payment →	IPG	Net Banking	OTC	NEFT																												
Purpose & Amount ↓																																
Registration Fee Rs 2247.00	Yes	Yes	No	No																												
Tender Fee (differs for each tenders)	Yes	Yes	Yes	Yes																												
Processing Fee (0.1 % of tender estimated value + service tax – Varies between Rs 562.00 to Rs 5618.00) Rs 2247.00 for tenders where estimated value is not known	Yes	Yes	No	No																												
<b>EMD</b> (differs for <b>each</b> tenders)	Yes	Yes	Yes	Yes																												

5	Registration	<p>Steps to be followed for registration of bidders:</p> <ol style="list-style-type: none"> <li>Click on "Register" and fill the online registration form.</li> <li>Pay the registration fee of Rs. 2247/- through e-Payment Gateway (IPG and Net Banking).</li> <li>Note the User ID and Password allotted by the system.</li> <li>Upload following documents in scanned format:- <ol style="list-style-type: none"> <li>Request on Company Letter Head</li> <li>PAN Card</li> <li>Enlistment certificate, if any.</li> <li>Registration Acknowledgement</li> </ol> </li> </ol> <p>After this the bidder will have to contact Punjab e-Procurement Helpdesk for the activation of his User ID.</p>
6	Login & Participation in the Tendering process	<p>Log in with your <b>User Id and Password</b> (which was allotted by the system after registration). For participating in the tendering process follow the instructions given below:</p> <ol style="list-style-type: none"> <li>Insert the PKI (which consists of your DSC) in your PC USB port (make sure that necessary driver software of PKI is installed in your system).</li> <li>To open the Microsoft Internet Explorer (from the Desktop of your computer) click on the Internet Explorer icon, or</li> <li>Go to Start &gt; Programs &gt; Internet Explorer.</li> <li>Type <a href="http://etender.punjabgovt.gov.in">etender.punjabgovt.gov.in</a> in the address bar, to access the Login Screen.</li> <li>Enter e-Procurement User Id and Password, click on "Go".</li> <li>Click on "Click here to login" for selecting the DSC.</li> <li>Select the Certificate and enter DSC Password.</li> <li>Re-enter the e-Procurement User Id &amp; Password.</li> <li>Select the Department (in this case Punjab Information &amp; Communications Technology Corporation Ltd.) from the drop box in whose tender you intend to participate.</li> </ol>
7	Online Query Resolution System/ Pre-bid meeting	<p>Under the Department selected as explained at ser. No. 6 above click on the tender, then take the "email" option and you will be able to upload your queries under the "Pre-bid meeting" option.</p>
8	Online Request for Tender Documents	<p>Steps to be followed for online request for tender:</p> <ol style="list-style-type: none"> <li>Click on "Un Applied" to view / apply for new tenders.</li> <li>Click on  for online request.</li> <li>Pay the Tender Fee and Processing Fee online.</li> <li>Click  to view the tender documents which are available in the user profile (<i>Tender document screen appears</i>).</li> <li>Click on "Click here to download" to download the documents on your desktop</li> </ol>
9	Other Department tenders	<p>To apply for other Department tenders, Click on "Select Department" to switch over to other Department Tenders and repeat procedure given at ser 7 above.</p>
10	Pay EMD and update details in the web site	<p>Steps to be followed for uploading supporting documents:</p>

		<p>a) From the  screen click on "Click here to enter EMD Details" (which is displayed in "Red color") to feed the EMD details and upload the scanned copy of challan with UTR Number in case payment is made through OTC or NEFT.</p> <p>b) When the user finishes with the payment of EMD, the "Red color" will automatically turn to "Black color".</p> <p>c) Click "Click here to Download Empty Document" and download the editable Technical/ Price bid documents and save the same without changing the "File Name" on your Desktop.</p> <p>d) The user may log off and fill up the editable documents off line in his own time.</p>
11	Upload files – Technical Sheet/ Price bid Sheets and attach documents to the tender	<p>a) From the  screen click on "Click here to Upload the Filled File" (which is displayed in "Red color")</p> <p>b) Select the filled file/ files which were saved in the same name.</p> <p>c) Click on "OK" to upload the filled Technical and Price bid documents to the tender. (Note that when the user uploads the filled Technical and Price Sheet, the "Red color" will automatically turn to "Black color" which reflects that user is ready for the final submission).</p> <p>d) Click "Click here to Attach the General Documents" to upload all the documents which are already saved in the vendor profile.</p> <p>e) Attach the required documents to the concerned tender from general document section to the tender document screen.</p>
12	To Submit the Tender	<p>a) Bids once submitted cannot be revised. Therefore, prior to submission, verify whether requisite documents have been attached and uploaded.</p> <p>b) Note down / take a print of "bid control number" once it is displayed on the screen.</p>
13	To view the tender opening process	<p>Tender opening event can be viewed online as per procedure given below:</p> <p>a) Log in with your User Id and Password (which was allotted by the system after registration).</p> <p>b) Select Department from "Select the Department" drop down box.</p> <p>c) Click on "OPENED". Click on the  icon to view bid documents of all bidders participating in the tendering process.</p>
14	e-Procurement Help Desk details	<p>a) <b>Office Address:</b> Punjab Infotech, (e-Procurement Helpdesk), S.C.O - 101, 2nd Floor, Sector – 47 C, Chandigarh.</p> <p>b) <b>Visiting Hours:</b> 8 AM to 8 PM (Monday to Sunday except Public Holidays)</p> <p>c) <b>Contact Details:</b></p> <ol style="list-style-type: none"> <li>Tel : 0172-3953764</li> <li>Fax : 0172-3934665 (Fax)</li> <li>Mobile : 09257209340, 08054628821</li> </ol> <p>d) <b>E-mail</b> : <a href="mailto:etender.helpdesk1@punjabinfotech.gov.in">etender.helpdesk1@punjabinfotech.gov.in</a></p>

Appendix B – JCC Locations and status

<b>List of District &amp; Sub Divisional Judicial Court Complexes (JCC) to be covered under the Project</b>					
<b>Legend for Status:</b> Newly Constructed (NC)/ Under Construction (UC)/ Old Complex (Old)					
<b>S.N.</b>	<b>Districts and Sub Divisions</b>	<b>Dist. JCC</b>	<b>Sub. Div. JCC</b>	<b>Total JCC</b>	<b>Status</b>
1	<b>Amritsar</b>				
a.	Amritsar city		1	1	Old
b.	Baba Bakala (Rural)		1	1	Old
c.	Ajnala (rural)		1	1	<b>UC</b>
2	<b>Taran Taran</b>				
a.	Patti		1	1	<b>old</b>
b.	<b>Rasulpur</b>	1		1	<b>UC</b>
c.	<b>Old court city</b>	1		1	<b>old</b>
3	<b>Gurdaspur</b>	1		1	<b>NC</b>
a.	Batala		1	1	Old
4	<b>Pathankot</b>	1		1	<b>NC</b>
5	<b>Ferozpur</b>	1		1	<b>UC</b>
a.	Zira		1	1	<b>UC</b>
b.	Jalalabad		1	1	Old
c.	Gurhar Sahai		1	1	Old
6	<b>Fazilka</b>	1		1	Old
a.	Abohar		1	1	Old
7	<b>Muktsar</b>	1		1	Old
a.	Malaut		1	1	<b>UC</b>
b.	Giddarbaha		1	1	Old
8	<b>Faridkot</b>	1		1	Old
9	<b>Moga</b>	1		1	Old
a.	Nihal Singh		1	1	Old
10	<b>Jalandhar</b>	1		1	Old
a.	Philaur		1	1	Old
b.	Nakodar		1	1	Old
11	<b>Kapurthala</b>	1		1	UC
a.	Sultanpur Lodhi		1	1	Old
b.	Phagwara		1	1	Old
12	<b>Hoshiarpur</b>	1		1	Old
a.	Garhshankar		1	1	Old
b.	Mukerian		1	1	Old
c.	Dasuya		1	1	Old
13	<b>SBS Nagar/ Nawanshar</b>	1		1	Old
a.	Balachaur		1	1	old
14	<b>Ludhiana</b>	1		1	Old
a.	Khanna		1	1	Old

	b.	Samrala		1	1	Old
	c.	Jagraon		1	1	Old
15		<b>Sangrur</b>	1		1	Old
	a.	Malerkotla		1	1	Old
	b.	Sunam		1	1	Old
	c.	Dhuri		1	1	Old
	d.	Moonak		1	1	Old
16		<b>Barnala</b>	1		1	Old
17		<b>Bhathinda</b>	1		1	Old
	a.	Talwandi Sabo		1	1	Old
	b.	Phul		1	1	Old
18		<b>Mansa</b>	1		1	Old
	a.	Budhlada		1	1	Old
	b.	Sardulgarh		1	1	<b>UC</b>
19		<b>Patiala</b>	1		1	Old
	a.	Nabha		1	1	Old
	b.	Rajpura		1	1	Old
	c.	Samana		1	1	Old
20		<b>Fatehgarh Sahib</b>	1		1	Old
	a.	Amloh		1	1	Old
	b.	Khamanon		1	1	<b>UC</b>
21		<b>Rupnagar/ Ropar</b>	1		1	Old
	a.	Kharar		1	1	Old
	b.	Anandpur Sahib		1	1	Old
	c.	Derabassi		1	1	Old
22		<b>SAS Nagar/ Mohali</b>	1		1	Old
		<b>Total</b>	<b>22</b>	<b>38</b>	<b>60</b>	

Appendix C – Details of Existing LAN at various JCC

Ser No.	District Courts (19) / Taluka (40)	No. of Sw	Type of Sw	Make & Model of Sw	Installation Date (DD-MM-YY)	Room/ Location of sw in JCC	Remarks/ No.of Sw need to be transferred
1	Amritsar	9	L2 = 8 , L3= 1	L2=Catalyst 2960 and CISCO SF 300-24,L3=Catalyst 3750G	11-5-2010	Server room,Nazir room, JW ROOM	NA
2	Ajnala	4	L2 = 4	3 Catalyst 2960 & 1 CISCO SF 300-24	19/10/2011	Server room, JW Room	NA
3	Tarn Taran	6	L2 = 6	4 Catalyst 2960 & 1 CISCO SF 300-24,1 L2= H.P A5120	13/12/2011	Server room, JW Room	NA
4	Khadoor Sahib	NA	NA	NA	NA	NA	NA
5	Pattti	2	L2=2	1 Catalyst 2960 & 1 CISCO SF 300-24	14/12/2011	Server room and Copy agency.	NA
6	Baba Bakala	2	L2-8 port, (L2-24 port under pawan)	1 Catalyst 2960 & 1 CISCO SF 300-24	14/10/2011	Server room	NA
7	Bathinda	6	L2 =6	Cisco Catalyst 2960 Series	23/12/2011	Server Room & Ahlmad Room	NA
8	Talwandi Sabo	3	L1=3	1 DLink-DES 1016 D & 2 DLink DES 1024D	15/11/11	Server Room, Ahlmad Room	Installed by PWD B&R
9	Phul	3	L1=3	1 DLink-DES 1016 D & 2 DLink DES 1024D	15/11/11	Server Room, VC Room	Installed by PWD B&R
10	Barnala	23	L1=20, L2=3	20 DLink - DES1024 A, 2 CISCO 2960, 1 Cisco SF-300-24	NK	3 Server room, 20 Coridoor	NA
11	Fatehgarh Sahib	6	L2=5, L3=1	L2= Catalyst 2960, L3=Catalyst 2960 G, 1 CISCO SF 300-24 24ports	30/04/2010	Server room, JW Room	No
12	Amlah	2	L2=2	L2= Catalyst	7-9-2011	Server Room	No
13	Faridkot	1	L2=1	Catalyst 2960	27-05-2011	Server room	No
14	Ferozepur	10	L2=10	CISCO 2960 L2	05.07.2011	Server room, JW Room	1 L2 switch has been transfered to Guruharsahai JCC for LAN

15	Zira	3	L2=3	CISCO 2960 L2	07.12.2011	Server room, JW Room	NA
16	Jalalabad	3	L2=3	CISCO 2960 L2	08.12.2011	Server room, JW Room	NA
17	Fazilka	5	L2=5	CISCO 2960 L2	13.12.2011	Server room, JW Room	Two 24 port sw has been provided by the PWD
18	Guruharsa hai	1	L2=1	CISCO 2960 L2	09.01.2014	Server room	Transferred from Ferozpur Headquarters
19	Abohar	3	L2=3	CISCO 2960 L2	08.12.2011	Server room, JW Room	
20	Gurdaspur	9	L2=8,L3=1	One L2=SF300-24 Port 10/100 Managed Sw, Seven L2=CISCO Catalyst 2960 24 Port 10/100-2T/SEP, One L3=CISCO WS-C3750G-12S-E L3 Catalyst Sw	2-4-2010	Server Room	Two sw are functional, rest are laying idle in computer server room.
21	Batala	2	L2=2	One L2=SF300-24 Port 10/100 Managed Sw, One L2=CISCO Catalyst 2960 24 Port 10/100-2T/SEP	NK	Server Room	NA
22	Pathankot	2	L2	Two L2=3C17300A One L2 (PAWAN)= cisco SF 300-24	Two L2 sw on 8/5/2014 One L2 sw (PAWAN) on 28.06.2011	Server Room, Ahlmad Room of Court No.-6 (2nd Floor)	Both of the L2 Switch are provided by the P7H HC temporary use.
23	Hoshiarpur	9	L2=7 & L3=2	Seven L2 Sw 24 Port 10/100 Managed Sw, Two L3 Sw CISCO 2960G-Series Catalyst Sw and one L2 sw Cisco SF 300-24 24 PORT 10/100 MANAGED SW FOR PAWAN NW	04.03.2010	1. Sesssion Court Complex: Server Room, JW Room D&SJ, JW Room ADJ1, Library. 2.Lower Court Complex: Server Room, COC Branch, Copying Branch, Ahlmad Room ACJSD	NA
24	Dasuya	6	DLINK DES-1016D 16 Ports Switch (L1)	Cisco SF 300-24 24 PORT 10/100 MANAGED SWITCH FOR PAWAN NETWORK	NK	server room	NA

25	Garhshankar	2	L2	One L2 switch Cisco 2960 series for local network and one L2 switch Cisco SF 300-24 24 PORT 10/100 MANAGED SWITCH FOR PAWAN NETWORK	11.02.2011	Server Room	NA
26	Mukerian	NA	NA	NA	NA	NA	NA
27	Jalandhar	13	L3=1 L2=12	L3 Switch Cisco 3750, L2 Cisco Catalyst 2960	L3=20/08/2010 , L2=19/12/2009	Server Room, JW Room	NA
28	Nakodar	2	L3=1 (Pawan) L2=1	L2= HP A3100 Switch JD 3208	25/04/2011	Server Room,	NA
29	Phillaur	2	L3=1(Pawan), L2=1	L3=Cisco F300-24, L2= Cisco 2960	Pawan L3 on 21/11/2011 and L2 on 19/11/2011	Server Room	NA
30	Kapurthala	7	L3=1(E-Court) L2=5(E-Court) L2=1(SWAN)	L2=Cisco, Catalyst2960, 24 port 10/100+2T/SEP, L2(SWAN)=CISCO SRW2024 Small Business Switch, L3=CISCO C2960G-24TC-L 10/100	13-05-2011	Server Room L3=(1), SWAN L2=1, JW-CJM(1),EB L2=(2),Ahlmad Room(1), Copy Agency (1)	NA
31	Phagwara	4	L2=1(SWAN) L2=3(E-Court)	L2=Cisco, Catalyst2960, 24 port 10/100+2T/SEP, L2(SWAN)=CISCO SRW2024 Small Business Switch,	29-06-2011	Server Room (L2=2), Ahlmad Room (L2=1), Nazir Branch (L2=1)	NA
32	Sultanpur Lodhi	3	L2=1(SWAN) L2=2(E-Court)	L2=Cisco, Catalyst2960, 24 port 10/100+2T/SEP, L2(SWAN)=CISCO SRW2024 Small Business Switch,	11-11-2011	Server Room (2),Judgement Writer Room(1)	NA
33	Ludhiana	17	L3=1(e-Court) and L2=15 (e-Court), L2=1 (PAWAN)	L2=Cisco, Catalyst2960, 24 port 10/100+2T/SEP, L2(PAWAN)=CISCO SRW2024 Small Business Switch, L3=CISCO C3750 12 port fibre switch	6-5-2010	Server room and JW rooms	All L2 sw need to be fixed on wall. Currently, sw in Old wing building and on 6th floor are fixed on walls. (13 sw out of 15 L2 installed under e-courts)
34	Khanna	3	L3=0 and L2=2	L2 Cisco Catalyst 2960	23/08/11	Server room	NA
35	Jagraon		L3=0 and L2=2	HP A3100 Series Switch JD 320B	18-3-2013	Server Room(L3=1) and 2 In Ahlmad Room(L2=2)	NA
	Samrala	3	L3=0 and L2=2	HP A3100 Series Switch JD 320B	9-4-2013	Server room, and JW room First Floor	NA



36	Payal						NA
37	Mansa	5 + 1 (Pawan)	L2=6	L2= 5 (CISCO Catalyst 2960 G Series) and L2 =1 (CiscoSF300 24) and all are of 24 ports each	04.03.2010	Server Room(L2=1)(L2=2 Under E-Court),Judgement Writer Room(L2=1)1st Floor, Judgement Writer Room(L2=2) 11nd Floor	NA
38	Budhlada	4	L2=4	L2= 2(DLINK DES 1024D) and L2 =1(CISCO SF300 24) and all are of 24 ports each and L2 =1 (DLINK DES 1016D) -16 ports	2009	Server Room	NA
39	Sardulgarh	2	L2=2	L2=1 (Cisco SF300 24) - 24 ports and L2=1 (Cisco Catalyst 2960)-8 ports	2010	Server Room	New site is ready shifting likely in 3 months.
40	Moga	3 (24 port), 2 (8 Port)	L3=5	Cisco small business 24 port SF 300-24 (Sw) , Catalyst 2960 - 24 Port (2 Sw) , catalyst 2960 - 8 Port (2 Sw)	2011	2 (24 port in server room), 1 (24 port in Steno -I of ADJ, 2 ( 8 Port In Supritendent's Room))	2 (24 port Sw) needed, 1 for one court with subordinate rooms and record room, another for 3 courts with conference room.
41	Nihal SinghWala	0	0	N.A	N.A	At present LAN and Racks are installed in Computer Room at Sub-Divison	we need a 24 port switch to connect the whole complex,
42	Patiala	16	L2(NEW) =6,L3 =1 AND L2 (OLD) =9	L3 CISCO CATALYST 3750G SERIES,L2 CISCO CATALYST 2960 SERIES,3COM 4210 26 PORT AND DLINK DES 1024D	L2 sw on 22.02.2010, L3 sw on 10.03.2011 and L2 sw old in 2003-04)	SUVIDHA CENTRE,SERVE R ROOM,ADA ROOMS,ALHMAD ROOM AND RECORD ROOM	NA
43	Rajpura	6	L2=5 AND ONE 16 PORT	D LINK DES 1024D 24 PORT AND D LINK DES 1016D 16 PORT	2007	sw HAS BEEN INSTALLED IN THE ELECTRICITY CUPBOARD	NA
44	Nabha	5	L2=5	D LINK DES 1024D	2008	sw HAS BEEN INSTALLED IN THE ELECTRICITY CUPBOARD	NA
45	Samana	2	L2 = 1 AND ONE 8 PORT	HP 24 PORTS A 3100 SERIES AND HP 8 PORT A 3100 SERIES	26.04.2013	SERVER ROOM AND AHLMAD ROOM	NA
46	Rupnagar	5 (24 PORT)	L2	5 L2 CISCO CATALYST 2960 SERIES	7-2-2010	SERVER ROOM,RECORD ROOM, ALHMED ROOM	NA
47	Mohali	1 (8 PORT),	L2	1(24 port) 1 (8port) L2 CISCO CATALYST 2960	2011	SERVER ROOM AND Retiring room of ACJSD	NA

		1(24 PORT)		SERIES			
48	<i>Kharar</i>	1 (24 PORT)	L2	Layer 2 CISCO CATALYST 2960	2011	NAZIR ROOM	YES(NAZIR ROOM TO SERVER ROOM)
49	<i>Anandpur Sahib</i>	1 (8 PORT), 1(24 PORT)	L2	1(24 port) 1 (8port) L2 CISCO CATALYST 2960 SERIES	2011	SERVER ROOM AND JW ROOM	NO
50	<i>Dera Bassi</i>	NA	NA	NA			SITE NOT UNDER ECOURT PROJECT
51	<b>Sangrur</b>	6	L3=1(PWAN),L3=1(eCourt) AND L2=4	L3 CISCO CATALYST 3750G SERIES,L2 CISCO CATALYST 2960 SERIES	26.08.2010	SERVER ROOM, JW ROOM	NA
52	<i>Sunam</i>	3	L3=1(PWAN),L2=1 and ONE 8 PORT	CISCO CATALYST 3750-L3,CISCO CATALYST 2960 - L2,8-PORT CISCO	21-10-2011	Server Room,Ahlmad Room	NA
53	<i>Dhuri</i>	3 (24 port)	L2=2 and L3=1(PWAN)	D LINK DES 1024D	5/4/2011(L3 Switch)	Server Room,Nazar Room,Copying room	NA
54	<i>Malerkotla</i>	5	L2=4 and L3=1(PWAN)	D LINK DES 1024D	NK	Server Room , Record Room	NA
55	<i>Moonak</i>	5	L2=4 and L3=1(PWAN)	D LINK DES 1024D	NK	Server Room, Copying Room,Front Office	Front Office to Server Room
56	<b>Shri Muktsar Sahib</b>	2 (24 Port) + 2 (8 Port)	L2=4	L2=2(HP A3100-8V2 E160) L2=HP A3100-24 V2 E160 L2= Cisco SF300 24P	NK	Server Room,Ahlmad Room,VC room	Requirement of 24 port sw replacing with 8 ports sw
57	<i>Gidderbaha</i>	2 (24 Port) + 1 (8 Port)	L2=2	L2= Cisco SF300 24P L2=	NK	Server room,Court room	
58	<i>Malout</i>	2 (8Ports) + 1 (24 port)	L2=2	L2= Cisco SF300 24P L2=2(2960 Catalyst)	NK	Server room	New site is ready and courts will be shifted from old complex to new complex
59	<b>SBS Nagar</b>	3(8 Port) + 3(24 Port CISCO)	L2=6	CISCO Catalyst 24 Ports 2960 2 switch's, Cisco SF 300-24 Ports, D-LINK=2, TP-Link=1	2010	Server Room, Court Room, COC, Nazir Room	One 24 port sw is needed to connect the court room

60	Balachaur	1(8 Port )+ 1(24 Port CIS CO)	L2=2	CISCO 24 PORTS SF-300-24,CISCO 2960 8 Posts	2010	Server Room	NA
61	Chandigarh	24 (24 port ) L2 + 1 (24 port ) L3	L3 Switch=1, L2=24	L3= Cisco Ctalyst 3750, L2= Cisco catalyst 2960 Series,	2013	L3 Switch= 1 in Server Room, L2 Switch= Cisco catalyst 2960 Series(2 in library, 1 in Record Room, 5 in 1st floor, 5 in 2nd Floor, 5 in 3rd Floor, 4 in 4th floor, 2 in Server Room	NA

### Appendix - D : Tentative Node Distribution Guidelines for District Courts

**Note:**

A. Total number of nodes in a District court with N courts =  $13*N+22+20+31$ .

B. In addition the requirement of additional I/O points against the existing number of vacant posts of Judicial Officers which are to be filled during the course of next year, shall also be counted towards the total LAN requirement. 13 LAN points against each post must be catered. Total number of vacancies existing at present is 130 (Punjab Superior Judicial Service – 11 and Punjab Civil Service – 119).

S. N.	Room Wise	User wise	Nos. (a)	User wise additional LAN points	Nos. (b)	Total (a + b)	Sub Total	Category
1	Retiring Room	Judicial Officer	1	NA	0	1	13	13* No. of Court Rooms (Sessions + Lower)
2	Court Room	Judicial Officer, Reader, Stenographer & VC Point	4	Backup at Dias, Addl. VC Point	2	6		
3	Peshi Room	Civil Ahlmad , Criminal Ahlmad & Execution Clerk	3	Summary Clerk / Translator, Copy Clerk	1	4		
4	Steno Room	Judgment Writer	1	NA	0	1		
5	Display Board	NA	0	One for each court depending on vicinity of litigants	1	1		
6	Office	Court Manager	1	NA	0	1	22	Office of

7	Office	Superintendent	1	NA	0	1	District & Sessions Judge	
8	English Office	Photocopy Machine, English Clerk , Enquiry Clerk & LRC	4	Receipt Clerk , Dispatch Clerk & LRC	4	8		
9	Accounts Office	Bill Clerk , Service Book Record Holder , GPF Clerk	3	NA	0	3		
10	Statistics Branch	Addl. English Clerk & Statement Clerk	2	NA	0	2		
11	Nazarat Branch	NA	0	Distt. Nazar, Addl . Clerk	2	2		
12	Copying Agency Sessions	Photocopy Machine, Head Copyist & Copyist	3	NA	0	3		
13	Record Room Session	Record Keeper & DRK	2	NA	0	2		
14	COC Office	Photocopy Machine, COC , Bill Clerk , Service Book Record holder& LRC	5	LRC	2	7	Office of Civil Judge (Senior Division) & Chief Judicial Magistrate	
15	Civil Nazar	NA	0	Civil Nazar, Addl . Clerk	2	2		
16	Tamil Nazar	Tamil Nazar	1	Shariff Petty, Common	2	3		
17	SWJ Branch	High Court Bail Orders , Statement Lower Courts	2	Malkhana Moharrar	1	3		
18	Copying Agency Subordinate	Photocopy Machine, Head Copyist & Copyist	3	NA	0	3		
19	Record Room Subordinate	Record Keeper & DRK	2	NA	0	2		
20	Server Room	Server Room Equipment(4) , Nodal Official , System Officer , Sys Assistant s(3)	9	Additional backup Points	5	14		31

21	JSC / Suvidha Centre	Inquiry Counter , Fresh Institution Sessions & Fresh Institution Lower	3	Copying Agency Application Sessions, Copying Agency Applications Lower, File Inspection Application	3	6
22	Video Conferen ce Room	VC Equipment & Stenographer	2	Judicial Officer	1	3
23	Conferen ce Hall	On the Wall	2	On the Table	2	4
24	Centraliz ed Library	NA	0	Librarian & Common Point	2	2
25	PRO	NA	0	Public Relation Officer	2	2
<b>Grand Total</b>			<b>54</b>		<b>32</b>	<b>86</b>

Appendix E: Indicative Delivery & Implementation Schedule		
S.N	Activity	Schedule
1.	Preparation and Submission of Site survey reports	4 Weeks
2.	Submission of report on relocation of active components for better design & usage	2 weeks
3.	Approval of Site Survey & relocation reports	2 weeks
4.	LAN design, cabling diagram and cable identification details	4 weeks
5.	Approval of proposed LAN design with details by High Court	2 week
6.	Supply of passive components from the approval of site survey reports by High Court.	16 weeks
7.	Cable laying, Termination, IO fixing	
8.	Supply & installation of active components from the approval of site survey reports by High Court	
9.	Testing of the laid cable & rectification of faults	2 weeks
10.	NMS Configuration for Network Management and Testing of active components	1 week
11.	Submission of all Test reports (OTDR / Panta Scanning) / Inspection by purchaser	1 week
12.	<b>First Inspection of physically installed components (active &amp; passive)</b> Note – The Inspection Certificate is to be issued by Concerned District Court Manager in consultation with DIO/NIC.	
13.	Posting of one network assistant for five years from the date of first inspection. (His Joining report should be forwarded to High Court with all the relevant documents)	Immediately after First Inspection
14.	<b>Rectification of defects pointed out by purchaser.</b>	1 week
15.	<b>Final inspection by Purchaser.</b> Note – The Final Inspection Certificate is to be issued by Court Manager in consultation with DIO/NIC.	After rectification of defects pointed out by purchaser
16.	Training of Staff, Submission of OEMs Warranty Support	As per approved

	Documents	schedule
17.	<p><b>Final Acceptance by Purchaser</b></p> <p>Note – The final acceptance certificate of inspected &amp; verified items is to be issued by District &amp; Session Judge in consultation with concerned District Court Manager.</p>	One month (30 days) trouble free operation from Date of final inspection
18.	Network Audit by Purchaser	As per approved schedule
19.	25 / 20 years Certification from authorized network integrator	Within 3 months of Final acceptance
20.	Configuration of switches for best performance and solve reported LAN problems	Once in every quarter after final acceptance

**Appendix F: Activities & Guidelines for LAN Enhancement at Court Complexes**

<b>SN</b>	<b>Report Title</b>	<b>Guidelines</b>	<b>Explanation</b>
1	<b>LAN Survey</b>	Conduct survey for each site to study the exact requirements for LAN enhancement which include desired LAN points for court rooms, VC etc.	a) Identify existing LAN components, IP Scheme, Node placement. b) Work Out additional node requirement as per High Court guidelines. c) Make use of free ports available on existing switches for connecting additional nodes. d) Propose rearrangement (if any) of existing and new switches for better usage and design. e) Work out additional requirement of Active and passive components, IP scheme. f) Prepare Network diagrams for: <ul style="list-style-type: none"> <li>• Existing Network</li> <li>• New Network</li> <li>• Complete network</li> </ul> g) Prepare additional Bill of Material (BoM). Get all documents countersigned from Court Manager. h) Submit details in triplicate to Punjab Infotech, NIC and High Court.
		Prepare site layout & network requirements, take stock of all existing network components & network infrastructure and to gather any other information required for providing required services at each site.	
2	<b>LAN Design</b>	Total LAN node requirement (e.g. conduct survey & prepare list of nodes locations within the rooms ) , modular with provision for easy future additions	Verify number of LAN Nodes with guidelines provided by High Court. Depending on the size of court complex 10-20% future escalation for number of nodes may be planned. Margin to be made for services such as VC, Network
		Meet all the application requirements	
		Capable for data & video	
		Use multimode OM-4 fiber for backbone	



		Use CAT6A cable for last mile from patch panel to IO	Printers, IP Telephony, etc
		Should prepare LAN IP addressing scheme	
3	<b>Engineering</b>	Proxy & antivirus requirements	
		Create in building VLAN for segregation between user's to meet service requirements	
		Address all the LAN security issues,	
		List power requirements for new and existing LAN	
		Fire safety	
		Bill of material of LAN active devices (Switches, SFP/SFP+ modules)	Clear Make / Model in BOM with quantities
4	<b>Structured cabling installation</b>	Cable routing on building blueprint / plan with scales & distances , integration of existing cabling infrastructure	Node-wise length of cable. Switch wise length of fiber cable, Blueprint to include IP Addressing, room structure, and node numbering
		Identification of existing cable risers and equipment closets to be used	
		labeling plan for cabling infrastructure	
		marking & identification of entire LAN infrastructure	
		creation of separate cable trays / pathways / raceways if required	
		Plan for digging pits, crossing roads for laying underground fiber cable through GI pipe or HDPE pipe where ever required	
		Documentation required to be handed to building administration / PWD for safe keep of cabling infrastructure	
		Bill of material of LAN passive Components	
5	<b>Commissioning , testing &amp; documentation for maintenance</b>	Testing certification of LAN components & cabling infrastructure	
		tools & manuals required for maintenance	
		suggest list items to stocked as spares for	

		<p>immediate fault rectification</p> <p>OEM or third party NMS to manage LAN where ever number of nodes exceed 200.</p> <p>Post acceptance OEM maintenance Support for active components</p> <p>On Site support engineer at all District Court sites to work under supervision of court manager</p>
6	WAN	WAN connectivity provided using PAWAN and NICNET. IP addressing to be in accordance with the scheme already finalized for all courts in the state of Punjab.
7	Verification	<p>OTDR to be used for fiber measurement, 5% escalation may be allowed</p> <p>Penta scan to be calibrated for +- 6 months</p> <p>Penta scan to be used for cable measurement, 5% escalation may be allowed</p> <p>Duct measurement to be done according to blueprint by vendor</p>

Appendix G: Site Survey Report With Complete Item Wise Bill Of Material

Notes:

1. Site Survey plan to be finalized by Nodal Judicial Officer of each court in consultation with Court Manager or any other officer authorized by District and Sessions Judge.
2. During site survey by the successful vendor, all the existing components of LAN shall be marked by the Court Manager by using a distinct color code and year of installation & year of expiry of OEM warranty shall be mentioned on each equipment already installed.
3. The vendor, in consultation with the Nodal Judicial Officer at the Site as well as the Court Manager or any other person authorized by the learned District and Sessions Judge, shall make a detailed list of all the existing components and thereafter shall bifurcate the existing components into two lists i.e. a. Existing Components which are usable and which are to be integrated in the new LAN; and b. Existing Components which are not to be used. Also the equipment propose to be relocated is to be provided in the format given at Annexure AA. These lists shall be submitted to the High Court along with Site Survey Reports.
4. Vendor shall propose CAMC for all the existing identified usable components of LAN for 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> year after expiry of 5 years OEM warranty for each site.
5. The grant of CAMC for each site as well as for 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> year on the price quoted by the vendor shall be subject to final decision by the High Court.
6. The list of new equipment required for LAN is given below:

<b>Name of the Court Complex:</b>			
<b>Contact Person Details</b>	<b>Name</b>		
	<b>Designation</b>		
	<b>Contact Number (Mobile &amp; Landline)</b>		
<b>Details of Bill of Material</b>			
<b>S#</b>	<b>New Bill Items required for LAN</b>	<b>Unit</b>	<b>Quantity</b>
1	CAT 6A STP Cable	Meter	
2	24 Port CAT 6A STP Patch Panel with wire manager		
n.			
N+1	Additional items (if any)		
Name & Sign of Surveying Engineer		Name and Signature of Court Manager	
Contact Number:		Contact Number:	

Annexure 1: Proposed list of items (Active Components) for relocation from One JCC to Another to be submitted by the selected vendor after site survey			
<b>From JCC</b>			
<b>TO JCC</b>			
Details of Components			
	Make	Model	Quantity
Core Switch			
Edge Switch			
Module (SFP)			
Module (1000 Base T)			
Other items (If any)			
<b>Name, Designation &amp; Sign of proposer:</b>			
<b>Name, Designation &amp; Sign of approver:</b>			

Annexure 2: Performa of certificate to be issued by the purchaser after successful  
Commissioning

No.

Date:

M/S.....  
.....

**Sub: Certificate of Acceptance**

1. This is to certify that the equipment as detailed below has/have been received in good condition along with all the standard and special accessories (subject to remarks in para 2). The same has been installed and commissioned.

- a. Contract No. \_\_\_\_\_ dated
- b. Description of the equipment (Attach Detailed List)
- c. Name of the consignee.....
- d. Date of User acceptance testing and commissioning.

2. Details of accessories/spares/ services not yet supplied and recoveries to be made on that account:

S.no.	Description	Amount to be recovered
-------	-------------	------------------------

3. The UAT has been done to our entire satisfaction and users have been trained.

4. The supplier has fulfilled his contractual obligations satisfactorily.

Or

The supplier has failed to fulfil his contractual obligations with regard to the following:

- (a) \_\_\_\_\_
- (b) \_\_\_\_\_
- (c) \_\_\_\_\_
- (d) \_\_\_\_\_

5. The amount of recovery on account of non-supply of accessories spares and services is given under Para 2 above.

6. The amount of recovery on account of failure of the supplier to meet his contractual obligations is as indicated in endorsement of the letter.

Signature .....

Name.....

Designation .....