NOTICE INVITING e-TENDER

e-Tenders are hereby invited for implementation of Supply, Installation, Testing and Commissioning (SITC) with Three Years Products and Installation Warranty of Managed Local Area Network & Integration for Kolkata Traffic Police HQ.

Reputed System Integrators (SI) having sufficient experience and credentials for successful completion of "**Similar Nature**" of work in a Government Department/PSU/Autonomous Body or any reputed organization. Bidder must have adequate Service Engineer for providing on-site warranty service within the stipulated time.

1.	Tender No. & Date	WTL/KTP/LANW/23-24/067 dated 07.02.2024	
2.	Tender Version No.	1.0	
3.	Brief description of Job	Supply, Installation, Testing, Commissioning (SITC) with Three Years Products and Installation Warranty of Managed Local Area Network & Integration for Kolkata Police	
4.	Tender document Fee	₹ 6000.00 (Rupees Six Thousand Only). The amount to be transferred online through e-Tender portal.	
5.	Earnest Money Deposit	₹ 4,00,000.00 (Rupees Four Lakh only) The amount to be transferred online through e-Tender portal.	
6.	Date of Downloading/Sale of Tender document	07.02.2024	
7.	Pre-Bid Meeting date & time	 19.02.2024 at 12.00 Hrs. (On-Line Meeting) Pre-Bid meeting will be organized on online platform only. Only queries as per format (Section - N) reaching WTL by 15.02.2024 at 15.00 Hrs. will be taken for decision. Interest bidders are requested to send mail to purchase@wtl.co.in for participation of online pre-bid meeting. Based on request WTL will share meeting id / links for meeting. Participants will be notified in advance if there are changes in pre-bid meeting date and time. Queries will be sent to Purchase Deptt. 	
8.	Bid Submission Start date & time	(purchase@wtl.co.in) <u>.</u> 22.02.2024 at 14.00 Hrs.	
9.	Last date & time of EMD & Tender Fee submission	Before Uploading of Tender	
10.	Last date & time of Bid Submission	28.02.2024 at 13.00 Hrs.	
11.	Date & time of Technical Bid Opening	01.03.2024 at 13.00 Hrs.	
12.	Venue of Pre-Bid Meeting & submission of EMD & Tender Fee	WEBEL TECHNOLOGY LIMITED (A Govt. of West Bengal Undertaking) Plot - 5, Block – BP, Sector – V, Salt Lake City, Kolkata – 700091.	
13.	Contact person	033-23673403-06	

- 1. Intending bidder may download the tender documents from the website <u>https://wbtenders.gov.in</u> directly with the help of Digital Signature Certificate. Necessary Tender fee may be remitted electronically through e-tender portal in favour of "Webel Technology Limited" and also to be documented through e-filling. Necessary Earnest Money Deposit (EMD) may be remitted electronically through e-tender portal in favour of "Webel Technology Limited" and also to be documented through e-tender portal in favour of "Webel Technology Limited" and also to be documented through e-tender portal in favour of "Webel Technology Limited" and also to be documented through e-tender portal in favour of "Webel Technology Limited" and also to be documented through e-filling.
- 2. Both Techno Commercial Bid and Financial Bid are to be submitted concurrently duly digitally signed in the website <u>https://wbtenders.gov.in</u>
- 3. Tender documents may be downloaded from website and submission of Techno Commercial Bid and Financial Bid will be done as per Time Schedule stated in Section C of this Tender Document.
- 4. The Financial Bid of the prospective Bidder will be considered only if the Techno Commercial Bid of the bidder is found qualified by the Tender Committee. The decision of the 'Tender Committee' will be final and absolute in this respect. The list of Qualified Bidders will be displayed in the website.
- 5. All clarifications / corrigendum will be published only on the WTL Website.

CONTENTS OF THE TENDER DOCUMENT

The Tender document comprises of the following:

- SECTION A SCOPE OF WORK & RESPONSIBILITY
- SECTION B ELIGIBILITY CRITERIA
- SECTION C DATE AND TIME SCHEDULE
- SECTION D INSTRUCTION TO BIDDER
- SECTION E BID FORM
- SECTION F TECHNO COMMERCIAL EVALUATION & AWARDING OF CONTRACT
- SECTION G GUIDANCE FOR E-TENDERING
- SECTION H BILL OF MATERIAL
- SECTION I TECHNICAL SPECIFICATION WITH COMPLIANCE STATEMENT
- SECTION J TECHNICAL CAPABILITY OF BIDDER
- SECTION K FINANCIAL CAPABILITY OF BIDDER
- SECTION L BIDDER'S DETAILS
- SECTION M MANUFACTURER'S AUTHORIZATION FORM
- SECTION N PRE-BID MEETING QUERY
- SECTION O LIST OF CLIENTS OF SIMILAR ORDERS
- SECTION P PROFORMA FOR PERFORMANCE BANK GUARANTEE
- SECTION Q NIT DECLARATION FOR BIDDER
- SECTION R MAKE, MODEL, PART NUMBER

<u>SECTION – A</u>

SCOPE OF WORK & RESPONSIBILITY

For System Integrator

- The System Integrator is responsible for end-to-end execution of the turnkey project from procurement of Active and Passive Items, Installations and commissioning and making necessary arrangement warranty support for three years, maintain SLA. Time to time software/firmware upgradation of installed devices, preventive maintenance, generate weekly reports of system health and daily report on issues and their status.
- 2) Supply: Entrusted bidder must supply and work as per work order. Supplied components must satisfy the minimum guiding specifications and guidelines, as applicable, proprietary technology must be mentioned against each component. Bidder is allowed to propose only one make / model per system required for the proposed solution. Bids with optional offers would be summarily rejected.
- 3) Technical refreshment and enhancement of coverage area, Installation, Integration & Implementation: Delivery, Installation & Commissioning Managed Local Area Network & Integration at Kolkata Police Jurisdiction. Delivery & Installation will be governed by the stated guidelines and associated standards & in line with the scope of work defined in this document. The delivery / supply of the materials done by successful Bidder at respective location only. The Post installation warranty supports are the sole responsibility of the Original Equipment Manufacturer (OEM) and selected bidder.
- 4) Service Quality and Assurance: Services within installation, warranty period must be rendered with back to back OEM for hardware.
- 5) Acceptance: After successful Delivery & installation, installation reports prepare by WTL, signed and sealed by Kolkata Police Authority.
- 6) Warranty / Support coverage period: All hardware component service items should have minimum warranty period of period i.e. 36 months from the date of final acceptance/Go-Live of the system by the user or 38 months from date of delivery, whichever is earlier. Within warranty period, entrusted OEM will replace, re-integrate faulty, buggy components.
- 7) Delivery: All materials are to be delivered at Kolkata Police office. After necessary checking, testing, marking of the all materials under supervision of WTL, successful bidder will take necessary step to install the material at installation site. Any sticker/ stationery item required to complete the marking will be provided by successful bidder. The items may be delivered in multiple phases.
- 8) Warranty Certificate: On successful installation bidder should provide installed equipment's actual serial no. duly certified by respective OEM. This clause is applicable for only active materials / components of Switch & UPS.
- 9) Joint site visits with KP TI & WTL representative SI After receiving the PO from WTL, shall be required to finalize the exact location.
- 10) Existing infrastructure of Traffic Building, Kolkata Police should be used to install the Switches and other accessories to reduce the project cost and increase the feasibility.
- **11)** Integration of the hardware equipment with the existing Hardware-based video system, implement analytics solutions should work with the Existing equipment installed, with minimum complexity.
- 12) Training & Documentation SI shall prepare and train user nominated representative for Systems operation.

- 13) Go-Live & Handover On the date of Go-Live SI and WTL shall formally hand over the system to the client for to complete official Go-Live formalities.
- 14) Bidder should confirm and make a provision for seamless integration with Existing Network System those are installed by Kolkata Police Commissionerate under their jurisdiction.

For the Kolkata Police

1) Kolkata Police Authority will provide necessary working permission for installation of Network system at Kolkata Police jurisdiction area.

2) Kolkata Police authority will provide necessary power points for installation of Network system at Kolkata Police jurisdiction.

For Webel Technology Ltd.

1) WTL will provide all necessary support during the installation and post installation phase and SI will work under supervision of WTL team.

<u>SECTION – B</u>

ELIGIBILITY CRITERIA

A) To Pre-qualify Passive & Active (Network) OEM's Equipment should satisfy the Eligibility Criteria mentioned below:

Sealed and signed supporting documents by authorized person from OEM to be uploaded.

Passive :

SL.	Eligibility Criteria
1	Passive OEM offered must be registered in India for more than at-least 15 years.
2	OEM should have members participating in Telecommunications Industry Association (TIA)
	committee. Membership shall be available for validation at <u>www.tiaonline.org</u>
3	OEM shall have at least 1 RCDD certified technical staff based in India and one technical
	manpower based out of Project Location for technical support. OEM letterhead declaration need
	to be submit.
4	OEM must have ISO 9001:2015 and ISO 14001 certified manufacturing facility in India at least 5
	years in operation.
5	The Cat6A SCS must be tested by an accredited 3rd Party test facility to the following standards:
	- ANSI/TIA 568-C.2: Category 6A Channel – 4 connectors
	3rd Party verification for both 100m Long channel & Short Channel (15m) testing must be
	provided as part of the bid response.
	Copies of test reports should be appended to this RFP.
6	The Copper and Fiber cabling solution must be upgradable to intelligent system as per ISO
	18598 AIM standards, without any Network downtime.
7	All passive cabling components including fiber and copper must be from same OEM.
8	All offered components must be ROHS 2011-EU compliant. ROHS compliance shall be mentioned
	in datasheets or in OEM website.

Active :

1	The OEM for switches must be listed Leaders/Challengers in Gartner Magic Quadrant for Wired and Wireless LAN Infrastructure as per last 3* years reports.
2	The OEM of the Network product should have well established manufacturing plant/ Research & Development Lab in India.
3	The OEM of active Network devices to be quoted by the bidder should have local Technical Assistance Centre (TAC) support in India and Returned Materials Authorization (RMA) depot in at least 8 states across India.
4	The OEM of active Network devices to be quoted by the bidder should be present in the country from at least past 10 years.
5	The OEM whose active components are being quoted by the bidder should have posted profit in last 7* years.
6	All material to be procured by the bidder should be from an OEM, which has not been acquired/ or likely to be acquired by any other business entities during the period of last 7 years till the last date of bid submission. This is to ensure dependable and continuous support for the next 7 years as per warranty requirements and lifecycle of the Network.
7	All products being quoted should be available as on date with the OEM and should be publicly referenceable.
8	Shall support Single Operating System binary image for all switch models proposed as part of the design.

9	Proposed Switches, Wireless Access points and Routers should be from same OEM
10	Proposed Switches, Wireless Access points and Routers should support common transceivers
	from same OEM of the active components

B) To Pre-qualify all the UPS OEM's should satisfy the Eligibility Criteria mentioned below: (Sealed and signed supporting documents by authorized person from OEM to be uploaded.)

- 1) Online UPS OEM The OEM should have submitted valid License or certification mentioned below ISO 9001, ISO 14001
- 2) UPS OEM should have registered office in East for at least 05 and should also have minimum 7 years of experience in Supply, installation & commissioning of On-Line UPS with Govt. / PSU undertakings.
- UPS OEM should not have past history of being blacklisted / debarred from business from any Govt. OR PSU in India (affidavit required)
- C) To Pre-qualify all the RACK OEM's should satisfy the Eligibility Criteria mentioned below: (Sealed and signed supporting documents by authorized person from OEM to be uploaded.)
- 1) OEM should have valid ISO 9001 certificate
- 2) OEM should have their own factory in India
- 3) Rack OEM should have minimum 10 years Manufacturing experience in India
- 4) OEM should have minimum yearly turnover of 55 Cr.

D) **BIDDERS' ELIGIBILITY CRITERIA**

- 1. The bidder must be a company registered under Companies Act, 1956/2013 or Partnership or LLP or OPC or Proprietary Firm. Documentary (Certificate of incorporation/Relevant document) evidence to be submitted.
- 2. The bidder must be a System Integrator in Networking sector. Relevant document to be submitted.
- 3. The bidder should have been operating for the last 10 years in India. Certificate of Incorporation and/ or Certificate of Commencement of Business issued by the Registrar of Companies/ Partnership Registration/ sole proprietorship registration under the Shops & Establishments Act / Trade License to be submitted.
- 4. The bidder must have their Registered/ Branch office in West Bengal (Preferably in Kolkata). Valid trade license and local GST Registration Certificate are to be submitted.
- 5. The bidder should have valid GST Registration Certificate & PAN Card. Bidder shall have to submit photocopy of the documents.
- The bidder shall have an order of "Similar Nature" of single order an amount not less than Rs.1.00 Crore (one Crore) in last 05 (Five) financial years in Government Department / PSU / Autonomous Body. Documentary evidence should be enclosed.

- The bidder should have a minimum average annual turnover of not less than Rs. 10 Crore each year in the last 3 financial year (2020-21, 2021-22 & 2022-23). Bidder shall have to submit Audited Balance Sheet / Audited Accounts / Auditor Certificate in support of their claim.
- 8. Bidder should have Positive net worth for last 03 (Three) financial years (From FY 2020-21, 2021-22, 2022-23).
- 9. The bidder must submit the Manufacturers Authentication Form (MAF) for All type Network Active & Passive components, all type of UPS, Racks. As per prescribed format enclosed (Section - M), along with Technical Compliance statements. Without these documents from the OEMs, the offer will be treated as non-responsive and summarily may be rejected.
- 10. The bidder shall not have been blacklisted by any State/Central Government or PSU Organization or bilateral / multilateral funding agencies for breach of ethical conduct or fraudulent practices as on date of submission of the proposal (as per DIT guidance note issued on 26-Dec-2011). Declaration on bidder's letter head to be submitted.
- 11. The bidder shall submit Bid Form (Section I) duly signed by the authorized signatory of the company as per the format enclosed. Deviation in format may not be accepted.
- 12. Bidder shall submit NIT Declaration (Section Q) duly signed by the authorized signatory of the company as per the format. Deviation in format may not be accepted.

<u>SECTION – C</u>

DATE AND TIME SCHEDULE

Sl. No.	Particulars	Date & Time
1	Date of uploading of N.I.T. & other Documents (online) (Publishing Date)	07.02.2024
2	Documents download/sale start date (Online)	07.02.2024
3	Last Date and time of sending the queries (Offline)	15.02.2024 & 15.00 hrs.
4	Pre Bid Meeting (On Line)	19.02.2024 & 12.00 hrs.
5	Corrigendum, if any will be published (On Line)	-
6	Bid Submission start date & time (On line)	22.02.2024 & 14.00 hrs.
7	Last Date & time of submission of Earnest Money Deposit & submission of remittance details	Before Uploading of Tender
8	Last Date & time of submission of Tender Fee & submission of remittance details	Before Uploading of Tender
9	Bid Submission closing date & time (On line)	28.02.2024 & 13.00 hrs.
10	Bid opening date & time for Technical Proposals (On line)	01.03.2024 & 13.00 hrs.
11	Date of uploading the final list of Technically Qualified Bidder (online) after disposal of appeals, if any	-
12	Date for opening of Financial Bid (Online)	-

<u>SECTION – D</u>

INSTRUCTION TO BIDDER

1. DEFINITIONS

In this document, the following terms shall have following respective meanings:

"**Acceptance Test Document**" means a document, which defines procedures for testing the functioning of installed system. The document will be finalized with the contractor within 7 days of issuance of the Letter of Award.

"**Bidder**" means any firm offering the solution(s), service(s) and /or materials required in the RFP. The word Bidder when used in the pre award period shall be synonymous with Bidder, and when used after award of the Contract shall mean the successful Bidder.

"Contract" is used synonymously with Agreement.

"**Contract Price**" means the price to be paid to the Contractor for providing the Solution, in accordance with the payment terms.

"**Contractor**" means the Bidder whose bid to perform the Contract has been accepted by Tender Committee and is named as such in the Letter of Award.

"Default Notice" shall mean the written notice of Default of the Agreement issued by one Party to the other.

"Installation" Shall means installation of supplied Hardware.

"**Fraudulent Practice**" means a misrepresentation of facts in order to influence a procurement 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 artificial noncompetitive levels and to deprive the Directorate of Commercial Taxes and eventually Gov. of W. Bengal of the benefits of free and open competition.

"**Good Industry Practice**" shall mean the exercise of that degree of skill, diligence and prudence which would reasonably and ordinarily be expected from a reasonably skilled and experienced Operator engaged in the same type of undertaking under the same or similar circumstances.

"Government" / "Gov. of W. Bengal" means the Government of West Bengal.

"GoI" shall stand for the Government of India.

"GoWB" means Government of West Bengal

"KOLKATA POLICE" means Kolkata Police Commissionerate

"**Personnel**" means persons hired by the Bidder as employees and assigned to the performance of the Infrastructure Solution or any part thereof.

"Similar Nature of Work" means Delivery, Installation & Commissioning of Local Area Netwok.

"**Project**" Technical refreshment and enhancement of coverage area for Network system at Kolkata Police jurisdiction area.

"Services" means the work to be performed by the Bidder pursuant to this Contract, as described in the detailed Scope of Work.

WTL/KTP/LANW/23-24/067

"Interest rate" means "364 days Government of India (GoI) Treasury Bills" rate.

"**Law**" shall mean any Act, notification, bye law, rules and regulations, directive, ordinance, order or instruction having the force of law enacted or issued by the Central Government and/or the Government of West Bengal or any other Government or regulatory authority or political subdivision of government agency.

"LOI" means issuing of Letter of Intent shall constitute the intention of the WTL to place the Purchase Order with the successful bidder.

"**Operator**" means the company providing the services under Agreement.

"**Requirements**" shall mean and include schedules, details, description, statement of technical data, performance characteristics, standards (Indian as well as International) as applicable and specified in the Contract.

"CTD" means Directorate of Commercial Taxes, GoWB

"Service" means provision of Contracted service viz., operation, maintenance and associated services for DEPLOYED SYSTEMS as per Section titled "Scope of Work"

"Termination Notice" means the written notice of termination of the Agreement issued by WTL.

"**Uptime**" means the time period when specified services are available with specified technical and service standards as mentioned in section titled WARRANTY SUPPORT" "% **Uptime**" means ratio of 'up time' (in minutes) as mentioned in section titled "Warranty support"

"Service Down Time" (SDT) means the time period when specified services with specified technical and operational requirements as mentioned in section titled "WARRANTY SUPPORT"" are not available to Gov. of W. Bengal and its user departments and organizations.

"WTL" means Webel Technology Limited a Govt. of W. Bengal undertaking.

2. PRE BID MEETING

Pre Bid Meeting will be held on 19.02.2024 at 12.00 hrs. (**On-Line Meeting**). Bidder can send their queries as per format (Section - N) to Purchase Deptt. (<u>purchase@wtl.co.in</u>). Only the queries received within the stipulated date prior to the Pre Bid Meeting will be answered. Interest bidders are requested to send mail to (<u>purchase@wtl.co.in</u>) for participation of online pre-bid meeting Based on request WTL will share meeting id / links for meeting. If there is any change in date and time, then will inform.

3. COST OF BIDDING

The bidder shall bear all costs associated with the preparation and submission of the bid and WTL will no case be responsible for those costs regardless of the conduct or outcome of the bidding process.

4. BID DOCUMENT

Bidder is expected to examine all instructions, forms, terms and requirement in the bid document. The invitation to bid together with all its attachment thereto shall be considered to be read, understood and accepted by the bidder unless deviations are specifically stated in the seriatim by the bidder. Failure to furnish all information required by the bid document or a bid not substantially responsive to the bid document in every respect may result of the bid.

5. AMENDMENT OF BID DOCUMENT

At any time prior to the deadline for submission of proposals, WTL reserves the right to add/modify/delete any portion of this document by issuance of an Corrigendum, which would be

published on the website and will also be made available to the all the Bidder who have been issued the tender document. The Corrigendum shall be binding on all bidders and will form part of the bid documents.

6. MODIFICATION AND WITHDRAWAL OF BIDS

As per the bidding process available in the tender.

7. LANGUAGE OF BID & CORRESPONDENCE

The proposal will be prepared by the Bidder in English language only. All the documents relating to the proposal (including brochures) supplied by the firm should also be in English, and the correspondence between the Bidder & WTL will be in English language only. The correspondence by fax/E-mail must be subsequently confirmed by a duly signed formal copy.

8. BIDDER'S SOLUTION

The bidders are requested to study the Bill of Material supplied with this document carefully. While working out the solution the bidder has to work with the broad minimum specification provided in the tender documents, conforming to the model, make and Part number (wherever provided). While submitting the bid the bidder has to detail out all components needed to complete the system BOM. The bidder is required quote for each item retaining all major components/sub system detailed and specified. As the contractor will be responsible for smooth functioning of the system, availability of spares during the tenure of the warranty period have to be take care by the contractor to maintain the guaranteed uptime.

9. EARNEST MONEY DEPOSIT (EMD) / TENDER FEE

The bidder shall furnish Online Receipt against payment of Tender Fees and Earnest Money Deposit.

10. REFUND OF EMD

EMD will be refunded to the unsuccessful bidders without interest by following guidelines of circular 3975-F(Y) dated 28/07/2016 on final selection of Successful Bidders.

11. FORFEITURE OF EMD

EMD made by Bidder may be forfeited under the following conditions:

If Bidder withdraws the proposal before the expiry of validity period.

During the evaluation process, if a Bidder indulges in any such activity as would jeopardize the process, the decision of WTL regarding forfeiture of EMD shall be final and shall not be called upon question under any circumstances.

If Bidder violates any of the provisions of the terms and conditions of the proposal.

In the case of a successful Bidder, if Bidder fails to:

- a) Accept the work order along with the terms and conditions.
- b) Furnish performance security.
- c) Violates any of the work conditions of this proposal or indulges in any such activities as would jeopardize the work.
- d) Submitting false/misleading information/declaration/documents/proof/etc.

The decision of WTL regarding forfeiture of EMD shall be final and shall not be called upon to question under any circumstances, besides, forfeiture of EMD even the Bidder will be deferred from participating in any job for a period of one year.

12. FORMS AND FORMATS

The various inputs for the Techno Commercial as Financial Bids are to be submitted in the format specified. The bidder shall use the form, wherever specified, to provide relevant information. If form does not provide space for any required information, space at the end of the form or additional sheets

shall be used to convey the said information. For all other cases, the bidder shall design a form to hold the required information.

13. LACK OF INFORMATION TO BIDDER

The bidder shall be deemed to have carefully examined the Bid document to his entire satisfaction. Any lack of information shall not relieve the bidder of his responsibility to fulfill his obligation under the bid. If bidder has any queries relating to bid document, then he can send the queries before the Pre Bid Meeting.

14. CONTRACT EXECUTION

On receipt of the Letter of Award the contractor should submit a Performance Bank Guarantee (PBG) equivalent to 5% of the total contract value within three weeks from the date of receipt of Letter of Award/Order. The PBG should be valid for six months more than the warranty period. All delivery of the material will have to be completed within 45 days from the date of acceptance of contract and the contractor has to ensure all activities leading to the commissioning of the contract to be completed within 12 weeks from the date of award. Subsequent to the award of contract, the contractor will have to arrange for the requisite material as per BOM.

15. TIME SCHEDULE FOR DELIVERY & INSTALLATION

All delivery of the material will have to be completed within 6-8 weeks from the date of Work Order/LoI issued by WTL and installation will have to be completed within 12 weeks from the date of Order/LoI issued by WTL.

16. LIQUIDATED DAMAGE / PENALTY

The job includes the supply and installation of materials mentioned in the tender document. In the event of failure to meet the job completion in stipulated date/time liquidated damage may be imposed on the contractor for sum not less than 0.5% of the contract value for that item/job for each week or part thereof, subject to a ceiling of 3% of the total contract value (excluding all taxes & duties and other charges). In the event of LD exceeds 3% of the order value, WTL reserves the right to terminate the contract and WTL will get the job completed by any other competent party. The difference of cost incurred by WTL will be recovered from the contractor and PBG will be invoked.

17. LIABILITY

In case of a default on bidder's part or other liability, WTL shall be entitled to recover damages from the Contractor. In each such instance, regardless of the basis on which WTL is entitled to claim damages from the Contractor (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), Contractor shall be liable for no more than:

- Payment referred to in the Patents and Copyrights clause.
- Liability for bodily injury (including death) or damage to real property and tangible personal property limited to that cause by the Contractor's negligence.
- As to any other actual damage arising in any situation involving non-performance by Contractor pursuant to or in any way related to the subject of this Agreement, the charge paid by WTL for the individual product or Service that is the subject of the Claim. However, the contractor shall not be liable for
- For any indirect, consequential loss or damage, lost profits, third party loss or damage to property or loss of or damage to data.

For any direct loss or damage that exceeds the total payment for Contract Price made or expected to be made to the Contractor hereunder.

18. PATENTS & COPYRIGHT

If a third party claims that a product delivered by the Contractor to WTL infringes that party's patent or copyright, the Contractor shall defend WTL against that claim at Contractor's expense and pay all costs, damages, and attorney's fees that a court finally awards or that are included in a settlement approved by the Contractor, provided that WTL.

• Promptly notifies Contractor in writing of the claim

• Allows Contractor to control and co-operate with Contractor in the defense and any related settlement negotiations.

Remedies: If such a claim is made or appears likely to be made, WTL would permit Contractor to enable WTL to continue to use the product, or to modify it, or replace it with one that is minimum functionally equivalent. If Contractor determines that none of these alternatives is reasonably available, WTL agrees to return the product to Contractor on Contractor's written request. Contractor will then give WTL a credit equal to for a machine. WTL's net book value (provided WTL has followed generally accepted accounting principles for a generally available software product produced by Contractor (Program) the amount paid by WTL or 12 months charges (whichever is lesser) and for materials the amount paid by WTL for the materials. These will be Contractor's entire obligation regarding any claim of infringement.

19. SUSPENSION OF WORK

WTL shall have the power at any time and from time to time by notice to the Contractor to delay or suspend the progress of the work or any part of the work due to any other adequate reasons and on receipt of such notice the contractor shall forthwith suspend further progress of the work until further notice from WTL. The Contractor shall recommence work immediately after receiving a notice to do so from WTL. The whole or any part of the time lost for such delay or suspension shall, if WTL in its absolute discretion thinks fit, but not otherwise, be added to the time allowed for completion.

20. TERMS OF PAYMENT

Payment terms will be on back-to-back basis, i.e., payment will be made only on receipt of payment from relevant customer, i.e. Rail Vikas Nigam Limited. A scheduled payment terms depicted below:

60% payment will be done on procurement of material and submission of document. 30% payment will be done on installation, testing and commissioning of the project. Balance 10% (item No 52 & 53) will be done for maintenance period of 3 years.

On successful installation bidder to get installed equipment's with actual serial no. duly certified by respective OEM.

21. GOVERNING LAWS

This contract should be governed by and interpreted by Arbitration clause in accordance with Laws in force in India. The courts at Kolkata shall have exclusive jurisdiction in all matters arising under the contract. The selected vendor shall keep himself fully informed of all current national, state and municipal law and ordinances. The selected vendor shall at their own expense, obtain all necessary permits and license and pay all fees and taxes required by law. These will be selected vendor's entire obligation regarding any claim of infringement. The selected vendor hereto agrees that it shall comply with all applicable union, state and local laws, ordinances, regulations and codes in performing its obligations hereunder, including the procurement of licenses, permits certificates and payment of taxes where required. The selected vendor shall establish and maintain all proper records (particularly, but without limitation, accounting records) required by any law, code/practice of corporate policy applicable to it from time to time including records and returns as applicable under labor legislation.

22. CORRUPT OR FRAUDULENT

The Tender Committee requires that the bidders under this Tender observe the highest standards of ethics during the procurement and execution of such contracts. For this purpose, the definition of corrupt and fraudulent practices will follow the provisions of the relevant laws in force. The Tender Committee will reject a proposal for award if it detects that the bidder has engaged in corrupt or fraudulent practices in competing for the contract in question. The Tender Committee will declare a firm ineligible, either indefinitely or for a stated period of time, if it at any time determines that the firm has engaged in corrupt and fraudulent practices in competing for, or in executing, a contract.

23. BIDING CLAUSE

All decisions taken by the Tender Committee regarding the processing of this tender and award of contract shall be final and binding on all parties concerned. The Tender Committee reserves the right:

- To vary, modify, revise, amend or change any of the terms and conditions mentioned above and,
- To reject any or all the Tender/s without assigning any reason whatsoever thereof or to annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability to the affected bidder(s) or any obligation to inform the affected bidder(s) of the grounds for such decision.

24. WORKMEN'S COMPENSATION

In every case in which by virtue of the provision of the workmen's compensation Act 1923 or any other relevant acts and rules, compensation to a workmen employed by the contractor, is payable, then this should be done by the Contractor. If WTL is obliged to make any compensation under the said rules and acts, then the amount shall be recovered without prejudice, from the bills and due of the Contractor. WTL shall not be bound to contest any claim made against the Contractor in respect of workmen's compensation.

25. CONTRACTOR'S EMPLOYEES

The Contractor shall comply with the provision of all labour legislation including the requirement of the payment of Wage Act 1936 and the rules framed there under and modifications thereof in respect of men employed by him in carrying out the contract. The Contractor must ensure that he complies with PF, ESI regulation for all his deployed employees. The Contractor shall see that all authorized Sub Contractors under him similarly complied with the above requirement.

26. SAFETY MEASURES

The Contractor shall in the course of execution of the work take all necessary precaution for the protection of all persons and property. The Contractor shall take adequate measures to protect the work and present accident during the work. In the event of any accident to any person or persons or damage or injury of any description to any person or property due to failure on the part of the contractor in taking proper precautionary measures the contractor shall be responsible for and must make good the loss the damage at his own cost to the satisfaction of the department and employees of the department shall be indemnified from all claims or liabilities arising there from or any expenses incurred on account thereof.

27. EQUIPMENT

All tools & tackles necessary for the work shall have to be procured by the contractor unless otherwise specified elsewhere in these tender documents. The equipment used by the contractor for a particular work must be appropriate for the type of work. The contractor shall maintain the equipment used on the work properly so that they are in good working condition. In no case shall the contractor use defective or imperfect equipment in the work. The contractor shall arrange to replace or repair all defective equipment so that the progress of the work is not hampered. No defective equipment should be left at the site of work and the department shall not be responsible for any loss or damage to any of these equipment's during the course of the execution of the work.

28. SUB-CONTRACT

The purchaser (WTL) does not recognize the existence of Sub-Contractors. The Contractor's responsibility is not transferable.

29. TERMINATION FOR DEFAULT

WTL may without prejudice to any other remedy or right of claim for breach of contract by giving not less than 30 days' written notice of default sent to the contractor, terminate the order in whole or in part. If the contractor materially fails to render any or all the services within the time period specified in the contract or any extension thereof granted by WTL in writing and fails to remedy its failure within a period of thirty days after receipt of default notice from WTL. If the project (delivery, commissioning as well as warranty maintenance support is not carried out according to specification due to deficiency in service as per terms of the contract. In such case WTL will invoke the amount held back from the contractor as PBG.

30. BANKRUPTCY

WTL/KTP/LANW/23-24/067

If the contractor becomes bankrupt or have a receiving order made against him or compound with his creditors or being a corporation commence to be wound up, not being a voluntary winding up for the purpose only or amalgamation or reconstruction, or carry on their business under a receiver for the benefit of their creditors or any of them, WTL shall be at liberty to terminate the engagement forthwith without any notice in writing to the contractor or to the liquidator or receiver or to any person in whom the contractor may become vested and without any compensation to give such liquidator or receiver or other person the option of carrying out the engagement subject to their providing a guarantee for the due and faithful performance of the engagement up to an amount to be determined by WTL.

31. FORCE MAJEURE

It is hereby defined as any cause, which is beyond the control of the Contractor or WTL as the case may be, which such party could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the contract, such as

- War, Hostilities or warlike operations (whether a state of war be declared or not), invasion, act of foreign enemy and civil war.
- Rebellion, revolution, insurrection, mutiny, usurpation of civil or military, government, conspiracy, riot, civil commotion and terrorist area.
- Confiscation, nationalization, mobilization, commandeering or requisition by or under the order of any government or de facto authority or ruler, or any other act or failure to act of any local state or national government authority.
- Strike, sabotage, lockout, embargo, import restriction, port congestion, lack of usual means of public transportation and communication, industrial dispute, shipwreck, shortage of power supply epidemics, quarantine and plague.
- Earthquake, landslide, volcanic activity, fire flood or inundation, tidal wave, typhoon or cyclone, hurricane, nuclear and pressure waves or other natural or physical disaster.

If either party is prevented, hindered or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances of the event of Force Majeure within fourteen days after the occurrence of such event. The party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such party's performance is prevented, hindered or delayed.

The party or parties affected by the event of Force Majeure shall use reasonable efforts to mitigate the effect of the event of Force Majeure up to its or their performance of the Contract and to fulfill its or their obligation under the Contract but without prejudice to either party's right to terminate the Contract.

No delay or nonperformance by either party to this Contract caused by the occurrence of any event of Force Majeure shall.

- Constitute a default or breach of the contract.
- Give rise to any claim for damages or additional cost or expense occurred by the delay or nonperformance. If, and to the extent, that such delay or nonperformance is caused by the occurrence of an event of Force Majeure.

32. INSURANCE COVERAGE

Appropriate insurance to cover all solution components for the transit period and until the time of its acceptance at the respective site is to be taken by the contractor. As the contractor will carry the risk for the material in his books during transit, the contractor should arrange insurance for the total system as period from the dispatch till Acceptance Test is successfully achieved. Further the contractor is to take all required insurance coverage in respect of all its personnel who shall be working on this engagement.

33. WARRANTY / SUPPORTNTERMS

The OEM on behalf of bidder will warranty that products supplied under the contract are newly made and are free from defects in the design, engineering and workmanship. The Contractor would be responsible for the up keep and maintenance of the NETWORK system and necessary deliverables

under the scope of work during the entire warranty period, i.e. 36 months from the date of final acceptance of the system by the user or 38 months from date of delivery, whichever is earlier. Within warranty period, entrusted OEM will replace, re-integrate faulty, buggy components. The Contractor/OEM shall not, without the express prior written consent of WTL, assign to any third party of the contract or part thereof. Service support for the entire warranty period will be on site and comprehensive (including spares) and free of cost for the entire warranty period. Warranty will be invalid if the equipment is serviced by unauthorized personnel of misuse is detected.

34. WARRANTY SUPPORT

As per clause 33 and other warranty / support terms

35. PERFORMANCE BANK GUARANTEE (PBG)

As a guarantee for timely delivery, installation and commissioning of equipment as well as performance of on-site warranty support, as mentioned in Bill of Material, from the date of final acceptance of systems and pertaining to proper running of the systems, the bidder will have to submit 5% of the contract value as security in the form of Performance Bank Guarantee from any nationalized bank as per format enclosed (Section – P).

36. CONTRACTOR'S RESPONSIBILITIES

Refer Section - A (Scope of Work & Responsibility)

37. NO WAIVER OF RIGHTS

Neither the inspection by WTL or any of their agents nor any order by WTL for payment of money or any payment for or acceptance of the whole or any part of the works by WTL, nor any extension of time, nor any possession taken by WTL shall operate as a waiver of any provision of the contract or of any power reserved to WTL, or any right to damages here in provided, nor shall any waiver of any breach in the contract be held to be a waiver of any other subsequent breach.

38. GRAFTS, COMMISSIONS, GIFTS, ETC.

It is the Purchaser's policy to require that bidders, suppliers, contractors and consultants under contracts, observe the highest standard of ethics during the procurement and execution of such contracts. Any graft, commission, gift or advantage given, promised or offered by or on behalf of the contractor or his partner, agent, officers, director, employee or servant or any one on his or their behalf in relation to the obtaining or to the execution of this or any other contract with WTL shall in addition to any criminal liability which it may incur, subject the contractor to the cancellation of this and all other contracts and also to payment of any loss or damage to WTL resulting from any cancellation. WTL shall then be entitled to deduct the amount so payable from any monies otherwise due to the contractor under contract.

39. ENFORCEMENT OF TERMS

The failure of either party to enforce at any time any of the provision of this contract or any rights in respect thereto or to exercise any option here in provided shall in no way be construed to be a waiver to such provisions, rights or options or in any way to affect the validity of the contract. The exercise by either party of any of its rights herein shall not preclude or prejudice either party from exercising the same or any other right it may have hereunder.

40. PERIOD OF VALIDITY OF OFFER

For the purpose of placing the order, the proposals shall remain valid till 180 days. During the period of validity of proposals, the rates quoted shall not change. In exceptional circumstances, WTL may ask for extension of the period of validity and such a request shall be binding on Bidders. WTL's request and the response to such a request by various Bidders shall be in writing. A Bidder agreeing to such an extension will not be permitted to increase its rates.

41. TAXES & DUTIES

- The prices shall be inclusive of all taxes & levies including Service Tax. However, the rate of taxes should be indicated separately in the Price Bid. The Purchaser shall reimburse taxes and levies at actual as applicable at the time of delivery.
- For the purpose of the Contract, it is agreed that Contract Price specified in Financial Bid, is based on the taxes & duties and charges prevailing at the date one day prior to the last date of Bid submission date. If any rate of tax changes and new tax rate is introduced then it will be accessed on the Bidder in connection with the performance of the Contract, an equitable adjustment of the Contract Price or deduction there from as the case may be.
- Deduction of all statutory and necessary Tax from each bill will be made as per Government Order prevailing at the time of payment. Necessary tax deduction certificate will be issued on demand by the Company.
- Bidder submitting a tender shall produce up to date VAT, Income Tax and Profession Taxes Certificate in the standard form from the Tax Authority or a Certificate that the assessment is under consideration. All such clearance certificates shall remain valid on the last date of permission.
- In case of CST billing WTL will provide "Waybill" and "C Form". Entry Tax will be borne by the bidder.

42. DISCREPANCIES IN BID

- Discrepancy between description in words and figures, the rate which corresponds to the words quoted by the bidder shall be taken as correct.
- Discrepancy in the amount quoted by the bidder due to calculation mistake of the unit rate then the unit rate shall be regarded as firm.
- Discrepancy in totaling or carry forward in the amount quoted by the bidder shall be corrected.

43. BID DUE DATE

The online tender has to submitted not later than the due date and time specified in the Important Dates Sheet. WTL may as its discretion on giving reasonable notice by fax, or any other written communication to all prospective bidders who have been issued the bid documents, extend the bid due date, in which case all rights and obligations of the WTL and the bidders, previously subject to the bid due date, shall thereafter be subject to the new bid due date as extended.

44. LATE BID

Any proposal received by WTL after the deadline for submission of proposals may not be accepted.

45. OPENING OF BID BY WTL

Bids shall be opened and downloaded electronically through operation of the process in the e-Tender portal in presence of Tender Committee. Bidders interested to remain present during electronic bid opening may attend the bid opening session at WTL premises at scheduled date & time.

46. CONTACTING WTL

Bidder shall not approach WTL officers beyond office hours and/or outside WTL office premises from the time of the Bid opening to the time of finalization of successful bidder. Any effort by bidder to influence WTL office in the decision on Bid evaluation, bid comparison or finalization may result in rejection of the Bidder's offer. If the bidder wishes to bring additional information to the notice of WTL, it should be in writing following the procedure mentioned hereinabove.

47. WTL'S RIGHT TO REJECT ANY OR ALL BIDS

WTL reserves the right to reject any bid and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected bidder(s) or any obligation to inform the affected bidder(s) of the grounds for such decision.

48. BID CURRENCIES

Prices shall be quoted in Indian Rupees, inclusive of all prevailing taxes, levies, duties, cess etc.

49. PRICE

- Price should be quoted in the Price Bid format only. No deviation in any form in the Price Bid sheet is acceptable.
- Price quoted should be firm, inclusive of packing, forwarding, insurance and freight charges.
- Percentage/specified amount of taxes & duties should be clearly mentioned otherwise WTL reserves the right to reject such vague offer.
- Price to be quoted inclusive of supply, installation & commissioning charges.

50. CANVASSING

Canvassing or support in any form for the acceptance of any tender is strictly prohibited. Any bidder doing so will render him liable to penalties, which may include removal of this name from the register of approved Contractors.

51. NON-TRANSFERABILITY OF TENDER

This tender document is not transferable.

52. FORMATS AND SIGNING OF BID

The original and all copies of the proposals shall be neatly typed and shall be signed by an authorized signatory(ies) on behalf of the Bidder. The authorization shall be provided by written Power of Attorney accompanying the proposal. All pages of the proposal, except for un-amended printed literature, shall be initialed by the person or persons signing the proposal. The proposal shall contain no interlineations, erase or overwriting. In order to correct errors made by the Bidder, all corrections shall be done & initialed with date by the authorized signatory after striking out the original words/figures completely.

53. WITHDRAWAL OF BID

Bid cannot be withdrawn during the interval between their submission and expiry of Bid's validity period. Fresh Bid may be called from eligible bidders for any additional item(s) of work not mentioned herein, if so required.

54. INTERPRETATION OF DOCUMENTS

If any bidder should find discrepancies or omission in the specifications or other tender documents, or if he should be in doubt as to the true meaning of any part thereof, he shall make a written request to the tender inviting authority for correction/clarification or interpretation or can put in a separate sheet along with his technical bid document.

55. SPLITTING OF THE CONTRACT AND CURTAILMENT OF WORK

WTL reserve the right to split up and distribute the work among the successful bidders and to curtail any item of work in the schedule partly or fully.

56. PREPARATION OF TENDER

Tender shall be submitted in accordance with the following instructions:

- a) Tenders shall be submitted in the prescribed forms. Digital signatures shall be used. Where there is conflict between the words and the figures, the words shall govern.
- b) All notations must be in ink or type written. No erasing or overwriting will be permitted. Mistakes may be crossed out and corrections typed or written with ink adjacent thereto and must be initialed in ink by the person or persons signing the tender.
- c) Tenders shall not contain any recapitulation of the work to be done. Alternative proposals will not be considered unless called for. No written, oral, telegraphic or telephonic proposals for modifications will be acceptable.
- d) Tenders shall be uploaded as notified on or before the date and time set for the opening of tenders in the Notice Inviting Tenders.
- e) Tenders subject to any conditions or stipulations imposed by the bidder are liable to be rejected.
- f) Each and every page of the tender document must be signed with company seal by the bidder.
- g) Any bidder may withdraw his tender by written request at any time prior to the scheduled closing time for receipt of tenders and not thereafter.

57. PRE-DISPATCH INSTRUCTION

All materials / equipment's supplied against the purchase order shall be subjected to Inspection, check and /or test by the authorized representative from WTL.

58. FINAL INSPECTION

Final inspection will be carried by the authorized representative from WTL.

59. SITE INSPECTION

Bidder can inspect (at their own cost) the sites if required, for which they have to take necessary permission from WTL in writing. WTL will take minimum four days to organize such permission.

60. ERASURES OR ALTERNATIONS

The offers with overwriting and erasures may make the tender liable for rejection if each of such overwriting/erasures/manuscript ions is not only signed by the authorized signatory of the bidder. There should be no hand-written material, corrections or alterations in the offer. Technical details must be completely filled up. Correct technical information of the product being offered must be filled in. Filling up of the information using terms such as "OK", "accepted", "noted", "as given in brochure/manual" is not acceptable. The Customer may treat offers not adhering to these guidelines as unacceptable. The Customer may, at its discretion, waive any minor non-conformity or any minor irregularity in the offer. This shall be binding on all bidders and the Tender Committee reserves the right for such waivers.

61. COMPLIANCE WITH LAW

The contractor hereto agrees that it shall comply with all applicable union, state and local laws, ordinances, regulations and codes in performing its obligations hereunder, including the procurement of licenses, permits certificates and payment of taxes where required. The contractor shall establish and maintain all proper records (particularly, but without limitation, accounting records) required by any law, code/practice of corporate policy applicable to it from time to time including records and returns as applicable under labor legislation.

62. CLARIFICATION OF BIDS

During evaluation of the bids, the Customer/Tender Committee, at its discretion may ask the bidder for clarification of its bid. The request for the clarification and the response shall be in writing (fax/email) and no change in the substance of the bid shall seek offered or permitted.

63. QUALITY CONTROL

- The contractor is obliged to work closely with WTL act within its authority and abide by directive issued by them on implementation activities.
- The contractor will abide by the safety measures and free WTL from all demands or responsibilities arising from accident/loss of life, the cause of which is due to their negligence. The bidder will pay all indemnities arising from such incidents and will not hold WTL responsible.
- The contractor will treat as confidential all data and information about the system, obtained in the execution of its responsibilities in strict confidence and will not reveal such information to any party without the prior written approval of WTL.
- WTL reserves the right to inspect all phases of contractor's operation to ensure conformity to the specifications. WTL shall have engineers, inspectors or other duly authorized representatives made known to the contractor, present during the progress of the work and such representatives shall have free access to the work at all times. The presence or absence of representatives of WTL does not relieve the contractor of the responsibility for quality control in all phases.
- The Court of Kolkata only will have the jurisdiction to deal with and decide any legal matters or dispute whatsoever arising out of the contract.

64. SITE NOT READY

The bidder shall not be in any manner liable for any delay arising out of Kolkata Police / RVNL inability to make the site ready within the stipulated period.

65. GENERAL TERMS

- a) All the pages of the bid document including documents submitted therein must be duly signed and stamped failing which the offer shall be liable to be rejected.
- b) All the documents to be submitted by the bidder along with their offer should be duly authenticated by the person signing the offer and if at any point of time during procurement process or subsequently it is detected that documents submitted are forged/tampered/manipulated in any way, the total responsibility lies with the bidder and WTL reserves the full right to take action as may be deemed fit including rejection of the offer and such case is to be kept recorded for any future dealing with them.
- c) No Technical/Commercial clarification will be entertained after opening of the tender.
- d) Overwriting and erasures may make the tender liable for rejection if each of such overwriting/erasures/manuscript ion is not only signed by the authorized signatory of the bidder. All overwriting should be separately written and signed by the authorized signatory of the bidder.
- e) Quantity mentioned in the tender document is indicative only and orders shall be placed subject to actual requirement. WTL reserve the right to increase or decrease the quantity specified in the tender.
- f) WTL reserve the right to reject or accept or withdraw the tender in full or part as the case may be without assigning the reasons thereof. No dispute of any kind can be raised the right of buyer in any court of law or elsewhere.
- g) WTL reserve the right to ask for clarification in the bid documents submitted by the bidder. Documents may be taken if decided by the committee.
- h) No dispute by the bidders in regard to Technical/Commercial points will be entertained by WTL and decision taken by the Tender Committee will be final.
- i) Discrepancy in the amount quoted by the bidder due to calculation mistake, the unit rate shall be regarded as firm and the totaling or carry in the amount quoted by the bidder shall be corrected accordingly.
- j) The price offers shall remain firm within the currency of contract and no escalation of price will be allowed.
- k) The acceptance of the tender will rest with the accepting authority who is not bound to accept the lowest or any tender and reserves the right to reject in part or in full any or all tender(s) received and to split up the work among participants without assigning any reason thereof.
- 1) The customer/WTL at its discretion may extend the deadline for the submission of Bids.
- m) The Court of Kolkata only will have the jurisdiction to deal with and decide any legal matters or dispute whatsoever arising out of the contract.

66. WARRANTY MAINTENANCE & SLA

The OEMs and their authorized partners must adhere to the support and comprehensive maintenance support required onsite. The OEM/authorized partners must have their own call center, support management system and support center in Kolkata to adhere to the following SLA.

- The supplied equipment must be provided with comprehensive onsite warranty support for minimum 3 years. During the 3 years, the following SLAs must be adhered to:
- Calls must be attended within 24 hours of logging of complaint / reporting.
- Call resolution within 48 hours of logging of complaint.
- Penalty amount per day (working day) for each day after the expiry of the 24-hr. window for complaint resolution shall be applicable as per the SLA specified in the tender document.

- The maximum penalty shall not exceed 3% of the value of the equipment supplied under any circumstances, failing which the PBG of the implementation partner may be forfeited, based on the decision of WTL Management.
- The OEM/Partner shall provide a maintenance portal for tracking of complaints/issues, updating of call resolution status and monitoring of the SLAs. The WTL support manager shall coordinate with the partner field personnel for escalation of issues to ensure speedy resolution.
- A SLA shall have to be signed between WTL and SI ensuring 24 X 7 service to maintain 99.9% uptime of the system its entirely.

<u>SECTION – E</u>

BID FORM

(Bidders are requested to furnish the Bid Form in the Format given in this section, filling the entire Blank and to be submitted on Letter Head in original)

To Webel Technology Limited Plot – 5, Block – BP, Sector - V, Salt Lake City, <u>Kolkata – 700091.</u>

<u>Sub : Supply, Installation, Testing, Commissioning (SITC) with Three Years Products and Installation</u> <u>Warranty of Managed Local Area Network & Integration for Kolkata Police.</u>

Dear Sir,

- 1. We the undersigned bidder/(s), having read and examined in details the specifications and other documents of the subject Tender No. WTL/KTP/LANW/067 dated 07.02.2024, do hereby propose to execute the job as per specification as set forth in your Bid documents.
- 2. The prices of all items stated in the bid are firm during the entire period of job irrespective of date of completion and not subject to any price adjusted as per in line with the bidding documents. All prices and other terms & conditions of this proposal are valid for a period of 180 (one hundred eighty) days from the date of opening of bid. We further declare that prices stated in our proposal are in accordance with your bidding.
- 3. We confirm that our bid prices include all other taxes and duties and levies applicable on bought out components, materials, equipment and other items and confirm that any such taxes, duties and levies additionally payable shall be to our account.
- 4. Earnest Money Deposit & Tender Fee: We have transferred EMD & Tender Fee amount online through e-Tender Portal.
- 5. We declare that items shall be executed strictly in accordance with the specifications and documents irrespective of whatever has been stated to the contrary anywhere else in our proposal. Further, we agree that additional conditions, deviations, if any, found in the proposal documents other than those stated in our deviation schedule, save that pertaining to any rebates offered shall not be given effect to.
- 6. If this proposal is accepted by you, we agree to provide services and complete the entire work, in accordance with schedule indicated in the proposal. We fully understand that the work completion schedule stipulated in the proposal is the essence of the job, if awarded.
- 7. We further agree that if our proposal is accepted, we shall provide a Performance Bank Guarantee of the value equivalent to ten percent (10%) of the Order value as stipulated in Financial Bid (BOQ).
- 8. We agree that WTL reserves the right to accept in full/part or reject any or all the bids received or split order within successful bidders without any explanation to bidders and his decision on the subject will be final and binding on Bidder.

Dated, thisday of2024

Thanking you, we remain,

Yours faithfully

Signature

Name in full

Designation

Signature & Authorized Verified by

Signature

Designation

.....Company Stamp

<u>SECTION – F</u>

TECHNO COMMERCIAL EVALUATION & AWARDING OF CONTRACT

1. EVALUATION PROCEDURE

- The Eligibility Criteria (Section B) will be evaluated by Tender Committee and those qualify will be considered for further evaluation.
- The Tender Committee shall verify the Technical Specification (Technical Specification with Compliance Statement, Section I) Deviation in specification shall not be allowed. Bidder qualified in Technical Specification shall be considered for further evaluation.
- After qualifying in Technical Specification, qualified bidders will only be considered for Financial Bid evaluation.

2. FINAL EVALUATION

Financial Proposal of the bidders qualifying in the evaluation of Technical specification will be evaluated. The bidder who has qualified in the Technical Specification evaluation and returns with lowest quote (L1) in financial bid would normally be awarded the contract subject to Post Qualification.

3. AWARDING OF CONTRACT

An affirmative Post Qualification determination will be prerequisite for award of the contract to the lowest quoted bidder. A negative determination will result in rejection of bidder's bid, in which event the WTL will proceed to the next lowest evaluated bidder to make a similar determination of that bidder's capability to perform satisfactorily. The successful bidder (s) will have to give security deposit in the form of Performance Bank Guarantee.

4. POST QUALIFICATION

The determination will evaluate the Bidder's financial, technical, design, integration, customization, production, management and support capabilities and will be based on an examination of the documentary evidence of the Bidder's qualification, as well as other information WTL deems necessary and appropriate. This determination may include visits or interviews with the Bidder's client's reference in its bid, site inspection, and any other measures.

<u>SECTION – G</u>

GUIDANCE FOR E-TENDERING

Instructions / Guidelines for electronic submission of the tenders have been annexed for assisting the Bidders to participate in e-Tendering.

• Registration of Bidder:

Any Bidder willing to take part in the process of e-Tendering will have to be enrolled & registered with the Government e-Procurement System through logging on to **https://wbtenders.gov.in.** The Bidder is to click on the link for e-Tendering site as given on the web portal.

• Digital Signature Certificate (DSC):

Each Bidder is required to obtain a Class-II or Class-III Digital Signature Certificate (DSC) for submission of tenders from the approved service provider of the National Informatics Centre (NIC) on payment of requisite amount. Details are available at the Web Site stated above. DSC is given as a USB e-Token.

• The Bidder can search & download N.I.T. & BOQ electronically from computer once he logs on to the website mentioned above using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.

• Participation in more than one work:

A prospective bidder shall be allowed to participate in the job either in the capacity of individual or as a partner of a firm. If, found to be applied severally in a single job all the applications will be rejected.

• Submission of Tenders:

Tenders are to be submitted through online to the website stated above in two folders at a time, one in Techno Commercial Proposal & the other is Financial Proposal before the prescribed date & time using the Digital Signature Certificate (DSC). The documents are to be uploaded virus scanned copy duly Digitally Signed. The documents will get encrypted (transformed into non readable formats)

The proposal should contain scanned copies of the following in two covers (folders).

Techno Commercial Cover:

Technical Document 1 (scanned & join in pdf format then upload)

- 1. Copy of Remittance details of Earnest Money Deposit (EMD)
- 2. Copy of Remittance details of Tender Fee
- 3. Other Documents

Technical Document 2 (scanned & join in pdf format then upload)

- 1. NIT Declaration duly stamped & signed in letter head of bidder (Section Q)
- 2. Bid Form as per format (Section E)

Technical Compliance (scanned & joins in pdf format then upload)

- 1. Technical Specification with Compliance Statement (Section I)
- 2. Manufacturer Authorization Form (Section M)

Financial Cover:

BOQ will be downloaded and same will be uploaded with quoted rates. While uploading BOQ file name shall remain unchanged. Absence of this document shall lead to summary rejection of the bid.

<u>NON-STATUTARY COVER (MY SPACE) CONTAIN FOLLOWING DOCUMENT:</u> (In each folder, scanned coy will be uploaded with single file having multiple pages)

Sl. No.	Category Name	Sub Category Name	Sub Category Description	
A	CERTIFICATES	A1. CERTIFICATES	 GST Registration Certificate PAN Trade License Other Documents 	
В	COMPANY DETAILS	B1. COMPANY DETAILS 1	Other Documents	
		B2. COMPANY DETAILS 2	 Company Profile (Not more than 3 pages) As required 	
С	CREDENTIAL	CREDENTIAL 1	Order copies as per Section – B	
		CREDENTIAL 2	 Product brochure Other documents, if any 	
D	DECLARATION	DECLARATION 1	List of Clients as per format (Section – O)	
		DECLARATION 2	Financial Capability of Bidder (Section – K)	
		DECLARATION 3	Bidder's Details (Section – L)	
		DECLARATION 4	Details of Order Execution (Section – J)	
		DECLARATION 5	As required	
F	FINANCIAL INFO	P/L & BALANCE SHEET 2020-2021	P/L & BALANCE SHEET 2020-2021	
		P/L & BALANCE SHEET 2021-2022	P/L & BALANCE SHEET 2021-2022	
		P/L & BALANCE SHEET 2022-2023	P/L & BALANCE SHEET 2022-2023	

<u>SECTION – H</u>

BILL OF MATERIAL

Sl. No.	Item Descriptions	Quantity	Unit
1	Core Switch - 24x10GbaseX switch with 2x100G uplink ports. MACsec AES256.	2	Nos.
-	Airflow out of PSU. Optional module-4x10G or 4x25G	_	1.001
2	Distribution Switch - 24-Port 10/100/1000BaseT, 4x 10G SFP+ Uplink ports, 4x		
	25G SFP28 Stacking/Uplink ports, redundant fans, 1 AC PSU JPSU-150-AC-AFO	4	Nos.
	included (optics sold separately) with Standard SW. TAA Compliant		
3	Edge Switch - 24-Port 10/100/1000BaseT, 4x 10G SFP+ Uplink ports, 4x 10G	26	Nos.
	SFP+ Stacking ports (optics sold separately) with Standard SW.TAA Compliant.		
4	Server Farm Switch - 24-Port 10/100/1000BaseT, 4x 10G SFP+ Uplink ports, 4x 25G SFP28 Stacking/Uplink ports, redundant fans, 1 AC PSU JPSU-150-AC-AFO	3	Nos.
4	included (optics sold separately) with Standard SW. TAA Compliant	5	1105.
5	Network Management System (HW+SW) NMS Server	1	Nos.
6	10G SR Transceiver (for Switch)	26	Nos.
7	24 Port LIU Loaded SC type	<u> </u>	Nos.
8	12 Port LIU Loaded SC type	2	Nos.
9	SC-LC 10G duplex Patch Cord	18	Nos.
10	SC-SC 10G duplex Patch Cord	4	Nos.
10	LC-LC 10G duplex Patch Cord 3 Mtr	8	Nos.
12	LC-LC 10G duplex Patch Cord 10 Mtr	4	Nos.
13	UTP Cat6A Cable	60	Boxes
14	24 Port Cat6A Jack Panel	23	Nos.
15	Cat6A Information Outlet	390	Nos.
16	Face Plate Single	390	Nos.
17	Back Box	390	Nos.
18	Cat6A 1 Mtr Patch Cord for Panel end	410	Nos.
19	Cat6A 2 Mtr Patch Cord	390	Nos.
20	9 U Equipment Rack (5 Port PDU 5/15 Amp+2 X Cable Manager + Fan + HW)	3	Nos.
21	12U Equipment Rack (5 Port PDU 5/15 Amp+3 X Cable Manager + Fan + HW)	2	Nos.
	22U Equipment Rack (2X 5 Port PDU 5/15 Amp+ 6 X Cable Manager + 2X Fan +		
22	Castors+ Back door + HW)	1	Nos.
~~	32U Equipment Rack (2X 10 Port PDU 5/15 Amp+ Cable Channel + 6 X Cable		
23	Manager +2 X Full Tray + 4X Fan + Castors+ Back door + HW)	1	Nos.
24	UPS 1.1 KVA Line Interactive	7	Nos.
25	UPS 2KVA Online 30 mins Backup	2	Nos.
26	UPS 3KVA Online 30 mins Backup	1	Nos.
27	FO Cable laying with PVC Conduit	1800	Mtrs.
28	Laying of UTP Cat 6 Cable through PVC conduit.	18000	Mtrs.
29	Jack Panel Termination	23	Nos.
30	1/O Fixing	390	Nos.
31	Rack Fixing Charges (Wall Mount)	7	Nos.
32	Rack Fixing Charges (Floor Mount)	3	Nos.
33	Splicing Charges	120	Nos.
34	Charges for Switch Configuration & Integration with existing Firewall	1	Job
35	Commissioning, Testing & Documentation	1	Job

<u>SECTION – I</u>

TECHNICAL SPECIFICATION WITH COMPLIANCE STATEMENT

(Tender No. WTL/KTP/LANW/23-24/067)

Minimum Technical Specification

Core Switch

Make: Complexitient Complied If any deviation				
1.1	General Features :			
1.1.1	Switch should be 1U and rack mountable in standard 19" rack.			
1.1.2	Switch should support internal hot-swappable Redundant Power supply from day 1			
1.1.3	Switch should have redundant hot swappable fans.			
1.1.4	Switch should have minimum 16 GB RAM and 12 GB Flash.			
1.1.5	Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 480 Gbps of stacking throughput with 8 switch in single stack.			
1.2	Performance :			
1.2.1	Switch shall have minimum 1800 Gbps of switching fabric and 1200 Mpps of forwarding rate			
1.2.2	Switch shall have minimum 32K MAC Addresses and 1000 active VLAN.			
1.2.3	Should support minimum 32K IPv4 routes or more and 16K IPv6 routes or more			
1.2.4	Switch shall have 8K or more multicast routes.			
1.2.5	Switch should support atleast 64K flow entries			
1.2.6	Switch should support 128 or more STP Instances.			
1.2.7	Switch should have 16MB or more packet buffer.			
1.3	Functionality :			
1.3.1	Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z & 1588v2.			
1.3.2	Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1			
1.3.3	Should support advance Layer 3 protocol like BGPv4, BGPv6, MPLS, VRF, VXLAN, IS-ISv4, OSPFv3, full MP-BGP functionality on the same hardware, from Day 1			
1.3.4	Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues.			
1.3.5	Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+ .			
1.3.6	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.			

1.3.7	Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-256 on hardware*	
1.3.8	Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.	
1.3.9	During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic.	
1.3.10	Switch shall have modular OS to support application 3rd party application hosting	
1.4	Interface	
1.4.1	Switch shall have 24 nos. 1/10/25 G interfaces populated with 12*10G SFP+ transceivers from Day 1. It should also have a free expansion module for adding additional interafces if needed in the future. The switch should support 1G, 10G, 25G and 40G uplink interfaces without changing the hardware	
1.5	Certification:	
1.5.1	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.	
1.5.2	Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.	
1.5.3	Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification.	

Distribution Switch

Make: Model:				
1.1	General Features :			
1.1.1	Switch should be 1U and rack mountable in standard 19" rack.			
1.1.2	Switch should support internal hot-swappable Redundant Power supply from day 1			
1.1.3	Switch should have redundant hot swappable fans.			
1.1.4	Switch should have minimum 8 GB RAM and 8 GB Flash.			
1.1.5	Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 320 Gbps of stacking throughput with 8 switch in single stack.			
1.2	Performance :			
1.2.1	Switch shall have minimum 56 Gbps of switching fabric and 41 Mpps of forwarding rate.			
1.2.2	Switch shall have minimum 32K MAC Addresses and 1000 active VLAN.			
1.2.3	Should support minimum 32K IPv4 routes or more and 16K IPv6 routes or more			

1.2.4	Switch shall have 8K or more multicast routes.	
1.2.5	Switch should support atleast 64K flow entries	
1.2.6	Switch should support 128 or more STP Instances.	
1.2.7	Switch should have 16MB or more packet buffer.	
1.3	Functionality :	
1.3.1	Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z & 1588v2.	
1.3.2	Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1	
1.3.3	Should support advance Layer 3 protocol like BGPv4, BGPv6, MPLS, VRF, VXLAN, IS-ISv4, OSPFv3, MP-BGP	
1.3.4	Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues.	
1.3.5	Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+.	
1.3.6	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.	
1.3.7	Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-256 on hardware	
1.3.8	Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.	
1.3.9	During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic.	
1.3.10	Switch shall have modular OS to support application 3rd party application hosting	
1.4	Interface	
1.4.1	Switch shall have 24 nos. 10/100/1000 Base-T ports and additional 4 nos. SFP+ uplinks ports	
1.5	Certification:	
1.5.1	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.	
1.5.2	Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.	
1.5.3	Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification.	
1.5.4	OEM should be listed in Gartner Leader Quadrant for Wired and Wireless LAN Infrastructure from last 3 years before releasing this RFP.	

Server Firm Switch

Make: Model:			
S. No.	General Specifications	Complied Yes/No	If any deviation (Yes/No)
1.1	General Features :		
1.1.1	Switch should be 1U and rack mountable in standard 19" rack.		
1.1.2	Switch should support internal hot-swappable Redundant Power supply from day 1		
1.1.3	Switch should have redundant hot swappable fans.		
1.1.4	Switch should have minimum 16 GB RAM and 12 GB Flash.		
1.1.5	Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 480 Gbps of stacking throughput with 8 switch in single stack.		
1.2	Performance :		
1.2.1	Switch shall have minimum 800 Gbps of switching fabric and 630 Mpps of forwarding rate		
1.2.2	Switch shall have minimum 32K MAC Addresses and 1000 active VLAN.		
1.2.3	Should support minimum 32K IPv4 routes or more and 16K IPv6 routes or more		
1.2.4	Switch shall have 8K or more multicast routes.		
1.2.5	Switch should support atleast 64K flow entries		
1.2.6	Switch should support 128 or more STP Instances.		
1.2.7	Switch should have 16MB or more packet buffer.		
1.3	Functionality :		
1.3.1	Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z & 1588v2.		
1.3.2	Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1		
1.3.3	Should support advance Layer 3 protocol like BGPv4, BGPv6 , MPLS, VRF, VXLAN, IS-ISv4, OSPFv3, full MP-BGP functionality on the same hardware, if needed in the future		
1.3.4	Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues.		
1.3.5	Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+.		
1.3.6	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.		
1.3.7	Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-256 on hardware*		
1.3.8	Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.		
1.3.9	During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide		

	assurance that the firmware & BIOS are authentic.	
1.3.10	Switch shall have modular OS to support application 3rd party application hosting	
1.4	Interface	
1.4.1	Switch shall have 12 nos. 1/10/25 G interfaces populated with 12*10G SFP+ multimode transceivers from Day 1. It should also have a free expansion module for adding additional interafces if needed in the future. The switch should support 1G, 10G, 25G and 40G uplink interfaces without changing the hardware	
1.5	Certification:	
1.5.1	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.	
1.5.2	Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.	
1.5.3	Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification.	

Edge Switch

Make:			
Model:			
S. No.	General Specifications	Complied Yes/No	If any deviation (Yes/No)
1.1	General Features :		
1.1.1	Switch should be 1U and rack mountable in standard 19" rack.		
1.1.2	Switch should support internal field replaceable unit redundant power supply from day 1.		
1.1.3	Switch should have minimum 2 GB RAM and 2 GB Flash.		
1.1.4	Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 48 Gbps of stacking thoughput with 8 switch in single stack.		
1.2	Performance :		
1.2.1	Switch shall have minimum 128 Gbps of switching fabric and 95.23 Mpps of forwarding rate.*		
1.2.2	Switch shall have minimum 16K MAC Addresses and 250 active VLAN.		
1.2.3	Should support minimum 11K IPv4 routes or more		
1.2.4	Switch shall have 1K or more multicast routes.		
1.2.5	Switch should support atleast 16K flow entries		
1.2.6	Switch should support 128 or more STP Instances.		
1.2.7	Switch should have 6MB or more packet buffer.		
1.3	Functionality :		
1.3.1	Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z.		
1.3.2	Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1		
1.3.3	Switch should support Network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs.		
1.3.4	Switch shall have 802.1p class of service, marking,		
			33

classification, policing and shaping and eight egress queues.	
Switch should support management features like SSHv2,	
1 0	
*	
-	
-	
2/NDPP or above under Common Criteria Certification.	
OEM should be listed in Gartner Leader Quadrant for Wired	
OEM should be listed in Gartner Leader Quadrant for Wired and Wireless LAN Infrastructure from last 3 years before	
	Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+ Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard. Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-128 on hardware for all ports. Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type. During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic. Interfaces Switch shall have 24 nos. 10/100/1000 Base-T ports and additional 1 4 nos. of 1G SFP uplinks ports. Certification: Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment. Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements. Switch ' Switch's Operating System should be tested for EAL

Network Management System

Controller

Make:			
Model:			
S.No.	Functional Requirement for LAN	Complied Yes/No	If any deviation (Yes/No)
1	Controller should provide central management from single dashboard, device lifecycle management like device discovery, topology, inventory, image upgrade for both for wired and wireless Networks		
2	Controller should support multiple application to solve business problem like end to end path trace, automated end to end QoS deployment in the Network, automation to create SD-LAN fabric etc.		
3	With controller, It should possible to create SD-LAN fabric with following capabilities:		
3.1	Automated provisioning of layer-3 routed access layer design for access switches		

	Solution should support User mobility (from one floor to	
3.2	another or anywhere in the campus) on layer-3 routed	
	access architecture without change in ip address	
	It should possible to create micro segmentation between	
	floor users where we should able to restrict communication	
0.0	between users on the same segment/vlan and	
3.3	communication between users will only be allowed based	
	on policy. Vendor needs to provide details on how they are	
	going to achieve it with their solution.	
	Fabric should support the feature to provide layer-3	
3.4	overlay Network using virtual Networks (VRF) and VXLAN	
	for end to end separation	
	Communication between switches to switch should be	
	encrypted at Layer 2. It also encapsulates and protects the	
	metadata fields. It should use industry standard MKA.	
	Communication should have AES-GCM (Galois/Counter	
	Mode) symmetric encryption, which is capable of line-rate	
4	encryption and decryption and provides replay attack	
	protection of every frame. Switches should support	
	MACSec encryption for switch-to-switch (inter-Network	
	device) security using OEM proprietary and MKA-based	
	key exchange protocol.	
_	Controller should be able to integrate with NAC solution to	
5	provide integrated security with SD-LAN	
	Controller should able to integrate with external services	
6	like DHCP, DNS, SNMP, AAA servers	
	Controller should able to collect real time telematry data	
	from syslog, snmp, flow etc. and should provide end to end	
7	visibility, Network time travel, proactive and predictive	
	information for troubleshooting	
	Controller should provide following management and	
8	visibility capability:	
8.1	Network and user health with top 10 issues	
8.2	Client health summary, Client on boarding in wireless, RF	
	details, history of performance of each client device	
	Capability to view histrorical events to check Network	
8.3	status when issue occurred	
	Troubleshooting issue along Network path, checking if	
8.4	ACL, QoS affecting connectivity or performance issue	
	Controller should support REST APIs to share data with	
9		
10	third party applications	
10	Controller should have redundant power supplies	

Network Access Control

Make:			
Model:			
SL. No.	Specification	Complied Yes/No	If any deviation (Yes/No)
1	The Solution should provide a highly powerful and flexible attribute-based access control solution that combines and supports authentication, authorization, and accounting (AAA); posture; profiling; and guest management services on a single platform.		

	It should allow enterprises to authenticate and authorize users	
2	and endpoints via wired, wireless, and VPN with consistent	
	policy throughout the enterprise	
	Provides complete guest lifecycle management by empowering	
3	sponsors to on-board guests.	
	Solution should have the capacity to support atleast 22000	
4	endpoints on a single box. If more end-points needed or in case	
	of a distributed deployment, additional nodes can be added to	
	the NAC cluster to meet the requirement	
5	Solution should be scalable enough to support 100 Network	
0	devices.	
	Delivers customizable self-service portals as well as the ability	
	to host custom web pages to ease device and guest on-	
6	boarding, automate endpoint secure access and service	
·	provisioning, and enhance the overall end-user experience	
	inside business-defined workflows	
7	The solution should support guest users onboarding through	
	social media login to simplify the registration process	
	The solution should support sponsor approval for guest users	
8	connecting into the Network and the approval request should	
0	have control from multiple sponsor to avoid single point of	
	failure	
	The solution should support flexible guest account approval	
9	even in absence of sponsor	
	The Solution should support complete guest lifecycle where	
10		
10	Sponsor should be able to Extend, Suspend and reinstate guest	
	accounts with reasons.	
	Offers comprehensive visibility of the Network by automatically	
11	discovering, classifying, and controlling endpoints connected	
	to the Network to enable the appropriate services per endpoint	
	Enforces security policies by blocking, isolating, and repairing	
12	noncompliant machines in a quarantine area without requiring	
	administrator attention	
	Offers a built-in monitoring, reporting, and troubleshooting	
13	console to assist helpdesk operators and administrators	
10	streamline operations	
	Should support the capacity for finer granularity while	
14		
14	identifying devices on your Network with Active Endpoint	
	Scanning	
	The NAC solution should be able to block	
15	unauthenticated/rogue machine without giving any access to	
	the Network.	
	Augments Network-based profiling by targeting specific	
	endpoints (based on policy) for specific attribute device scans,	
16	resulting in higher accuracy and comprehensive visibility of	
	what is on your Network	
	The NAC solution should be able to control the user even	
17		
17	before IP address is assigned. It should act as a pre-admission	
	solution	
	The NAC solution should be able to intervate with ADT NDAD	
18	The NAC solution should be able to integrate with APT, NBAD	
18	and SIEM solution	
18		
18 19	and SIEM solution The solution should provide full TACACS+ capability including	
	and SIEM solution	

	Protection Service, which enables administrators to specify an	
	endpoint and select an action - for example, move to a new	
	VLAN, return to the original VLAN, or isolate the endpoint from	
	the Network entirely - all in a simple interface	
	Supports a wide range of authentication protocols, including	
21	PAP, MS-CHAP, Extensible Authentication Protocol (EAP)-MD5,	
21	Protected EAP (PEAP), EAP-Flexible Authentication via Secure	
	Tunneling (FAST), and EAP-Transport Layer Security (TLS).	
	Offers a rules-based, attribute-driven policy model for creating	
	flexible and business-relevant access control policies. Provides	
	the ability to create fine-grained policies by pulling attributes	
	from predefined dictionaries that include information about	
22	user and endpoint identity, posture validation, authentication	
	protocols, profiling identity, or other external attribute sources.	
	Attributes can also be created dynamically and saved for later	
	use	
	Provides a wide range of access control mechanisms, including	
23	downloadable access control lists (dACLs), VLAN assignments,	
20		
	URL redirect, and Security Group Access (SGA) tagging.	
0.4	Should have predefined device templates for a wide range of	
24	endpoints, such as IP phones, printers, IP Network Equipments,	
	smartphones, and tablets.	
	It should allow Administrators to create their own device	
	templates. These templates can be used to automatically detect,	
25	classify, and associate administrative-defined identities when	
	endpoints connect to the Network. Administrators can also	
	associate endpoint-specific authorization policies based on	
	device type.	
	Solution must allow administrator to add exception for certain	
26	device properties in the device templates/ device profiles	
20	available in the solution to filter unintentionally picked	
	parameters of endpoints.	
	The Solution should have capability to collect endpoint attribute	
07	data via passive Network telemetry, querying the actual	
27	endpoints, or alternatively from the infrastructure via device	
	sensors on switches.	
	The Solution should have capability to see endpoints attribute	
	data via passive Network telemetry or alternatively from the	
28	infrastructure via device sensors on switches at Core,	
	Distribution and Access Layer.	
	Solution should allow end users to interact with a self-service	
	portal for device on-boarding, providing a registration vehicle	
29	for all types of devices as well as automatic supplicant	
20	provisioning and certificate enrollment for standard PC and	
	mobile computing platforms.	
	Should support full guest lifecycle management, whereby guest	
00	users can access the Network for a limited time, either through	
30	administrator sponsorship or by self-signing via a guest portal.	
	Allows administrators to customize portals and policies based	
	on specific needs of the enterprise.	
	Verifies endpoint posture assessment for PCs connecting to the	
	Network. Works via either a persistent client-based agent or a	
31	temporal web agent to validate that an endpoint is conforming	
	to a company's posture policies. Provides the ability to create	
	powerful policies that include but are not limited to checks for	

	the latest OS patches, antivirus and antispyware software packages with current definition file variables (version, date, etc.), registries (key, value, etc), and applications. Solution should support auto-remediation of PC clients as well as periodic reassessment to make sure the endpoint is not in violation of company policies.	
32	Solution should have capability which allows users to add a device on a portal, where the device goes through a registration process for Network access. Should allow users to mark as lost any device that you have registered in the Network, and blacklist the device on the Network, which prevents others from unauthorized Network access when using the blacklisted device. Should have capability to reinstate a blacklisted device to its previous status in Device Portal, and regain Network access without having to register the device again in the Devices Portal. Should also support removing any device in the enterprise Network temporarily, then register the device for Network access again later.	
33	Solution should be able to enforce Layer 4 controls right from Access to distribution to core to edge to data center to servers without the need of mirroring the traffic and maintaining end to end segmentation even when two endpoints are in same broadcast domain.	
34	Solution should consume license only based on active devices on the Network where Devices include user endpoints (such as laptops, tablets and smartphones), non-user devices (such as printers, IP phones, security equipment, medical devices, manufacturing equipment), virtual machines, Network infrastructure devices (such as switches, routers and access points) should not consume license and If so vendor should consider these licenses exclusively and should be counted along with User/Endpoints.	
35	Solution should support detecting Endpoint anomaly behavior for example - a device MAC address earlier seen on Wired Network next moment or later seen on Wireless Network etc.	
36	Open seating environments where the MAC address is not persistence, solution should be to authorize managed endpoint	
37	The solution should be able to detect the IOT devices using MUD for identifying the device type and its capabilities. Manufacturer Usage Description (MUD) is an embedded software standard defined by the IETF that allows IoT Device makers to advertise device specifications, including the intended communication patterns for their device when it connects to the Network.	

CAT 6A LSZH U/UTP Cable

Make:		
Model:		
Specification	Complied Yes/No	If any deviation (Yes/No)
CAT 6A UTP Horizontal Cable		

WTL/KTP/LANW/23-24/067

CAT6A U/UTP 23 AWG Cable should meet and exceed ANSI/TIA 568C.2	
Category 6A and ISO/IEC 11801 Class EA Specifications	
Cable shall be constructed with 4 pair separator as well as individual	
conductor separator.	
The weight of the cable box of 1000 Feet should not be less than 36 lb/kft	
The nominal Outside diameter should not be more than 0.285 inches	
(7.28mm)	
Cable should support Operating temperature of -20 to 60 ⁰ C	
CAT6A UTP Cable must comply to the latest requirements of 4-Pair PoE as	
per IEEE 802.3bt (Type 4)	
The cable jacket shall be Low-Smoke, Zero Halogen (LSZH) and must comply	
with the following Fire Safety standards:	
1) ISO/IEC 60332-3-22: Vertical Flame Spread	
2) ISO/IEC 60754-2: Acidity	
3) ISO/IEC 61034-2: Smoke Density	
NEXT - Minimum 3 dB above the standards;	
Should support a minimum of 4 connector Channel with a minimum 3 dB	
guaranteed NEXT	
Electrical Properties:	
Max DC Resistance: <7.61 Ohms/100m	
Max. Operating voltage: 80 V	
Frequency: upto 550 Mhz	
Certifications and Test Reports:	
Category 6A cable along with offered channel components should be	
certified by Intertek lab under 4 connector channel configuration to the	
requirement of ANSI/TIA 568-C.2 for long channel (100m) as well as short	
links (<15m). Test Certificates to be provided with bid.	
Cable shall be ETL verified as per ANSI/TIA 568-C.2 and ISO/IEC 11801 for	
CAT6A requirements.	
Cable shall be compliant to EN50575 CPR Cable EuroClass and certified for	
Dca, s2, d2, a1 standards. Certificate should be submitted with bid.	
Factory test reports for CAT6A cable must be available for verification of	
authenticity, at OEM website with unique print string on individual cable	
jacket.	

Category 6A U/UTP Information Outlets

Make:		
Model:		
Specification	Complied Yes/No	If any deviation (Yes/No)
The CAT6A UTP 8-pin modular (RJ-45) jacks shall have Electrical performance guaranteed to meet or exceed the channel specifications of ISO/IEC 11801 Class EA and ANSI/TIA-568-C.2 Category 6A.		
Shall support Network line speeds up to at least 10 gigabits per second		
Information outlet shall have IDC connector terminations on rear of base allow quick and easy installation of 22 to 24 AWG cable		
Each outlet shall be supplied with rear protective strain relief cap to protect against contamination and securing the termination.		
Electrical properties:		
Current Rating of 1.5 A at 20°C		
Insulation Resistance, minimum: 500 MOhm		
Contact Resistance, maximum: 100 mOhm		

Dielectric Withstand Voltage, RMS, conductive surface: 1,500 Vac @ 60 Hz	
Mechanical performance: Material: High-impact, flame retardant, thermoplastic, UL 94V-0 rated Shall be certified for IEC 60603-7 compliance Plug retention force, min: 130N Plug insertion life, Min: 750 cycles Should be UL and cUL listed	

Category 6A U/UTP Information Outlets

Make:		
Model:		
Specification	Complied Yes/No	If any deviation (Yes/No)
The CAT6A UTP 8-pin modular (RJ-45) jacks shall have Electrical		
performance guaranteed to meet or exceed the channel specifications of ISO/IEC 11801 Class EA and ANSI/TIA-568-C.2 Category 6A.		
Shall support Network line speeds up to at least 10 gigabits per second		
Information outlet shall have IDC connector terminations on rear of base allow quick and easy installation of 22 to 24 AWG cable		
Each outlet shall be supplied with rear protective strain relief cap to protect		
against contamination and securing the termination.		
Electrical properties:		
Current Rating of 1.5 A at 20°C		
Insulation Resistance, minimum: 500 MOhm		
Contact Resistance, maximum: 100 mOhm		
Dielectric Withstand Voltage, RMS, conductive surface: 1,500 Vac @ 60 Hz		
Mechanical performance:		
Material: High-impact, flame retardant, thermoplastic, UL 94V-0 rated		
Shall be certified for IEC 60603-7 compliance		
Plug retention force, min: 130N		
Plug insertion life, Min: 750 cycles		
Should be UL and cUL listed		

CAT 6A LSZH U/UTP RJ45 Patch Cords

Make:		
Model:		
Specification	Complied Yes/No	If any deviation (Yes/No)
CAT6A U/UTP Patch Cord, solid construction, 4 pair, with pair separator		
Offered CAT6A Patch cord shall support intelligent cable detection mechanism when used as part of AIM system.		
Cords shall be equipped with 8-pin modular plugs on each end.		
Plugs shall be designed with an anti-snag latch to facilitate easy removal during move, add and change processes.		
The LSZH version must comply with the following Fire Safety standards: ISO/IEC 60332-3-22: Vertical Flame Spread ISO/IEC 60754-2: Acidity ISO/IEC 61034-2: Smoke Density		

The cordage shall be UTP components that do not include internal or	
external shields, screened components or drain wires.	
The patch cords will have insertion life of 750 cycles minimum.	
Shall be available in multiple colors.	
Min Plug retention force: 130N	
Shall be ETL and cETL certified.	
Patch Cords shall have maximum dc Resistance:0.30 Ohm	
Safety voltage rating: 300 V	

CAT 6A Jack Panel

Make:		
Model:		
Standard Compliance	Complied Yes/No	If any deviation (Yes/No)
Patch Panel shall be ANSI TIA 568-C.2 CAT6A UTP loaded with rear cable		
management		
The ganged adapter style patch panel will utilize increments of six RJ-45		
style jacks in a common moulded component.		
The ganged adapters shall have RJ45 jack in the front and Insulation		
Displacement Connector (IDC) at the rear of the module.		
The panel must be capable of supporting an upgrade to an intelligent		
system without any interruption to service due to patch cord removal or		
terminal block re-termination.		
3rd Party Verification test certificates shall be provided to show compliance		
to ANSI/TIA 568-C.2 testing for Cat 6A components.		
The patch panel type shall be 1U (24 port) panel compliant with IEC 60603-		
7-4 while meeting the Channel Performance as specified in Amendment 1 to		
ISO/IEC 11801:2002.		
3 rd party Certificate of compliance must be submitted.		
The panel shall support universal T568 A/B wiring labeling and 110		
connector terminations on rear of panel allowing for quick and easy		
installation of 22 to 24 AWG cable		
The panel shall be equipped with a removable rear mounted cable		
management bar and labels		
The panel shall be UL Listed		
Operating Temperature Range: -10°C to 60°C		
Humidity: 95% (noncondensing)		
Insertion Life = 750 minimum insertions of an FCC 8-Position		
Telecommunications Plug		
Plug retention force: min 130N		
Current Rating – 1.5 A @ 20 °C		
Dielectric Withstand Voltage, RMS – 1500 Vac @ 60 Hz		
Insulation Resistance, minimum – 500 Mohm		

Faceplates – 2 port, 1 port

Make:		
Model:		
Specification	Complied Yes/No	If any deviation (Yes/No)
Faceplate shall be available in 1 or 2 port square version, with dust caps or shutter.		

WEI	BEL TECHNOLOGY LIMIT	'ED	
te Material shall be high impa	ct flame retardant III-rated 94 V-0		
	$\mathbf{v}_{\mathbf{v}}$		
ore Multi Mode Outdoo	r Armoured Fiber, OM3		
:			
Specifications	Requirement	Complied Yes/No	If any deviation (Yes/No)
Cable Type	6-core, Multimode, 10G Ethernet OM3, Armored, loose-tube, Gel Filled		
Fiber type	50/125/250, Laser Grade, primary coated buffers		
Standard	Compliant to EN 50173; ISO 11801; ANSI/TIA-568-C.3 and Telcordia GR- 20		
Fiber Attenuation			
@850nm	<=2.7 dB / Km Max		
@1300nm	<=0.7dB / Km Max		
Bandwidth			
@850nm	>1500 MHz-KM		
@1300nm	>500 MHz-KM		
Network Support			
@850nm (1000Base-SX)	1000m		
@1300nm (1000Base-LX)	600m		
@850nm (10GBase-SR & SW)	300m		
@1300nm (10GBase-LX4)	300m		
Loose Tube construction	Single PBTP loose tube of min		
	diameter of 3mm filled with water		
	-		
Min Bend radius -	160 mm		
	1250 N		
Maximum Crush	3000N		
	-20 Degree C to +70 Degree C		
Weight	100 Kg/Km		
	te Material shall be high impa plastic. Dre Multi Mode Outdoo Specifications Cable Type Fiber type Standard Fiber Attenuation @850nm @1300nm Bandwidth @850nm @1300nm Network Support @850nm (100Base-SX) @1300nm (100Base-SX) @1300nm (100Base-LX) @850nm (100Base-SX) @1300nm (10GBase-SR & SW) @1300nm (10GBase-SR & SW) @1300nm (10GBase-LX4) Loose Tube construction Outer Sheath Overall Diameter Strength members Min Bend radius - Installation Min Bend radius - Service Tensile rating Maximum Crush resistance Operating Temperature	tte Material shall be high impact, flame retardant, UL-rated 94 V-0, plastic. Specifications Requirement Cable Type 6-core, Multimode, 10G Ethernet OM3, Armored, 10OS ethernet OM3, Armored, 10OB ase-IX3 (20) Fiber Attenuation @850nm <=2.7 dB / Km Max Bandwidth @850nm <=0.7 dB / Km Max Bandwidth @1300nm (100Base-IX3) 600m @1300nm (100Base-IX3) 600m @1300nm (10GBase-IX4) 300m Loose Tube construction Single PBTP loose tube of min diameter of 3mm filled with water blocking gel. Outer Sheath HDPE, 2mm thickness Overall Diameter 10 mm Strength members Water blocking E glass yearns Min Bend radius - Io0 mm Installation Min Bend radius - Io0 mm Service Tensile rating 1250 N Maximum Crush resistance Operating Temperature -20 Degree C to +70 Degree C	Specifications Requirement Complied Yes/No Cable Type 6-core, Multimode, 10G Ethernet OM3, Armored, loose-tube, Gel Filled 6 Fiber type 50/128/250, Laser Grade, primary coated buffers 6 Standard Compliant to EN 50173; ISO 11801; ANSL/TIA-568-C.3 and Telcordia GR- 20 7 Fiber Attenuation 6 6 @850nm <=2.7 dB / Km Max

Fiber LIU Rack-mountable, 1U fully loaded, OM3

Make:				
Model:				
Sr. No. Specifi	cations	Requirement	Complied Yes/No	If any deviation (Yes/No)
	.			· · · ·

WTL/KTP/LANW/23-24/067

1	Fiber Management shelf	The fiber management shelf shall	
1	riber management snen	have compact design and be ideal for	
		high density front patching	
		applications.	
		Should be fully loaded and factory	
		fitted assembly with no assembling	
		required during installation at site	
		• High Density: 1U: 12/24 Fiber	
		terminations	
		 Should be supplied loaded with SC 	
		adapters, splice trays, SC OM3	
		Pigtails and fiber management rings	
		 Mounting brackets can be placed in 	
		different positions	
2	Drawer style shelf	o Easy access to splicing tray	
		o Easy access to back side of	
		connector	
3	Accessories	Fiber management guides, radius	
		controls & secure tie downs provided	
		Pre loaded with labeling strips,	
		grounding lugs	
		Sealed cable inlets for dust and rodent	
		protection	
4	Material	Min 1.6mm CRCA sheet with powder	
		coating	
5	Compact size (mm)	44 x 450 x 320 (HxWxD)	
6	Pigtails loaded in Shelf:		
i	Туре	SC Type, OM3 1.5 Mtr.	
Ii	Attenuation	<=0.3 dB, at 850 nm	
iii	Return Loss	>= 30 dB in mated condition	
iv	Cable Info	50/125 um	
V	Outer Dia	0.9 mm	

Fiber Patch Cables, SC/LC-SC/LCOM3, 3/5/10 Mtr.

Make:				
Model:				
Sr. No.	Specifications	Requirement	Complied Yes/No	If any deviation (Yes/No)
1	Make and Type	SC to LC , SC to SC, LC to LC Duplex tuned Fiber Optic Patch Cord, 50/125 Micron, OM3		
2	Cable Sheath	LSZH		
3	Cable Diameter	1.8 x 3.6 mm		
4	Insertion Loss	MAX .3 db at 850nm		
5	Return Loss	> 30 db at mated condition		
6	Length	3 Mtrs, 5 Mtrs		
7	Temperature Range	-10 Degree C to +60 Degree C		

Wall Mount Equipment Rack 9U

WTL/KTP/LANW/23-24/067

Make:	Make:				
Model:					
S1. No	Technical Specification	Complied Yes/No	If any deviation (Yes/No)		
1	19" Wall Mount Rack:9U x 600mm width x 600mm depth, Steel frame structure design, Top & Bottom Cover with Vent and Cable entry/exit provision, Epoxy Polyester Texture finish 80uM with Seven Tank pretreatment process meeting ASTM standards. Certified for IP20 & IK08 protection. Powder quoting certified for 500 hrs Salt spray test.				
2	Front toughened glass door with lock & key				
3	Front panel mounting hardware. – 1 No.				
4	230V A/C 90 CFM fan mounted on top cover - 2 Nos.				
5	PDU 6 sockets 6A – 1 No.				
6	Horizontal Cable Manager 1U with loops – 2 No.				
	ISO 9001-2015 & Confirms to DIN41494 Standard				

Wall Mount Equipment Rack 12U

Make:	Make:				
Model:					
Sr. No	Technical Specification	Complied Yes/No	If any deviation (Yes/No)		
1	19" Wall Mount Rack: 12U x 600mm width x 600mm depth, Steel frame structure design, Top & Bottom Cover with Vent and Cable entry/exit provision, Epoxy Polyester Texture finish 80uM with Seven Tank pretreatment process meeting ASTM standards. Certified for IP20 & IK08 protection. Powder quoting certified for 500 hrs Salt spray test.				
2	Front toughened glass door with lock & key				
3	Front panel mounting hardware. – 2 No.				
4	230V A/C 90 CFM fan mounted on top cover - 2 Nos.				
5	PDU 6 sockets 6A – 1 No.				
6	Horizontal Cable Manager 1U with loops – 3 No.				
	ISO 9001-2015 & Confirms to DIN41494 Standard				

Floor Mount Equipment Rack 22U

Make:				
Model:				
S1. No	Technical Specification	Complied Yes/No	If any deviation (Yes/No)	
1	Floor Mount -FM- 22U - W600xD800 Equipment Rack. Static load taking capacity 300 Kg . SKD form. With toughen Glass Door with Cam Lock. Back Mesh Door with cam Lock, Side Panel with Cam Lock, Castor 3 " (Set of 4(2Brake+2Without Brake) + Levelling Legs (Set of 4 110 mm), 4 Nos 90CFM AC Fan 230 Volt with 3Core 3Pin Moulded Wire Designed & built to ANSI-310-D, IEC 297-2 ,DIN 41491/41494 Compatible 19" Mounting Standards. Designed, Tested & certified for, IP20 ingress protection, IK08 Impact			

	protection, Colour coat Epoxy Polyester Texture Finish for 500Hrs. Salt spray test (500SST). Labs accredited by NABL	
2	AC PDU 19Inch 5/15Amp 6Way Round Pin 6 Socket,0.75 Sqmm 3 Core 1.8 mtr 16Amp MCB	
3	19" Stationary tray	
5	Horizontal Cable Manager 1U with loops – 4 No.	
6	Front Panel Hardware (Qty of 20) x 4 Pkt.	

Floor Standing Equipment Rack 32U

Make:					
Model:					
\$1. No	Technical Specification	Complied Yes/No	If any deviation (Yes/No)		
1	Floor Mount -FM- 32U - W600xD800 Equipment Rack. Static load taking capacity 300 Kg. SKD form. With toughen Glass Door with Cam Lock. Back Mesh Door with cam Lock, Side Panel with Cam Lock, Castor 3 " (Set of 4(2Brake+2Without Brake) + Levelling Legs (Set of 4 110 mm), 4 Nos 90CFM AC Fan 230 Volt with 3Core 3Pin Moulded Wire Designed & built to ANSI-310-D, IEC 297-2 ,DIN 41491/41494 Compatible 19" Mounting Standards. Designed, Tested & certified for, IP20 ingress protection, IK08 Impact protection, Colour coat Epoxy Polyester Texture Finish for 500Hrs. Salt spray test (500SST). Labs accredited by NABL				
2	AC PDU 19Inch 5/15Amp 6Way Round Pin 6 Socket,0.75 Sqmm 3 Core 1.8 mtr 16Amp MCB				
3	19" Stationary tray				
5	Horizontal Cable Manager 1U with loops – 4 No.				
6	Front Panel Hardware (Qty of 20) x 4 Pkt.				

1100va Line Interactive UPS

Make:			
Model:			
Description	Specification	Complied Yes/No	If any deviation (Yes/No)
Rating	1100va 660 watts or Higher		
Input Voltage Range	145V to 290V		
Input Frequency	45 to 65 Hz		
Automatic Voltage Regulation	Yes, Trim & boost		
Nominal Output Voltage	230V +/- 8%		
Waveform	Stepped Sinewave		
Output Frequency	On Line: Same as Input & On Battery 50/60Hz +/- 3Hz		
Output Sockets	5 Threepin Sockets.		
Surge Protection	UPS should be with Surge Protection min 255Joules		
Battery Voltage & Rating	12V, 7ah * 2nos		

Short Circuit Protection	Circuit Breakers	
Battery Charging 90% in 4-6hrs		
Battery Saver Mode	UPS should be with battery Saver Mode.	
Cold Start	UPS Should be with Cold Start feature.	
Visual Indicators	On/Off, Charging, Battery Saver & Replace battery	
Standard Warranty	l Years onsite repair or replace including Batteries	
Environment	0-40C , 0-95% RH Non Condensing.	
Preventive Feature	Thermal Run Away Prevention	
Audible Alarms	On Battery, Overload, Low Battery & Replace battery	
Make In India	With Minimum 50% Local Content (Certificate Must be Enclosed).	
Regulatory Approvals	BIS Approved, & ISO 9001, 14001, 50001, technical Compliance on OEM Letter must be submitted in Bid.	

Online UPS 2000VA with 30 Mins.

Make: Model:				
Sr. No.	Features	Description	Complied Yes/No	If any deviation (Yes/No)
1	Make	Vendor to Specify (Online UPS)		
2	Model	Vendor to Specify		
3	Country of Origin	India		
4	Capacity (in kVA / kW)	This UPS is having 0.8 or Better O/P power factor		
5	Technology and Capability	 a) True Online configuration with double conversion VFI SS 111 b) Microprocessor /DSP based control, using IGBT devices and high switching frequency PWM (>10kHz) c) Active Power Factor Correction (APFC) in converter to improve Input Power Factor > 0.98 		
6	Input facility -Phases / Wires	l Phase IN & l Phase Out		
7	Input Voltage Range	110 – 280 V AC		
8	Input Frequency Range	40 to 70 Hz		
9	Input Power Factor	> 0.95 on Full Load		
10	Generator Compatibility	Compatibility to genset supply required		
11	Input Protection (Thru In- built 1P MCB)	Circuit Breaker Should be provided at the input of the UPS suitable for the full rated capacity of the UPS		
12	Nominal Output voltage	220/ 230/ 240VAC (Selectable)		
13	Output Voltage Regulation	+/- 1% static and +/- 6% at 100%		

		load step	
14	Nominal Output Frequency	50 / 60 Hz	
15	Output Frequency Regulation	50 Hz \pm 0.5% or 60 Hz \pm 0.5%- Battery Mode. 50 Hz \pm 3 Hz or 60 Hz \pm 3 Hz- AC mode	
16	Output Wave Form	Pure sine wave	
17	Output Voltage Distortion (THDu)	3% max. for full linear load 6% max. for full non linear load (100% VA, 0.8 PF) • 15% for the last 60 seconds of the backup time	
18	Crest Factor	3 : 1 On Full Load (Minimum)	
19	Output Short circuit Protection	Electronic / Fused/Thermal circuit breaker	
20	Transfer Time (Mode of operation)	Nil from Mains mode to Battery Mode Nil from Battery Mode to Mains mode	
21	Transfer Time (Inverter to Bypass / Bypass to Inverter)	< 4 ms (Synchronized Mode)	
22	Automatic By-pass (In- built)	To be provided	
23 a.	Overall Efficiency (AC to AC) - Online (Double Conversion)	>= 88% at Full Load >= 98% in Green ECO mode	
23 b.	Green Mode / Eco Mode	Shall be provided in each UPS (All ratings) to choose Higher Efficiency Mode of Operation	
24	Measurements (On LCD)	Input: Voltage / Frequency Output: Voltage / frequency Battery: Remaining time / Voltage Load: Percentage / kW	
25	Fault Indication (On LCD)	Charger Failure Battery Failed Battery Low Overload	
26	Indications (LED/LED)	AC indicator/Battery Mode of Operation / Bypass feeding the load / UPS Fault	
27	Audible Alarms	Battery Low beep / DC Fault beep/ UPS Overload beep/ o/p short circuit fault beep/ Shutdown beep	
28	Backup Required	30 Min back up at 0.8 PF and 1.75 ECV. Calculations to be submitted by the OEM.	
29	Battery Bank Voltage	Vendor to Specify	
30	Batteries Type	Sealed Maintenance Free (SMF) - 12V Cells	
31	Battery Makes	Exide / Amararaja / Panasonic	

32	Battery recharge time (After complete discharge) to 90% capacity	8-10 hours	
33	USB Port	Shall be present in the UPS	
34	Emergency Power Off	Should be provided as standard in the UPS	
35	Remote Monitoring	To be provided with access to user using a mobile app compatible with IOS/Android.	
36	Interface to BMS (Building Management System)	ModBus Card for connecting to UPS to BMS thru RS485 & monitoring thru BMS option shall be available.	
37	Interface to DCS (Distributed Control System)	Relay I/O Card or PFC (Potential free contacts) for connecting to UPS to DCS / PLC / SCADA system for communicating UPS operating status option shall be available	
38	Scheduled Shutdown	The UPS NMC shall be capable for scheduling a shutdown.	
39	NMC Security	Remote Access: SSH File Transfer: SCP Web Server: TLS Remote Authentication Dial-In User Service for central administer remote access shall be provided	
38	Cold Start	UPS should start up On AC Supply (Mains) without DC Supply (Batteries) On DC Supply (Batteries) without AC Supply (Mains)	
49	Automatic Restart	UPS should start up automatically on mains resumption after battery low shutdown	
40	Operating Temperature	0 to 40 deg C and 40 to 50 °C linearly derated to 80% of maximum load capacity	
41	Storage Temperature	–20 to 60 °C	
42	Operating Humidity	0% ~ 95%RH (No Condensing)	
43	Operating Elevation	0 to 2,000 m: normal operation 2,000 to 3,000 m: The output power reduces @ 1% for increase in height of every 100 m >3,000 m: UPS will not work	
44	Type of Cooling	Natural Convection Cooling through air vents	
45	Noise Level	< 50 dbA at 1 meter distance	
46	Form Factor	l kVA: Tower >1 kVA: Rack & Tower mountable both	
47	Air Filters (mandatory)	UPS should have internal anticorrosion air filters for dust filtration	
48	Dimension (w x d x h) in	filtration To be furnished by the vendor	

	mm		
49	Weight - in kg	To be furnished by the vendor	
		BIS Certification	
		OEM should have own centralized	
		Help Desk (24 X 7 support) with Toll	
		Free Number.	
		Gutor/APC Schneider	
	Product Certificates	/Socomec/GE/ Luminous	
50	& Makes & Manufacturing	For all Rack-Tower Mount UPS,	
	location	Domestic component shall be >30%	
		Component (Only for UPS	
		excluding Battery and related	
		accessories) & PCBs shall be	
		manufactured in OEM's factory in	
		India.	

3 KVA ONLINE UPS SYSTEM WITH 30 MIN BACK UPTIME

Make:				
Model:				
Sl. No.	PARAMETERS	REQUIRED SPECIFICATIONS	Complied Yes/No	If any deviation (Yes/No)
1	CAPACITY	3KVA/2.4 KW@0.8 P.F or more		· · ·
2	Technology	3 KVA online rack-mount UPS. UPS should have facility for installation as tower model easily (rack-tower convertibility). Each UPS should be with SNMP card & have provisioning for monitoring with a Cloud-based software for providing 24/7 visibility through live data, smart alarming, and data-driven insights on the health of connected assets directly to a smartphone through an ANDROID or iOS based APP which can be downloaded from Google or Apple Store as well as standard windows laptop/PC. The software should be able to monitor all connected infra equipment such as UPS, Cooling (AC), PDU, Access Control, Fire Alarm etc. (irrespective of make & model – vendor neutral)) Note: The UPS and Monitoring software should be from same OEM with license for at least 5 years Detailed Datasheet of Software Solution and web link should be provided		
3	Rack height (U)	2U max		
4	AC Input voltage range	160 – 280VAC, single phase UPS @100% load 110 – 280VAC, single phase UPS @50% load		
5	UPS Efficiency at full load double conversion mode	≥90%		
6	Input frequency range	40-70hz (auto sensing)		
7	Ac output voltage	Configurable for 220:230:240 V		

	I		
8	Output	50/60 Hz \pm 0.1 Hz (free run) and \pm 3 Hz (sync to	
	frequency	mains)	
9	Wave form	Pure sine wave (output)	
10	Input protection	Through circuit breaker	
11	Surge Energy rate	600 Joules	
12	Harmonic distortion	<3% for 100% linear load	
13	Crest factor	3:1	
14	Audible alarms	On battery; low battery alarm; overload	
15	LCD	Multifunction rotatable LCD and control console for displaying below parameters: • Output voltage & frequency • Input voltage & frequency • State of battery charge • Battery voltage • Ambient temperature • Remaining On Battery runtime • Load level in percentage • Load level in kVA • Total Ah capacity of connected battery • On Line Operation • On Battery Operation • Bypass Operation • System Alerts • Overload • Green Mode • Event Log	
16	Battery back-up	Battery backup of upto 30 minutes on IT printer + led bulb load using 12V SMF VRLA Batteries. VAH should be minimum 1872 VAH. Battery Qty, AH rating and DC voltage to be mentioned along with Datasheet	
17	Battery make	Battery make: Exide/Quanta/Panasonic only	
18	Environmental	Operating temperature: 0-40°C, Heat dissipation: 920 BTU/H. Relative humidity: 0 ~ 95% non-condensing	
19	Interface ports	Serial RS-232, USB, SNMP	
20	Other features	 PCBs should be Conformal coated for protection from moisture, dust and extreme temperatures. Emergency Power Off (EPO) as standard 	
21	Warranty	Support for Dry Contacts and Modbus Minimum 2 years onsite warranty on UPS & battery both	

- Bidder should submit all relevant data sheet/brochure of all quoted items and should also available in respective OEM's official website.
- Bidder should indicate items mentioned in the OEM data sheet / brochure by marketing as mentioned in minimum specification in the RFP

Authorized Signatory (Signature In full):

Name and title of Signatory: _____

Stamp of the Company: _____

<u>SECTION – J</u>

TECHNICAL CAPABILITY OF BIDDER

(Tender No. WTL/KTP/LANW/23-24/067)

S1. No.	Project Name	Start Date	End Date / Status	Brief description of project & scope of work (implementation, operation & maintenance)	Type of project	Approx. value of the project	Contact details of the Customer

Authorized Signatory (Signature In full):

Name and title of Signatory: _____

Stamp of the Company: _____

Note:

- A. Type of Project shall indicate the implementation of services (Delivery, Installation & Commissioning of Outdoor Closed Circuit Television (NETWORK) system).
- B. Scope of work shall indicate whether it is implementation, Operation or maintenance.
- C. Submit Customer Order Copy details of the order indicating the project value, customer contact details.

SECTION - K

FINANCIAL CAPABILITY OF BIDDER

(Tender No. WTL/KTP/LANW/23-24/067)

FINANCIAL INFORMATION

S1. No.	Nome of the Biddor	Tu	rnover (Rs. / Cror	es)
51. INO.	Name of the Bidder	2020-21	2021-22	2022-23
_				
1				

Authorized Signatory (Signature In full): _____

Name and title of Signatory: _____

Stamp of the Company: _____

Note:

Submit the audited financial statement/ audited annual report of the last five financial years.

<u>SECTION – L</u>

BIDDERS'S DETAILS

(Tender No. WTL/KTP/LANW/23-24/067)

1	Name of the Firm	
2	Registered Office Address	
	Contact Number	
	Fax Number	
	E-mail	
3	Correspondence / Contact address	
	Name & Designation of Contact person	
	Address	
	Contact Number	
	Fax Number	
	E-mail	
4	Is the firm a registered company? If yes, submit	
1	documentary proof	
	Year and Place of the establishment of the company	
6	Former name of the company, if any	
7	Is the firm	
1		
	 a Government/ Public Sector Undertaking a propriety firm 	
	 a propriety initial a partnership firm (if yes, give partnership deed) 	
	 a particlessip mill (if yes, give particlessip deed) a limited company or limited corporation 	
	 a member of a group of companies, (if yes, give 	
	 name and address and description of other 	
	companies)	
	 a subsidiary of a large corporation (if yes give the 	
	name and address of the parent organization). If the	
	company is subsidiary, state what involvement if	
	any, will the parent company have in the project.	
8	Is the firm registered with Sales Tax department? If yes,	
	submit valid GST Registration certificate.	
9	Is the firm registered for Service Tax with Central Excise	
	Department (Service Tax Cell)? If yes, submit valid Service	
	Tax registration certificate.	
10		
	showing the structure of the organization.	
11	Are you registered with any Government/ Department/	
	Public Sector Undertaking (if yes, give details)	
12		
	under your present name? What were your fields when you	
	established your organization	
13		
	the right to verify the claims if necessary)	
	 Manufacturer 	
	 Supplier 	
	 System Integrator 	
	Consultant	
	 Service Provider (Pl. specify details) 	
	 Software Development 	
	 Total Solution provider (Design, Supply, 	
	Integration, O&M)	

	 IT Company 	
14	Number of Offices in district headquarters in West Bengal	
15	Is your organization has ISO 9001:2015 / 2018 certificates?	
16	List the major clients with whom your organization has been	
	/ is currently associated.	
17	Have you in any capacity not completed any work awarded	
	to you? (If so, give the name of project and reason for not	
	completing the work)	
18	Have you ever been denied tendering facilities by any	
	Government / Department / Public sector Undertaking?	
	(Give details)	

Authorized Signatory (Signature In full): _____

Name and title of Signatory: _____

Company Rubber Stamp: _____

SECTION - M

MANUFACTURER'S AUTHORIZATION FORM

Date:

To Webel Technology limited Plot-5, Block-BP, Sector-V Salt Lake <u>Kolkata-700 091</u>

Ref: Tender No.: WTL/KTP/LANW/23-24/067 dated 07.02.2024

Sir,

WHEREAS	and	who havi	are ng	official production	producers facilities	of at
			do	hereby		horize
following Products produced by us, for the Supp Bids.	•		-	locat "Bidder") to s ed with the al	ubmit a bid	
When resold by, the	ese produc	ts are su	ıbject t	o our three wa	irranty terms	•
THE second deat in the second of				1-1	1. 1:	

We assure you that in the event of ______, not being able to fulfill its obligation as our Service Provider in respect of our Warranty Terms we would continue to meet our Warranty Terms through alternate arrangements.

We also confirm that _________ is our authorized service provider/system integrator and can hence provide maintenance and upgrade support for our products.

We also confirm that the products quoted are on our current product list and are not likely to be discontinued within 3 years from the day of this letter. We assure availability of spares for the products for the next two years after three years' warranty.

We also confirm that the material will be delivered as per delivery schedule against above mentioned tender from the date of placement of confirmed order.

Name

In the capacity of

Signed

Duly authorized to sign the authorization for and on behalf of _____

Dated on _____ day of _____2024

Note: This letter of authority must be on the letterhead of the Manufacturer and duly signed by an authorized signatory.

WTL/KTP/LANW/23-24/067

<u>SECTION – N</u>

FORMAT FOR PRE-BID MEETING QUERY

(Tender No. WTL/KTP/LANW/23-24/067)

Name of the Bidder:

Queries

S1. No.	Section No.	Clause No.	Page No.	Queries

Note: The filled form to be submitted in XLS & PDF Format. There is a cutoff date for receiving of queries before Pre Bid Meeting. Queries received after the cutoff period will not be accepted. The Purchaser reserves the right to respond all queries over e-mail.

Authorized Signatory (Signature In full):

Name and title of Signatory: _____

Company Rubber Stamp: _____

<u>SECTION – O</u>

LIST OF CLIENTS OF SIMILAR ORDERS

(Tender No. WTL/KTP/LANW/23-24/067)

S1. No.	Name of the Client	Address	Contact Person	Designation	Contact Numbers

Authorized Signatory (Signature In full):

Name and title of Signatory: _____

Company Rubber Stamp: _____

SECTION - P

PROFORMA FOR PERFORMANCE BANK GUARANTEE

(On non-judicial stamp paper of appropriate value to be purchased in the name of executing Bank)

PROFORMA OF BANK GUARANTEE FOR SECURITY DEPOSIT –CUM-PRFORMANCE GUARANTEE

Ref Bank Guarantee no.....

Date.....

PROFORMA OF BG FOR SECURITY DEPOSIT

KNOW ALL MEN BY THESE PRESENTS that in consideration of WEBEL TECHNOLOGY LIMTED, a Government of West Bengal Undertaking incorporated under the Companies Act, 1956 having its Registered office at Plot - 5, Block BP, Sector V, Kolkata-700 091 (hereinafter called "The Purchaser") having agreed to accept from (hereinafter called "The Contractor") Having its Head Office ____, a Bank guarantee for Rs. ______ in lieu of Cash Security Deposit for the at due fulfillment by the Contractor of the terms & conditions of the Work Order No. issued the Purchaser dated bv for (hereinafter called "the said work order _dated_____)". We ______ (Name & detailed address of the branch) (hereinafter called "the Guarantor") do hereby undertake to indemnify and keep indemnified the Purchaser to the extent of Rs._____ (Rupees _____ only against any loss or damage caused to or suffered by the Purchaser by reason of any breach by the Contractor of any of the terms and conditions contained in the said Work Order No. dated of which breach the opinion of the Purchaser shall be final and conclusive.

(2) AND WE, ______DO HEREBY Guarantee and undertake to pay forthwith on demand to the Purchaser such sum not exceeding the said sum of ______Rupees_____) only as may be specified in such demand, in the event of the Contractor failing or neglecting to execute fully efficiently and satisfactorily the order for ______ Work Order no. , dated

(3) WE _______ further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said order as laid down in the said Work Order No. _______ dated _______ including the warranty obligations and that it shall continue to be enforceable till all the dues of the Purchaser under or by virtue of the said Work Order No. _______ dated _______ have been fully paid and its claims satisfied or is charged or till the Purchaser or its authorized representative certified that the terms and conditions of the said Work Order No. _______ dated _______ have been fully and properly carried out by the said contractor and accordingly discharged the guarantee.

(4) We ______ the Guarantor undertake to extend the validity of Bank Guarantee at the request of the contractor for further period of periods from time to time beyond its present validity period failing which we shall pay the Purchaser the amount of Guarantee.

(5) The liability under the Guarantee is restricted to Rs. _____ (Rupees _____

_____) only and will expire on ______ and unless a claim in writing is presented to us or an action or suit to enforce the claim is filled against us within 6 months from ______ all your rights will be forfeited and we shall be relieved of and discharged from all our liabilities (thereinafter)

(6) The Guarantee herein contained shall not be determined or affected by liquidation or winding up or insolvency or closer of the Contractor.

(7) The executants has the power to issue this guarantee on behalf of Guarantor and holds full and valid power of Attorney granted in his favour by the Guarantor authorizing him to execute the Guarantee.

(8) Notwithstanding anything contained herein above, our liability under this guarantee is restricted to Rs.

 (Rupees
) only and our guarantee shall remain in force up to

 and unless a demand or claim under the guarantee is made on us in writing on or before

 all your rights under the guarantee shall be forfeited and we shall be relieved and

 discharged from all liabilities there under.

WE, ______ lastly undertake not to revoke this guarantee during the currency except with the previous consent of the Purchaser in writing. In witness whereof we have set and subscribed our hand on this ______ day of

SIGNED, SEALED AND DELIVERED

WITNESS

(Stamp of the executants)

2) _____

1) _____

(Name & address in full with Rubber Stamp)

INSTRUCTIONS FOR FURNISHING BANK GUARANTEE

- 1. Bank Guarantee (B.G.) for Advance payment, Mobilization Advance, B.G. for security Deposit-cum-Performance Guarantee, Earnest Money should be executed on the Non-Judicial Stamp paper of the applicable value and to be purchased in the name of the Bank.
- 2. The Executor (Bank authorities) may mention the Power of Attorney No. and date of execution in his/her favour with authorization to sign the documents. The Power of Attorney is to be witnessed by two persons mentioning their full name and address.
- 3. The B.G. should be executed by a Nationalised Bank/ Scheduled Commercial Bank preferably on a branch located in Kolkata. B.G. from Co-operative Bank / Rural Banks is not acceptable.
- 4. A Confirmation Letter of the concerned Bank must be furnished as a proof of genuineness of the Guarantee issued by them.
- 5. Any B.G. if executed on Non-Judicial Stamp paper after 6 (six) months of the purchase of such stamp shall be treated as Non-valid.
- 6. Each page of the B.G. must bear signature and seal of the Bank and B.G. Number.
- 7. The content of the B.G. shall be strictly as Proforma prescribed by WTL in line with Purchase Order /LOI/ Work Order etc. and must contain all factual details.
- 8. Any correction, deletion etc. in the B.G. should be authenticated by the Bank Officials signing the B.G.
- 9. In case of extension of a Contract the validity of the B.G. must be extended accordingly.
- 10. B.G. must be furnished within the stipulated period as mentioned in Purchase Order / LOI / Work Order etc.
- 11. Issuing Bank / The Bidder are requested to mention the Purchase Order / Contract / Work Order reference along with the B.G. No. For making any future queries to WTL.

SECTION - Q

NIT DECLARATION FOR BIDDER

(Bidders are requested to furnish the Format given in this section, filling the entire Blank and to be submitted on Bidder's Letter Head)

To Webel Technology Limited Plot – 5, Block – BP, Sector - V, Salt Lake City, <u>Kolkata – 700091.</u>

<u>Sub: Supply, Installation, Testing, Commissioning (SITC) with Three Years Products and Installation</u> <u>Warranty of Managed Local Area Network & Integration for Kolkata Police.</u>

Dear Sir,

We the undersigned bidder/(s) declare that we have read and examined in details the specifications and other documents of the subject Tender No. WTL/KTP/LANW/23-24/067 dated 07.02.2024 for Supply, Installation, Testing, Commissioning (SITC) with Three Years Products and Installation Warranty of Managed Local Area Network & Integration for Kolkata Police published by Webel Technology Limited in e-Tender website.

We further declare that we have agreed and accepted all the clauses / sub-clauses / formats / terms & conditions other requirements related to the said tender and we will abide by the same as mentioned in the tender document while participating and executing the said tender.

Thanking you, we remain

Yours faithfully

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Name in full

Designation

Company Stamp

Dated, thisday of2024

SECTION - R

MAKE, MODEL AND PART NUMBER

S1.	Item Descriptions	Quantity	Unit	Make	Model	Part No.
1	Core Switch - 24x10GbaseX switch with 2x100G uplink ports. MACsec AES256. Airflow out of PSU. Optional module-4x10G or 4x25G	2	Nos.			
2	Distribution Switch - 24-Port 10/100/1000BaseT, 4x 10G SFP+ Uplink ports, 4x 25G SFP28 Stacking/Uplink ports, redundant fans, 1 AC PSU JPSU-150-AC-AFO included (optics sold separately) with Standard SW. TAA Compliant	4	Nos.			
3	Edge Switch - 24-Port 10/100/1000BaseT, 4x 10G SFP+ Uplink ports, 4x 10G SFP+ Stacking ports (optics sold separately) with Standard SW.TAA Compliant.	26	Nos.			
4	Server Farm Switch - 24-Port 10/100/1000BaseT, 4x 10G SFP+ Uplink ports, 4x 25G SFP28 Stacking/Uplink ports, redundant fans, 1 AC PSU JPSU-150-AC-AFO included (optics sold separately) with Standard SW. TAA Compliant	3	Nos.			
5	Network Management System (HW+SW) NMS Server	1	Nos.			
6	10G SR Transceiver (for Switch)	26	Nos.			
9	24 Port LIU Loaded SC type	4	Nos.			
10	12 Port LIU Loaded SC type	2	Nos.			
11	SC-LC 10G duplex Patch Cord	18	Nos.			
12	SC-SC 10G duplex Patch Cord	4	Nos.			
13	LC-LC 10G duplex Patch Cord 3 Mtr	8	Nos.			
14	LC-LC 10G duplex Patch Cord 10 Mtr	4	Nos.			
15	UTP Cat6A Cable	60	Boxes			
16	24 Port Cat6A Jack Panel	23	Nos.			
17	Cat6A Information Outlet	390	Nos.			
18	Face Plate Single	390	Nos.			
19	Back Box	390	Nos.			
20	Cat6A 1 Mtr Patch Cord for Panel end	410	Nos.			
21	Cat6A 2 Mtr Patch Cord	390	Nos.			
22	9 U Equipment Rack (5 Port PDU 5/15 Amp+2 X Cable Manager + Fan + HW)	3	Nos.			
23	12U Equipment Rack (5 Port PDU 5/15 Amp+3 X Cable Manager + Fan + HW)	2	Nos.			
24	22U Equipment Rack (2X 5 Port PDU 5/15 Amp+ 6 X Cable Manager + 2X Fan + Castors+ Back door + HW)	1	Nos.			
25	32U Equipment Rack (2X 10 Port PDU 5/15 Amp+ Cable Channel + 6 X Cable Manager +2 X Full Tray + 4X Fan + Castors+ Back door + HW)	1	Nos.			
26	UPS 1.1 KVA Line Interactive	7	Nos.			
27	UPS 2KVA Online 30 mins Backup	2	Nos.			
28	UPS 3KVA Online 30 mins Backup	1	Nos.			
37	Commissioning, Testing & Documentation	1	Job			