

NOTICE INVITING TENDER (NIT)

FOR

SUPPLY, INSTALLATION AND COMMISSIONING OF WI-FI NETWORK AT CORPORATE OFFICE OF BYPL

NIT: CMC/BY/23-24/RS/SkS/SS/29

Due Date for Submission of Bids: 26.09.2023, 15:00 Hrs

BSES YAMUNA POWER LTD (BYPL)

BSES YAMUNA POWER LTD (BYPL) CONTRACTS & MATERIALS DEPT., SHAKTI KIRAN BUILDING, KARKARDOOMA, DELHI-110032

CIN: U40109DL2001PLC111525 **WEBSITE:** www.bsesdelhi.com **GSTIN: 0711BCC8569N1Z0**

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VOLUME - I

SECTION - I

REQUEST FOR QUOTATION

FY 23-24

Tender Notification: CMC/BY/23-24/RS/SKS/SS/29

SUPPLY, INSTALLATION AND COMMISSIONING OF WI-FI NETWORK AT CORPORATE OFFICE OF BYPL



REQUEST FOR QUOTATION

1.00 EVENT INFORMATION

1.01 BYPL invites Sealed tenders for Supply, Installation and COMMISSIONING of Wi-Fi Network from reputed suppliers.

The bidder must qualify the technical requirements as specified in clause 2.0 stated below. The sealed envelopes shall be duly superscribed as - "SUPPLY, INSTALLATION AND COMMISSIONING OF WI-FI NETWORK AS PER SPECIFICATION, TENDER NOTICE CMC/BY/23-24/RS/SkS/SS29. DUE DATE FOR SUBMISSION ON 26.09.2023, 15:00 Hrs.

SL. No.	Material Description	Technical Specification	Estimated Cost (Rs)	EMD Cost (Rs)
1	SUPPLY, INSTALLATION AND COMMISSIONING OF WI-FI NETWORK	Section V	Rs. 1.06 Crore	Rs. 2.12 Lakh

The bidder must qualify the requirements as specified in clause 2.0 stated below.

Bid shall be submitted in two (02) parts. Details of Bid part are as follows:

Part A – Techno Commercial Bid (Technical and Commercial)

Part B - Price Bid

1.02 The schedule of specifications with detail terms & conditions can be obtained from address given below against submission of non-refundable demand draft of Rs. 1,180/- drawn in favour of BSES Yamuna Power Ltd, payable at Delhi or Online transfer of requisite amount through IMPS/ NEFT/ RTGS. The tender documents & detail terms and conditions can also be downloaded from the website www.bsesdelhi.com --> BSES YAMUNA POWER LTD --> Tender --> Open Tenders

In case tender papers are downloaded from the above website, then the bidder has to enclose a demand draft covering the cost of bid documents.

1.2. Bids will be received up to **26.09.2023**, **15:00** Hrs. at the address given below. Part A of the Bid shall be opened on **27.09.2023**, **15:30** Hrs.

Part B of the Bid will be opened in case of Techno-Commercially Qualified Bidders and the date of opening of same shall be intimated in due course. It is the sole responsibility of the bidder to ensure that the bid documents reach this office on or before the last date.

Head of Department Contracts & Materials Dept. BSES Yamuna Power Ltd Reception, Ground Floor Shaktikiran Building, Karkardooma Delhi 110032

- 1.3 BSES Yamuna Power Ltd reserves the right to accept/reject any or all tenders without assigning any reason thereof in the event of following:
 - a) Tender is received after due date and time.
 - b) Tender fee of requisite value is not submitted.



- c) Earnest Money Deposit (EMD) of requisite value & validity is not deposited in shape of Bank Guarantee drawn in favor of BSES Yamuna Power Ltd, payable at Delhi or Online transfer of requisite amount through NEFT/RTGS.
- d) Price Bid as per the Price Schedule mentioned in Annexure-III is not submitted.
- e) Incomplete Bids.
- f) Necessary documents against compliance to Qualification Requirements mentioned at Section 1 Clause 2.0 of this Tender Document.
- g) Complete Technical details are not enclosed as per the Technical Bid Submission Checklist.
- h) Filled in Schedule of Deviations as per Annexure-V.

2.0 QUALIFICATION CRITERIA:-

The prospective bidder must qualify all of the following requirements to be eligible to participate in the bidding and management has the right to disqualify those bidders who do not meet these requirements.

TECHNICAL CRITERIA:-

	Qualifying Criteri	ia
SL	Criteria	Documents Required along with Bid
1.	The bidder proposed solution should be present in Leaders quadrant in Gartner's Magic Quadrant for Wired and Wireless LAN Access Infrastructure for last 3 years.	Documentary evidence of presence of Leaders quadrant in Gartner's Magic Quadrant website.
2.	The Bidder should be OEM or authorized channel partner of OEM (Software & Hardware) as on the date of the tender with an authority to sell, upgrade, supply, service and maintain the proposed products.	In case bidder is an authorized partner of OEM, Manufacturer Authorization Form (MAF) in the format specified, from OEM stating that bidder is an authorized partner of OEM and authorized to participate in this tender and in case the bidder is not able to perform obligations as per contract during the contract period, contracted services will be provided by OEM within the stipulated time.
3.	The bidder should have minimum 5 years' experience in executing Wi-Fi implementation projects of Enterprise Campus/Corporate/Public Place during the last five (05) years.	i) Purchase / Work Order copies ii) List of Clients with project details. iii) Completion Certificates of the Purchase / work order copies shared.
4.	The Bidder must have completed at least 5 full implementation of Wi-Fi project in Campus/Corporate/Public System in 5 different organizations including supply and support during the last five years from the date of bid submission.	i) Work Order copies. ii) List of Clients with project details. iii) Completion Certificates of the Work Order copies shared. If bidder is an authorized channel partner of OEM, then OEM credentials shall also be considered against point Sl. No. 3, 4 and 5.
5.	The bidder must have installed and providing support for 200+ Access point with Controller and must be in operation for the last 36 months from the date of bid submission.	i) Purchase /work Order copies for installation and support of access points. ii) List of references with contact information for similar work.
6.	OEM/Authorized Partners country should not share land border with India as per MoP Order no. No.25-11/6/2018-PG dated 2July, 2020 and Order No.25-4.1.2019-PG dt.11Aug, 2020.	Undertaking to be enclosed



	The bidder should have experience in providing	
7	24x7 Technical support service for Wireless	i) Self Undertaking
/.	solution and should have in-house technical	ii) CV's of at least 3 in-house technical
	expertise.	experts.

COMMERCIAL CRITERIA:-

	Qualifying Criteria	
SL	Criteria	Documents Required
1	Bidder should have Average Annual Sales Turnover of	Audited balance sheets / Duly certified
1.	Rs. Five (05) Crores or more in the last three (3) Financial Years (i.e. FY 2020-21, 2021-22 & 2022-23).	CA certificate with UDIN to be submitted.
2.	The bidder should be a public/private limited company/partnership/limited liability partnership, corporation registered under Indian Companies Act, 1956/2013 / Indian Partnership Act, 1932.	The bidder must submit the copy of registrations.
3.	The bidder should have valid Registration of GST and PAN No. with the appropriate authorities in addition to other statutory compliance.	i) Documents of PAN copy and GST registration certificate. ii) The bidder must submit an self undertaking that the bidder shall comply all the statutory compliance as per the applicable laws/rules etc.
4.	The Bidder shall submit an undertaking that "No Litigation" is pending with BYPL or its Group/Associates Companies.	Self-undertaking on bidder's letterhead
5.	The Bidder shall not be blacklisted/debarred by any central/state government institution /electricity utilities as on the date of submission of the bid.	Self-undertaking on bidder's letterhead

The bidder should send the compliance of above mentioned parameters in technical offer and has to give an undertaking about *No Objection* to verify his manufacturing facility as a part of tendering process.

3.00 BIDDING AND AWARD PROCESS

Bidders are requested to submit their offer strictly in line with this tender document. Normally, the deviations to tender terms are not admissible and the bids with deviation are liable for rejection. Hence, the bidders are advised to refrain from taking any deviations on this Tender. Still in case of any deviations, all such deviations shall be set out by the Bidders, clause by clause in the 'Annexure - Schedule of Deviations' and same shall be submitted as a part of the Technical Bid.

3.01 BID SUBMISSION

Please mention our NIT Number: - on the Tender and drop the same in our Tender Box placed at:

BSES Yamuna Power Ltd, Reception, Ground Floor, Shaktikiran Building, Karkardooma, Delhi 110032

The bids and the outer envelope shall be addressed to: Head of Department Contracts & Materials Dept. 3rd Floor, 'A' Block BSES Yamuna Power Ltd, Shaktikiran Building, Karkardooma, Delhi 110032

Kindly Note:



- > Bidder will inform BYPL through email immediately after the submission or before the due date & time of submission to TPC & Buyer:
 - 1. Mr Rakesh Sharma, E-mail: Rakesh.Ku.Sharma@relianceada.com
 - 2. Mr Sisir Kumar Sahu , E-mail: Sisir.Sahu@@relianceada.com
- > Tender documents shall be submitted at main gate in tender box.
- Authorized person of TPC will collect the documents from tender box at scheduled time of tender submission and verify the bid documents with mails received. A confirmation of receipt shall be sent to bidder through mail by TPC on the same day.
- > Bidder has to ensure that tender copy is dropped in correct box designated for tender submission only.
 - BYPL shall not be responsible for any wrong placement of tender document by bidder.

PART A: TECHNICAL BID comprising of following (01 Original and soft copy of Technical bid in Pen Drive):

Sr. No	Descriptions	Type of Documents
Comme	ercial :	
1.	Tender Fee - Demand Draft (Rs.1180/-) (incl. GST)	Non-refundable demand draft for Rs 1180/- in case the tender/forms are downloaded from website
2.	EMD	In prescribed stamp paper & format
3.	Power-of-Attorney	In prescribed stamp paper & format
4.	PQR Compliances	Documentary evidence in support of qualifying criteria like: 1. Details of constitution of the company (Proprietary/Limited/etc along with the details), Memorandum of Association of the company 2. Bidders shall submit the certified annual Balance sheets for the last completed three (3) financial years 3. Supportive document on Positive Net worth. Credit rating/solvency certificate from competent authority. 4. Copies of Orders, Execution /Performance Certificate & Other Documents to support qualification Criteria
5.	Signed Tender document	Original Tender documents duly stamped & signed on each page as token of acceptance
6.	Black listing undertaking	Bidder should submit a Self-undertaking signed by its Authorized Signatories that the Bidder or any of their sub-contractor has not been blacklisted/barred by any Govt. Organization or Regulatory Agencies in India or abroad.
7.	Commercial Terms and Conditions	Acceptance on Commercial Terms and Conditions viz Delivery schedule/period, Payment terms, PBG etc.
8.	Acceptance on Reverse Auction	Duly signed Acceptance Form For Participation In Reverse Auction Event as per attached format
9.	Bid Form (Unpriced) Duly Signed	Duly Signed Bid Form as per attached format
10.	Un price Bid Duly Signed	Duly Signed Un price Bid as per attached format



Sr. No	Descriptions	Type of Documents
Technic	al:	
11.	Technical Details/ Filled in GTP/Drawings	Bidder shall submit duly filled GTP with all Technical documents and Drawings.
12.	Type Test Reports	Bidders shall submit the copy of type test reports in their technical bids in support of technical specifications
13.	Testing Facilities	Bidder shall submit the details of testing facilities available at their works/factory.
14.	Organization Chart & Manpower Details.	Bidder shall submit the details of Organization & Manpower with qualification and experience.

PART B : PRICE BID comprising of (01 original only)

 Price strictly in the Format enclosed indicating Break up of basic price, taxes & duties, transportation etc

3.02 TIME SCHEDULE

The bidders should complete the following within the dates specified as under:

S. No.	Events	Due date & Time
1.	Date of sale/ availability of tender documents from BYPL Website	upto 25.09.2023, 15:00 Hrs
2.	Date & Time of Pre-Bid Meeting Pre-Bid Meeting will be done online, Register in advance for this meeting, Zoom Meeting link: https://zoom.us/meeting/register/tJErc upj0sHNOBvAS09OQYPxuZ0w0DHX_9 Meeting ID : 95646686667 Password : 449568 After registering, you will receive a confirmation email	13.09.2023, 11:30 Hrs
	containing information about joining the meeting.	
3.	Last Date of receipt of pre-bid queries, if any (Queries to be submitted via e-mail)	20.09.2023, 17:00 Hrs
4.	Last Date of replies to all the pre-bid queries as received	23.09.2023, 18:00 Hrs
5.	Last date and time of receipt of Complete Bids (Tender Fees, EMD, Part A & Part B)	26.09.2023, 15:00 Hrs
6.	Date & Time of Opening of PART A — EMD and Technical & Commercial Bid	27.09.2023, 15:30 Hrs
7.	Date & Time of opening of Price bid/R-Auction of qualified bids	Will be notified to the qualified bidders through our website / e-mail

Note :- In the event of last date specified for submission of bids and date of opening of bids is declared as a closed holiday for BSES office, the last date of submission of bids and date of opening of bids will be the following working day at appointed times.

This is a two part bid process. Bidders are to submit the bids in Two (02) parts.

Both these parts should be furnished in separate sealed covers super scribing NIT no. DUE DATE OF SUBMISSION, with particulars as **PART-A: TECHNICAL BID & COMMERCIAL WITH TERMS &**



CONDITIONS and **Part-B: PRICE BID** and these sealed envelopes should again be placed in another sealed envelope cover which shall be submitted before the due date & time specified in NIT.

 $\underline{\textbf{Part}} - \underline{\textbf{A}}$: Technical Bid should not contain any cost information whatsoever and shall be submitted within the due date.

PART B:: This envelope will be opened internally after techno-commercial evaluation and only of the qualified bidders.

Bidder has to submit the item wise price bifurcation in bid. Un priced copy must be attached with the Part A (Technical Bid). Reverse Auction will be carried out on individual item wise rates.

REVERSE AUCTION CLAUSE: Purchaser reserves the right to use the online reverse auction through SAP – SRM as an integral part of the entire tendering process. All the bidders who are techno-commercially qualified on the basis of tender requirements shall participate in reverse auction.

Notwithstanding anything stated above, the Purchaser reserves the right to assess bidder's capability to perform the contract, should the circumstances warrant such assessment in the overall interest of the purchaser. In this regard the decision of the purchaser is final.

BIDS RECEIVED AFTER DUE DATE AND TIME MAY BE LIABLE TO REJECTION

4.00 AWARD DECISION

- 4.01 Purchaser intends to award the business on a lowest bid basis, so suppliers are encouraged to submit the bid competitively. The decision to place purchase order/LOI solely depends on purchaser on the cost competitiveness across multiple lots, quality, delivery and bidder's capacity, in addition to other factors that Purchaser may deem relevant.
- 4.02 In the event of your bid being selected by purchaser (and / or its affiliates) and you subsequent DEFAULT on your bid; you will be required to pay purchaser (and / or its affiliates) an amount equal to the difference in your bid and the next lowest bid on the quantity declared in NIT/RFQ.
- 4.03 In case any supplier is found unsatisfactory during the delivery process, the award may be cancelled and BYPL reserves the right to award other suppliers who are found fit.
- 4.05 Rate Contract: The rate contract shall have a validity period of 12 months from the date of LOI/PO issued to the responsive, techno-commercially acceptable and evaluated to be the lowest bidder. Purchase Order (PO) shall be placed as per the requirement of BYPL.
- 4.06 Quantity Variation: The purchaser reserves the rights to vary the quantity by +/- 30% of the tender quantity during the execution of the Contract/Rate contract/PO.
- 4.07 Quantity Splitting: The purchaser reserves the right to distribute the procurable quantity on one or more than one of the eligible tenders. If the quantity is to be split, quantity distribution shall be in the manner detailed below:
 - a) If the quantity is to be split among 2 bidders, it will be done in the ratio of 70:30 on L1 price.
 - b) It the quantity is to be split among 3 bidders, it will be done in the ratio of 50:30:20 on L1 price. Note: In case quantity needs to be distributed and order splitting is required, distribution of quantity shall be maximum among three (3) bidders

5.0 MARKET INTEGRITY



We have a fair and competitive marketplace. The rules for bidders are outlined in the Terms & Conditions. Bidders must agree to these rules prior to participating. In addition to other remedies available, we reserve the right to exclude a bidder from participating in future markets due to the bidder's violation of any of the rules or obligations contained in the Terms & Conditions. Bidders who violate the marketplace rules or engage in behavior that disrupts the fair execution of the marketplace restricts a bidder to length of time, depending upon the seriousness of the violation. Examples of violations include, but are not limited to:

- Failure to honor prices submitted to the marketplace.
- Breach of the terms of the published in Request for Quotation/NIT.

6.0 SUPPLIER CONFIDENTIALITY

All information contained in this RFQ is confidential and shall not be disclosed, published or advertised in any manner without written authorization from BYPL. This includes all bidding information submitted.

All RFQ documents remain the property of BYPL and all suppliers are required to return these documents to BYPL upon request.

Suppliers who do not honor these confidentiality provisions will be excluded from participating in future bidding events.

7.0 CONTACT INFORMATION

Technical clarification, if any, as regards this RFQ shall be sought in writing and sent by e-mail/post/courier to following addresses. The same shall not be communicated through phone.

Address	Name/ Designation	E-mail Address
IT Dept 3 rd Floor, C Block, Shakti Kiran Building,	Ashwani Aggarwal HOD-IT	Ashwani.Aggarwal@relianceada.com
Karkardooma, Delhi-32	Rakesh Nayak GM (IT)	Rakesh.Nayak@relianceada.com
	Commercial	
C&M Dept. 3rd Floor, A-Block,	Robin Sebastian HOD-C&M	Robin.Sebastian@relianceada.com
BSES Yamuna Power Ltd Shaktikiran Building,	Santosh Kumar Singh Head-Procurement	Santosh.kum.Singh@relianceada.com
Karkardooma, Delhi 110032	Sisir Kumar Sahu Buyer	Sisir.Sahu@relianceada.com



SECTION – II INSTRUCTION TO BIDDERS (ITB)

SUPPLY, INSTALLATION AND COMMISSIONING OF WI-FI NETWORK AT CORPORATE OFFICE OF BYPL

NIT No.: CMC/BY/23-24/RS/SkS/SS/29

NIT Dt. - 05.09.2023



A. GENERAL

1.0 BSES YAMUNA POWER LIMITED, hereinafter referred to as the Purchaser "are desirous of implementing the various System Improvement/Repair & Maintenance works at their respective licensed area in Delhi. The Purchaser has now floated this tender for procurement of licenses as notified earlier in this bid document.

2.0 SCOPE OF WORK

The scope shall includes "Supply, Installation and COMMISSIONING of Wi-Fi Network System in BYPL conforming to the Technical Specifications/IS along with Packing, Forwarding, Transportation and Unloading and proper stacking at Purchaser's stores/office.

3.0 DISCLAIMER

- 3.01 This Document includes statements, which reflect various assumptions, which may or may not be correct. Each Bidder/Bidding Consortium should conduct its own estimation and analysis and should check the accuracy, reliability and completeness of the information in this Document and obtain independent advice from appropriate sources in their own interest.
- 3.02 Neither Purchaser nor its employees will have any liability whatsoever to any Bidder or any other person under the law or contract, the principles of restitution or unjust enrichment or otherwise for any loss, expense or damage whatsoever which may arise from or be incurred or suffered in connection with anything contained in this Document, any matter deemed to form part of this Document, provision of Services and any other information supplied by or on behalf of Purchaser or its employees, or otherwise a rising in any way from the selection process for the Supply.
- 3.03 Though adequate care has been taken while issuing the Bid document, the Bidder should satisfy itself that Documents are complete in all respects. Intimation of any discrepancy shall be given to this office immediately.
- 3.04 This Document and the information contained herein are Strictly Confidential and are for the use of only the person(s) to whom it is issued. It may not be copied or distributed by the recipient to third parties (other than in confidence to the recipient's professional advisors).

4.0 **COST OF BIDDING**

The Bidder shall bear all cost associated with the preparation and submission of its Bid and Purchaser will in no case be responsible or liable for those costs.

5.0 **BIDDING DOCUMENTS**

5.01 The Scope of Work, Bidding Procedures and Contract Terms are described in the Bidding Documents. In addition to the covering letter accompanying Bidding Documents, the Bidding Documents include:

Volume -I

•	Request for Quotation (RFQ)	- Section – I
•	Instructions to Bidders (ITB)	- Section – II
•	General conditions of Contract	- Section - III
•	Quantity and delivery requirement	- Section - IV
•	Technical Specifications (TS)	- Section – V
•	Vendor code of Conduct	- Section – VI



Volume - II

• Bid Form - Annexure - I • EMD Format - Annexure - II Price Format - Annexure - III • Commercial Terms & Conditions - Annexure - IV Schedule of Deviations - Annexure - V • Reverse Auction Event - Annexure - VI Manufacture's authorization letter - Annexure - VII Bidder Details form - Annexure - VIII Self Declaration form - Annexure - IX

5.02 The Bidder is expected to examine the Bidding Documents, including all Instructions, Forms, Terms and Specifications. Failure to furnish all information required by the Bidding documents or submission of a Bid not substantially responsive to the Bidding Documents in every respect will may result in the rejection of the Bid.

6.0 **AMENDMENT OF BIDDING DOCUMENTS**

- 6.01 At any time prior to the deadline for submission of Bids, the Purchaser may for any reasons, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bidding Documents by Amendment.
- 6.02 The Amendment shall be part of the Bidding Documents, pursuant to Clause 5.01, and it will be notified in website www.bsesdelhi.com and the same will be binding on them.
- 6.03 In order to afford prospective Bidders reasonable time in which to take the Amendment into account in preparing their Bids, the Purchaser may, at its discretion, extend the deadline for the submission of Bids. The same shall be published as a corrigendum in website **www.bsesdelhi.com**
- 6.04 Purchaser shall reserve the rights to following:
 - a) extend due date of submission,
 - b) modify tender document in part/whole,
 - c) cancel the entire tender
- 6.05 Bidders are requested to visit BYPL website regularly for any modification/clarification/corrigendum/addendum of the bid documents.

C. PREPARATION OF BIDS

7.0 **LANGUAGE OF BID**

The Bid prepared by the Bidder and all correspondence and documents relating to the Bid exchanged by the Bidder and the Purchaser, shall be written in the English Language. Any printed literature furnished by the Bidder may be written in another Language, provided that this literature is accompanied by an English translation, in which case, for purposes of interpretation of the Bid, the English translation shall govern.

8.0 **DOCUMENTS COMPRISING THE BID**

The Bid prepared and submitted by the Bidder shall comprise the following components:

(a) Bid Form, Price & other Schedules (STRICTLY AS PER FORMAT) and Technical Data Sheets completed in accordance with Technical Specification.



- (b) All the Bids must be accompanied with the required EMD as mentioned in the Section-I against each tender.
- (c) Tender documents duly stamped and signed on each page by authorized signatory.

9.0 **BID FORM**

9.01 The Bidder shall submit Bid Form and the appropriate Price Schedules and Technical Data Sheets duly filled in as per attached specification enclosed with the Bidding Documents.

9.02 **EMD**

Pursuant to Clause 8.0 (b) above, the bidder shall furnish, as part of its bid, a EMD amounting to as specified in the Section-I. The EMD is required to protect the Purchaser against the risk of Bidder's conduct which would warrant forfeiture.

The EMD shall be denominated in **any of** the following form:

(a) Bank Guarantee drawn in favour of BSES Yamuna Power Ltd, payable at Delhi.

OR

Online transfer through NEFT/RTGS in favour of BSES Yamuna Power Ltd, Delhi.

(b) EMD shall be valid for One Hundred Twenty (120) days after due date of submission drawn in favour of BSES Yamuna Power Ltd, Delhi

The EMD may be forfeited in case of:

(a) the Bidder withdraws its bid during the period of specified bid validity

or

- (b) the case of a successful Bidder, if the Bidder does not
 - (i) Accept the Purchase Order, or
 - (ii) Furnish the required performance security BG.

10.0 BID PRICES

- 10.01 Bidders shall quote for the entire Scope of Supply with a break-up of prices for individual items. The total Bid Price shall also cover all the Supplier's obligations mentioned in or reasonably to be inferred from the Bidding Documents in respect of Design, Supply, Transportation to site, all in accordance with the requirement of Bidding Documents the Bidder shall complete the appropriate Price Schedules included herein, stating the Unit Price for each item & total Price.
- 10.02 The prices offered shall be inclusive of all costs as well as Duties, Taxes and Levies paid or payable during execution of the supply work, breakup of price constituents, should be there.

Prices quoted by the Bidder shall be "Firm" and not subject to any price adjustment during the performance of the Contract. A Bid submitted with an adjustable price/ Price Variation Clause will be treated as non -responsive and rejected.

11.0 **BID CURRENCIES**



Prices shall be quoted in Indian Rupees Only.

12.0 **PERIOD OF VALIDITY OF BIDS**

- 12.01 Bids shall remain valid for 120 days from the due date of submission of the Bid.
- 12.02 Notwithstanding Clause12.01 above, the Purchaser may solicit the Bidder's consent to an extension of the Period of Bid Validity. The request and the responses thereto shall be made in writing and sent by post/courier

13.0 **ALERNATIVE BIDS**

Bidders shall submit Bids, which comply with the Bidding Documents. Alternative Bids will not be considered. The attention of Bidders is drawn to the provisions regarding the rejection of Bids in the terms and conditions, which are not substantially responsive to the requirements of the Bidding Documents.

14.0 FORMAT AND SIGNING OF BID

- 14.01 The original Bid Form and accompanying documents (as specified in Clause 5.0), clearly marked "Original Bid" plus Duplicate Soft copy in USB flash drive must be received by the Purchaser at the date, time and place specified pursuant to Clauses 15.0 and 16.0. In the event of any discrepancy between the original and the copies, the original shall govern.
- 14.02 The original and copy of the Bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to sign on behalf of the Bidder. Such authorization shall be indicated by written Power-of-Attorney accompanying the Bid. The Bid submitted on behalf of companies registered with the Indian Companies Act, for the time being in force, shall be signed by persons duly authorized to submit the Bid on behalf of the Company and shall be accompanied by certified true copies of the resolutions, extracts of Articles of Association, special or general Power of Attorney etc. to show clearly the title, authority and designation of persons signing the Bid on behalf of the Company. Satisfactory evidence of authority of the person signing on behalf of the Bidder shall be furnished with the bid. A bid by a person who affixes to his signature the word 'President', 'Managing Director', 'Secretary', 'Agent' or other designation without disclosing his principal will be rejected.

The Bidder's name stated on the Proposal shall be the exact legal name of the firm.

14.03 The Bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be initialed by the person or persons signing the Bid.

D. SUBMISSION OF BIDS

15.0 **SEALING AND MARKING OF BIDS**

- 15.01 Bid submission: One original (hard copies) & One Duplicate Soft copy in USB flash drive of all the Bid Documents shall be sealed and submitted to the Purchaser before the closing time for submission of the bid.
- 15.02 The Technical Documents, Commercial and the EMD shall be enclosed in a sealed envelope and the said envelope shall be superscribed with "Techno Commercial Bid & EMD". The price bid shall be inside another sealed envelope with superscribed "Price Bid". Both these envelopes shall be sealed inside another big envelope. All the envelopes should bear the Name and Address of the Bidder and marking for the Original and Copy. The envelopes should be superscribed with "Tender Notice No.



& Due date of opening".

15.03 The Bidder has the option of sending the Bids in person. Bids submitted by Email/Telex/Telegram /Fax will be rejected. No request from any Bidder to the Purchaser to collect the proposals from Courier/Airlines/Cargo Agents etc shall be entertained by the Purchaser.

16.0 **DEADLINE FOR SUBMISSION OF BIDS**

- 16.01 The original Bid, together with the required copies, must be received by the Purchaser at the address on or before the due date & time of submission.
- 16.02 The Purchaser may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding Documents in accordance with Clause 6.0, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

17.0 **ONE BID PER BIDDER**

Each Bidder shall submit only one Bid by itself. No Joint venture is acceptable. A Bidder who submits or participates in more than one Bid will cause all those Bids to be rejected.

18.0 LATE BIDS

Any Bid received by the Purchaser after the deadline for submission of Bids prescribed by the Purchaser, pursuant to Clause 16.0, will be declared "Late" and may be rejected and returned unopened to the Bidder.

19.0 MODIFICATIONS AND WITHDRAWAL OF BIDS

19.01 The Bidder is not allowed to modify or withdraw its Bid after the Bid's submission subject to any corrigendum/addendum/modifications in the tender documents uploaded in website.

E. EVALUATION OF BID

20.0 PROCESS TO BE CONFIDENTIAL

Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process. Any effort by a Bidder to influence the Purchaser's processing of Bids or award decisions may result in the rejection of the Bidder's Bid.

21.0 CLARIFICATION OF BIDS

To assist in the examination, evaluation and comparison of Bids, the Purchaser may, at its discretion, ask the Bidder for a clarification of its Bid. All responses to requests for clarification shall be in writing and no change in the price or substance of the Bid shall be sought, offered or permitted.

22.0 PRELIMINARY EXAMINATION OF BIDS / RESPONSIVENESS

- 22.01 Purchaser will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the Bids are generally in order.
- 22.02 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price per item that is obtained by multiplying the unit price and quantity, the unit



price shall prevail and the total price per item will be corrected. If there is a discrepancy between the Total Amount and the sum of the total price per item, the sum of the total price per item shall prevail and the Total Amount will be corrected.

- 22.03 Prior to the detailed evaluation, Purchaser will determine the substantial responsiveness of each Bid to the Bidding Documents including production capability and acceptable quality of the Goods offered. A substantially responsive Bid is one, which conforms to all the terms and conditions of the Bidding Documents without material deviation.
- 22.04 Bid determined as not substantially responsive will be rejected by the Purchaser and/or the Purchaser and may not subsequently be made responsive by the Bidder by correction of the non -conformity.

23.0 EVALUATION AND COMPARISON OF BIDS

- 23.01 The evaluation of Bids shall be done based on the delivered cost competitiveness basis.
- 23.02 The evaluation of the Bids shall be a stage-wise procedure. The following stages are identified for evaluation purposes: In the first stage, the Bids would be subjected to a responsiveness check. The Technical Proposals and the Conditional ties of the Bidders would be evaluated.
 - Subsequently, the Financial Proposals along with Supplementary Financial Proposals, if any, of Bidders with Techno-commercially Acceptable Bids shall be considered for final evaluation.
- 23.03 The Purchaser's evaluation of a Bid will take into account, in addition to the Bid price, the following factors, in the manner and to the extent indicated in this Clause:
 - a. Delivery Schedule
 - b. Conformance to Qualifying Criteria
 - c. Deviations from Bidding Documents

Bidders shall base their Bid price on the terms and conditions specified in the Bidding Documents.

The cost of all quantifiable deviations and omissions from the specification, terms and conditions specified in Bidding Documents shall be evaluated. **The Purchaser will make its own assessment of the cost of any deviation for the purpose of ensuring fair comparison of Bids.**

23.04 Any adjustments in price, which result from the above procedures, shall be added for the purposes of comparative evaluation only to arrive at an "Evaluated Bid Price". Bid Prices quoted by Bidders shall remain unaltered.

F. AWARD OF CONTRACT

24.0 **CONTACTING THE PURCHASER**

- 24.01 From the time of Bid submission to the time of contract award, if any Bidder wishes to contact the Purchaser on any matter related to the Bid, it should do so in writing.
- 24.02 Any effort by a Bidder to influence the Purchaser and/or in the Purchaser's decisions in respect of Bid evaluation, Bid comparison or Contract Award, will result in the rejection of the Bidder's Bid.

25.0 THE PURCHASER 'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS

Submission of bid shall not automatically construe qualification for evaluation. The Purchaser reserves the right to accept or reject any Bid and to any of the Bidding process and reject all Bids at anytime



prior to award of Contract, without thereby incurring any liability to the affected. Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Purchaser's action.

26.0 AWARD OF CONTRACT

The Purchaser will award the Contract to the successful Bidder whose Bid has been Determined to be the lowest-evaluated responsive Bid, provided further that the Bidder has been determined to be qualified to satisfactorily perform the Contract. Purchaser reserves the right to award order to other bidders in the tender, provided it is required for timely execution& progress of project and provided he agrees to come to the lowest rate. Purchaser reserves the right to distribute the entire tender quantity at its own discretion without citing any reason thereof.

27.0 THE PURCHASER 'S RIGHT TO VARY QUANTITIES

The Purchaser reserves the right to vary the quantity i.e. increase or decrease the numbers/quantities without any change in terms and conditions during the execution of the Order.

28.0 LETTER OF INTENT/ NOTIFICATION OF AWARD

The letter of intent/ Notification of Award shall be issued to the successful Bidder whose bids have been considered responsive, techno-commercially acceptable and evaluated to be the lowest (L1). The successful Bidder shall be required to furnish a letter of acceptance within 7 days of issue of the letter of intent /Notification of Award by Purchaser.

29.0 PERFORMANCE BANK GUARANTEE

The successful Bidder shall furnish the Performance Bank Guarantee within fifteen (15) days, for an amount of 10% (Ten percent) of the Total Contract value. The Performance Bond shall be valid for a period of Sixty months (60) from the date of the commissioning or Sixty six months (66) from the date of receipt of material (last consignment) at site/stores whichever is earlier plus 3 months towards claim period. Upon submission of the performance security, the EMD shall be released.

30.0 CORRUPT OR FRADULENT PRACTICES

- 30.01 The Purchaser requires that the Bidders observe the highest standard of ethics during the procurement and execution of the Project. In pursuance of this policy, the Purchaser:
- (a) Defines, for the purposes of this provision , the terms set forth below as follows:
- (i) "Corrupt practice" means behavior on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves and/or those close to them, or induce others to do so,by misusing the position in which they are placed, and it includes the offering, giving, receiving, or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; and
- (ii) "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Purchaser, and includes collusive practice among Bidders (prior to or after Bid submission) designed to establish Bid prices at artificial non -competitive levels and to deprive the Purchaser of the benefits of free and open competition.
- (b) Will reject a proposal forward if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
- (c) Will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in



competing for, or in executing, a contract.

30.02 Furthermore, Bidders shall be aware of the provision stated in the General Conditions of Contract.





SECTION — III

(GENERAL CONDITION OF CONTRACT)

SUPPLY, INSTALLATION AND COMMISSIONING OF WI-FI NETWORK AT CORPORATE OFFICE OF BYPL

NIT No.: CMC/BY/23-24/RS/SkS/SS/29



GENERAL TERMS AND CONDITIONS

1.0 General Instructions

- **1.01** All the Bids shall be prepared and submitted in accordance with these instructions.
- **1.02** Bidder shall bear all costs associated with the preparation and delivery of its Bid, and the Purchaser will in no case shall be responsible or liable for these costs.
- **1.03** The Bid should be submitted by the Bidder in whose name the bid document has been issued and under no circumstances it shall be transferred/sold to the other party.
- **1.04** The Purchaser reserves the right to request for any additional information and also reserves the right to reject the proposal of any Bidder, if in the opinion of the Purchaser, the data in support of RFQ requirement is incomplete.
- 1.05 The Bidder is expected to examine all instructions, forms, terms & conditions and specifications in the Bid Documents. Failure to furnish all information required in the Bid Documents or submission of a Bid not substantially responsive to the Bid Documents in every respect may result in rejection of the Bid. However, the Purchaser's decision in regard to the responsiveness and rejection of bids shall be final and binding without any obligation, financial or otherwise, on the Purchaser.

2.0 Definition of Terms

- **2.01** "Purchaser" shall mean BSES YAMUNA POWER LIMITED, on whose behalf this bid enquiry is issued by its authorized representative / officers.
- 2.02 "Bidder" shall mean the firm who quotes against this bid enquiry issued by the Purchaser. "Supplier" or "Supplier" shall mean the successful Bidder and/or Bidders whose bid has been accepted by the Purchaser and on whom the "Letter of Acceptance" is placed by the Purchaser and shall include his heirs, legal representatives, successors and permitted assigns wherever the context so admits.
- **2.03** "Supply" and " shall mean the Scope of Contract as described.
- **2.04** "Specification" shall mean collectively all the terms and stipulations contained in those portions of this bid document known as RFQ, Commercial Terms & Condition, Instructions to Bidders, Technical Specifications and the Amendments, Revisions, Deletions or Additions, as may be made by the Purchaser from time to time.
- **2.05** "Letter of Acceptance" shall mean the official notice issued by the Purchaser notifying the Supplier that his proposal has been accepted and it shall include amendments thereto, if any, issued by the Purchaser. The "Letter of Acceptance" issued by the Purchaser shall be binding on the "Supplier" The date of Letter of Acceptance shall be taken as the effective date of the commencement of contract.
- **2.06** "Month" shall mean the calendar month and "Day" shall mean the calendar day.
- **2.07** "Codes and Standards" shall mean all the applicable codes and standards as indicated in the Specification.
- **2.08** "Offer Sheet" shall mean Bidder's firm offer submitted to BYPL in accordance with the specification.
- **2.09** "Contract" shall mean the "Letter of Acceptance" issued by the Purchaser.



- **2.10** "Contract Price" shall mean the price referred to in the "Letter of Acceptance".
- **2.11** "Contract Period" shall mean the period during which the "Contract" shall be executed as agreed between the Supplier and the Purchaser in the Contract inclusive of extended contract period for reason beyond the control of the Supplier and/or Purchaser due to force majeure.
- **2.12** "Acceptance" shall mean and deemed to include one or more of the following as will be stipulated in the specification:
 - a) The written acceptance of material by the inspector at suppliers works to ship the materials.
 - b) Acceptance of material at Purchaser site stores after its receipt and due inspection/ testing and release of material acceptance voucher.
 - c) Where the scope of the contract includes supplying, acceptance shall mean issue of necessary equipment / material takeover receipt after installation & commissioning and final acceptance.

3.0 Contract Documents & Priority

- **3.01** Contract Documents: The terms and conditions of the contract shall consist solely of these RFQ conditions and the offer sheet.
- **3.02** Priority: Should there be any discrepancy between any term hereof and any term of the Offer Sheet, the terms of these RFQ shall prevail.

4.0 Scope of Supply -General

- **4.01** The "Scope of Supply" shall be on the basis of Bidder's responsibility, completely covering the obligations, responsibility and supplies provided in this Bid enquiry whether implicit or explicit.
- **4.02** Bidder shall have to quote for the Bill of quantities as listed in Section IV of this NIT/RFQ.
- **4.03** Quantity variation and additional requirement if any shall be communicated to successful bidder during project execution.
- **4.04** All relevant drawings, data and instruction manuals.

5.0 Quality Assurance and Inspection

- **5.01** Immediately on award of contract, the bidder shall prepare detailed quality assurance plan / test procedure identifying the various stages of manufacture, quality checks performed at each stage, raw material inspection and the Customer hold points. The document shall also furnish details of method of checking, inspection and acceptance standards / values and get the approval of Purchaser before proceeding with manufacturing. However, Purchaser shall have right to review the inspection reports, quality checks and results of suppliers in house inspection department which are not Customer hold points and the supplier shall comply with the remarks made by purchaser or his representative on such reviews with regards to further testing, rectification or rejection, etc.
- **5.02** Witness and Hold points are critical steps in manufacturing, inspection and testing where the supplier is obliged to notify the Purchaser in advance so that it may be witnessed by the Purchaser. Final inspection is a mandatory hold point. The supplier to proceed with the work past a hold point only after clearance by purchaser or a witness waiver letter from BYPL.
- **5.03** The performance of waiver of QA activity by Purchaser at any stage of manufacturing does not relieve the supplier of any obligation to perform in accordance with and meet all the requirements of the procurement documents and also all the codes & reference documents mentioned in the procurement document nor shall it preclude subsequent rejection by the purchaser.



- **5.04** On completion of manufacturing the items can be dispatched only after getting the clearance from IT department.
- **5.05** All testing and inspection shall be done without any extra cost.
- 5.06 Purchaser reserve the right to send any material out of the supply to any recognized laboratory for testing and the cost of testing shall be borne by the Purchaser. In case the material is found not in order with the technical requirement / specification, the charges along with any other penalty which may be levied is to be borne by the bidder. To avoid any complaint the supplier is advised to send his representative to the stores to see that the material sent for testing is being sealed in the presence of bidders representative.

6.0 Inspection & Test Charges

- 6.01 GOODS shall be inspected by BUYER and/or third party inspection agency nominated by BUYER. Inspection shall carry out stage wise/final inspection as per agreed QA /QC procedure. In addition, inspection of GOODS shall be carried out at our Site/stores. SELLER shall, however, repair/replace the damaged/rejected GOODS to the satisfaction of BUYER at no extra cost.
- 6.02 Inspection charges are included in total order value, however BUYER will bear third party inspection charges. In case of futile/abortive visit of BUYER's inspector at SELLER'S works, the cost towards the same shall be debited from the SELLER's invoices.
- 6.03 GOODS covered by this PURCHASE ORDER shall not be dispatched in whole or in part until SELLER has received a written Release for Shipment Notice from BUYER or their designated representative.
- 6.04 Inspection call shall be raised minimum 15(fifteen) days in advance from delivery schedule mentioned in PO and duly filled Format issued by BYPL

7.0 Handling and Storage

7.01 Material Safety Data Sheet (MSDS), detail handling & storage instruction sheet/manual, wherever applicable, to be furnished before commencement of supply and one copy is to be submitted in store/site with First Lot.

8.0 Packing, Packing List & Marking

- 8.01 **Packing:** Supplier shall pack or shall cause to be packed all Commodities in crates/boxes/drums/containers/cartons and otherwise in such a manner as shall be reasonably suitable for shipment by road or rail to BYPL, Delhi/New Delhi stores/site without undue risk of damage in transit.
- **8.02** Packing List: The contents of each package shall be itemized on a detailed list showing the exact weight, extreme outside dimensions (length, width & weight) of each container/box/drum/carton, Item SAP Code, PO No & date. One copy of the packing list shall be enclosed in each package delivered.

9.0 Prices/Rates/Taxes

9.01 Price basis for supply of materials

a) Bidder to quote their prices on Landed Cost Basis and separate price for each item for supply to BYPL Delhi/New Delhi stores/site/office inclusive of packing, forwarding, loading at manufacturer's



- premises, payment of GST, Freight, any other local charges. **Octroi is presently not applicable in Delhi and however if applicable shall be reimbursed at actuals.**
- b) The above supply prices shall also include unloading at BYPL Delhi/New Delhi stores/site.
- c) Transit and storage insurance will be arranged by BYPL, however bidder to furnish required details in advance for arranging the same by BYPL

10.0 Taxes & Duties

- 10.01 Prices for Goods are on Ex- Works basis. For the Goods covered under the GST laws, all taxes that are applicable under CGST, SGST, UGST, IGST and GST Compensation Cess shall be payable extra.
- 10.02 For the Goods not covered in the GST laws, the applicable ED, VAT / CST shall be payable extra at applicable rates.
- 10.03 GSTIN of BSES YAMUNA POWER LTD 07AABCC8569N1Z0 CST No of BSES YAMUNA POWER LTD -07740254593 TIN NO of BSES YAMUNA POWER LTD 07740254593 PAN NO of BSES YAMUNA POWER LTD AABCC8569N
- 10.04 At the end of each month, the SELLER must submit their detail of invoices and amount thereof to the concerned officer in charge, within 07 days after the close of the respective month of which supply relates. Non submission of the said request would be treated as good as that the SELLER has no requirement of reconciliation.

11.0 Invoicing Instructions

- 11.01 Invoices in triplicate [1) Original for recipient, 2) Duplicate for Transporter, 3) Triplicate for supplier] shall be made out and delivered to the following address: BSES YAMUNA POWER LIMITED, SHAKTI KIRAN BUILDING, KARKARDOOMA, DELHI-110032. MDCC will be released separately for Capex & Opex. Invoice will be submitted by supplier as per the MDCC.
- 11.02 Vendor shall obtain GST registration in the State from where the supply will be carried out. Vendors supplying Goods to the Purchaser shall have a valid GST registration number and shall submit GST Tax Invoice and other documents as per SGST Act, CGST Act, IGST Act, UTGST Act, GST Compensation Cess Act and Rules made there under. Failure to submit GST Tax Invoice shall be liable for withholding SGST, CGST, IGST, UTGST, GST Compensation Cess amount charged by the vendor while releasing the payment.
- 11.03 Invoice will be in the name of BSES YAMUNA POWER LIMITED & address of the store/site mentioned in the MDCC. Invoice should contain all information as required under GST Invoice, Debit Note and Credit Rules. The government has notified rules of invoicing under GST along with a template of invoice(GST INV-01) covering the elements such as supplier's details, GSTIN No, HSN Codes, item details, GST tax rates, etc that need to be presented by the supplier.
- 11.04 Vendor to carefully examine and charge relevant CGST / SGST, UGST, IGST and GST compensation cess as applicable to the transactions.
- 11.05 Timely provision of invoices / Debit Notes / Credit Notes:
- 11.05.1 Vendor to timely provide invoice / Debit note / Credit note to enable Purchaser to claim tax benefit on or before stipulated time period. All necessary adjustment entries (Credit Note, Purchase Returns, Debit Notes) shall be made within the time lines prescribed under the GST Laws.



- 11.05.2 In case of receipt of advance, the Vendor undertakes to raise the tax invoice. Purchaser, upon payment of advance, shall issue payment voucher as per applicable GST laws and rules. Four copies of the invoices need to be provided by suppliers and wherever the law requires, an Electronic Reference Number for each invoice. Documents and devices to be carried by a person-in-charge of a conveyance under.
- 11.06 E Way Bills / transit documents for movement of Goods:

Wherever applicable, the Vendor shall be responsible to issue required transit documents / E Way Bills for movement of Goods and the logistic partner / transporter shall not be liable for any loss arising due to confiscation of goods by government agencies on account of lack of proper documents or any mis-declaration. The Supplier is responsible to comply with rules applicable for E-way bill. Any violation in provision of E-way Bill will attract penalty and seizure of Transit Material. Any Penalty and Pre-Deposit due to violation of rules/provision shall be paid and borne by Supplier. Also, Supplier is responsible for releasing of goods from Authority whether CGST/SGST. Delay in supply from the contractual date due to seizure of goods shall also attract liquidated damages.

12.0 Terms of payment & Milestone:

12.01 Milestone:

Milestone Number	Milestone Description	
Part-A	For Supply of Equipment's:	
MS-1	 80% Payment within 30 days of successful supply of required Wi-Fi Network system and accessories as per B.O.M subject to fulfillment of following pre-requisites: Submission of Supply schedule. (submission and approval of material delivery, Documents of Hardware & Software System, List of Deliverables. Supply of complete hardware and software required for Wi-Fi Network system and its acceptance. High level and low level design document submission and its approval. 	
MS-2	20% of contract value for part A of Price schedule shall be released after 3 months of UAT bug free successful operations system run from completion of supply of all items i.e. 1. Successful operation of Wi-Fi Network system 2. Approval of Administration & Operator's User's Manual, 3. Documentation & training as per tender scope of supply.	
Part-B	For Services of Equipment:	
MS-1	80% of contract value for part B shall be released subject to fulfillment of following pre- requisites: (i). Baseline system and application software for installation, testing and Commissioning of Wi-Fi Network System.	
	(ii) After UAT, Wi-Fi system should run bug free for 3 months.	
MS-2	,	
MS-2 MS-3	 (ii) After UAT, Wi-Fi system should run bug free for 3 months. 10% of contract value for part B shall be released on completion, i.e. i. Closure of all exceptions including availability of application. ii. Approval of Administration & Operator's User's Manual, 	



Note: Milestone payments shall be made in full upon the successful completion of the milestone. In the event that only a minor portion of a milestone is not fully completed, invoicing for partial payment of the milestone will be entirely at BYPL discretion. Payment terms shall be within 30 days from receipt of invoice supported by BYPL certification of completion of milestone as per table 12.01 above.

- **12.02** Bidder to submit the following documents against dispatch of each consignment at our Vendor Support Cell (VSC):
- a) Signed copy of accepted Rate Contract / Purchase Order (for first payment)
- b) LR / RR / BL as applicable
- c) Challan as applicable
- d) Two (02) copies of Supplier's detailed Recipient Invoice showing Commodity description, quantity, unit price, total price and basis of delivery, and being 100% of the value of the consignment claimed.
- e) Two (02) copies of Supplier's transporter invoice duly receipted by BYPL Stores & Original certificate issued by BYPL confirming receipt of the subject material at Stores/Site and acceptance of the same as per the provisions of the contract.
- f) Two (02) copies Packing List / Detailed Packing List
- g) Approved Test certificates / Quality certificates, if applicable
- h) Certificate of Origin, if applicable
- i) Material Dispatch Clearance Certificate (MDCC)
- j) Insurance Policy / Certificate, if applicable
- k) Warranty / Guarantee Certificate, if applicable
- Check list for bill submission.
- 12.02 Purchaser has the right to recover tax loss, interest and penalty suffered due to any non-compliance of tax laws by the Vendor. In the event, Purchaser is not able to avail any tax credit due to any short coming on the part of the Vendor (which otherwise should have been available to Purchaser in the normal course), then the Vendor at his own cost and effort will get the short coming rectified. If for any reason the same is not possible, then the Vendor will make 'good' the loss suffered by Purchaser due to the tax credit it lost. In such event, any amount paid to the Vendors shall be first attributable to the tax (GST) charged in the invoice and the balance shall be considered towards the 'value' of supply of goods/ services.
- 12.03 Purchaser shall deduct "Tax Deducted at Source" wherever applicable and at the rate prescribed under the GST Laws or any other Indian law and remit the same to the Government. Necessary TDS certificates as per law shall be issued by the purchase to the vendor.
- 12.04 Any liability arising out of dispute on the tax rate, classification under HSN, calculation and payment of tax to the Government will be to the Vendor's account.
- 12.05 Where the supply of Goods are liable to GST under reverse charge mechanism, then the supplier should clearly mention the category under which it has been registered and also that "the liability of payment of GST is on the Recipient of Supply".

13.0 Tax Indemnity Clause

13.01 Vendor (along with its affiliates in India or overseas including any agent/ third party contractor or any other person appointed by such affiliates for the purpose of this agreement) agrees that it will be solely responsible for performing all compliances and making payments of all taxes (direct tax or indirect tax including but not limited to income-tax, transfer pricing, value added tax, SGST, CGST, IGST, UTGST, GST Compensation Cess custom duty, excise duty, Research and Development Cess, etc.), cesses, interest, penalties or any other tax/ duty/ amount/ charge/ liability arising either out of laws/ regulations applicable in India and overseas or because of a demand/ recovery initiated by any revenue authority under laws/ regulations applicable in India or overseas.



- 13.02 In case any tax liability (including but not limited to income-tax, transfer pricing, value added tax, SGST, CGST, IGST, UTGST, GST Compensation Cess custom duty, excise duty, Research and Development Cess, etc.), cesses, interest, penalties or any other tax/ duty/ amount/ charge/ liability becomes payable by Purchaser due to failure of the Vendor, or any of its affiliates in India or overseas including any agent/ third party contractor or any other person appointed by such affiliates for the purpose of this agreement, to comply with the relevant laws/ regulations applicable in India or overseas, Vendor undertakes to indemnify Purchaser for an amount equal to amount payable by Purchaser.
- 13.03 Further, Vendor undertakes to keep Purchaser indemnified at all times against and from all other actions, proceedings, claims, loss, damage, costs and expenses which may be brought against Purchaser or suffered or incurred by Purchaser and which shall have arisen either directly or indirectly out of or in connection with failure of The Vendor, or any of its affiliates in India or overseas including any agent/ third party contractor or any other person appointed by such affiliates for the purpose of this agreement, to comply with relevant obligations/ compliance under any law/ regulations applicable in India and overseas.
- 13.04 The parties agree to follow the following process in case any communication of demand, arising out non-compliance by Vendor (along with its affiliates in India or overseas including any agent/ third party contractor or any other person appointed by such affiliates for the purpose of this agreement), is received by Purchaser:
- 13.04.1 On Purchaser receiving any communication from a competent authority demanding tax liability (including but not limited to income-tax, transfer pricing, value added tax, SGST, CGST, IGST, UTGST, GST Compensation Cess custom duty, excise duty, Research and Development Cess, etc.), cesses, interest, penalties or any other tax/ duty/ amount/ charge/ liability, Purchaser shall, within 5 common working days from the date of receipt of such communication (save where the period to respond to the relevant authority is less than five days, in which case, as soon as reasonably possible) inform Vendor in writing of such communication.
- 13.04.2 Pursuant to receiving communication from Purchaser, Vendor shall suggest to accept the communication and pay the demand amount to the competent authority. In such an event, Vendor shall reimburse such amount paid to Purchaser within 5 working days from the date of payment by Purchaser to the competent authority.
- 13.04.3 If Vendor advises in writing and Purchaser agrees to dispute the demand, then Purchaser shall dispute the matter with competent authority as per due process prescribed under the regulations and Purchaser shall not pay the Tax Demand. In such scenario, cost of litigation including but not limited to Counsel cost, filing fees, other related charges, should be reimbursed by Vendor to Purchaser. Additionally, If any coercive steps of recovery are initiated by the department, then Purchaser would pay such amount (including by way of adjustment of refunds due to it) and the same would be reimbursed by Vendor within 5 working days from date of such recovery from Purchaser. Purchaser will take all necessary steps to avoid such recovery measures.
- 13.04.4 On determination of the demand through an Order issued by a Tribunal or any other similar Authority, by whatever name called, under any law applicable in India or overseas, if the demand or any part thereof becomes payable and is paid by Purchaser, then Vendor undertakes to reimburse such amount to Purchaser within 10 days from the date of payment. Alternatively, if on determination of the demand through an Order, no amount is payable by Purchaser then any refund arising to Purchaser due to such an Order shall be passed on to Vendor within 10 days from the date of receipt of refund.

14.0 The Micro, Small and Medium Enterprises (MSME)



14.01 If the SELLERS establishment is covered under the purview of The Micro, Small and Medium Enterprises Development Act, 2006 and its amendments, he shall declare so within the bid of its status failing which it will be presumed that it is a non-MSME unit. Also submit a copy of Udyog Aadhaar (UA) & Udyam Registration Number.

15.0 Price Validity

15.01 All bids submitted shall remain valid, firm and subject to unconditional acceptance by BYPL Delhi for 120 days from the due date of submission. For awarded suppliers, the prices shall remain valid and firm till contract completion.

16.0 Performance Guarantee

- **16.01** The successful Bidder shall furnish the Performance Bank Guarantee within fifteen (15) days, for an amount of 10% (Ten percent) of the Total Contract value (both for Supply and Service). The Performance Bond shall be valid for a period of Sixty months (60) from the date of the commissioning or Sixty Six months (66) from the date of receipt of material (last consignment) at site/stores/office whichever is earlier plus 3 months towards claim period. Upon submission of the performance security, the EMD shall be released.
- 16.02 Bank guarantee shall be drawn in favour of BSES Yamuna Power Ltd as applicable. The performance Bank guarantee shall be in the format as specified by BYPL.

17.0 Forfeiture

- **17.01** Each Performance Bond established under Clause 10.0 shall contain a statement that it shall be automatically and unconditionally forfeited without recourse and payable against the presentation by BYPL of this Performance Bond to the ICICI Bank at Mumbai, or to the relevant company/ correspondent bank referred to above, as the case may be, together with a simple statement that supplier has failed to comply with any term or condition set forth in the Contract.
- **17.02** Each Performance Bond established under will be automatically and unconditionally forfeited without recourse if BYPL in its sole discretion determines that supplier has failed to comply with any term or condition set forth in the contract.

18.0 Release

All Performance Bonds will be released without interest within seven (7) days from the last date up to which the Performance Bond has to be kept valid (as defined in Clause 16.0) except for the case set forth in Clause 22.0.

19.0 Warranty & Support

- **19.1** The Wireless Access Point shall be offered with minimum five years hardware warranty with 24x7 Technical support from OEM directly.
- **19.2** The switch shall be offered with minimum five years hardware warranty with NBD Shipment and software updates/upgrades from OEM directly.
- **19.3** Software upgrades/updates shall be included as part of the warranty.
- **19.4** The switch shall EAL2/NDPP common criteria certified
- **19.5** All Switches, Transceivers, Wireless APs shall be from the same OEM. The OEM shall be present in Leaders quadrant in Gartner's Magic Quadrant for Wirel and Wireless LAN Access Infrastructure for



last 3 years

19.6 The software shall be offered with minimum five years Software/hardware warranty with NBD Shipment and software updates/upgrades from OEM directly

20.0 Return, Replacement or Substitution.

BYPL shall give Supplier notice of any defective product promptly after becoming aware thereof. BYPL may in its discretion elect to return defective Commodities to Supplier for replacement, free of charge to BYPL, or may reject such Commodities and purchase the same or similar Commodities from any third party. In the latter case BYPL shall furnish proof to Supplier of the cost of such substitute purchase. In either case, all costs of any replacement, substitution, shipping, labour and other related expenses incurred in connection with the return and replacement or for the substitute purchase of a Commodity hereunder should be for the account of Supplier. BYPL may set off such costs against any amounts payable by BYPL to Supplier. Supplier shall reimburse BYPL for the amount, if any, by which the price of a substitute Commodity exceeds the price for such Commodity as quoted in the Bid. BUYER at its sole discretion shall have the opinion to dispose the material or GOODS so rejected and not taken back within forty-five days from the date of intimation of rejection.

21.0 Effective Date of Commencement of Contract:

21.01 The date of the issue of the Letter of Acceptance shall be treated as the effective date of the commencement of Contract.

22.0 Time – The Essence of Contract

22.01 The time and the date of completion of the "Supply"" as stipulated in the Letter Of Acceptance / Purchase order issued to the Supplier shall be deemed to be the essence of the "Contract". The Supply has to be completed not later than the aforesaid Schedule and date of completion of supply .

23.0 The Laws and Jurisdiction of Contract:

- **23.01** The laws applicable to this Contract shall be the Laws in force in India.
- **23.02** All disputes arising in connection with the present Contract shall be settled amicably by mutual consultation failing which shall be finally settled as per the rules of Arbitration and Conciliation Act, 1996 at the discretion of Purchaser. The venue of arbitration shall be at Mumbai in India

24.0 Events of Default

- **24.01** Events of Default. Each of the following events or occurrences shall constitute an event of default ("Event of Default") under the Contract:
 - (a) Supplier fails or refuses to pay any amounts due under the Contract;
 - (b) Supplier fails or refuses to deliver Commodities conforming to this RFQ/specifications, or fails to deliver Commodities within the period specified in P.O. or any extension thereof
 - (c) Supplier becomes insolvent or unable to pay its debts when due, or commits any act of bankruptcy, such as filing any petition in any bankruptcy, winding-up or reorganization proceeding, or acknowledges in writing its insolvency or inability to pay its debts; or the Supplier's creditors file any petition relating to bankruptcy of Supplier;



(d) Supplier otherwise fails or refuses to perform or observe any term or condition of the Contract and such failure is not remediable or, if remediable, continues for a period of 30 days after receipt by the Supplier of notice of such failure from BYPL.

25.0 Consequences of Default.

- (a) If an Event of Default shall occur and be continuing, BYPL may forthwith terminate the Contract by written notice.
- (b) In the event of an Event of Default, BYPL may, without prejudice to any other right granted to it by law, or the Contract, take any or all of the following actions;
 - (i) present for payment to the relevant bank the Performance Bond;
 - (ii) purchase the same or similar Commodities from any third party; and/or
 - (iii) recover any losses and/or additional expenses BYPL may incur as a result of Supplier's default.

26.0 Penalty for Delay

- 26.01 If supply of items / equipments is delayed beyond the supply schedule as stipulated in purchase order then the Supplier shall be liable to pay to the Purchaser as penalty for delay, a sum of 1% (one percent) of the basic (ex-works) price for every week delay of undelivered units or part thereof for individual mile stone deliveries.
- 26.02 The total amount of penalty for delay under the contract will be subject to a maximum of ten percent (10%) of the basic (ex-works) price for both **supply** of total undelivered units and **service** for balance uninstalled units.
- 26.03 The Purchaser may, without prejudice to any method of recovery, deduct the amount for such damages from any amount due or which may become due to the Supplier or from the Performance Bond or file a claim against the supplier.
- 26.4 If Penalty is levied as per the Order terms & conditions; BYPL will raise Invoice of the penalty amount along with applicable GST rates. Accordingly, after set off of the penalty Invoice amount, net payment shall be made.

27.0 Variation in Taxes, Duties & Levies

- 27.1 The total order value shall be adjusted on account of any variations in Statutory Levies imposed by Competent Authorities by way of fresh notification(s) within the stipulated delivery period only. In case of reduction in taxes, duties and levies, the benefits of the same shall be passed on to BUYER.
- 27.2 No other Taxes, Duties & Levies other than those specified above will be payable by BUYER except in case of new Levies, Taxes & Duties imposed by the Competent Authorities by way of fresh notification(s) subsequent to the issue of PURCHASE ORDER but within the stipulated delivery period.
- 27.3 Notwithstanding what is stated above, changes in Taxes, Duties & Levies shall applied only to that portion of PURCHASE ORDER not executed on the date of notification by Competent Authority. Further, changes in Taxes, Duties & Levies after due date of Delivery shall not affect PURCHASE ORDER Terms and Value.



27.4 PURCHASE ORDER value shall not be subject to any variation on account of variation in Exchange rate(s).

28.0 Taxes & Duties on raw materials & bought out components

- 28.01 Taxes & Duties on raw materials & bought out components are included in Order Value and are not subject to any escalation or variation for any reason whatsoever.
- 28.02 Taxes & Duties on raw materials & bought out components procured indigenously are included in Order Value and are not subject to any escalation or variation for any reason whatsoever.

29.0 Force Majeure

29.01 General

An "Event of Force Majeure" shall mean any event or circumstance not within the reasonable control directly or indirectly, of the Party affected, but only if and to the extent that:

- (i) Such event or circumstance materially and adversely affects the ability of the affected Party to perform its obligations under this Contract, and the affected Party has taken all reasonable precautions, due care and reasonable alternative measures in order to prevent or avoid the effect of such event on the affected party's ability to perform its obligations under this Contract and to mitigate the consequences thereof.
- (ii) For the avoidance of doubt, if such event or circumstance would not have materially and adversely affected the performance of the affected party had such affected party followed good industry practice, such event or circumstance shall not constitute force majeure.
- (iii) Such event is not the direct or indirect result of the failure of such Party to perform any of its obligations under this Contract.
- (iv) Such Party has given the other Party prompt notice describing such events, the effect thereof and the actions being taken in order to comply with above clause.
- 29.02 Specific Events of Force Majeure subject to the provisions of above clause, Events of Force Majeure shall include only the following to the extent that they or their consequences satisfy the above requirements:
 - (i) The following events and circumstances:
 - a) Effect of any natural element or other acts of God, including but not limited to storm, flood, earthquake, lightning, cyclone, landslides or other natural disasters.
 - b) Explosions or fires
 - (ii) War declared by the Government of India.
 - (iii) Dangers of navigation, perils of the sea.
- 29.03 Notice of Events of Force Majeure If a force majeure event prevents a party from performing any obligations under the Contract in part or in full, that party shall:
 - i) Immediately notify the other party in writing of the force majeure events within 7(seven) working days of the occurrence of the force majeure event
 - ii) Be entitled to suspend performance of the obligation under the Contract which is affected by force majeure event for the duration of the force majeure event.
 - iii) Use all reasonable efforts to resume full performance of the obligation as soon as practicable
 - iv) Keep the other party informed of all such efforts to resume full performance of the obligation on a regular basis.
 - v) Provide prompt notice of the resumption of full performance or obligation to the other party.
- 29.04 Mitigation of Events of Force Majeure Each Party shall:



- Make all reasonable efforts to prevent and reduce to a minimum and mitigate the effect of any delay occasioned by an Event of Force Majeure including recourse to alternate methods of satisfying its obligations under the Contract;
- (ii) Use its best efforts to ensure resumption of normal performance after the termination of any Event of Force Majeure and shall perform its obligations to the maximum extent practicable as agreed between the Parties; and
- (iii) Keep the other Party informed at regular intervals of the circumstances concerning the event of Force Majeure, with best estimates as to its likely continuation and what measures or contingency planning it is taking to mitigate and or terminate the Event of Force Majeure.
- 29.05 Burden of Proof in the event that the Parties are unable in good faith to agree that a Force Majeure event has occurred to an affected party, the parties shall resolve their dispute in accordance with the provisions of this Agreement. The burden of proof as to whether or not a force majeure event has occurred shall be upon the party claiming that the force majeure event has occurred and that it is the affected party.
- 29.06 Termination for Certain Events of Force Majeure. If any obligation of any Party under the Contract is or is reasonably expected to be delayed or prevented by a Force Majeure event for a more continuous period of than months, 3 Parties shall promptly the discuss in good faith how to proceed with a view to reaching a solution on mutually agreed basis. If a solution on mutually agreed basis cannot be arrived at within a period of 30 days after the expiry of the period of three months, the Contract shall be terminated after the said period of 30 days and neither Party shall be liable to the other for any consequences arising on account of such termination.
 - The Purchaser may terminate the contract after giving 7 (seven) days' notice if any of following occurs:
 - Bidder fails to complete execution of works within the approved schedule of works, terms and conditions.
 - ii. In case the Bidder commits any Act of Insolvency, or adjudged insolvent
 - iii. Has abandoned the contract
 - iv. Has failed to commence work or has suspended the progress of works
 - v. Has failed to proceed the works with due diligence and failed to make such due progress
- 29.07 Limitation of Force Majeure event. The Supplier shall not be relieved of any obligation under the Contract solely because cost of performance is increased, whether as a consequence of adverse economic consequences or otherwise.
- 29.08 Extension of Contract Period due to Force Majeure event The Contract period may be extended by mutual agreement of Parties by way of an adjustment on account of any period during which an obligation of either Party is suspended due to a Force Majeure event.
- 29.09 Effect of Events of Force Majeure. Except as otherwise provided herein or may further be agreed between the Parties, either Party shall be excused from performance and neither Party shall be construed to be in default in respect of any obligations hereunder, for so long as failure to perform such obligations shall be due to and event of Force Majeure."
- 29.10 Severability
 - If any provision of this Agreement is or becomes invalid or unenforceable by the courts of any jurisdiction to which it is subject, such invalidity or unenforceability shall not prejudice the remaining provisions of this Agreement, which shall continue in full force and effect.

30.0 Termination for Purchaser Convenience

30.01 The Purchaser may terminate this contract for its convenience at any time upon providing five (5) days written notice to the supplier. In such case, the supplier shall be entitled to receive as full



- compensation for all obligation performed under the Contract prior to the date of termination, together with all retain age withheld in accordance with this Contract.
- 30.02 Payment of such compensation is the sole and exclusive remedy of the supplier for termination of this Agreement by Purchaser hereunder and the supplier shall not be entitled to, and hereby waives, claims for lost profits and all other damages and expenses.
- 30.03 Supplier hereby agrees that substantiation for settlement of any claims submitted by supplier shall be complete and in sufficient detail to allow Purchaser's evaluation. Terminate all sub contracts except those have been/ to be assigned to the Purchaser all rights, title and benefits of the Suppliers/Vendor as the case may be".

31.0 Transfer and Sub-Letting

31.01 The Supplier shall not sublet, transfer, assign or otherwise part with the Contract or any part thereof, either directly or indirectly, without prior written permission of the Purchaser.

32.0 Recoveries

32.01 Whenever under this contract any money is recoverable from and payable by the bidder, the purchaser shall be entitled to recover such sum by appropriating in part or in whole by detecting any sum due to which any time thereafter may become due from the supplier in this or any other contract. Should the sum be not sufficient to cover the full amount recoverable the bidder shall pay to the purchaser on demand the remaining balance.

33.0 Waiver

33.01 Failure to enforce any condition herein contained shall not operate as a waiver of the condition itself or any subsequent breach thereof.

34.0 Indemnification

34.01 Notwithstanding contrary to anything contained in this RFQ, Supplier shall at his costs and risks make good any loss or damage to the property of the Purchaser and/or the other Supplier engaged by the Purchaser and/or the employees of the Purchaser and/or employees of the other Supplier engaged by the Purchaser whatsoever arising out of the negligence of the Supplier while performing the obligations under this contract.

35.00 Documentation

35.01 The Bidder shall procure all equipment from BYPL approved sources as per attached specifications. The Bidder's shall submit 5 copies of Material/Type Test Certificates, O&M Manuals, and Approved & As-built drawings, related to various equipment. The Bidder's shall ensure for the strict compliance to the specifications and Field Quality Procedures issued by BYPL Engineer in-charge.

36.0 Transit Insurance

- 36.01 Transit Insurance shall be arranged by the Bidder.
- 36.02 DAMAGE / LOSS OF CARGO IN TRANSIT: Vendor shall be solely responsible for coordinating with the concerned insurance company for procuring insurance for material and/or Goods, processing claim lodgment and settlement. Notwithstanding the insurance cover, in case of loss / damage to material and/or Goods, in any manner and for any cause whatsoever, Vendor shall cause the damaged cargo to be replaced and delivered to the Purchaser with new material and/or Goods within 30 days of such loss / damage. The Vendor shall be solely responsible for all expenses in relation to the replacement and delivery in such circumstances.



37.0 Limitation of Liability

- **37.01** Except as provided otherwise in the Contract and except for willful misconduct or gross negligence, neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or any other indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract. The total liability of the Supplier to the Purchaser under the Contract shall not exceed the Contract Value. Except that this Clause shall not limit the liability of the Supplier:
 - (a) Under any other provisions of the Contract which expressly impose a greater liability,
 - (b) In cases of fraud, willful misconduct or illegal or unlawful acts, or
 - (c) In cases of acts or omissions of the Supplier which are contrary to the most elementary rules of diligence which a conscientious Supplier would have followed in similar circumstances.

38.0 Liability of Suppliers

- 38.1 Subject to the due discharge of its obligations under the Contract and except in case of gross negligence or willful misconduct on the part of the Supplier or on the part of any person acting on behalf of the Supplier, with respect to any loss or damage caused by the Supplier to the Purchaser's property or the Site, the Supplier shall not be liable to the Purchaser for the following:
 - (a) For any indirect or consequential loss or damage; and
 - (b) For any direct loss or damage that exceeds:
 - (c) The total payments made and expected to be made to the Supplier under the Contract including reimbursements, if any; or
 - (d) The insurance claim proceeds which the Supplier may be entitled to receive from any insurance purchased by the Supplier to cover such a liability, whichever is higher.
- This limitation of liability shall not affect the Supplier's liability, if any, for damage to any third party, caused by the Supplier or any Person or firm acting on behalf of the Supplier in executing the Works.
- 38.3 Notwithstanding anything contained in the Contract, the Supplier shall not be liable for any gross negligence or willful misconduct on the part of the Purchaser or any of its affiliates, any vendor, or any party, other than Supplier and/or, its directors, officers, agents or representatives or its affiliates, or Sub Supplier, or the vendor or any third party engaged by it.
- 38.4 Notwithstanding anything contained in the Contract, including but not limited to approval by the Purchaser of any drawings, documents, vendor list, supply of information or data or the participation of the Purchaser in any meeting and/or discussion or otherwise, shall not absolve the Supplier from any of its liabilities or responsibilities arising in relation to or under the Contract.

39.0 Intellectual Property Rights and Royalties

39.1 The Supplier shall indemnify the Purchaser and the Purchaser's Representative from and against all claims and proceedings on account of infringement (or alleged infringement) of any patent rights, registered designs, copyright, design, trademark, trade name, know-how or other intellectual property rights (hereinafter collectively referred to as "Intellectual Property Rights") in respect of the Works, Supplier's Equipment, machines, Works method, Plant, Materials, or anything whatsoever required for the execution of the Works and from and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. In the event of infringement of any Intellectual Property Rights of any third party as a result of the execution of the Works (or any part thereof) by the Supplier, the Supplier shall rectify, modify or replace, at its own cost, the Works, Plant or Materials or anything whatsoever required for the Works so that infringement ceases to exist or, in the alternative, the Supplier shall procure necessary rights/ licenses from the affected third party so that there is no infringement of Intellectual Property Rights.



- 39.2 The Supplier shall be promptly notified of any claim made against the Purchaser. The Supplier shall, at its cost, conduct negotiations for the settlement of such claim, and any litigation or arbitration that may arise from it. The Purchaser or the Purchaser's Representative shall not make any admission which might be prejudicial to the Supplier, unless the Supplier has failed to take over the conduct of the negotiations, litigation or arbitration within a reasonable time after having been so requested. In the event of Supplier failing to act at the Purchaser's Representative's notice, the Purchaser shall be at full liberty to deduct any such amount of pending claim from any amount due to the Supplier under the Contract or any other contract and the balance portion of claim shall be treated as debt due from the Supplier.
- 39.3 All Intellectual Property Rights in respect of any Plant, Materials, Drawings and Designs, plans, documents, specifications, data, materials, know how, charts, information, etc., provided to the Supplier by the Purchaser pursuant to this Contract for the execution of the Works, belongs to and shall continue to belong to the Purchaser and the Supplier shall not have any rights in the same other than the limited right for its use for the purpose of execution of the Works.
- 39.4 Intellectual Property Rights in respect of any Plant, Materials, Drawings and Designs, plans, calculations, drawings, documents, know-how and information relating to the Works which are proprietary to the Supplier and/ or its third party licensors ("**Supplier's IPR**") shall continue to vest with the Supplier and/ or its third party licensors and the Supplier shall grant and/ or procure from its third party licensors, at its own cost, a worldwide, perpetual, royalty free, non-exclusive license (along with the right to sub-license) to use and reproduce such Supplier's IPR for the use, operation, maintenance and repair of the Works.
- 39.5 If any patent, trademark, trade name, registered design or software is developed by the Supplier or its Sub Supplier specifically for the execution of the Works, then all Intellectual Property Rights in respect of such design, trademark, trade name or software shall be the absolute property of the Purchaser and shall not be utilized or retained by the Supplier (or its Sub Suppliers) for any purpose other than with the prior written consent of the Purchaser.
- 39.6 If the Supplier uses proprietary software (whether customized or off the shelf) for the purpose of storing or utilizing records in relation to the Works, the Supplier shall obtain at its own expense, the grant of a worldwide, royalty-free, perpetual licence or sublicence (including the right to sublicense) to use such software, in favour of the Purchaser provided that the use of such software under the licence or the sublicense may be restricted to use any such software only for the design, construction, reconstruction, manufacture, installation, completion, reinstatement, extension, repair and operation of the Works or any part thereof.
- 39.7 If any software is used by the Supplier for the execution of the Works over which the Supplier or a third party holds pre-existing title or other rights, the Supplier shall obtain for the Purchaser, a worldwide, royalty free, perpetual license for the right to use and apply that software (together with any modifications, improvements and developments thereof).

40.0 Acceptance

- 40.01 Vendor confirms to have gone through the Policy of BYPL on legal and ethical code required to be followed by vendors encapsulated in the "Vendor Code of Conduct" displayed on the official website of BYPL (www.bsesdelhi.com) also, which shall be treated as a part of the contract/PO/WO.
 - Vendor undertakes that he shall adhere to the Vendor code of Conduct and also agrees that any violation of the Vendor Code of Conduct shall be treated as breach of the contract/PO/WO.
 - In event of any such breach, irrespective of whether it causes any loss/damage, Purchaser (BYPL) shall have the right to recover loss/damage from Vendor.
 - The Contractor/Vendor herby indemnifies and agrees to keep indemnified the Purchaser (BYPL) against any claim/litigation arising out of any violation of Vendor Code of Conduct by the Contractor/Vendor or its officers, agents & representatives etc.
- 40.02 Acceptance of the CONTRACT implies and includes acceptance of all terms and conditions enumerated in the CONTRACT in the technical specification and drawings made available to



- Contractor consisting of general conditions, detailed scope of work, detailed technical specification, detailed equipment drawing and complete scope of work.
- 40.03 Contractor and Company contractual obligation are strictly limited to the terms set out in the CONTRACT. No amendments to the concluded CONTRACT shall be binding unless agreed to in writing for such amendment by both the parties
- 40.04 We expect your services and supplies are aligned to our Vision, Mission and Values. Please refer to the following link to know about our Vision, Mission and Values; https://www.bsesdelhi.com/web/bypl/about-bses.

41.0 Documentation & Training

- 41.1 The bidder shall provide the required Documentation specified in the document for all the proposed equipment and systems.
- **41.2** The Bidder shall be responsible for training the BYPL's employees in the areas of parameterization,

implementation, migration, operations, management, error handling, system administration, etc.

The training should at least cover the following areas:

- 1. Functionality available in the solution,
- 2. New functionality customized (if any),
- 3. Parameterization,
- 4. Impact Analysis,
- 5. Generating various MIS/EIS reports from the solution provided,
- 6. System and Application administration,
- 7. Log analysis and monitoring
- **41.3** The documentations shall include but not limited to the followings: -
 - 41.3.1 User guides for those who shall be using the system
 - 41.3.2 Operational guides for administrators and technical support officers;
 - 41.3.3 Installation, COMMISSIONING, fine-tuning and maintenance guides;
 - 41.3.4 COMMISSIONING documentations, which includes the various parameter settings in the various system after the fine-tuning processes.
- **41.4** Technical hands-on training for Administrator and Operational teams of BYPL, at the appropriate sites (Bidder and BYPL premises as identified at the time of training) and the Bidder has to organize the classroom trainer from OEM for 4 persons.



SECTION – IV: QUANTITY AND DELIVERY REQUIREMENT

SI. No.	Item Description	Specification	Total Qty. (Nos)	Tentative Delivery Schedule	Destination	
		Part-A (Supp	ly)			
1.	Wireless Controller		02			
2.	Access Point		40	02 months from the date of LOI/ Purchase Order.		
3.	24 Ports PoE Switch		5		BYPL Stores/Site Office, Delhi	
4.	Distribution Switch		02			
5.	Network Management System	SECTION – V	01			
6.	MM 10G SFP+ trans receiver		24			
7.	Accessories (attached in Technical specifications)					
	Core Switch Cisco Nexus (Cisco Nexus N9K-					
8.	C93108TC-EX) MM 10G SFP+ trans receiver (SFP port for Connectivity with Distribution switch to Core Switch)		04			
	Part-B (Install	ation, Commiss	ioning and T	esting)		
1.	Installation, Commissioning and testing of Wi-Fi at BYPL HQ.	SECTION – V	1 Lot	Within 45 days from	BYPL Stores/Site/	
2.	Installation of AP, cabling and conducting as per site requirement.	SECTION - V	40	supply of material	Office, Delhi	

The delivery schedule shown above is tentative. PO(s) will be released as per the actual requirement. However, supplier has to deliver the material within the delivery schedule provided.



SECTION - V

(TECHNICAL SPECIFICATION)

SUPPLY, INSTALLATION AND COMMISSIONING OF WI-FI NETWORK AT CORPORATE OFFICE OF BYPL

NIT No.: CMC/BY/23-24/RS/SkS/SS/29

NIT Dt.: 05.09.2023



SECTION – VI (VENDOR CODE OF CONDUCT)

SUPPLY, INSTALLATION AND COMMISSIONING OF WI-FI NETWORK AT CORPORATE OFFICE OF BYPL

NIT No.: CMC/BY/23-24/RS/SkS/SS/29



VENDOR CODE OF CONDUCT

Purchaser is committed to conducting its business in an ethical, legal and socially responsible manner. To encourage compliance with all legal requirements and ethical business practices, Purchaser has established this Vendor Code of Conduct (the "Code") for Purchaser's Vendors. For the purposes of this document, "Vendor" means any company, corporation or other entity that sells, or seeks to sell goods or services, to Purchaser, including the Vendor's employees, agents and other representatives.

Fundamental to adopting the Code is the understanding that a business, in all of its activities, must operate in full compliance with the laws, rules and regulations of the countries in which it operates. This Code encourages Vendors to go beyond legal compliance, drawing upon internationally recognized standards, in order to advance social and environmental responsibility.

I. Labour and Human Rights

Vendors must uphold the human rights of workers, and treat them with dignity and respect as understood by the international community.

- Fair Treatment Vendors must be committed to a workplace free of harassment. Vendors shall not threaten workers with or subject them to harsh or inhumane treatment, including sexual harassment, sexual abuse, corporal punishment, mental coercion, physical coercion, verbal abuse or unreasonable restrictions on entering or exiting company provided facilities.
- . Antidiscrimination Vendors shall not discriminate against any worker based on race, colour, age,gender,sexual orientation, ethnicity, disability, religion, political affiliation, union membership, national origin, or marital status in hiring and employment practices such as applications for employment, promotions, rewards, access to training, job assignments, wages, benefits, discipline, and termination. Vendors shall not require a pregnancy test or discriminate against pregnant workers except where required by applicable laws or regulations or prudent for workplace safety. In addition, Vendors shall not require workers or potential workers to undergo medical tests that could be used in a discriminatory way except where required by applicable law or regulation or prudent for workplace safety.
- Freely Chosen Employment Forced, bonded or indentured labour or involuntary prison labour is not to be used. All work will be voluntary, and workers should be free to leave upon reasonable notice. Workers shall not be required to hand over government-issued identification, passports or work permits as a condition of employment.
- . Prevention of Under Age Labor Child labor is strictly prohibited. Vendors shall not employ children. The minimum age for employment or work shall be 15 years of age, the minimum age for employment in that country, or the age for completing compulsory education in that country, whichever is higher. This Code does not prohibit participation in legitimate workplace apprenticeship programs that are consistent with Article 6 of ILO Minimum Age Convention No. 138 or light work consistent with Article 7 of ILO Minimum Age Convention No. 138.
- "Juvenile Labor Vendors may employ juveniles who are older than the applicable legal minimum age for employment but are younger than 18 years of age, provided they do not perform work likely to jeopardize their health, safety, or morals, consistent with ILO Minimum Age Convention No. 138.
- . Minimum Wages Compensation paid to workers shall comply with all applicable wage laws, including those relating to minimum wages, overtime hours and legally mandated benefits. Any Disciplinary wage deductions are to conform to local law. The basis on which workers are being paid is to be clearly conveyed to them in a timely manner.
- . Working Hours Studies of good manufacturing practices clearly link worker strain to reduced productivity, increased turnover and increased injury and illness. Work weeks are not to exceed maximum set by local law. Further, a work week should not be more than 60 hours per week, including overtime, except in emergency or unusual situations. Workers should be allowed at least one day off per seven-day week.



• Freedom of Association - Open communication and direct engagement between workers and management are the most effective ways to resolve workplace and compensation issues. Vendors are to respect the rights of workers to associate freely and to communicate openly with management regarding working conditions without fear of reprisal, intimidation or harassment. Workers' rights to join labour unions seek representation and or join worker's councils in accordance with local laws should be acknowledged.

II. Health and Safety

Vendors must recognize that in addition to minimizing the incidence of work-related injury and illness, a safe and healthy work environment enhances the quality of products and services, consistency of production and worker retention and morale. Vendors must also recognize that ongoing worker input and education is essential to identifying and solving health and safety issues in the workplace.

The health and safety standards are:

- . Occupational Injury and Illness Procedures and systems are to be in place to prevent, manage, track and report occupational injury and illness, including provisions to: a) encourage worker reporting; b) classify and record injury and illness cases; c) provide necessary medical treatment; d) investigate cases and implement corrective actions to eliminate their causes; and e) facilitate return of workers to work.
- Emergency Preparedness Emergency situations and events are to be identified and assessed, and their impact minimized by implementing emergency plans and response procedures, including: emergency reporting, employee notification and evacuation procedures, worker training and drills, appropriate fire detection and suppression equipment, adequate exit facilities and recovery plans.
- Occupational Safety Worker exposure to potential safety hazards (e.g., electrical and other energy sources, fire, vehicles, and fall hazards) are to be controlled through proper design engineering and administrative controls, preventative maintenance and safe work procedures (including lockout/ragout), and ongoing safety training. Where hazards cannot be adequately controlled by these means, workers are to be provided with appropriate, well-maintained, personal protective equipment. Workers shall not be disciplined for raising safety concerns.
- Machine Safeguarding Production and other machinery is to be evaluated for safety hazards. Physical guards, interlocks and barriers are to be provided and properly maintained where machinery presents an injury hazard to workers.
- .Industrial Hygiene Worker exposure to chemical, biological and physical agents is to be identified, evaluated, and controlled. Engineering or administrative controls must be used to control overexposures. When hazards cannot be adequately controlled by such means, worker health is to be protected by appropriate personal protective equipment programs.
- Sanitation, Food, and Housing Workers are to be provided with ready access to clean toilet, facilities potable water and sanitary food preparation, storage, and eating facilities. Worker dormitories provided by the Participant or a labour agent are to be maintained clean and safe, and provided by the Participant or a labour egress, hot water for bathing and showering, and adequate heat and ventilation and reasonable personal space along with reasonable entry and exit privileges.
- . Physically Demanding Work Worker exposure to the hazards of physically demanding tasks, including manual material handling and heavy or repetitive lifting, prolonged standing and highly repetitive or forceful assembly tasks is to be identified, evaluated and controlled.

III. Environmental

Vendors should recognize that environmental responsibility is integral to producing world class products In manufacturing operations, adverse effects on the environment and natural resources are to be minimized while safeguarding the health and safety of the public.

The environmental standards are:



- Product Content Restrictions Vendors are to adhere to applicable laws and regulations regarding prohibition or restriction of specific substances including labeling laws and regulations for recycling and disposal. In addition, Vendors are to adhere to all environmental requirements specified by Purchaser.
- Chemical and Hazardous Materials -Chemical and other materials posing a hazard if released to the environment are to be identified and managed to ensure their safe handling, movement storage, recycling or reuse and disposal.
- Air Emissions Air emissions of volatile organic chemicals, aerosols, corrosives, particulates, ozone depleting chemicals and combustion by-products generated from operations are to be characterized, monitored, controlled and treated as required prior to discharge.
- Pollution Prevention and Resource Reduction -Waste of all types, including water and energy, are to reduced or eliminated at the source or by practices such as modifying production, maintenance and facility processes, materials substitution, conservation, recycling and re-using materials.
- Wastewater and Solid Waste Wastewater and solid waste generated from operations industrial processes and sanitation facilities are to be monitored, controlled and treated as required prior to discharge or disposal.
- Environmental Permits and Reporting All required environmental permits (e.g. discharge monitoring) and registrations are to be obtained, maintained and kept current and their operational and reporting requirements are to be followed.

IV. Ethics

Vendors must be committed to the highest standards of ethical conduct when dealing with workers, Vendors, and customers.

- Corruption, Extortion, or Embezzlement Corruption, extortion, and embezzlement, in any form, are strictly prohibited. Vendors shall not engage in corruption, extortion or embezzlement in any form and violations of this prohibition may result in immediate termination as an Vendor and in legal action.
- Disclosure of Information Vendors must disclose information regarding its business activities, structure financial situation, and performance in accordance with applicable laws and regulations and prevailing industry practices.
- . No Improper Advantage Vendors shall not offer or accept bribes or other means of obtaining undue or improper advantage.
- Fair Business, Advertising, and Competition Vendors must uphold fair business standards in advertising, sales, and competition.
- . Business Integrity The highest standards of integrity are to be expected in all business interactions. Participants shall prohibit any and all forms of corruption, extortion and embezzlement. Monitoring and enforcement procedures shall be implemented to ensure conformance.
- Community Engagement Vendors are encouraged to engage the community to help foster social and economic development and to contribute to the sustainability of the communities in which they operate.
- Protection of Intellectual Property Vendors must respect intellectual property rights; safeguard customer information; and transfer of technology and know-how must be done in a manner that protects intellectual property rights.

V. Management System

Vendors shall adopt or establish a management system whose scope is related to the content of this Code. The management system shall be designed to ensure (a) compliance with applicable laws, regulations and customer requirements related to the Vendors' operations and products; (b) conformance with this Code; and (c) identification and mitigation of operational risks related to this Code. It should also facilitate continual improvement.

The management system should contain the following elements:

- **.** Company Commitment Corporate social and environmental responsibility statements affirming Vendor's commitment to compliance and continual improvement.
- Management Accountability and Responsibility Clearly identified company representative[s]responsible for ensuring implementation and periodic review of the status of the management systems.



- **.** Legal and Customer Requirements Identification, monitoring and understanding of applicable laws, regulations and customer requirements.
- . Risk Assessment and Risk Management Process to identify the environmental, health and safety and labour practice risks associated with Vendor's operations. Determination of the relative significance for each risk and implementation of appropriate procedural and physical controls to ensure regulatory compliance to control the identified risks.
- .Performance Objectives with Implementation Plan and Measures Areas to be included in a risk assessment for health and safety are warehouse and storage facilities, plant/facilities support equipment, laboratories and test areas, sanitation facilities (bathrooms), kitchen/cafeteria and worker housing /dormitories. Written standards, performance objectives, and targets an implementation plans including a periodic assessment of Vendor's performance against those objectives.
- . Training Programs for training managers and workers to implement Vendor's policies, procedures and improvement objectives.
- Communication Process for communicating clear and accurate information about Vendor's performance, practices and expectations to workers, Vendors and customers.
- Worker Feedback and Participation Ongoing processes to assess employees' understanding of and obtain feedback on practices and conditions covered by this Code and to foster continuous improvement.
- . Audits and Assessments Periodic self-evaluations to ensure conformity to legal and regulatory requirements, the content of the Code and customer contractual requirements related to social and environmental responsibility.
- Corrective Action Process Process for timely correction of deficiencies identified by internal or external assessments, inspections, investigations and reviews.
- Documentation and Records Creation of documents and records to ensure regulatory compliance and conformity to company requirements along with appropriate confidentiality to protect privacy.

The Code is modeled on and contains language from the Recognized standards such as International Labour Organization Standards (ILO), Universal Declaration of Human Rights (UDHR), United Nations Convention against Corruption, and the Ethical Trading Initiative (ETI) were used as references in preparing this Code and may be useful sources of additional information



VOLUME - II

SUPPLY, INSTALLATION AND COMMISSIONING OF WI-FI NETWORK AT CORPORATE OFFICE OF BYPL

NIT No.: CMC/BY/23-24/RS/SkS/SS/29

Due Date for Submission of Bids: 26.09.2023; 15:00 hrs



ANNEXURE – I to NIT

BID FORM

To, Head of the Department Contracts & Materials BSES Yamuna Power Ltd Shakti Kiran Building, Karkardooma New Delhi– 110032

Sir,

,	
1.	We understand that BYPL is desirous of carrying out
2.	network area in Delhi. Having examined the Bidding Documents for the above named works, we the Undersigned, offer to provide our services in full conformity with the Terms and Conditions and technical specifications for the sum of
3.	If our Bid is accepted, we undertake to provide our services as per completion schedule mentioned in the tender document from the date of award of work order/letter of intent.
4.	If our Bid is accepted, we will furnish a performance bank guarantee as mentioned in the RFQ for due performance of the Contract in accordance with the Terms and Conditions.
5.	We agree to abide by this Bid for a period of 120 days from the due date of bid submission and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
6.	Unless and until Letter of Intent is issued, this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.
7.	We understand that you are not bound to accept the lowest, or any bid you may receive.
8.	There is provision for Resolution of Disputes under this Contract, in accordance with the Laws and Jurisdiction of Contract.
Signa	d this



ANNEXURE – II to NIT

FORMAT FOR BID SECURITY BANK GUARANTEE

(To be issued in a Non Judicial Stamp Paper of Rs.50/-purchased in the name of the bank)

Whereas [name of the Bidder] (hereinafter called the Bidder") has submitted its bid dated [date of submission of bid] for the supply of [name and/or description of the goods] (hereafter called 'the Bid").

KNOW ALL PEOPLE by these presents that WE [name of bank]at[Branch Name and address],having our registered office at[address of the registered office of the bank](herein after called —the Bank"),are bound unto BSES Yamuna Pwoer Ltd., with it's Corporate Office at BSES Shakti Kiran Building Karkardooma, New Delhi -110032 ,(herein after called —the Purchaser")in the sum of Rs(Rupees
Sealed with the Common Seal of the said Bank this day of 20
THE CONDITIONS of this obligation are:
 If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form ;or
If the Bidder, having been notified of the acceptance of its Bid by the Purchaser during the period of bid validity:
(a) Fails or refuses to execute the Contract Form , if required; or(b) Fails or refuses to furnish the performance security, In accordance with the Instructions to Bidders/Terms and conditions;
We undertake to pay to the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that is its demand the purchaser will note that amount claimed by it is due to it, owing to the occurrence of on e or both of the two condition s, specifying the occurred condition or conditions.
This guarantee will remain in force up to and including One Twenty (120) days after the due date of submission bid, and any demand in respect thereof should reach the Bank not later than the above date.
(Stamp & signature of the bank)
Signature of the witness



BYPL BANK DETAIL WITH IFSC & SWIFT CODE:

1. Name of the Bank: Axis Bank Limited

2. Branch Name & Full Address: Swasthya Vihar, New Delhi 110092

3. Branch Code: 055

4. Bank Account No: 911030003596085

5. IFSC Code: UTIB0000055

6. Swift Code: AXISINBB055



ANNEXURE - III to NIT

PRICE FORMAT

SL. No.	Description	Qty	UoM	HSN / SAC	Basic Rate (Rs)	GST (%)	GST Amount (Rs)	Unit Landed Cost (Rs)	Total Amount (Rs)
		A			В	С	D=B*C	E=B+D	E*A
Part-	A: (Supply of Equipment	:)							
1.	Wireless Controller	02	Nos						
2.	Access Point	40	Nos						
3.	24 Ports PoE Switch	5	Nos						
4.	Distribution Switch	02	Nos						
5.	Network Management System	01	Nos						
6.	MM 10G SFP+ trans receiver	24	Nos						
7.	Accessories (Refer table in Pg-21 of Specs)								
8.	Core Switch Cisco Nexus (Cisco Nexus N9K-C93108TC-EX) MM 10G SFP+ trans receiver	4	Nos						
	Total Value of supply (Part A)								
Part-E	3 : Service of Equipment	(Installa	ation, Co	mmiss	ioning a	nd Testi	ng)		
1.	Installation, COMMISSIONING and testing of Wi-Fi at BYPL HQ.	1	lot						
2.	Installation of AP, cabling and conducting as per site requirement.	40	Nos						
	Total Value of Service (Part B)								
	Grand Total Value (Part A + Part B)								

Note:

This is Turnkey Project which includes, Material supply & Installation, civil work designed, developed and equipped with all facilities by a bidder under a contract.

Civil work includes "Complete installation and Mounting of Access point, Cable lay out from access point to POE-POE to DC, Device mounting, end to end Installation of all equipment required for Wi-fi implementation".

- 1. Prices shall be Firm
- 2. The prices received without break up of ex-works, GST are liable for rejection
- 3. Please indicate the exact percentage of taxes in figures and words
- 4. If there is a discrepancy between the unit price and the total price **THE UNIT PRICE** shall prevail.



ANNEXURE – IV to NIT

COMMERCIAL TERMS AND CONDITIONS

ITEM DESCRIPTIO N	AS PER BYPL		CONFIRMATION OF BIDDER/ BIDDER TERMS
Price basis	a) Firm, FOR Delhi store basis. Prices shall be inclusive of GST & freight up to Delhi stores/office.b) Unloading at Karkardooma office shall be in vendor's scope.		
	c) Transit insurance in BYPL scope.		
Validity of prices	120 days from the date of bid submission.		
	For Supply of Equipment's: (Part-A)		
Payment terms	successful supply of required Wi-Fi Network system and accessories as per B.O.M subject to fulfillment of following pre-requisites: (i) Submission of Supply schedule. (ii) submission and approval of material delivery, Documents of Hardware & Software System, List of Deliverables. (iii) Supply of complete hardware and software required for Wi-Fi Network system and its acceptance. (iv) High level and low level design document submission and its approval. MS-2: 20% of contract value for part A of Pricing schedule shall be released after 1 month of successful system run from completion of supply of all items i.e. 1. Successful operation of Wi-Fi Network system 2. Approval of Administration & Operator's User's Manual, 3. Documentation & training as per tender scope of supply.		
			_
	be released subject to fulfillment of following pre-requisites: (i). Baseline system and application software for installation, testing and Commissioning of Wi-Fi Network System. (ii) After UAT, Wi-Fi system should run bug free for 3 months.		
	Price basis Validity of prices	AS PER BYPL a) Firm, FOR Delhi store basis. Prices shall be inclusive of GST & freight up to Delhi stores/office. b) Unloading at Karkardooma office shall be in vendor's scope. c) Transit insurance in BYPL scope. Validity of prices 120 days from the date of bid submission. For Supply of Equipment's: (Part-A) MS-1: 80% Payment within 30 days of successful supply of required Wi-Fi Network system and accessories as per B.O.M subject to fulfillment of following pre-requisites: (i) Submission of Supply schedule. (ii) submission and approval of material delivery, Documents of Hardware & Software System, List of Deliverables. (iii) Supply of complete hardware and software required for Wi-Fi Network system and its acceptance. (iv) High level and low level design document submission and its approval. MS-2: 20% of contract value for part A of Pricing schedule shall be released after 1 month of successful system run from completion of supply of all items i.e. 1. Successful operation of Wi-Fi Network system 2. Approval of Administration & Operator's User's Manual, 3. Documentation & training as per tender scope of supply. For Services of Equipment: (Part-B) M.S-1: 80% of contract value for part B shall be released subject to fulfillment of following pre-requisites: (i) Baseline system and application software for installation, testing and Commissioning of Wi-Fi Network System. (ii) After UAT, Wi-Fi system should run bug	a) Firm, FOR Delhi store basis. Prices shall be inclusive of GST & freight up to Delhi stores/office. b) Unloading at Karkardooma office shall be in vendor's scope. c) Transit insurance in BYPL scope. Validity of prices 120 days from the date of bid submission. For Supply of Equipment's: (Part-A) M5-1: 80% Payment within 30 days of successful supply of required Wi-Fi Network system and accessories as per B.O.M subject to fulfillment of following pre-requisites: (i) Submission of Supply schedule. (ii) submission and approval of material delivery, Documents of Hardware & Software System, List of Deliverables. (iii) Supply of complete hardware and software required for Wi-Fi Network system and its acceptance. (iv) High level and low level design document submission and its approval. M5-2: 20% of contract value for part A of Pricing schedule shall be released after 1 month of successful system run from completion of supply of all items i.e. 1. Successful operation of Wi-Fi Network system 2. Approval of Administration & Operator's User's Manual, 3. Documentation & training as per tender scope of supply. For Services of Equipment: (Part-B) M.S-1: 80% of contract value for part B shall be released subject to fulfillment of following pre-requisites: (i). Baseline system and application software for installation, testing and Commissioning of Wi-Fi Network System. (ii) After UAT, Wi-Fi system should run bug free for 3 months. MS-2: 10% of contract value for part B shall



		i. Closure of all exceptions including
		availability of application.
		ii. Approval of Administration & Operator's
		User's Manual,
		iii. Documentation & training as per tender
		scope of work (service).
		scope of work (service).
		MS-3: Balance 10% of contract value for
		Part B will be released after one (01) month
		of successful Wi-Fi Network system run.
		Payment against all the aforesaid milestones
		(Supply & Services) shall be made within 30
		days after receipt of invoices duly certified by
		Engineer-in-Charge
		Supply: 02 months from the date of
4.	Delivery	LOI/Purchase Order.
٦.	schedule	Service : Within 45 days from supply of
		material.
5.	Warranty &	As mentioned in the Technical Specifications
٥.	Support	· ·
		1% per week of delay of undelivered units
6.	Penalty for	part thereof subject to maximum of 10% of
0.	delay	total PO (ex-works) value of undelivered
		units both for supply and service.
		The successful bidder shall furnish the
		Performance Bank Guarantee within fifteen
		(15) days from the Purchase Order Date for
	5 6	an amount of 10% (Ten percent) of the Total
_	Performance	Contract value (both for Supply and Service).
7.	Bank	The Performance Bond shall be valid for a
	Guarantee	period of Sixty months (60) from the date of
		the commissioning or Sixty Six months (66)
		from the date of receipt of material (last
		consignment) at site/stores whichever is
-		earlier plus 3 months towards claim period. In a bid to make our entire procurement
		process more fair and transparent, BYPL
		intends to use the reverse auctions through
	Reverse	SAP-SRM tool as an integral part of the entire
8.	Auction	tendering process. All the bidders who are
	Auction	found as techno commercial qualified based
		on the tender requirements shall be eligible
		to participate in the reverse auction event.
L		to participate in the reverse auction event.



ANNEXURE – V to NIT

SCHEDULE OF DEVIATIONS

Vendor shall refrain from taking any deviations on this TENDER. Still in case of any deviations, all such deviations from this tender shall be set out by the Bidder, Clause by Clause in this schedule and submit the same as a part of the Technical Bid.

Unless **specifically** mentioned in this schedule, the tender shall be deemed to confirm the BYPL's specifications:

TECHNICAL DEVIATIONS:-

SL No.	Clause No.	NIT Page No.	NIT Clause descriptions	Details of Clarification/deviation with justifications

COMMERCIAL DEVIATIONS:-

SL	Clause No.	NIT Page No.	NIT Clause	Details of Clarification/deviation
No.			descriptions	with justifications
INO.			descriptions	with Justifications

SIGNATURE & SEAL OF BIDDER

NAME OF BIDDER

Note: By signing this document we hereby withdraw all the deviations whatsoever taken anywhere in this bid document and comply to all the terms and conditions, technical specifications, scope of work etc. as mentioned in the standard document except those as mentioned above.



ANNEXURE -VI to NIT

ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT

(To be signed and stamped by the bidder prior to participation in the auction event)

In a bid to make our entire procurement process more fair and transparent, BYPL intends to use the reverse auctions through SAP-SRM tool as an integral part of the entire tendering process. All the bidders who are found as techno commercial qualified based on the tender requirements shall be eligible to participate in the reverse auction event.

The following terms and conditions are deemed as accepted by the bidder on participation in the bid event:

- 1. BYPL shall provide the user id and password to the authorized representative of the bidder. (Authorization letter in lieu of the same be submitted along with the signed and stamped acceptance form)
- 2. BYPL will make every effort to make the bid process transparent. However, the award decision by BYPL would be final and binding on the supplier.
- 3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of BYPL, bid process, bid technology, bid documentation and bid details.
- 4. The bidder is advised to understand the auto bid process to safeguard themselves against any possibility of non-participation in the auction event.
- 5. In case of bidding through internet medium, bidders are further advised to ensure availability of the entire infrastructure as required at their end to participate in the auction event. Inability to bid due to telephone line glitch, internet response issues, software or hardware hangs, power failure or any other reason shall not be the responsibility of BYPL.
- 6. In case of intranet medium, BYPL shall provide the infrastructure to bidders, further, BYPL has sole discretion to extend or restart the auction event in case of any glitches in infrastructure observed which has restricted the bidders to submit the bids to ensure fair & transparent competitive bidding. In case of an auction event is restarted, the best bid as already available in the system shall become the start price for the new auction.
- 7. In case the bidder fails to participate in the auction event due any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid as submitted by the bidder as a part of the tender shall be considered as the bidder's final no regret offer. Any offline price bids received from a bidder in lieu of non-participation in the auction event shall be out rightly rejected by BYPL.
- 8. The bidder shall be prepared with competitive price quotes on the day of the bidding event.
- 9. The prices as quoted by the bidder during the auction event shall be inclusive of all the applicable taxes, duties and levies and shall be FOR at BYPL site.
- 10. The prices submitted by a bidder during the auction event shall be binding on the bidder. No further communication will be there.
- 11. No requests for time extension of the auction event shall be considered by BYPL.
- 12. The original price bids of the bidders shall be reduced on pro-data basis against each line item based on the final all inclusive prices offered during conclusion of the auction event for arriving at contract amount.

Signature & seal of the Bidder



ANNEXURE – VII to NIT

FORMAT FOR MANUFACTURER'S AUTHORISATION LETTER TO AGENT (on letter head)

Ref. No. & Date:

To, H.O.D (Contracts & Materials) BSES YAMUNA POWER LTD. Shakti Kiran Building, Karkardooma 3rd floor, 'A' Block Delhi-110032

Sub.: Authorization Letter.

Dear Sir,	
We,	orize bid, gular f the
which we will ipso-facto become liable for all acts of commission or omission on the part of new In Agent / distributor.	ıdian
Yours faithfully, [
Name & Signature] for and on behalf of M/s [N <i>ame of manufacturer</i>]	

Note: This letter of authorization should be on the letterhead of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the manufacturer. A copy of notarized power of attorney should also be furnished.



ANNEXURE -VIII to NIT

BIDDER DETAILS FORM

Offer No.:	Date:
To, Head - Contracts and Materials BSES YAMUNA POWER LIMITED 3rd Floor "A" Block, Shakti Kiran Building, Delhi-110032 (INDIA).	
Dear Sir,	
	er No. CMC/BY/23-24/RS/SkS/SS/29 for "SUPPLY, OF WI-FI NETWORK AT CORPORATE OFFICE OF BYPL" IN de hereby submit our offer herewith.
1. Bidder Name	1
2. Website Address	:
3. Email Address	:
4. Address for Communication	:
5. Telephone Number	1
6. Fax/Telefax Number	:
7. Authorized Person - Name	i
a. Designation	<u>;</u>
b. Mobile No.	:
c. Email-ID	:
8. Reverse Auction Person -Name	<u> </u>
a. Designation	:
b. Mobile No.	:
c. Email-ID	:



Executed	Executed						
Work/ Order	Work/Order	the Client	Date		at Page No.		
Description of the	Value of	Name of	Start	Finish Date	Doc. Evidence		
 Details of similar work / order executed during last 2 years (Please submit copy of completion certificate from the client. 							
	Average Turnover						
2022-2023							
2022-2023							
2021-2022							
2020-2021	110.						
Year	Annual Repor	t attached at	Page Tur	nover in Rs. (Crores)		
e. Address	of the Bank	:					
c. Date d. Name of	the Bank						
a. Amount b. DD No.							
14. Particulars of Tel	nder Fee	ı Do					
g. Validity	of BG	:					
f. Address	of the Bank						
d. Date e. Name of	the Bank						
c. BG No.	, , ,						
a. Amount b. Mode of	Payment (BG)	: Rs					
13. Particulars of EM	<u>ID</u>						
12. ECC Number	12. ECC Number :						
11. Service Tax Regn. No. :							
10. TIN Number		:					
9. PAN Number	9. PAN Number :						



17.	. Following Documents are submitted to substantiate other eligibility criteria.					
	i)					
	ii)					
	iii)					
	<u>DECLARATION</u>					
1)	We have read and understood the terms & conditions of the above mentioned tender and comply with all Terms & Conditions of your Tender.(In case of any deviation the Bidder must attach a separate sheet clearly mentioning the Clause No. of the Tender and Deviation thereto)					
2)	We certify that the information mentioned above are true and correct to best of our Knowledge.					
3)	In case of receipt of order we confirm that payment shall be received through e-Banking / Electronics Transfer.					
4)	This offer contains No. of pages including all Annexure and Enclosures.					
Place: Date:	Signature of Authorized Signatory					
Date.	Name:					
	Designation:					
	Seal:					



ANNEXURE -IX to NIT

SELF DECLARATION FORM

Tender No.: CMC/BY/23-24/RS/SkS/SS/29

To, The HOD Contract & Material Dept BSES Yamuna Power LTD Karardooma Delhi-110032

Subject: Declaration for Not blacklisted

Sir,

- 1. I / We, the undersigned do hereby declare that, I / We have never ever been blacklisted and / or there were no debarring actions against us for any default in supply of material/ Services or in the performance of the contract entrusted to us in any of the State Government, Central Government or any other public sector undertaking or a corporation or Electricity Utilities of India.
- 2. In the event of any such information pertaining to the aforesaid matter found at any given point of time either during the course of the contract or at the bidding stage, my bid/ contract shall be liable for truncation/ cancellation/ termination without any notice at the sole discretion of the purchaser.

	Yours faithfully
Place: Date:	
	Signature of the bidder with sea
(This from shall be duly signed	by the bidder & submitted along with the original copy of the bid.)



LITIGATION HISTORY

Year	Name of client	Details of contract & date	Cause of Litigation/ arbitration and dispute	Disputed amount

CURRENT CONTRACT COMMITMENTS/ WORK IN PROGRESS

Year	Name of client	Details of contract & date	Value of outstanding work	Estimated completion date



ANNEXURE-X to NIT

	PRE BID QUERIES FORMAT						
NIT No.	NIT No. : CMC/BY/23-24/RS/SkS/SS/29 NIT DATE 05.09.2023						
NIT FOR	NIT FOR SUPPLY, INSTALLATION AND COMMISSIONING OF WI-FI NETWORK AT CORPORATE OFFICE OF BYPL						
Compai	ny Name :		Address:				
	Person Name :	T	Contact Num		E-mail:		
Sl. No.	Section Number	Page Number	Clause No.	Clause Details	Clause Details Query BSES Clarific		



Technical Bid Submission Check List

- Submission of this duly filled checklist along with the bid is mandatory. The order of documents shall be as per this technical bid submission checklist.
- Bids with incomplete/ wrong information are liable for rejection.

SI. No.	Description	BYPL Requirement	Bidder's Response
01.	Tender No.	Mention Details Here →	
02.	Tender Fee, EMD & Signed Bid Form as mentioned in the tender, if applicable	Mention Referred Bid Section Title & Page No	
03.	Bidder Details		
3.1	Name of the Bidder	Mention Details Here →	
3.2	Company Profile / Organogram	Mention Referred Bid Section Title & Page No	
3.3	Name of duly Authorized contact person (along with Authorizations to submit Bid)	Mention Details Here →	
3.4	Contact No. of duly Authorized contact person	Mention Details Here →	
3.5	E-mail Id of duly Authorized contact person	Mention Details Here →	
3.6	Bidder Reference Number	Mention Details Here →	
3.7	Unpriced Bid Sheet (Quoted/Not Quoted)	Mention Referred Bid Section Title & Page No	
04.	Documents Submission Format		
4.1	Documents shall be submitted in Box file/spiral binding in offline tenders and Original pdf for online along with 'Separator with document description' before each document	Confirmation (Yes / No)	
4.2	Index of documents with page numbers for each document	Mention Referred Bid Section Title & Page No	
05.	Signed Copy of tender as an unconditional acceptance	Mention Referred Bid Section Title & Page No	
06.	Qualification Criteria Requirement Compliance, If applicable	Confirmation (Yes / No)	
6.1	Summary of compliance of qualifying criteria in tabular form along with details of documentary proof provided	Mention Referred Bid Section Title & Page No	
6.2	Detailed Documents supporting compliance of qualifying criteria	Mention Referred Bid Section Title→	
07.	Technical Specification reference number	Mention Referred Bid Section Title→	
08.	Drawings/ Documents as per Technical Specification	Confirmation (Yes / No)	
8.1	Signed copy of technical specification	Mention Referred Bid Section Title & Page No	
8.2	Type Test reports of offered model/ type/ rating	Mention Referred Bid Section Title & Page No	
8.3	Guaranteed Technical particulars (GTP)	Mention Referred Bid Section Title & Page No	
8.4	Deviation Sheet – Technical (along with soft editable copy)	Mention Referred Bid Section Title & Page No	



8.5	Detailed Drawings	Mention Referred Bid Section Title & Page No
8.6	Manufacturer's Quality Assurance Plan	Mention Referred Bid Section Title & Page No
8.7	Other drawings/ documents mentioned in technical specification	Mention Referred Bid Section Title & Page No
09.	Soft copy of complete technical bid in pen drive	Confirmation (Yes / No)
10.	Samples as per technical specification	To be submitted with the Bid





SECTION - V

(TECHNICAL SPECIFICATION)

SUPPLY, INSTALLATION AND COMMISSIONING OF WI-FI NETWORK AT CORPORATE OFFICE OF BYPL

NIT No.: CMC/BY/23-24/RS/SkS/SS/29



SECTION - V

(TECHNICAL SPECIFICATION)

SUPPLY, INSTALLATION AND COMMISSIONING OF WI-FI NETWORK AT CORPORATE OFFICE OF BYPL

NIT No.: CMC/BY/23-24/RS/SkS/SS/29



1. Scope of Work

- 1. The Proposed Hardware Should have life & support of 7 years from the date of delivery & commissioning.
- 2. The OEM should be present in Leaders quadrant in Gartner's Magic Quadrant for Wired and Wireless LAN Access Infrastructure for last 3 years.
- 3. The Intellectual Property Rights of equipment (Camera) must not reside in land border sharing country. The equipment supplied should not be manufactured by an entity in which the majority shareholding of the entity is from the Land border sharing country.
- 4. OEM to provide undertaking of compliance with land border sharing clause on country of origin for initial supply as well as replacement of faulty device throughout the life cycle of the product under valid contract.
- 5. Bidder will provide 100% Excellent coverage in BYPL end point, Shakti Kiran Building, Karkardooma office across the five floors under the BSES building from Basement to Third floor, including all cabin, meeting room, Board room, Gym etc. user can work Smoothly without any NW hindrance.
- 6. Guest Authentication through Self-register with Sponsor approval through SMS, and other LOB will get the authentication through Corporate Email ID.
- 7. By using the existing network like core, Distribution/access layer, to extend the applications & internet access to users (corporate/Guest users) by leveraging the wireless solution
- 8. Use of the existing network like core layer, Firewall etc. to extend the applications & internet access to users (corporate/Guest users) by leveraging the use of wireless solution
- 9. Bidder will review the Internal BYPL NW and design Wireless NW with industry best practices with all security compliance.
- 10. Bidder proposed solution with the help of Wireless solution other branch LAN users will migrate to the wireless and will use the same existing MPLS solution to reach and access the corporate applications and centralized internet access.
- 11. Wireless user will be restricted at the branch location itself by using controller DPI and IDS/IPS functionality
- 12. Scope of work includes supply, installation and configuration at BYPL corporate office wide Wi-Fi LAN network.
- 13. At present, BSES has the strength of 2500 users (approximately), out of which 600 users are in BYPL HQ Karkardooma. However, network infrastructure must support for higher user strength for the future course.
- 14. Bidder will execute the turnkey project which include hardware/software passive cabling etc. to execute the project Wi-Fi project.
- 15. Bidder has to roll out centralized managed Wi-Fi Solution and plans to provide internet /Intranet and all BYPL Services Access through wireless medium to the corporate users (Staff), LOB and guests.
- 16. The Bidder will provide the details project report, Successful installation report for implementing Wi-Fi at the BSES office.
- 17. Wi-Fi 6 (802.11ax) or higher network devices with backward compatibility along with MAC address filtering, IP Security (IPsec), WPA2 Authentication and AES Encryption. Solution shall support WIPS (Wireless Intrusion Prevention System).
- 18. Solution should support wide range of authentication protocols including PAP, MS- CHAP, Extensible Authentication Protocol (EAP)-MD5, Protected EAP (PEAP), EAP- Flexible Authentication via Secure Tunneling (FAST), and EAP-Transport Layer Security (TLS).
- 19. Detection of Various Threats, support various threat detection methods and fingerprints for identifying and mitigating phishing attempts, botnets, malware, spyware, DDoS attacks, viruses, and protocol anomalies. The solution can also monitor connections to IP addresses associated with bad reputation nations and dark IP addresses, adding an extra layer of security.
- 20. Support for Flow Monitoring Protocols, The solution supports popular flow monitoring protocols such as netflow, sflow, jflow, and IPFIX. These protocols enable the collection of network traffic data, which is essential for network visibility, traffic analysis, and security monitoring.



- 21. Bi-Directional Conversation Support, The solution can state fully reassemble uni-directional flows into bi-directional conversations, allowing seamless analysis of communication between devices. It also handles de-duplication of data and manages asymmetrical flows, enhancing the accuracy of traffic analysis
- 22. Detection of Traffic Anomalies in Encrypted Traffic, can detect traffic anomalies even within encrypted traffic. By leveraging advanced encryption technologies and machine learning algorithms, the solution can identify suspicious patterns and behaviors in encrypted data packets, enhancing the security of the wireless network
- 23. Secure access software should support local user database, active directory integration etc
- 24. The network must be managed and monitored centrally with scalability up to the full requirement of the BSES.
- 25. The bidder should provide and support End-End Solutions to the BSES.
- 26. All configurations, policies and OS patches should be updated to the latest version time to time per Government of India IT rules.
- 27. The end-point node which may be a Desktop/ Mobile Phone /Laptop/tablet PC shall not be allowed access to the network until it has been successfully authenticated.
- 28. Bidder shall ensure the delivery and installation of Wireless solution at the BSES location.
- 29. In case of any breach/fraud caused, the bidder/OEM should support with the proper logs & if bidder not producing required logs in timely manner, as per clauses penalty should be imposed.
- 30. Bidder is required to adhere to all SLA, requirement and terms & condition mentioned in the Tender Document and subsequent addendum/documents.
- 31. Scope of work also includes components, materials, accessories required to render the services (Including network equipment, systems, electrical wiring and grounding etc.) offered complete in all respects even though every individual item may not have been specifically mentioned in the Tender. Moreover, shifting of network devices and access points to achieve the optimum coverage and performance will be the responsibility of the bidder and BSES will not pay any cost even after the commissioning.
- 32. Bidder will be responsible to set-up monitoring at the BSES NOC premises which should be integrated with existing EMS/NMS and accessible to BYPL NOC team for necessary inspection and audit (If required).
- 33. Wi-Fi 6 APs have TPM chips built or equivalent security standard/parameter.
- 34. superior RF features like: Guarantees performance for latency-sensitive, high-bandwidth, and IoT services at the radio
- 35. RF technology designed to optimize user and application experience by providing SLA-grade application assurance. By dynamically allocating radio resources, such as time, frequency, and spatial streams, IT can guarantee performance for latency-sensitive applications
- 36. Client/AP mismatch conditions are managed:
 - Load Balancing: Client match balances clients across APs on different channels, based upon the client load on the APs and the SNR levels
 - Sticky Clients: The client feature also helps mobile clients that tend to stay associated to an AP despite low signal levels, continually monitor the client's RSSI as it roams between Aps.
 - Band Steering/Band Balancing: monitor the RSSI for clients that advertise a dual-band capability. If a client is currently associated to a 2.4 GHz radio and the AP detects that the client has a good RSSI from the 5 Ghz radio, the controller attempts to steer the client to the 5 Ghz radio, as long as the 5 Ghz RSSI is not significantly worse than the 2.4 GHz RSSI, and the AP retains a suitable distribution of clients on each of its radios.
 - BLE and ZigBee on all AP platforms
 - Secure Wireless Segmentation: solution should have the capability to use an AP infrastructure and terminate
 two different SSIDs on two different controllers while maintaining complete separation and security for all
 networks, policies,
 - several flexible power management like IPM, shared-PoE, Failover PoE, etc
 - For significant crowd density: controllers clustering to enable seamless experience across Wi-Fi zone in the event of failure.

37. Network Operation features



The solution must have a Network Operation Centre with following features:

- i) Web based user interface (secured).
- ii) Should support fault, and performance management.
- iii) Ability to present graphical view of the network.
- iv) Should support various privilege levels (limited access possible).
- v) Capability to view the network topology.
- vi) The NOC should be able to monitor all the active components like Wireless elements, of the network.
- vii) Ability to trace end to end traffic flow NW-Controller-AP-End point device.
- 38. The solution should have capabilities to support separate SSIDs for Participants OR Guest users and staff of the BSES with separate/different policies.
- 39. Bidder will provide online access to the BSES for browsing of usage report like Historical data/logs.
- 40. Bidder must have provision for one relationship manager/Project leader to drive installation, support to understand and execute customization or changes required to make on Wi-Fi / Networking systems for next three years after successfully Go-Live
- 41. The bidder must provide a centralized dashboard application/Web URL to fetch all such details and enable the historical data to be reviewed by the BSES or any external agency duly permitted by the BSES.
- 42. BSES will provide Power source and space for installation of Wi- Fi solution. Bidder has to provide all other cabling and infrastructure, Equipment, Software etc. for successful installation and commissioning of the Wi-Fi Internet solution at site.

Functional Requirement:

- 43. The proposed Architecture should not have single point of failure, and must be integrated with existing solution of BSES to provide the necessary access to the required applications & Internet.
- 44. Wireless controller should support 200 Access points in high availability mode from day 1 and scalable upto 1000 Access point in future in same hardware
- 45. Proposed network shall support Dynamic/micro segmentation
- 46. Wireless Network shall be WiFi6 or advance from Day 1
- 47. Access Points proposed shall have valid WPC certificate
- 48. Access Points proposed shall support redundant ports with LACP support
- 49. BSES requirement is to build wireless network solution to HQ/central location and all other branch locations to facilitate the end user to access application/internet from central location use the wireless network with advance functionality and security.
- 50. This solution not include NAC currently, in future it is proposed and bidder will integrate in future for policy enforcement and network security. But bidder proposed solution will provide user and device authentication (AAA) from day 1 and same integrate with AD and existing NW/FW policy.
- 51. All Switches, Transceivers, Wireless Aps and NMS shall be from the same OEM Preferred (Cisco and HP)
- 52. Complete solution stack should support sflow/net flow including wired, wireless and security (NAC)
- 53. Solution should support multiple programmatic interfaces, including REST APIs/ Open flow 1.0 and 1.3, to enable automation of network operations, monitoring, and troubleshooting
- 54. BYPL will share the Existing NW designs after final order, to design and implement.
- 55. Bidder will share the, **Technical Specifications, Distribution Switch, Access Switch, Wireless Controller, Access Point and NMS** specification in prescriber format.
- 56. Any changes in NW/FW, Bidder will provide all the support.
- 57. After Implantation OEM will certified the Implementation/Configuration.



2. System Specifications

2.1.Wi-Fi Controller

Sr. No	Specifications	Compliance (Yes/No)	Remarks
1	Wireless solution should support up to 250 Access points in high availability mode		
2	Wireless solution should support minimum 8000 concurrent devices and 8 Gbps Firewall throughput		
3	The wireless controller should support 802.11ax (Wi-Fi 6), WPA3, and Enhanced Open - and existing standards		
4	The Solution should have Built-in AI-powered Wireless/RF optimization		
5	Wireless controller should support 4 x10/100/1000G (4xCombo) ports and 2x1/10G SFP+ ports		
6	The wireless controller should support automate deployment with Zero-touch Provisioning and Hierarchical Configuration		
7	The wireless controller should support up to 10 controllers in a cluster to maximize performance and availability		
8	Wireless solution support controllers clustering to enable seamless experience across Wi-Fi zone in the event of failure or significant crowd density.		
9	Wireless solution should support full set of northbound APIs to enable deep visibility into the network. The northbound APIs should provide RF health metrics, app utilization, device type and user data in an easy to integrate format.		
10	Wireless solution support the ability to dynamically update individual service modules without requiring an entire system reboot.		
11	The solution should support Live Upgrades and multiple version support to upgraded alongside active user sessions and eliminate the need for planned maintenance windows or downtime. Each Controller Cluster or individual service modules can also be selectively upgraded without impacting the rest of the network.		
12	The controller should support Hitless Failover and automated load balancing		
13	The solution should have the capability to use an AP infrastructure and terminate two different SSIDs on two different controllers while maintaining complete separation and security for all networks, policies, management and visibility.		
14	Wireless solution should have the technology to eliminate sticky clients and boosts Wi-Fi performance by ensuring that clients associate with the best access point. It also groups the MU-MIMO clients together for simultaneous transmission to multiple devices, improving the overall WLAN capacity.		
15	Wireless solution should support application awareness to WLANs to prioritize applications for each user		
16	Should support an ability to dynamically adjust channel and power settings based on the RF environment.		
17	Wireless solution should support CCMP/AES ,WEP 64- and 128-bit,TKIP,SSL and TLS,RC4 128-bit,RSA 1024-bit,RSA 2048-bit,L2TP/IPsec (RFC 3193), XAUTH/IPsec and PPTP (RFC 2637) Encryption protocols		



18	Wireless solution should control all user traffic and flexibility to control exactly which users can run what apps.	
19	Wireless solution should control highly granular visibility and control over 1,000 applications	
20	The wireless solution should support Active/Active (1:1) or Active/Standby (1+1) or N+1 High Availability Deployment Modes	
21	Permit non-essential traffic while preventing it from overwhelming mission critical applications.	
22	Should be able to classify different types of interference.	
23	Should provide real-time charts/log showing interferers per access point, on a per- radio, per-channel basis.	
24	Support for configuring media streams with different priority to identify specific video streams for preferential quality-of-service treatment.	
25	To deliver optimal bandwidth usage, reliable multicast must use single session between AP and Wireless Controller.	
26	Should support IPv4 & IPv6.	
27	Should support Internet Group Management Protocol (IGMP) snooping and access point should transmits multicast packets only if a client associated to the access point is subscribed to the multicast group.'	
28	For smooth, seamless and easy manageability, operation, interoperability and maintenance, the bidder should offer/quote WLC & WAPs of the same make (OEM).	
29	Controller should support deep packet inspection for all user traffic across Layer 4-7 network to analyses information about applications usage, peak network usage times for all access points from day one	
	Advance WIDS/WIPS Security	
30	The WLAN solution should have the HW to implement advance WIDS & WIPS from day 1.	
31	WIPS solution should Automatically blacklist clients when it attempt any attack.	
32	WIPS solution should be capable of wireless intrusion detection & prevention. The WLAN should be able to detect Rogue AP and take corrective action to prevent the rogue AP. The system should detect and prevent an organization's wireless client connecting to rogue AP and also prevent an outside client trying to connect to organizational WLAN.	
33	WIPS solution should detect & prevent an Ad-hoc connection (i.e. clients forming a network amongst themselves without an AP) as well as windows bridge (client that is associated to AP is also connected to wired network and enabled bridging between two interfaces)	
34	The system should detect an invalid AP broadcasting valid SSID and should prevent valid clients getting connected from these AP's.	
35	WIPS Solution should track the location of interferer objects.	
36	For advance forensic WIPS solution should perform spectrum analysis to detect and classify sources of interferences. System should provide chart displays and spectrograms for real-time troubleshooting and visualization.	
37	The WIPS solution should able to detect and locate the rogue access point on floor maps once detected.	



38	The WIPS solution should able to detect and prevent if a client use FATA-Jack 802.11 DoS tool (Available free on internet) and tries to disconnect other stations using spoofed authentication frames that contain an invalid authentication algorithm number.	
39	The WIPS solution should detect and protect if a client probe-request frame will be answered by a probe response containing a null SSID to crash or lock up the firmware of any 802.11 NIC.	
40	The WIPS solution should detect and protect if a client/tool try to flood an AP with 802.11 management frames like authenticate/associate frames which are designed to fill up the association table of an AP.	
41	The WIPS solution should detect and protect if a client/tool keep on sending disassociation frames to the broadcast address (FF:FF:FF:FF:FF) disconnect all stations on a network for a widespread DoS.	
42	The WIPS solution should detect and protect if somebody try to spoof mac address of client or AP for unauthorized authentication.	
43	The WIPS solution should detect and protect if a client/tool try de-authentication broadcast attempts to disconnect all clients in range rather than sending a spoofed deauth to a specific MAC address.	
44	The WIPS solution should detect and protect if an attacker attempts to lure a client to a malicious AP using SSID on fake AP in close proximity of the premises. It should detect When the Valid Client probes for Valid SSID and these malicious APs respond and invite the client to connect to them.	
45	When client radio is in sleep mode to save battery and AP then begins buffering traffic bound for that client until it indicates that it is awake. The WIPS solution should detect and protect if intruder try sending spoofed frames to the AP on behalf of the original client to trick the AP into believing the client is asleep to buffer the AP beyond limit. Controller should support cataract and Detect Wellenreiter	
46	All Switches, Transceivers, Wireless Controllers and APs shall be from the same OEM. The OEM shall be consistently present in Leaders quadrant in Gartner's Magic Quadrant for Wired and Wireless LAN Access Infrastructure for last five years Detection of Various Threats:support various threat detection methods and	
47	fingerprints for identifying and mitigating phishing attempts, botnets, malware, spyware, DDoS attacks, viruses, and protocol anomalies. The solution can also monitor connections to IP addresses associated with bad reputation nations and dark IP addresses, adding an extra layer of security.	
48	Support for Flow Monitoring Protocols: The solution supports popular flow monitoring protocols such as net flow, sflow, jflow, and IPFIX. These protocols enable the collection of network traffic data, which is essential for network visibility, traffic analysis, and security monitoring.	
49	Bi-Directional Conversation Support: The solution can statefully reassemble uni- directional flows into bi-directional conversations, allowing seamless analysis of communication between devices. It also handles de-duplication of data and manages asymmetrical flows, enhancing the accuracy of traffic analysis.	
50	Data Flow Analysis Across All Ports and Services	



Detection of Traine Anomalies in Encrypted Traine.	51	Detection of Traffic Anomalies in Encrypted Traffic:		
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2.2. Access Point

Sr. No	Specifications	Compliance (Yes/No)	Remarks
1	Access Point radio should be minimum 2x2 MIMO & OFDMA on all three radios 2.4GHz, 5GHz and 6GHz respectively with up to 3.9 Gbps aggregate data rate. The AP should have tri radio 2x2:2 MIMO in all three bands. 802.11ax access point with OFDMA and Multi-User MIMO (MU-MIMO).		
2	Access Point should have 2 x 100/1000/2500 Base-T MDI/MDX with Link Aggregation (LACP) between both network ports for redundancy and increased capacity.		
3	Access Point should have ultra tri-band filtering which must enable 5GHz and 6GHz to operate without restrictions or interference.		
4	Access Point should have all Wi-Fi 6 features like Orthogonal Frequency Division Multiple Access (OFDMA), Enhanced Open, and WPA3.		
5	Access point should IoT-ready Bluetooth 5 and 802.15.4 radio for Zigbee support.		
6	Access Point should have integrated internal antennas		
7	The Max transit power of the AP + Antenna should be as per WPC norms for indoor Access Points. OEM should give an undertaking letter stating that the AP will be configured as per WPC guidelines for indoor AP and also submit the WPC certificate showing approval.		
8	Should support 16x BSSIDs per AP radio.		
9	The access point should be capable of performing security scanning and serving clients on the same radio. It should be also capable of performing spectrum analysis and security scanning using same radio.		
10	Access Point should support BPSK, QPSK, 16-QAM, 64-QAM, 256 QAM, 1024 QAM and 4096 QAM modulation types.		
11	Access Point should support 802.3at/bt POE standard (class 4 or higher).		
12	Access point should support Intelligent Power Monitoring (IPM) capability to continuously monitor and report hardware energy consumption.		
13	Access point should have Serial console interface (proprietary, micro-B USB physical jack), Kensington security slot		
14	Access point should operate as a sensor for Wireless IPS		
15	Access point must incorporate radio resource management for power, channel, coverage hole detection and performance optimization		
16	AP mounting kit should be with locking mechanism so that AP cannot be removed without using special tools. AP should have Kensington security slot		
17	AP should support standalone mode or Inbuilt Virtual controller mode for specific deployment requirements		
18	The AP should support Advanced Cellular Coexistence (ACC) to minimize interference from cellular networks, distributed antenna systems and commercial small cell/femtocell equipment		



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19	The AP should support priority handling and policy enforcement for unified communication apps, including Skype for Business with encrypted videoconferencing, voice, chat and desktop sharing		
20	The AP should support deep packet inspection to classify and block, prioritize, or limit bandwidth for thousands of applications in a range of categories		
21	AP should support Pass point Wi-Fi (Hotspot 2.0) offering seamless cellular-to-Wi-Fi carryover for guests		
22	The Access point should support maximum ratio combining (MRC) for improved receiver performance		
23	The Access point should support cyclic delay/shift diversity (CDD/CSD) for improved downlink RF performance		
24	The Access point should support Space-time block coding (STBC) for increased range and improved reception		
25	The Access point should support Low-density parity check (LDPC) for high-efficiency error correction and increased throughput		
26	The Access point should support Transmit beam-forming (TxBF) for increased signal reliability and range		
27	The Access point should support 802.11ax Target Wait Time (TWT) to support low-power client devices		
28	AP should be UL 2043 certified.		
29	AP should support various deployment options including, cloud- managed, managed by on-premises controller or stand-alone mode		
30	Solution should have the ability to provide AI-ML Powered radio resource algorithm		
31	AP should provide SLA-grade performance by allocating radio resources, such as time, frequency, and spatial streams, to specific traffic types.		
32	The Wireless Access Point should be manageable from cloud NMS or On- premises NMS solution offered		
	Certifications and Industry Recognition		
33	Regulatory Compliance FCC/ISED, CE Marked, RED Directive 2014/53/EU, EMC Directive 2014/30/EU, Low Voltage Directive 2014/35/EU, UL/IEC/EN 60950, EN 60601-1-1, EN60601-1-2 or equivalent certifications Bidder should be ISO 20000: 2011, ISO 27001:2013 certified and ISO 9001:2015. Industry Certification of supplied material, OEM must be ISO-14001, FCC, UL ROHS.		
34	Wi-Fi Alliance Certifications from Day 1: - Wi-Fi CERTIFIED a, b, g, n, ac - Wi-Fi CERTIFIED 6E (ax, 6GHz) - WPA, WPA2 and WPA3 – Enterprise with CNSA option, Personal (SAE), Enhanced Open (OWE) - WMM		
35	All Switches, Transceivers, Wireless Controllers and APs shall be from the same OEM. The OEM shall be consistently present in Leaders quadrant in Gartner's Magic Quadrant for Wired and Wireless LAN Access Infrastructure for last five years		



	Support and Warranty	
	The Wireless Access Point shall be offered with minimum five years	
36	hardware warranty with 24x7 Technical support from OEM directly	

2.3. 24 Ports PoE+ Switch

SI. No.	Specification	Compliance (Yes/No)	Remar ks
1	Architecture		
	Shall be 19" Rack Mountable		
	24 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+), PoE power 370 W PoE+, 4 SFP+ 1/10GbE ports populated with required Transceivers module & cable as per solution requirement		
	The switch should have 1 dual-personality (RJ-45 or USB micro-B) serial console port		
	1GB SDRAM, 4GB Flash memory and 12 MB Packet buffer size		
	Shall have switching capacity of 128 Gbps including stack port		
	Shall have up to 95 million pps switching throughput The Switch should support 32000 MAC address		
	The switch should have Routing table size of 2000 entries (IPv4), 1000 entries (IPv6)		
	The switch should support Auto-MDIX to provide automatic adjustments for straight-through or crossover cables on all 10/100 and 10/100/1000 ports		
2	Features		
	The switch should support HTTP redirect function		
	The switch should support User role to defines a set of switch-based policies in areas such as security, authentication, and QoS. A user role can be assigned to a group of users or devices, using switch configuration		
	The switch should support Per-port tunnelled node to provides a secured tunnel to transport network traffic on a per-port basis to a Controller. Authentication and network policies will be applied and enforced at the Controller		
	The Switch should support Static IP Visibility to do accounting for clients with static IP address		
3	Quality of Service (QoS)		
	The switch should support Traffic prioritization (IEEE 802.1p) to allows real-time traffic classification into eight priority levels mapped to eight queues		
	The switch should support Layer 4 prioritization to enable prioritization based on TCP/UDP port numbers		
	The switch should support Class of Service (CoS) to sets the IEEE 802.1p priority tag based on IP address, IP Type of Service (ToS), Layer 3 protocol, TCP/UDP port number, source port, and DiffServ		



	The switch should support Rate limiting to sets per-port ingress enforced maximums and per-port, per-queue minimums	
	The switch should Provide graceful congestion management	
4	IPv6 Feature	
	The switch should support IPV6 host to enable switches to be managed in an IPv6 network	
	The switch should support Dual stack (IPV4 and IPV6) to transition from IPv4 to IPv6, supporting connectivity for both protocols	
	The switch should support MLD snooping to forward IPv6 multicast traffic to the appropriate interface	
	The switch should support ACL and QoS for IPv6 network traffic	
	The switch should support static and RIPng protocols for IPV6	
5	Security	
	The switch should support RA guard, DHCPv6 protection, dynamic IPv6 lockdown, and ND snooping	
	The switch should have Energy-efficient design	
	The switch should support Energy-efficient Ethernet (EEE) to reduce power consumption in accordance with IEEE 802.3az	
	The switch should support very low latency, increased packet buffering, and adaptive power consumption	
	The switch should have facility to allow for increased performance by selecting the number of queues and associated memory buffering that best meet the requirements of the network applications	
6	Convergence	
	The switch should support IP multicast routing and PIM Sparse and Dense modes to route IP multicast traffic	
	The switch should support IP multicast snooping and data-driven IGMP	
	The switch should support LLDP-MED (Media Endpoint Discovery)	
	The switch should support IEEE 802.1AB Link Layer Discovery Protocol (LLDP)	
	The switch should support Local MAC Authentication	
7	Resiliency and high availability	
	The switch should support Virtual Router Redundancy Protocol (VRRP)	
	The switch should support IEEE 802.1s, 802.1w, 802.1d	
	The switch should support IEEE 802.3ad link-aggregation-control protocol (LACP) and port trunking	
	The switch should provide easy-to-configure link redundancy of active and standby links	
8	Management	
	The switch should support SNMPv1, v2, and v3	
	The switch should support Zero-Touch Provisioning (ZTP)	
	The switch should support cloud based management platform offers simple, secure, and cost effective way to manage switches	
	The Switch should support Built-in programmable and easy to use REST API interface	



9	Manageability		
	The switch should support Dual flash images		
	The switch should allow assignment of descriptive names to ports		
	Find-Fix-Inform		
	The switch should have the capability to find and fixes common network problems		
	automatically, then informs administrator		
	The switch should allow multiple configuration files to be stored to a flash image		
	The switch should support RMON, XRMON, and sFlow		
	The switch should provide advanced monitoring and reporting capabilities for statistics, history, alarms, and events		
	The switch should support ingress and egress port monitoring enable network problem solving		
	The switch should support Unidirectional link detection (UDLD)		
	The switch should support IP service level agreements (SLA) for voice		
10	Layer 2 switching		
	The switch should support IEEE 802.1Q (4094 VLAN IDs) and 2K VLANs simultaneously		
	The switch should support Jumbo packet support		
	The switch should support IEEE 802.1v protocol VLANs		
	The switch should support Rapid Per-VLAN Spanning Tree (RPVST+)		
	The switch should support GVRP and MVRP		
	The switch should support VxLAN encapsulation (tunnelling) protocol for overlay network that enables a more scalable virtual network deployment		
11	Layer 3 routing and Services		
	The switch should support DHCP server		
	The switch should support minimum 256 static IP routing		
	Routing Information Protocol (RIP)		
	The switch should support Static routing for IPv4 and IPv6		
	The switch should support OSPFv2 and OSPFv3 protocols for routing between access and the next layer on the LAN.		
	The switch should support Policy-based routing		
12	Security		
	The switch should support IEEE 802.1X, Web-based authentication, MAC-based authentication		
	The switch should support Multiple IEEE 802.1X users per port		
	The switch should support Concurrent IEEE 802.1X, Web, and MAC authentication schemes per port and accept up to 32 sessions of IEEE 802.1X, Web, and MAC authentications		
	The switch should support Access control lists (ACLs)		
	The switch should provide IP Layer 3 filtering based on source/destination IP address/subnet and source/destination TCP/UDP port number		
	The switch should support RADIUS/TACACS+		
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	The switch should support Port security, MAC address lockout, STP BPDU port protection, STP root guard, Dynamic ARP protection	
	The switch should support DHCP protection	
	The switch should support Per-port broadcast throttling	
	The switch should support Private VLAN	
13	Environmental and Regulatory Compliance	
	Shall support IEEE 802.3az Energy-efficient Ethernet (EEE) to reduce power consumption	
	Operating temperature: 0° to 45°C, Operating humidity: 15% to 95% non-condensing	
	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 or equivalent Indian Standard like IS-13252:2010 or better 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 or equivalent Indian Standard like IS 6873 (Part 7): 2012 or better for EMC (Electro Magnetic Compatibility) requirements.	
14	Warranty and Support	
	The switch shall be offered with minimum five years hardware warranty with NBD Shipment and software updates/upgrades from OEM directly	
	Software upgrades/updates shall be included as part of the warranty	
	The switch shall EAL2/NDPP common criteria certified	
	All Switches, Transceivers, Wireless APs shall be from the same OEM. The OEM shall be present in Leaders quadrant in Gartner's Magic Quadrant for Wired and Wireless LAN Access Infrastructure	

2.4 Distribution Switch Core switch

S. No	Specification	Compliance Yes/No	Remarks
1	Architecture		
	Shall be modular chassis based switch, 19" Rack Mountable		
	Shall have minimum 6 payload/module slots and minimum Two Free Slots available for future with hot-swappable network port modules		
	The switch shall have shall have distributed switching architecture on each interface module (any additional hardware shall be proposed to achieve distributed switching)		
	The Switch shall be configured in HA Mode (A / A) in Two different Buildings.		
	Switch Shall be populated with minimum 24 * 1G/10G SFP+ ports and 2x40G Ports available from day 1.		
	The switch shall support 1G/10G SFP+ (Fiber), Copper (10G-Base T, UTP) 10G capability, 1000 Base-T copper (PoE or Non-PoE) to allow customer to choose based on the backbone cabling design		
	1 RJ-45 (serial RS-232C) console port		
	Shall have routing/switching capacity of 960Gbps		



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	Shall have up to 570 million pps switching throughput		
	Shall provide Gigabit (1000 Mb) Latency of < 3 µs and 10 Gbps Latency of < 2 µs		
	The Switch shall be populated with Redundant management module and		
	redundant Power Supply.		
2	Software-defined networking		
	The Switch should support Open Flow 1.0 and 1.3 specifications to enable SDN by allowing separation of the data (packet forwarding) and control (routing decision) paths		
	The Switch should create custom Open Flow pipelines (processing stages) on- demand to support new SDN applications		
	Policy Manager support		
	The Switch should support unified wired and wireless policies using Policy Manager The Switch should support HTTP redirect function		
3	Quality of Service (QoS)		
	The Switch should classifie traffic using multiple match criteria based on Layer 2, 3, and 4 information; applies QoS policies such as setting priority level and rate limit to selected traffic on a per-port or per-VLAN basis		
	Traffic prioritization:		
	The Switch should support real-time traffic classification into eight priority levels mapped to eight queues		
	Bandwidth shaping:		
	The switch should support port-based rate limiting to provides per-port ingress- /egress-enforced increased bandwidth		
	The switch should support classifier-based rate limiting		
	The switch should provide per-port, per-queue egress-based reduced bandwidth		
	The switch should support IEEE 802.1p priority tag based on IP address, IP Type of Service (ToS), Layer 3 protocol, TCP/UDP port number, source port, and DiffServ		
4	Management		
	The switch should mirror selected ingress/egress traffic based on ACL, port, MAC address, or VLAN to a local or remote Switch located anywhere on the network		
	The switch should support RMON, XRMON, and sFlow v5		
	The switch should support IEEE 802.1AB Link Layer Discovery Protocol (LLDP)		
	The switch should leverage RADIUS to link a custom list of CLI commands to an individual network administrator's login; an audit trail documents activity		
	The switch should support provide independent primary and secondary operating system files for backup while upgrading		
	The switch should support Multiple configuration files		
	The switch should support Unidirectional Link Detection (UDLD)/DLDP		
	The switch should use settings in DHCP to enable Zero-Touch Provisioning with Network Management tool		
5	Connectivity		
	The switch should support Jumbo frames		



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	The switch should provide automatic adjustments for straight-through or crossover cables on all 10/100 and 10/100/1000 ports		
6	IPv6 Feature		
	The switch should support IPv6 host		
	The switch should support Dual stack (IPv4 and IPv6)		
	The switch should support MLD snooping		
	The switch should support IPv6 ACL/QoS		
	supports ACL and QoS for IPv6 traffic		
	The switch should support support static, RIPng, OSPFv3 routing protocols from		
	day one		
	The switch should support encapsulation of IPv6 traffic in IPv4 packets from day one		
	The switch should have RA guard, DHCPv6 protection, dynamic IPv6 lockdown, and ND snooping		
7	Resiliency and high availability		
	The Switch should creates one virtual resilient switch from two switches and attached the network devices using standard LACP for automatic load balancing and high availability to simplify network operation by reduce the need for complex protocols like Spanning Tree Protocol (STP), Equal-Cost Multipath (ECMP), and VRRP		
	The switch should support Virtual Router Redundancy Protocol (VRRP) from day one		
	The switch should support Nonstop switching		
	The switch should support Nonstop routing		
	The switch should support Redundant management module and power		
	The switch should support IEEE 802.1s Multiple Spanning Tree Protocol and 802.1w Rapid Spanning Tree Protocol		
	The switch should support IEEE 802.3ad Link Aggregation Control Protocol (LACP) and port trunking		
	The switch should support up to 144 trunks, each with up to eight links (ports) per trunk		
	The switch should enable loop-free and redundant network topology without using Spanning Tree Protocol; allows a server or switch to connect to two switches using one logical trunk for redundancy and load sharing		
	The switch should provide uninterrupted power and allows hot-swapping of the redundant power supplies when installed		
	The switch should support Hot-swappable modules		
	The switch should support Uplink Failure Detection		
	The switch should support easy-to-configure link redundancy of active and standby links		
8	Layer 2 switching		
	MAC address table size of 64000 entries		
	The switch should support IEEE 802.1v protocol VLANs		
	The switch should support IEEE 802.1ad Q-in-Q		
	The switch should support MAC-based VLAN		
	The switch should support Rapid Per-VLAN Spanning Tree (RPVST+)		



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The switch should support VLAN and tagging			
The switch should support IEEE 802.1Q standard and 4096 VLANs simultaneously			
Layer 3 services			
The switch should support User Datagram Protocol (UDP) helper function			
The switch should support Loopback interface address			
The switch should support Route maps			
The switch should support DHCP server			
The switch should support Bidirectional Forwarding Detection (BFD)			
Layer 3 routing			
The switch should support 10000 (IPv4), 5000 (IPv6) routing entries			
The switch should support Static IP routing for both IPv4 and IPv6 networks			
The switch should support OSPFv2 for IPv4 routing and OSPFv3 for IPv6 routing			
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address/subnet, and source/destination TCP/UDP port number on per-VLAN or per- port basis			
The switch should support IEEE 802.1X users per port			
The switch should support Web-based authentication from a Web browser for clients that do not support IEEE 802.1X supplicant			
The switch should support MAC-based authentication			
The switch should support Concurrent IEEE 802.1X, Web, and MAC authentication schemes per port			
The switch should support DHCP protection to blocks DHCP packets from unauthorized DHCP servers, preventing denial-of-service attacks			
The switch should support secure encryption of all access methods (CLI, GUI, or MIB) through SSHv2, SSL, and/or SNMPv3			
The switch should support CPU protection			
The switch should support CPU protection The switch should support ICMP throttling to defeat ICMP denial-of-service attacks by enabling any switch port to automatically throttle ICMP traffic			
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The switch should support ICMP throttling to defeat ICMP denial-of-service attacks by enabling any switch port to automatically throttle ICMP traffic The switch should support STP BPDU port protection			
The switch should support ICMP throttling to defeat ICMP denial-of-service attacks by enabling any switch port to automatically throttle ICMP traffic The switch should support STP BPDU port protection The switch should support Dynamic IP lockdown			
	The switch should support IEEE 802.1Q standard and 4096 VLANs simultaneously Layer 3 services The switch should support User Datagram Protocol (UDP) helper function The switch should support Loopback interface address The switch should support Route maps The switch should support DHCP server The switch should support Bidirectional Forwarding Detection (BFD) Layer 3 routing The switch should support 10000 (IPv4), 5000 (IPv6) routing entries The switch should support Static IP routing for both IPv4 and IPv6 networks The switch should support OSPFv2 for IPv4 routing and OSPFv3 for IPv6 routing from day one The switch should support Policy-based routing from day one The switch should support Border Gateway Protocol (BGP) from day one The switch should support RIPv1, RIPv2, and RIPng routing from day one Security The switch should provide filtering based on the IP field, source/destination IP address/subnet, and source/destination TCP/UDP port number on per-VLAN or perport basis The switch 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	The switch should support Port security to allow access only to specified MAC addresses, which can be learned or specified by the administrator	
	The switch should support MAC address lockout	
	The switch should support Source-port filtering	
	The switch should support RADIUS/TACACS+	
	The switch should support Secure Shell	
	The switch should support Secure FTP	
	The switch should support secure management interfaces such as SNMP, telnet, SSH, SSL, Web, and USB at the desired level	
	Switch management logon security	
	helps secure switch CLI logon by optionally requiring either RADIUS or TACACS+ authentication	
	The switch should support customized security policy when users log in to the switch	
	The switch should support Private VLAN	
12	Convergence	
	The switch should support IP multicast routing	
	The switch should support IP multicast snooping (data-driven IGMP)	
	The switch should support LLDP-MED (Media Endpoint Discovery)	
	The switch should support multiple methods (automatic, IEEE 802.3af class, LLDP-MED, or user specified) to allocate PoE power for more efficient energy savings	
	The switch should support Auto VLAN configuration for voice	
	The switch should support Local MAC Authentication	
13	Environmental Features	
	Shall support IEEE 802.3az Energy-efficient Ethernet (EEE) to reduce power consumption	
	Operating temperature of 0°C to 40°C	
	Safety and Emission standards including EN 60950; IEC 60950; FCC part 15 Class A	
14	Warranty and Support	
	The switch shall be offered with minimum five years hardware warranty with NBD Shipment and software updates/upgrades from OEM directly	
	The switch shall EAL2/NDPP common criteria certified	
	All switches, Access Point, transceivers components shall be from the same OEM. The OEM shall be consistently present in Leaders quadrant in Gartner's Magic Quadrant for Wired and Wireless LAN Access Infrastructure for last 3 years.	
	Software upgrades/updates shall be included as part of the warranty	
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2.4. NMS

S.No	Specifications	Compliance (Yes/No)	Remarks
	NMS		



I I	S should be capable of monitoring both LAN and WLAN. There should be gle monitoring window	
2 Solu and mar for e	Troubleshooting, Indoor location monitoring capability, Wireless IPS nagement. Centralized Software updates, Network mapping with floor plans easier automated site survey, Rogue	
3 effic	S should provide real-time monitoring, pro-active alerts, historical reporting, cient ableshooting through centralized intuitive user interface	
4 RF h	S should have option to customize report on parameters like client health, nealth, device inventory, auditing, compliance and option to scheduling ort time.	
5 secu	MS should provide tools to help better manage RF coverage, address urity issues, location tracking to provide a clear picture of who is on the work, their location and how the network is performing.	
6 Sign	ution must provide client troubleshooting tools, including showing client hal to Noise Ratio (SNR), Received Signal Strength Indicator (RSSI) and sion throughput.	
7 qual	cy creation and enforcement - to easily create virtual LAN (VLAN), RF, lity of service policies, security policies, network topology maps, tomized reports	
	tem should automatically discover WLAN infrastructure devices and create polity into wired infrastructure that connects controllers and APs	
type	e, OS & more	
10 cand	tral configuration for controller and APs and there should be an option to cel out of a new configuration or reverts back to the last saved figuration.	
	ws quick location of users and wireless devices for troubleshooting, nning and asset setracking.	
	back location history of individual users over the past day to aid in bleshooting and precovery of lost devices.	
	known location of each tracked device is stored indefinitely to help find or stolen devices	
	play the location of each rogue device on a building floor plan and disable ed switch ports if attached rogue APs are detected.	
15 dete	regates, correlates, alerts and logs wireless attacks that have been ected and reported on the network, providing a comprehensive picture of astructure.	
16 user	tem should facilitate various administrative roles to match each individual rs responsibility e.g. HelpDesk user may be given read-only access to nitoring data without being permitted to make configuration changes.	
17 equi	tem must be able to provide detailed performance statistics for WLAN ipment (statistics related with bandwidth, coverage etc.) and must not be to specific WLAN vendors, also provide graphical details of WLAN zation, average data rate, WLAN traffic etc. on a per AP basis	
Syst deta asso	tem should provide current list of clients connected to each AP, graphical ails of wireless traffic & data rates on a per client basis, recent history of ociation with APs & adhoc networks for clients, alerts when wireless clients interface bridging or Internet	
10 Syst	tem should provide DHCP response times for every user. Aggregated DHCP conse times for servers.	
yes Cent Cent Conf 10 cand conf 11 Allor plan 12 Play trou 13 Last lost 14 Disp wire Agg 15 dete infra Syst 16 user mor Syst 17 tied utiliz Syst 18 asso use 19 Syst	tral configuration for controller and APs and there should be an option to cel out of a new configuration or reverts back to the last saved figuration. ws quick location of users and wireless devices for troubleshooting, aning and asset tracking. back location history of individual users over the past day to aid in ableshooting and crecovery of lost devices. known location of each tracked device is stored indefinitely to help find or stolen devices blay the location of each rogue device on a building floor plan and disable and switch ports if cattached rogue APs are detected. regates, correlates, alerts and logs wireless attacks that have been exted and reported on the network, providing a comprehensive picture of astructure. tem should facilitate various administrative roles to match each individual res responsibility e.g. HelpDesk user may be given read-only access to nitoring data without being permitted to make configuration changes. tem must be able to provide detailed performance statistics for WLAN ipment (statistics related with bandwidth, coverage etc.) and must not be to specific WLAN vendors, also provide graphical details of WLAN zation, average data rate, WLAN traffic etc. on a per AP basis tem should provide current list of clients connected to each AP, graphical ails of wireless traffic & data rates on a per client basis, recent history of ociation with APs & adhoc networks for clients, alerts when wireless clients interface bridging or Internet	



20	System should provide Authentication response times for every user. Aggregate Auth server response times per server.	
21	System should provide DNS response times for every user. Aggregated DNS response information per server.	
22	System should provide client troubleshooting information including Association time, Authentication success/failure and time, DHCP time and DNDS time.	
23	Connection Sharing, trends for WLAN performance parameters, alert when wireless bandwidth is being wasted due to excessive auxiliary traffic, trends for WLAN performance parameters	
24	System must be able to maintain recent history of connected clients for each AP for up to 2 years	
25	The operations solution should provide a network "dashboard" on all screens, providing up-to-date network-wide information on key usage and performance metrics. The operations solution should monitor edge switches to which wireless devices are connected. The operations must be able to monitor IDS events, since they have a potential impact on network performance as well as security.	
26	The operations must provide mechanisms for remediating and/or containing rogue devices it has detected.	
27	Warranty and Support	
	The software shall be offered with minimum five years Software/hardware warranty with NBD Shipment and software updates/upgrades from OEM directly	

3. Approved Makes and Accessories:

S.No.	Description	Approved Makes
		AMP-Tyco/ Commscope/
1.	CAT 6 Cable & CAT-6 Patch-cords	Systemax
		As per Solution
		AMP-Tyco/ Commscope/
2.	Fiber cable Multimode	Systemax
		As per Solution
3.	3Cx2.5 sq.mm PVC Insulated copper conductor cable	ISI Marked
4.	25mm dia PVS/ MS Conduit	ISI Marked
5.	Duct indoor cabling underground cabling for AP installations in false celling	Reputed make
	Other items/Parts/accessories not mentioned but required	
6.	for implementation of Wi-Fi Network turnkey project is to	Reputed make
	be considered in the scope of supply	



4. Documentation & Training

- **4.1.** The bidder shall provide the required Documentation specified in the document for all the proposed equipment and systems.
- **4.2.** The Bidder shall be responsible for training the BYPL's employees in the areas of parameterization, implementation, migration, operations, management, error handling, system administration, etc. The training should at least cover the following areas:
 - 1. Functionality available in the solution,
 - 2. New functionality customized (if any),
 - 3. Parameterization,
 - 4. Impact Analysis,
 - 5. Generating various MIS/EIS reports from the solution provided,
 - 6. System and Application administration,
 - 7. Log analysis and monitoring
- **4.3.** The documentations shall include but not limited to the followings: -
 - 4.3.1. User guides for those who shall be using the system
 - 4.3.2. Operational guides for administrators and technical support officers;
 - 4.3.3. Installation, configuration, fine-tuning and maintenance guides;
 - 4.3.4. Configuration documentations, which includes the various parameter settings in the various system after the fine-tuning processes.
- **4.4.** Technical hands-on training for Administrator and Operational teams of BYPL, at the appropriate sites (Bidder and BYPL premises as identified at the time of training) and the Bidder has to organize the classroom trainer from OEM for 4 persons.

5. Commissioning and Acceptance Test

- **5.1.** The bidder shall submit full documentation and status report on the commissioning and handover to BYPL.
- **5.2.** The bidder shall propose, design, implement and perform Commission and Acceptance test plan with the BYPL.
 - 5.2.1. Bidder shall prepare criteria for commissioning and acceptance for the various systems in consultation and approval of BYPL.
 - 5.2.2. The criteria shall be vetted and approved by BYPL.
- **5.3.** The criteria shall be attached as appendix with the commissioning and acceptance documents

6. Support and Services

1	Support and Services		
1.1	Support Window	9/6	
1.2	Response	30 Minutes	



1.3	Hardware Work Around	8 Hours	
1.4	Hardware permanent Resolve	24 Hours	
1.5	On Site all technical Support including Man with Material, Patch, Firmware, OS/Application upgrade etc.		
1.7	Software Upgrade	N-1	
1.8	Annual maintenance of device and report		
1.9	Service up time 99% Monthly (Controller and AP)		
2	Penalty		
2.1	Service penalty 10% of total Invoice, If service not meet the desired up Time on Monthly Basis		

