REQUEST FOR PROPOSAL (RFP) Volume- I

For

Selection of Agency for Implementation of revamped integrated communication infrastructure



General Administration Department (GAD)

Mahanadi Bhawan, Nava Raipur, Chhattisgarh Email: secy-gad@cg.gov.in, Website: gad.cg.gov.in

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SECTION-I

NOTICE INVITING TENDER & FACT SHEET

NOTICE INVITING TENDER

FOR

Selection of Agency for Implementation of revamped integrated communication infrastructure

No 01/04/GAD/2025

Raipur, Dated 07/05/2025

General Administration Department (GAD), Government of Chhattisgarh in the state of Chhattisgarh invites technical and financial proposals from reputed Selected Bidder / Implementing Agency of national and international repute in e-Governance implementation (in sealed cover), to provide "Implementation of revamped integrated communication infrastructure" as detailed in the Scope of Work in this RFP.

The document can be downloaded from the website https://gad.cg.gov.in & www.gad.cg.gov.in. In response to this tender, it shall be deemed to have been done after careful study and examination of this document with full understanding of its implications. This section provides general information about the Issuer, important dates and addresses and the overall eligibility criteria for the parties.

1.1 Issuer

The Secretary General Administration Department Mahanadi Bhawan, Nava Raipur Chhattisgarh–492001

Tel: +91-771-2510825 Fax: +91-771-2510825 Email: gad-secy@cg.gov.in Website: https://gad.cg.gov.in

1.2 Address for Bid Submission and Correspondence

The Secretary General Administration Department Mahanadi Bhawan, Nava Raipur Chhattisgarh–492001

Tel: +91 - 771 - 2510825 Fax: +91 - 771 - 2510825 Email: gad-secy@cg.gov.in Website: https://gad.cg.gov.in

LIST OF ABBREVIATIONS

Sr. No.	Abbreviations	Description	
1	APNIC	Asia Pacific Network Information Center	
2	AS	Autonomous System Number	
3	BGP	Boarder Gateway Protocol	
4	BIDDER	Tender participant	
5	GAD	General Administration Department	
6	CGSWAN	Chhattisgarh State Wide Area Network	
7	CPE	Customer Premise Equipment	
8	CVBE	Commercial Value for Bid Evaluation	
9	DMZ	De Militarized Zone	
10	DNS	Domain Name Server	
11	ESH	Extended Service Hours	
12	GoCG	Government of Chhattisgarh	
13	GoI	Government Of India	
14	GO-L IVE	Handover from Existing Wi-Fi Operator and start operation.	
15	HDSL	High bit rate Digital Subscriber Line	
16	HoD	Indravati Bhawan at Nava Raipur	
17	НОТО	Handing over Taking over	
18	HTTP	Hypertext Transfer Protocol	
19	IMAP	Internet Message Access Protocol	
20	IP	Internet Protocol	
21	IPS	Intrusion Prevention System	
22	ISP	Internet Service Provider	
23	LOI	Letter of Intend to be issued to successful bidder	
24	Mbps	Mega Bits Per Seconds	
25	MSM	Multi Service Mobility	
26	NAT	Network Address Translation	
27	NeGP	National e-governance plan	
28	NIC	National Informatics Centre	
29	NIT	Notice Inviting Tenders	
30	NKN	National Knowledge Network	
31	NMC	Network Management Centre	
32	NMS	Network Management Server	
33	OEM	Original Equipment Manufacturer	
34	PAT	Port Address Translation	
35	PBH	Prime Business Hours	
36	РоЕ	Power Over Ethernet	
37	POP	Point of Presence	
38	QGR	Quarterly Guaranteed Revenue	
39	QoS	Quality of Service	
40	RFP	Request for Proposal	
41	SHQ	State Head Quarter	
42	SNMP	Simple Network Management Protocol	
43	SLA	Service Level Agreement	
44	SWAN	State Wide Area Network Third Portry and item	
45 46	TPA VoIP	Third Party auditor	
40	VOIP	Voice over IP	

Sr	Abbreviations	Description
. No.		_
47	VC	Video Conferencing
48	WAN	Wide Area Network
49	Wi-Fi	Wireless Fidelity
50	Wi-Fi	Wi-Fi Infrastructure at Mahanadi and Indravati Bhawan in Naya
	Infrastructure	Raipur
51	WLAN	Wireless Local Area Network
52	LAN	Local Area Network
53	EPBAX	Electronic Private Automatic Branch Exchange

DISCLAIMER

The information contained in this Request for Proposal (hereinafter referred to as "RFP") document provided to the Bidders, by the General Administration Department Raipur, hereinafter referred to as GAD, or any of their employees or advisors, is provided to the Bidder(s) on the terms and conditions set out in this RFP document and all other terms and conditions subject to which such information is provided.

The purpose of this RFP document is to provide the Bidder(s) with information to assist in the formulation of Proposals. This RFP document does not aim to hold all the information each Bidder may require. This RFP document may not be appropriate for all persons, and it is not possible for the GAD, their employees, or advisors to consider the business/investment objectives, financial situation, and particular needs of each Bidder who reads or uses this RFP document. Each Bidder should conduct its own investigations and analysis and should check the accuracy, reliability, and completeness of the information in this RFP document and, where necessary, obtain independent advice from appropriate sources.

GAD, their employees and advisors make no representation or warranty and shall incur no liability under any law, statute, rules, or regulations as to the accuracy, reliability, or completeness of the RFP document.

GAD may, in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this RFP document.

FACT SHEET

1	Tender No.	01/GAD/IC /2025, Dated 7/05/2025	
2	Name of the Work	Selection of Agency for Implementation of revamped integrated communication infrastructure (WLAN/LAN/EPBAX)	
3	Name of the issuer of this tender	Secretary, GAD	
4	Date of issue of tender document	07/05/2025	
5	Last date for submission of pre- bid queries	11/05/2025 till 03:30 PM through online gem portal	
8	Last Date for Submission of Bids	27/05/2025 up to 04:00P.M. (Online)	
9	Last Date for Physical submission of EMD (in the form of DD/BG)	27/05/2025 up to 04:00 P.M.	
10	Date of Opening of technical Bids	27/05/2025 at 4:30 P.M.	
11	Date of Commercial Bid opening	Will be informed later.	
12	Place of physical Submission	The Secretary, GAD, Mahanadi Bhawan, Atal Nagar, Nava Raipur, Raipur, Chhattisgarh –	
		492001 Information on the outer envelope should also include:< Name of the RFP > & "DO NOT OPEN BEFORE < insert the date & time>.	
13	Address of Communication	Mahanadi Bhawan, Atal Nagar, Nava Raipur, Raipur, Chhattisgarh–492001	
14	Earnest Money Deposit (EMD)	Rs. 45,00,000/- (Rupees forty five Lakhs only) EMD may be submitted in Demand Draft in the name of Secretary, GAD:-	
		Scan copy of DD should be uploaded in gem portal along with actual online bid submission.	
		2) Original copy of the DD should be submitted to GAD office before the last date of bid submission (please refer fact sheet in this RFP Sr. no. 8).	
		OR	
		EMD may be submitted in the form of Bank Guarantee (BG) as per format mentioned in the RFP on stamp paper of value required under law duly signed by authorized representative of Bank:	

		1) Scan copy of BG should be uploaded GeM portal along with actual online bid submission.
		2) Original copy of BG should be submitted to GAD office before the last date of bid submission (please refer fact sheet in this RFP Sr. no. 8).
16	Validity of Proposal	Proposals must remain valid 180 days after the submission date.
17	Method of Selection	L1 (Least Cost)

Note:

- 1. GAD reserve the right to change any schedule of the bidding process.
- 2. Proposals must be received not later than the time, date and venue mentioned in the Fact Sheet.
- 3. Proposals that are received after the deadline WILL NOT be considered in this procurement process.
- 4. The financial quote must be submitted ONLY on GeM portal. If financial bid of bidder is submitted along with physical copy of bid or anywhere else apart from GeM portal, the bid of such bidder will be rejected.

SECTION-II INTRODUCTION

1.1 ABOUT THIS REQUEST FOR PROPOSAL (RFP)

General Administration Department (GAD), Government of Chhattisgarh invites technical and financial proposals from reputed Selected Bidder firms of national repute in System Integration and project implementation to provide revamped "Implementation of revamped integrated communication infrastructure" as detailed in the Scope of Work in this RFP. The successful bidder will be provided to cover services under this RFP for a 5-year period as per the scope mentioned in this RFP, which may be extended for another 2 years.

The invitation to a proposal is for the Service Provider/System Integrator/Implementing Agency for the project "Implementation of revamped integrated communication infrastructure" for the following deliverables:

- 1. Design, Supply, Installation, Commissioning, operations and Maintenance of new equipment for WLAN/LAN/EPBAX Wi-Fi Infrastructure as per requirement in Mahanadi and Indravati Bhawan and its circumstances.
- 2. Any other work or site assigned by GAD for SITC and O&M of WLAN/LAN/EPBAX services.

The bidders are advised to study the tender document carefully. Submission of bids shall be deemed to have been done after careful study and examination of the tender document with full understanding of its implications. This section provides general information about the Issuer, important dates and addresses and eligibility criteria for the bidders.

1.2 STRUCTURE OF THE RFP

This Request for Proposal is meant to inform interested bidders capable of delivering the services described herein. This Request for Proposal document consists of two volumes viz:

Volume I: Techno-Commercial and Bidding Terms

Volume I of RFP details the Instruction to Bidders, Evaluation Criteria, Commercial Formats, Service Levels and Bidding process details.

Volume II: Functional, Technical and Operational Requirements

Volume II of RFP details out Scope of Work, Bill of Material, Technical Specifications, and Technical Annexure

SECTION-III ELIGIBILITY CRITERIA

3. ELIGIBILITY CRITERIA

The bidder must possess the requisite experience, strength, and capability to provide the services necessary to meet the requirements as described in the tender documents. The bidder must also possess the technical know-how and the financial wherewithal that would be required to successfully provide the services for "Implementation of revamped integrated communication infrastructure" and support services sought by the Secretary, General Administration Department GAD Raipur, for the entire period of the contract. The bids must be complete in all respects and should cover the entire scope of work as stipulated in the Tender document. The invitation to a proposal is open to all bidders who qualify the eligibility standards as presented under:

Eligibility/ Technical Evaluation Criteria

Sr. No.	Eligibility Criteria	Documents Required
1	The bidder should be a State/Central PSU	Certificate of company
	registered in India under companies Act 1956 or	registered in India.
	2013 and operating for the last five years in	AND
	Telecome/IT/ITeS Services as on date of	GST certificate shall be
	submission of bid. They should have presence in	enclosed.
	Chhattisgarh.	
2	The bidder should furnish, as part of its proposal,	Online upload through CG
	Earnest Money Deposit (EMD) of the Rs.	Gem Portal and physical
	45,00,000/- (Rupees Forty five Lakhs only)	submission at GAD
	through online/offline mode.	
3	The Bidder, a State/Central PSU registered in	A copy of the audited Balance
	India, should have an average annual turnover of	sheet certified by a CA of the
	not less than Rs. 150 Crores in Telecom/IT / ITeS	bidding company showing
	Services for the last three financial years as on bid	turnover of the bidding company
	submission date.	for last three years should be
		enclosed.

Sr. No.	Eligibility Criteria	Documents Required
4	The bidder must have successfully completed same or	Enclose copy of work
4	similar project for Supply, installation,	order/agreement Installation
	Commissioning and Operation & Maintenance of	and Commissioning certificate/
	WLAN/LAN/EPBAX Infrastructure for	completion certificate
	government/PSU, of at least projects value of 15	•
	Crore during last 03 (three) years from the date of	
	publication of tender.	
5	A power of attorney / Board	Power of attorney/ Board
	resolution/authorization letter in the name of the	Resolution/ authorization letter
	person signing the bid.	copy to be enclosed as per
		ANNEXURE-II.

Sr. No.	Eligibility Criteria	Documents Required
6	The bidder should be authorized by original	
	equipment manufacturing companies for	The bidder should submit the
	WLAN/LAN/EPBAX to supply the equipment	MAF (Manufacturer
	and provide warranty on behalf of respective	authorization Form) certified
	original equipment manufacturers should confirm	by the OEM for active
	that the products meet the technical & functional	components.
	requirements & Products quoted are not the end of	
	sale and/or end of support and/or end of life.	
	OEM should undertake that the support including	
	spares, updates, patches, security patches, fixes,	
	bug fixes, for the quoted products shall be	
	available for minimum 5 years. The OEM should	
	be in operation in India for supply of WLAN/LAN	
	equipment for more than 5 years.	

SECTION-IV EVALUATION CRITERIA

4. EVALUATION CRITERIA

4.1 EVALUATION PROCESS

- a) The GAD Purchase Committee will evaluate the bidders' responses.
- b) The Purchase Committee established by the GAD will assess the responses to the RFP along with all supporting documents and evidence. Failure to submit the required supporting documents or evidence may result in rejection.
- c) The Purchase Committee's decision concerning the evaluation of RFP responses shall be final. No correspondence will be considered outside the Committee's evaluation process.
- d) The Purchase Committee may ask for meetings with the Bidders to seek clarifications on their proposals.
- e) The Purchase Committee reserves the right to reject any or all proposals.
- f) Each of the responses shall be evaluated as per the criteria and requirements specified in this RFP.

4.2 Tender Opening

The proposals submitted by the deadline specified in this RFP document will be opened by the Purchase Committee authorised by GAD, in the presence of any bidders or their representatives who choose to attend the opening. Bidders' representatives should be advised to bring an identity card or a letter of authority from their firms to confirm their legitimacy for attending the proposal opening.

4.3 Tender Validity

The offer submitted by the Bidders should be valid for a minimum period of 180 days from the date of submission of bid.

4.4 Tender Evaluation

- i) Initial Bid scrutiny will be held, and incomplete details as given below will be treated as non-responsive. If Proposals,
 - a) Are not submitted as specified in the RFP document.
 - b) Received without the Letter of Authorization (Power of Attorney) (ANNEXURE-II).
 - c) Are found with suppression of details.
 - d) With incomplete information, subjective, conditional offers and partial offers submitted
 - e) Submitted without the documents requested on the checklist.
 - f) Have non-compliance of any of the clauses stipulated in the RFP.
 - g) With a lesser validity period.
- ii) All responsive Bids will be considered for further processing as below:
 - The Purchase Committee will prepare a list of responsive bidders who comply with all the Terms and Conditions of the Tender. All eligible bids will be considered for further evaluation by a committee, according to the Evaluation process defined in this RFP document. The decision of the Committee will be final in this regard.
 - a. The evaluation committee will examine the bids to determine whether they are complete, whether any computational errors have been made, and whether the bids are generally in order.
 - b. Arithmetical errors will be rectified on the following basis:
 - If there is a discrepancy between the unit price and the total price calculated by multiplying the unit price by the quantity, the unit price shall prevail, and the total price shall be corrected.
 - If the Bidder does not accept the correction of the errors, his proposal will be rejected. If there is a discrepancy between words and figures, the amount in words will prevail.
 - c. GAD may conduct clarification meetings with each or any bidder to discuss any matters, technical or otherwise.
 - d. Further, the scope of the evaluation committee also covers taking any decision with regard to the Tender Document, execution of the project including management period.

- e. The proposal will be opened online in the presence of bidders' representatives who wish to attend at their own Expense. The representatives present must sign a register to confirm their attendance.
- f. The proposal document will be evaluated according to the following steps:
- Pre-qualification document will be examined to determine whether the bidder meets the eligibility criteria, whether the proposal is complete in all respects, whether the documents have been properly signed and whether the bids are generally in order. Any bids found to be non-responsive for any reason or not meeting the minimum levels of the performance or eligibility criteria specified in various sections of this Tender Document will be rejected and will not be considered further.
- ii. **Evaluation of document:** A comprehensive assessment of the bids will be conducted to determine the bidders' competency and the extent to which the technical aspects meet the requirements outlined in the Tender Document. Received bids will be assigned scores based on the parameters defined in the table below.

All supporting documents submitted in support of Eligibility and Technical Evaluation matrix should comply the following:-

- a) The supporting document is to be submitted online only.
- b) Supporting documents should clearly indicate the value of the completed project and scope of work/ services should be clearly highlighted.
- c) Supporting Documents should indicate the value and duration of the project.
- d) In case of Bidder is having a Non-Disclosure Agreement (NDA) with their client no such experience will be counted (if agreement copy not submitted).
- e) The Project submitted against the Pre-Qualification Criteria and Technical criteria shall be considered whose Last Deliverables or milestones against the contract/ Agreement falls under the last 5 Five Years.
- f) An incomplete order copy submitted by the bidder will not be considered for evaluation.

iii. PRICE BID EVALUATION

Bidders who are qualified in Eligibility Criteria only will be considered for Price Bid opening. Only authorised representatives of the bidders will be allowed to take part in the Price Bid opening. The Price valuation will include all Duties and Taxes as given below.

- a. In cases of discrepancy between the cost quoted in words and in figures, the amount mentioned in words will be considered.
- b. In evaluating an imported item's price, the price will be determined inclusive of the customs duty.
- c. In evaluation of the price of articles which are subject to excise duty, the price will be determined inclusive of such excise duty.
- d. Price evaluation will be inclusive of all Taxes and Delivery charges up to a respective location of Chhattisgarh state.
- e. The Price Validity for all items should be a minimum of two years from the date of signing the agreement.

iv. Evaluation of Commercial Bid

a. The commercial bids will be opened to those who will be qualified in the eligibility criteria in this RFP. The evaluation will be carried out only if Commercial bids are complete and computationally correct.

v. AWARD OF CONTRACT

- a. Within 21 days after the receipt of notification of award, Bidder should submit a Performance Bank Guarantee (PBG) as per the prescribed format in this RFP. The price discovery of manpower shall be valid for the contract duration.
- b. No dispute can be raised by any Bidder whose bid has been rejected, and no claims will be entertained or paid on this account.

vi. GAD RESERVES THE RIGHT TO

- i. Increase/decrease the quantity to be supplied/services to be provided.
- ii. Modify, reduce, or increase the quantity requirements as per the requirement of GAD.

Besides other conditions and terms highlighted in the Tender Document, bids may be rejected under the following circumstances:

General rejection criteria

- i) Conditional Bids.
- ii) If the information provided by the Bidder is found to be incorrect/misleading/fraudulent at any stage/time during the Tendering Process.
- iii) Any effort on the part of a Bidder to influence the bid evaluation, bid comparison or contract award decisions.
- iv) Bids without the signature of person (s) duly authorised on required pages of the bid.
- v) Bids without power of attorney/board resolution.
- vi) MAF and OEM-related document of OEM is not submitted by bidder.

Pre-Qualification rejection criteria

- i. Bidders not complying with the Eligibility Criteria given in this Tender.
- ii. Failure to furnish all information required by the Tender Document or submission of a bid not substantially responsive or clarification sought by GAD is not adequately addressed and complied with by the bidder.

Technical rejection criteria

- i. Technical Bid containing commercial details.
- ii. Revelation of Prices in any form or by any reason before opening the Commercial Bid.
- iii. Failure to furnish all information required by the Tender Document or submission of bid not substantially responsive to the Tender Document in every respect.
- iv. Bidders not quoting for the complete scope of Work as indicated in the Tender Documents, addendum (if any) and any subsequent information given to the Bidder.

- v. Bidders not complying with the Technical and General Terms and conditions as stated in the Tender Documents.
- vi. The Bidder not confirming unconditional acceptance of full responsibility of providing services in accordance with the Scope of work and Service Level Agreements of this tender.

Commercial Rejection Criteria

- i. Incomplete Price Bid.
- ii. Price Bids that do not conform to the Tender's price bid format.
- iii. If there is an arithmetic discrepancy in the commercial Bid calculations the GAD may consider rectifying the same. If the Bidder does not accept the rectification, then their bid may be rejected.

SECTION V

INSTRUCTIONS TO BIDDERS

5. INSTRUCTIONS TO THE BIDDERS

5.1 General

- a) While every effort has been made to provide comprehensive and accurate background information and requirements and specifications, Bidders must form their own conclusions about the implementation services required. Bidders and recipients of this RFP may wish to consult their own legal advisers in relation to this RFP.
- b) All information supplied by Bidders may be treated as contractually binding on the Bidders, on successful award of the assignment by the GAD on the basis of this RFP.
- c) No commitment of any kind, contract or otherwise, shall exist unless and until a formal written contract has been executed by or on behalf of the GAD. Any notification of preferred bidder status by the GAD shall not give rise to any enforceable rights by the Bidder. GAD may cancel this public procurement at any time prior to a formal written contract being executed by or on behalf of GAD.
- d) Bidders should use formats as per ANNEXURE-XI for "pre-bid query".
- e) This RFP supersedes and replaces any previous public documentation & communications, and Bidders should place no reliance on such communications.

5.2 Compliant Tenders / Completeness of Response

- a) Bidders are advised to study all instructions, forms, requirements, appendices, and other information in the RFP documents carefully. Submission of the bid/proposal shall be deemed to have been done after careful study and examination of the RFP document with full understanding of its implications.
- b) Failure to comply with the requirements of this paragraph may render the Proposal noncompliant, and the Proposal may be rejected. Bidders must:
 - i. Comply with all requirements as set out within this RFP.
 - ii. Submit the forms as specified in this RFP and respond to each element in the order as set out in this RFP.
 - iii. Include all supporting documentation specified in this RFP.

5.3 Key Requirements of the Bid

5.3.1 Right to Terminate the Process

- a) GAD may terminate the RFP process at any time and without assigning any reason. GAD make no commitments, express or implied, that this process will result in a business transaction with anyone.
- b) This RFP does not constitute an offer by GAD. The bidder's participation in this process may result GAD selecting the bidder to engage towards execution of the contract.

5.3.2 Earnest Money Deposit (EMD)

- 1. Rs. 45,00,000/- (Rupees forty-five Lakhs only) EMD may be submitted in Demand Draft in the name of Secretary, GAD:-
- a) A scanned copy of the DD should be uploaded to the GeM portal, along with the actual online bid submission.
- b) Original copy of the DD should be submitted to GAD office before the last date of bid submission (please refer fact sheet in this RFP Sr. no. 8).

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- 2. EMD may be submitted in the form of a Bank Guarantee (BG) as per the format mentioned in the RFP, on stamp paper of the value required under law, duly signed by an authorised representative of the Bank.
 - a) The BG scan copy should be uploaded to the GeM portal along with the actual online bid submission.
 - b) 2) The Original copy of the BG should be submitted to the GAD office before the last date for bid submission (please refer to the fact sheet in this RFP, Sr. no. 8).
- 3. The EMD of all unsuccessful bidders will be refunded by GAD within 60 days of notifying the bidder of their unsuccessful status. The EMD of the successful bidder, for the amount specified above, will be returned upon submission of a Performance Bank Guarantee in accordance with ANNEXURE-IV.
- 4. The EMD amount is interest-free and will be refundable to the unsuccessful bidder without any accrued interest on it.

The bid/proposal submitted without the EMD mentioned above will be summarily rejected.

- 5. The EMD may be forfeited:
 - i) If a bidder withdraws its bid during the period of bid validity.
 - ii) In case of a successful bidder, if the bidder fails to sign the contract in accordance with this RFP.

5.4 Submission of Responses

- a. The bidders should submit their responses online through the Chhattisgarh procurement portal as per the format given in this RFP in the following manner:
 - i) Bid Document Fees
 - ii) Scan copy of BG/DD
 - iii) Eligibility Criteria
 - iv) Financial Proposal
- b. EMD should submit original hard copy in the form of BG/DD as defined in this RFP
- c. Please note that Prices should not be indicated in the Technical Proposal but should only be indicated in the Commercial Proposal.
- d. The proposal must contain a list of contents with page numbers and be sequentially numbered. Any deficiency in the documentation may result in the rejection of the Bid.
- e. The original proposal/bid document uploaded shall be prepared in indelible ink. It shall contain no interlineations or overwriting, except as necessary to correct errors made by the bidder. Any such corrections must be initialed by the person (or persons) who sign(s) the proposals.
- f. All pages of the bid, including the duplicate copies, shall be initialed and stamped by the person or persons who sign the bid.
- g. If GAD observes any discrepancy between the contents of the submitted original paper bid documents and their respective copies, the information furnished on the original paper bid document will prevail over others.

Authentication of Bids

A Proposal should be accompanied by a power-of-attorney/authorization letter in the name of the signatory of the Proposal as per ANNEXURE-II mentioned in this RFP.

5.5 Preparation and Submission of Proposal

5.5.1 Proposal Preparation Costs

The bidder shall be responsible for all costs incurred in connection with participation in the RFP process, including, but not limited to, costs incurred in the conduct of informative and other diligence activities, participation in meetings/discussions/presentations, preparation of proposal, in providing any additional information required by GAD to facilitate the evaluation process, and in negotiating a definitive contract or all such activities related to the bid process.

GAD will not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

5.5.2 Language

The Proposal should be filled by the bidders in the English language only. If any supporting documents submitted are in any language other than English, a translation of the same in the English language is to be duly attested by the Bidders. For purposes of interpretation of the documents, the English translation shall govern.

5.6 Late Bids

- a) Bids received after the due date and the specified time (including the extended period, if any) for any reason whatsoever shall not be entertained and shall be returned unopened.
- b) The bids submitted by telex/telegram/ fax/e-mail etc. shall not be considered. No correspondence will be entertained on this matter.
- c) GAD reserve the right to modify and amend any of the above-stipulated conditions/criteria depending upon project priorities vi's-à-is urgent commitments.

5.7 Prequalification and Technical Proposal

i. Prequalification/Eligibility Criteria:

Pre-qualification document as per **eligibility criteria specified under Section 3 above** along with the following documentation:

- a. The profile of the bidder, along with the required certifications, states that the period of validity of bids is 180 days from the last date of submission of the proposal.
- b. Reference list of major clients.
- c. Power-of-attorney granting the person signing the proposal the right to bind the bidder as the 'Constituted attorney of the Directorate'.

ii. Technical proposal

- a. Proposal particulars
- b. Proposal letter
- c. Proposed approach and methodology and services offered
- d. Proposed Project Plan and Implementation Schedule
- e. Schedule of delivery
- f. All relevant documents for Technical Evaluation Criteria
- g. Annexure for Technical Evaluation Criteria

iii. Commercial proposal

a. Online Only

5.8 Modification and withdrawal of Bids

- a. The Bidder is allowed to modify or withdraw its submitted proposal any time prior to the last date prescribed for receipt of bids.
- Subsequent to the last date for receipt of bids, no modification of bids shall be allowed.

5.9 Proposal Forms

- a. Wherever a specific form is prescribed in the Proposal document, the Bidder shall use the form to provide relevant information. If the form does not provide space for any required information, space at the end of the form or additional sheets shall be used to convey the required information.
- b. For all other cases, the Bidder shall design a form to hold the required information.
- c. GAD shall not be bound by any printed conditions or provisions in the Bidder's Proposal Forms, packaging document or delivery challan.

5.10 Local Conditions

- a. Each Bidder is expected to become fully acquainted with the local conditions and factors, which may affect the performance of the contract and /or the cost.
- b. The Bidder is expected to know all conditions and factors, which may have any effect on the execution of the contract after issue of letter of Award as described in the bidding document. The GAD shall not entertain any request for clarification from the Bidder regarding such local conditions.
- c. It is the Bidder's responsibility to ensure that such factors have been thoroughly investigated and considered before submitting the proposal. No claims whatsoever, including requests for financial adjustments to the contracted awarded under the bidding document, will be entertained by the GAD. Neither any changes in the time schedule of the contract nor any financial adjustments arising from such changes shall be permitted by the GAD due to the Bidder's failure to understand the local laws and conditions.
- d. The Bidder is expected to visit and examine and study the location of Mahanadi and Indrvati Bhawan and its surroundings and obtain all information that may be necessary for preparing the proposal at its own interest and cost.

5.11 Contacting the General Administration Department, Raipur

- a. Any effort by a Bidder to influence the proposal evaluation, proposal comparison or contract award decisions may result in the rejection of the proposal.
- b. Bidder shall not approach GAD officers after office hours and/or outside GAD office premises from the time the proposal opens until the time the Contract is awarded.

5.12 Eligibility Criteria

The bidder shall meet the eligibility criteria mentioned in the Tender document. The bidder must have a registration certificate, registration under PF & ESIC, or a valid GST certificate, whichever is applicable, for this Tender.

5.13 Tentative Schedule of Events

The tentative schedule of events regarding this tender shall be as per the dates and times given on the Section-1:Fact Sheet.

5.14 Opening of Proposal

Bidder has to furnish all the documents in the prescribed manner. First, an envelope containing the Technical Proposal will be opened. The Evaluation Committee or its authorised representative will open the tenders. The sequence of opening is as follows:

- a. EMD Envelope
- b. Techno-Commercial Proposals
- c. Financial Proposals

5.15 Deciding Award of Contract

a. The GAD reserve the right to ask for a technical elaboration/clarification in the form of a technical presentation from the Bidder on the already submitted Technical Proposal at any point of time before opening the Commercial Proposal. The Bidder shall furnish the required information to GAD and its appointed representative on the date asked for, at no cost to GAD. The GAD may, at its discretion, visit the office of the Bidder any time before the signing of the Agreement.

- b. GAD shall inform that Bidder whose proposals are accepted via issuance of a Letter of Intent (LoI) in the duplicate copy. The bidder shall acknowledge the LoI and return the duplicate copy duly sealed and signed within seven days from the issue of the LoI by GAD.
- c. After acceptance of LoI, Performance Security shall be deposited as specified in this document for signing an Agreement with GAD.
- d. Special Condition for Awarding the Agreement:
 - 1) GAD will sign the Agreement with the Successful Bidder for an initial 5-year period.
 - 2) GAD may extend the Agreement period based on mutual understanding between the purchaser and successful bidder.

5.16 Confidentiality

- a. As used herein, the term "Confidential Information" means any information, including information created by or for the other party, whether written or oral, which relates to internal controls, computer or data processing programs, algorithms, electronic data processing applications, routines, subroutines, techniques or systems, or information concerning the business or financial affairs and methods of operation or proposed methods of operation, accounts, transactions, proposed transactions or security procedures of either party or any of its affiliates, or any client of either party, except such information which is in the public domain at the time of its disclosure or thereafter enters the public domain other than as a result of a breach of duty on the part of the party receiving such information. It is the express intent of the parties that all the business processes and methods used by the Bidder in rendering the services hereunder are the Confidential Information of the Bidder.
- b. The Bidder shall keep confidential, any information related to this tender, with the same degree of care as it would treat its own confidential information. The Bidders shall note that the confidential information will be used only for the purposes of this tender and shall not be disclosed to any third party for any reason whatsoever.
- c. At all time of the performance of the services, the Bidder shall abide by all applicable security rules, policies, standards, guidelines, and procedures. The Bidder should note that before any of its employees or assignees is given access to the Confidential Information, each such employee and assignees shall agree to be bound by the terms of this tender and such rules, policies, standards, guidelines and procedures by its

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employees or agents.

d. The Bidder should not disclose to any other party and keep confidential the terms and conditions of this Contract agreement, any amendment hereof, and any Attachment or Annexure hereof.

e. The obligations of confidentiality shall be applicable for the entire contract period.

5.17 Publicity

Any publicity by the bidder containing the name of GAD should be done only with the explicit written permission from GAD.

5.18 Execution of Agreement

PBG has to be submitted by bidder as per tender terms and conditions (Clause 5.24) and bidder shall sign the Agreement within Twenty One (21) days from the issue of the LoI.

5.19 Duration of the contract:

The Contract shall remain valid for a period of five (5) year or completion of Operation and Maintenance phase, whichever is later from the contract's signing date. Operation & Maintenance for Wi-Fi/LAN/EPBAX infrastructure would start with a successful bidder post successful FAT. GAD may extend the Agreement period on the basis of mutually agreed terms and conditions between GAD & successful bidder.

The price discovered (table BOQ page no 72 V-1) in the tender must be valid for 05 (five)years and may be extendable further.

The quantity of BOQ is tentative, actual quantity will be discovered post site survey. GAD reserve right to increase/decrease the quantity of materials. GAD if needed may also place order for additional sites in future within the contract period.

5.20 Terms and Conditions: Applicable Post Award of Contract

5.20.1 Termination Clause

I) Right to Terminate the Process

GAD reserve the right to cancel the contract placed on the selected bidder and recover expenditure incurred by GAD under the following circumstances: -

a. The selected bidder commits a breach of any of the terms and conditions of the

bid.

- b. The bidder goes into liquidation, voluntarily or otherwise.
- c. If the selected bidder fails to complete the assignment as per the timelines prescribed in the RFP and the extension, if any is allowed, it will be a breach of contract. The GAD reserves its right to cancel the order in the event of delay and forfeit the bid security as liquidated damages for the delay.
- d. If the Delay in implementation is more than the stipulated implementation time.
- e. In case the selected bidder fails to deliver the services as stipulated in the delivery schedule, GAD reserve the right to procure the same or similar services from alternate sources at the risk, cost, and the responsibility of the selected bidder.
- f. After award of the contract, if the selected bidder does not perform satisfactorily or delays execution, GAD reserves the right to get the balance contract executed by another party of its choice by giving one month's notice for the same. In this event, the selected bidder is bound to make good the additional expenditure, which GAD may have to incur in executing the balance contract. This clause is applicable if, for any reason, the contract is cancelled.
- g. GAD reserve the right to recover any dues payable by the selected Bidder from any amount outstanding to the credit of the selected bidder, including the pending bills and/or invoking the bank guarantee under this contract.

II) Consequences of Termination

- i. In the event of termination of the Contract due to any cause whatsoever, [whether consequent to the stipulated term of the Contract or otherwise], GAD shall be entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective business continuity of the Service(s) which the Bidder shall be obliged to comply with and take all available steps to minimize loss resulting from that termination/breach, and further allow the next successor Bidder to take over the obligations of the erstwhile Bidder in relation to the execution/continued execution of the scope of the Contract.
- ii. Nothing herein shall restrict the right of GAD to invoke the GAD Guarantee and other guarantees, securities furnished, enforce the Deed of Indemnity, and pursue such other rights and/or remedies that may be available to GAD under law or otherwise.

iii. The termination hereof shall not affect any accrued right or liability of either Party nor affect the operation of the provisions of the Contract that are expressly or by iplication intended to come into or continue in force on or after such termination.

5.20.2 Liquidated Damages

Notwithstanding GAD is having right to cancel the order, liquidated damages may be imposed for late delivery of project at 0.25% (One percent) of the undelivered portion of order value per week will be charged for every week's delay in the specified delivery schedule subject to a maximum of 10% of CAPEX value.

- i. GAD reserves the right to recover these amounts by any mode, such as adjusting any payments GAD makes to the bidder. Liquidated damages will be calculated on a perweek basis.
- ii. The imposition of Liquidated damage is subject to approval from a competent authority after analyzing and considering the situation/reasoning of the successful bidder.

5.20.3 Acceptance Tests for new equipment under this project.

The selected bidder in the presence of the GAD authorised officials will conduct acceptance tests at the sites. The test will involve installation and commissioning and successful operation of new equipment will be installed at Mahanadi and Indravati Bhawan in Nava Raipur under this project. No additional charges shall be payable by the GAD for carrying out these acceptance tests.

5.20.4 Audit by Third Party

GAD at its discretion, may appoint third party for testing of WLAN/LAN/EPBAX Infrastructure (like STQC, TPA etc.) auditing the activities of onsite services and operations of entire services provided to the GAD.

5.20.5 Penalty

- a. The Bidder shall perform its obligations under the agreement entered into with the GAD, in a professional manner.
- b. In the event of failure of maintaining the SLA, the penalty of the cost of concerned services mentioned in SLA would be levied.
- c. GAD may recover such amount of penalty from any payment being released to the Bidder, irrespective of whether such payment is related to this contract or otherwise.
- d. If any act or failure by the bidder under the agreement results in failure or inoperability of systems and if the GAD has to take corrective actions to ensure

functionality of its property, the GAD reserve the right to impose penalties, which may be equal to the cost it incurs or the loss it suffers for such failures.

- GAD may impose penalty to the extent of damage to its any equipment if the damage was due to the actions directly attributable to the staff of the Bidder.
- The GAD shall implement all penalty clauses after giving due notice to the bidder

Suppose the Bidder fails to complete the due performance of the contract in accordance with the specification and conditions of the offer document. In that case, GAD reserves the right either to cancel the order or to recover a suitable amount as deemed reasonable as Penalty / Liquidated Damage for non-performance.

5.20.6 Dispute Resolution Mechanism

The Bidder and the GAD shall endeavor their best to amicably settle all disputes arising out of or in connection with the Contract in the following manner:

- a. The Party raising a dispute shall address to the other Party a notice requesting an amicable settlement of the dispute within fifteen (15) days of receipt of the notice.
- b. The matter will be referred for negotiation between the Officer nominated by GAD and the Authorized Official of the Bidder. The matter shall then be resolved between them, and the agreed course of action documented within a further period of 15 days. In case any dispute between the Parties is not settled by negotiation in the manner as mentioned above, the same may be resolved exclusively by arbitration, and such dispute may be submitted by either party for arbitration within 20 days of the failure of negotiations. Arbitration shall be held in Raipur and conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 or any statutory modification or re-enactment thereof. Each Party to the dispute shall appoint one arbitrator, and the two arbitrators shall jointly appoint the third or the presiding arbitrator.

The "Arbitration Notice" should accurately set out the disputes between the parties, the intention of the aggrieved party to refer such disputes to arbitration as provided herein, the name of the person it seeks to appoint as an arbitrator with a request to the other party to appoint its arbitrator within 45 days from receipt of the notice. All notices by one party to the other in connection with the arbitration shall be in writing and be made as provided in this tender document

Each Party shall bear the cost of preparing and presenting its case, and the cost of arbitration, including fees and expenses of the arbitrators, shall be shared equally by the Parties unless the award otherwise provides. The Bidder shall not be entitled to suspend the Service/s or the completion of the job, pending resolution of any dispute between the Parties and shall continue to render the Service/s in accordance with the provisions of the Contract/Agreement notwithstanding the existence of any dispute between the Parties or the subsistence of any arbitration or other proceedings.

5.20.7 Notices

Notice or other communications given or required to be given under the contract shall be in writing and shall be faxed/emailed followed by hand-delivery with acknowledgement thereof or transmitted by pre-paid registered post or courier. Any notice or other communication shall be deemed to have been validly given to date of delivery if hand delivered & if sent by registered post than on the expiry of seven days from the date of posting.

5.20.8 Force Majeure

Force Majeure is herein defined as any cause, which is beyond the control of the selected bidder or GAD as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen, and which substantially affect the performance of the contract, such as:

- 1. Natural phenomenon, including but not limited to floods, droughts, earthquakes, and epidemics.
- 2. Acts of any government, including but not limited to war, declared or undeclared priorities, quarantines and embargos.
- 3. Terrorist attack, public unrest in work area provided either party shall, within 10 days from the occurrence of such a cause, notify the other in writing of such causes. The bidder or GAD shall not be liable for delay in performing his/her obligations resulting from any force majeure cause as referred to and/or defined above. Any delay beyond 30 days shall lead to the termination of the contract by the parties, and all obligations expressed quantitatively shall be calculated as on

the date of termination. Notwithstanding this, provisions relating to indemnity and confidentiality survive termination of the contract.

5.20.9 Failure to agree with the Terms and Conditions of the RFP

Failure of the successful bidder to agree with the Terms & Conditions of the RFP shall constitute sufficient grounds for the annulment of the award, in which event GAD may award the contract to the next best value bidder or call for new proposals from the interested bidders or invoke the PBG of the most responsive bidder.

5.21 Service Levels

The purpose of the Service Level Agreement (hereinafter referred to as SLA) is to clearly define the levels of services which the successful bidder shall provide to the GAD for the duration of this contract. The benefits of this SLA are as follows:

- a. Trigger a process that applies to successful Bidder's and GAD when that service provided falls below an agreed upon threshold, or target level.
- b. It makes explicit the performance expectations that GAD has for the successful bidder.

The Successful Bidder and GAD shall regularly review the performance of the services being provided by the Successful Bidder and the effectiveness of the SLA.

5.22 Payment Schedule

All bills will be submitted to GAD in accordance with the procedure mentioned in this RFP document. The fee amount will equal the amount specified in the Format for Tender Response – Commercial Proposal. Payments will be released only on satisfactory acceptance of the deliverables for each Task as per the following schedule:

The indicative mode of payments to be made in consideration of the work to be performed by the Bidder shall be as follows:

S.No.	Payment Schedule	Fee Payable	Remarks
1	On successful Supply/Delivery of material installation & commissioning Final Acceptance Test against each work order issued	Payment against Supply of material – successful supply of of material - 60% of the work order value for Component delivered Payment against installation & commissioning - successful installation & commissioning of components - 30% of the work order value Payment against Final Acceptance Testing - successful Acceptance testing of components - 10% of the work order value	Delivery Challan to be submitted with Invoice. Installation report to be submitted with Invoice. FAT report to be submitted with Invoice.
2	On providing Operation and Maintenance under Table (B): Bill of Quantity – OPEX	Quarterly payment	Quarterly submission of report regarding activity completed under O&M Phase
3	On providing Manpower support under Table (C): Bill of Quantity – FMS in Financial Proposal after Final handover from previous vendor	Quarterly payment	Quarterly submission of attendance report

Note:

<u>Instruction:</u> The Invoice will be submitted after completion of above milestone. The payment will be made within 30 days from date of submission of invoice along with supporting documents.

All Payments shall be made in Indian Rupees Only and will be subject to the provisions of Penalty and Liquidated Damages.

5.23 Category of SLAs

The following measurements and targets shall be used to track and report performance on a regular basis. The targets shown in the following paragraphs and tables are applicable for the duration of the contract for the 'Penalty shall be calculated on a quarterly basis'.

The penalty for various delays and deficiencies in "Implementation of revamped integrated communication infrastructure and Operation & Maintenance services of WLAN/LAN/EPBAX location/ site" will be as follows:

a. Service Level and Penalty Clause on Operation & Maintenance of Existing and New WLAN/LAN/EPBAX Infrastructure at Mahanadi and Indravati Bhawan in Nava Raipur:

The successful bidder shall be bound by various SLAs as specified below. GAD shall impose penalties from the first quarter onwards from Go-live. If the penalty in two consecutive quarters exceeds 20% of quarterly payment on account of any reasons attributable to the successful bidder, GAD may deem this event to be an event of "default" leading to possible termination of the contract. The Availability, Response time and Resolution time on various parameters are mentioned below:

Sr.		Day Time – (PBH)	Night Time – (ESH)
No.	Description	(hours) from	(hours) from
		09:00AM to	09:00PM to
		09:00PM	09:00AM
1	Availability of WLAN/LAN	99.5%	85%
	services in Mahanadi and		
	Indravati Bhawan		
2	Response Time	30 minutes	60 minutes
3	Resolution Time	4 hours	6 hours

PENALTIES FOR DOWNTIME

Network availability is defined as {Total time in a quarter (in minutes) less total downtime(in minutes)} as a percentage of total time in the quarter. The network is considered available when all the services mentioned in the requirement Section are available at full capacity. Downtime due to interruptions in internet services provided by NKN/NIC/CGSWAN shall not be considered as part of network downtime. Uptime for fiber connectivity from NIC/NKN Mahanadi and Indravati Bhawan (NOC) will be fully maintained by the successful bidder.

Successful bidder will take approval from GAD atleast 5 days prior to start any maintenance activity which may lead to downtime, and it shall be allowed only during Saturday or Sunday. Total planned downtime allowed in a month shall be 4hrs ONLY. Planned downtime of more than 4hrs in a given month shall be considered as network downtime and penalties shall be levied as per the penalty clause.

Additional downtime can be allowed only in special circumstances with prior approval.

Downtime percentages shall be calculated for equipment of NOC, Mahanadi and Indravati Bhawans for PBH and ESH separately.

PBH=Prime Business Hours ((0900 to 2100 hrs) Monday to Friday throughout the Quarter).

ESH=Extended SLA Hours (2100 to 0900Hrs) 07 days a week including Saturdays and Sundays full time throughout the quarter).

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Down time percentage for ESH(%) =
$$\frac{\text{(Total Downtime during ESH) x 100}}{\text{Total ESH Time in a quarter}}$$

Uptime Percentage (%) = 100 - Downtime percentage (%)

Successful bidder is expected to maintain network availability as explained below:

NOC Equipment at HoD Bhawan	Availability during PBH	Penalty	Availability during ESH	Penalty
	>= 99.5%	Nil	>= 85%	Nil
	Less by 1%	0.5% of QGR Value	Less by 1%	0.5% of QGR value
	Less by >1% but < 5%	1% of QGR Value	Less by >1% but < 5%	0.5% of QGR value
	Less by >5% but <10%	2% of the QGR Value	Less by >5% but <10%	1% of the QGR Value
	Less by >10% but <15%	5% of the QGR Value	Less by >10% but <20%	2% of the QGR Value
	Less than 85%	No payment for the QGR	Less than 70%	No payment for the QGR
Mahanadi and Indravati	>= 99.5%	Nil	>= 85%	Nil
Bhawans equipment (other than NOC equipment)	Less by 1%	0.5% of QGR value	Less by 1%	0.5% of QGR value
	Less by >1% but < 5%	1% of QGR value	Less by >1% but < 5%	0.5% of QGR value
	Less by >5% but <10%	2% of theQGR Value	Less by >5% but <10%	1% of the QGR Value
	Less by >5% but <15%	5% of the QGR Value	Less by >5% but <15%	2% of the QGR Value
	Less than 85%	No payment for the QGR	Less than 70%	No payment for the QGR

Above Table: Downtime Penalties

If network is down because of reasons not attributable to successful bidder like, fault in network provided by bandwidth provider, Successful bidder shall apprise GAD for all such events specifying the root cause of such downtime and duration of down time. For every such downtime related issue, the respective ticket shall be updated stating the reason for downtime with supporting documents.

The successful bidder shall also submit the supporting documents along with the quarterly invoice for exemption in SLA.

Downtime because of the NKN/NIC/CGSWAN network shall not be considered for calculating the effective downtime. The optical fibre connectivity between Mahanadi and Indravati Bhawans will be maintained by the successful bidder.

In such cases, the successful bidder shall provide related proof using the tools deployed at NOC. If the successful bidder is unable to generate such a proof, reason for outage (RFO) duly signed by nodal officer appointed by GAD has to be submitted.

If successful bidder unable to submits one of these documents, the entire downtime shall be considered as network downtime and penalties shall be levied as applicable.

PENALTIES FOR MANPOWER AND DELIVERABLES

S. No.	Service level	Penalties
1	Deployment of required manpower at Mahanadi and Indravati Bhawans within 1 Month of Issuance of work order	Rs. 10,000 per manpower

Note – Any change of Manpower must be only after approval from GAD, and the bidder has to ensure that proper handover and knowledge transfer are in place.

Above Table: Penalties for manpower

DEFINITION OF HARDWARE, SOFTWARE AND SERVICES

Hardware

Hardware is the physical aspect of the network; the term is as a way to distinguish the electronic circuitry and components of a computer or electronic devices from the program. The hardware used for the network includes Desktops, Servers, Router, Switch, IDS/IPS/Firewalls, Wireless Controller, Wireless Access Points (Internal and External), Modems, Cables, connectors, power supply units etc.

Software

Software, or program, enables to perform specific tasks, as opposed to the physical components of the system (hardware). This includes application software such as a word processor, which enables a user to perform a task, and system software such as an operating system, which enables other software to run properly by interfacing with hardware and with other software or custom software made to perform specific tasks related to specific equipment. The software includes system software and application software required for optimum performance of WLAN/LAN/EPBAX services.

Services

The services covered under the scope of the SLA include all services which are required to be delivered by the Wi-Fi Network. This includes providing effective communication between all terminals of Wi-Fi Network for Data, Video, VoIP, Video Conferencing, Internet, and E-mail etc. and any other applications etc. at all the connected under Wi-Fi Network.

b. Severity Levels & Penalty for Help Desk Service Support during the contract period:

The Successful Bidder shall be responsible for providing post implementation support for five years (plus extension period (if any)). The Selected Bidder shall provide/maintain centrally the complaints by the departments of Mahanadi and Indravati Bhawan OR Wi-Fi Infrastructure users at these two locations The Selected Bidder shall provide a contact number for Help Desk Supports at which complaints can be lodged.

The Selected Bidder should ensure uptime, as mentioned above, during PBH and EBH. The Selected Bidder would be the first point of contact for the GAD/ Department & he, in turn, would be responsible for coordinating with the State Data Centre (SDC) Operator and CGSWAN bandwidth service provider or any other bandwidth provider to resolve downtime issues. The Selected bidder shall be responsible for logging the complaint and resolving the issues related

with Wi-Fi infrastructure. If the selected bidders fail to provide a satisfactory resolution within the defined SLA, a penalty will be levied as per the penalty clause mentioned in this RFP.

5.24 Contract Performance Security

- Within 21 days after the receipt of notification of award of the Contract from the GAD, the successful Bidder shall furnish Implementation - Performance Bank Guarantee (PBG) to the GAD, Raipur (CG), which shall be equal to 5% of the CAPEX value of the contract, in the form of a Bank Guarantee (BG) from a scheduled commercial Bank in the Performa given in this document.
- 2. Implementation Performance Bank Guarantee (PBG) should be valid up to 60 days after "Successful Final Acceptance Testing (FAT)".
- 3. The Implementation PBG shall be returned to the bidder upon "Successful Final Acceptance Testing (FAT)" and against the submission of O&M PBG amounting to 5% of the OPEX + FMS value of the contract and should be valid up to 5 years or the completion of the contract, whichever is later.
- 4. The proceeds of the performance guarantees shall be payable to the Purchaser as compensation for any loss / penalties resulting from the Selected Bidder failure to complete its obligations under the contract.
- 5. The bidder must maintain the performance security for 5 years + any extension period (if any) until the project period ends. If necessary, the bidder must renew the performance security.
- 6. The O&M PBG will be discharged by the purchaser and returned to the Bidder within 60 days following the date of completion of the Selected Bidder performance obligations, including any warranty obligations under the Contract.

5.25 Statutory Requirements

During the tenure of this contract, nothing shall be done by the Selected Bidder in contravention of any law, act and/ or rules/regulations thereunder or any amendment thereof governing inter-alia customs, stowaways, foreign exchange, etc. and shall keep GAD indemnified in this regard.

5.26 Contract administration

a. Either party may appoint any individual/organisation as its authorised representative

through a written notice to the other party. Each Representative shall have the authority to:

- (a) Exercise all of the powers and functions of his/her Party under this contract, other than the power to amend this contract and ensure proper administration and performance of the terms hereof and
- (b) Bind his or her Party in relation to any matter arising out of or in connection with this Contract.
- b. The Selected Bidder shall be bound by all undertakings and representations made by the authorised representative of the Selected Bidder and any covenants stipulated hereunder, with respect to this contract, for and on their behalf.
- c. For the purpose of execution or performance of the obligations under this Contract, the GAD representative would act as an interface with the nominated representative of the Selected Bidder. The Selected Bidder shall comply with any instructions that are given by the GAD representative during the course of this contract in relation to the performance of its obligations under the terms of this contract and the Tender.

5.27 Right of Monitoring, Inspection and Periodic Audit

GAD reserves the right to inspect and monitor / assess the progress / performance at any time during the course of the Contract, after providing due notice to the Selected Bidder. The GAD may demand, and upon such demand being made, the selected bidder shall provide with any document, data, material, or any other information required as per tender/contract terms and conditions to assess the progress of the project.

GAD shall also have the right to conduct, either itself or through any other agency as it may deem fit, an audit to monitor the performance by the Selected Bidder of its obligations/functions in accordance with the tender/contract and the Selected Bidder undertakes to cooperate with and provide to the GAD/ any other Consultant/ Agency appointed by the GAD, all documents and other details as may be required by them for this purpose. Any deviations or contraventions identified because of such audit/assessment would need to be rectified by the Selected Bidder, failing which the GAD may, without prejudice to any other rights that it may have, issue a notice of default.

5.28 General Administration Department's / (GAD) Obligations

GAD representative shall interface with the Selected Bidder, to provide the required information, clarifications, and to resolve any issues as may arise during the execution of the Contract.

GAD shall ensure that timely approval is provided to the selected Bidder, where deemed necessary, which should include diagrams/plans required to be provided as part of the Scope of Work.

GAD will conduct Final Acceptance Testing of the network being established as part of this tender. Post Successful Final Acceptance Testing, a Go-live certificate will be issued by GAD.

The 5 years Operation and Maintenance of existing and new WLAN/LAN/EPBAX infrastructure will initiate from the date of the Final Acceptance Testing/Go-live certificate.

5.29 Information Security

The Selected Bidder shall not carry and/or transmit any material, information, layouts, diagrams, storage media or any other goods/material in physical or electronic form which are proprietary to or owned by the GAD out of the premises without prior written permission from the GAD.

The Selected Bidder shall, upon termination of this agreement for any reason, or upon demand by GAD, whichever is earlier, return all information provided to the Selected Bidder by GAD, including any copies or reproductions, both hard copy and electronic.

5.30 Indemnity

The Selected Bidder shall execute and furnish to the GAD a Deed of Indemnity in favour of the GAD in a form and manner acceptable to the GAD, indemnifying GAD from and against any costs, loss, damages, expense, claims, including those from third parties or liabilities of any kind how-so-ever suffered including patent, copyright, trademark and trade secret, arising, or incurred inter- alia during and after the Contract period out of:

a. Negligence or wrongful act or omission by the Selected Bidder or its team or any Agency/Third Party in connection with or incidental to this Contract; or

- b. Any breach of any of the terms of the Selected Bidder's Proposal as agreed, the Tender and this Contract by the Selected Bidder, its Team, or any Agency/ Third Party.
- c. The indemnity shall be to the extent of 100% of the project cost in favour of the GAD.

5.31 Prices

Prices quoted must be firm and shall not be subject to any upward revision on any account whatsoever throughout the period.

5.32 Special Conditions of Contract

Amendments of, and Supplements to, Clauses in the General Conditions of Contract.

5.33 Events of Default by the Selected Bidder

The failure on the part of the Selected Bidder to perform any of its obligations or comply with any of the terms of this contract shall constitute an Event of Default on the part of the Selected Bidder. The events of default, as mentioned above, may include inter-alia the following:

- a. The Selected Bidder has failed to perform any instructions or directives issued by the GAD that it deems proper and necessary to execute the scope of work under the Contract or
- b. The Selected Bidder has failed to adhere to any of the key performance indicators as laid down in the Key Performance Measures / Contract, or if the Selected Bidder has fallen short of matching such standards/targets as the GAD may have designated with respect to any task necessary for the execution of the scope of work under this Contract. The above mentioned failure on the part of the Selected Bidder may be in terms of failure to adhere to timelines, specifications, requirements, or any other criteria as defined by the GAD.
- c. The Selected Bidder has failed to remedy a failure to perform its obligations in accordance with the specifications issued by the GAD, despite being served with a default notice which laid down the specific deviance on the part of the Selected Bidder to comply with any stipulations or standards as laid down by the GAD; or
- d. The Selected Bidder / Bidder's Team has failed to conform to any of the

Service/Facility Specifications/standards as set out in the scope of the work of this Tender document or has failed to adhere to any amended direction, modification or clarification as issued by the GAD during the term of this Contract and which the GAD deems proper and necessary for the execution of the scope of work under this Contract.

- e. There is a proceeding in bankruptcy, insolvency, or winding up, or there is an appointment of a receiver, liquidator, assignee, or similar official against or in relation to the Selected Bidder.
- f. The Selected Bidder / Bidder's Team has failed to comply with or is in breach or contravention of any applicable laws.

Where such defaults have occurred, inter alia, as stated above, GAD shall issue a notice of default to the Selected Bidder, setting out specific defaults/deviances/omissions and providing a notice of Sixty (60) days to enable such defaulting party to remedy the default committed.

Where despite the is suance of a default notice to the Selected Bidder by the GAD and the Selected Bidder fails to remedy the default to the satisfaction of the GAD, the GAD may, where it deems fit, issue to the defaulting party another default notice or proceed to adopt such remedies as may be available to the GAD.

5.34 Liquidated Damages

Subject to the clause for Force Majeure, if the bidder fails to complete the services under the project scope of work before the scheduled completion date or the extended date or if the Selected Bidder repudiates the contract before the completion of the work, the GAD, may recover a maximum of 10 percent of the Capex cost from the Selected Bidder, as Liquidated Damages (LD). In case it leads to termination, GAD shall give thirty days' notice to the Selected Bidder of its intention to terminate the contract and shall so terminate the contract unless, during the thirty-day notice period, the Selected Bidder initiates remedial action acceptable to the GAD.

GAD may without prejudice to its right to affect recovery by any other method, deduct the amount of liquidated damages from any money belonging to the Selected Bidder in its hands (which includes the GAD right to claim such amount against Selected Bidder's Bank Guarantee) or which may become due to the Selected

Bidder. Any such recovery or liquidated damages shall not in any way relieve the Selected Bidder from any of its obligations to complete the work or from any other obligations and liabilities under the Contract.

The imposition of Liquidated damage is subject to approval from competent authority after analyzing and considering the situation/reasoning from successful bidder.

5.35 Dispute Resolution

GAD and the Selected Bidder shall make every effort to resolve amicably by direct informal negotiations, any disagreement, or disputes, arising between them under or in connection with the Contract.

If, even after thirty (30) days from the commencement of such direct informal negotiations, the GAD and the Selected Bidder are unable to resolve a contract dispute amicably, either party may require that the dispute be referred for resolution to the formal mechanism specified in the clauses below.

- ➤ In the case of a dispute or difference arising between the GAD and the Selected Bidder relating to any matter arising out of or connected with this Contract, such dispute or difference shall be referred to the award of the Arbitrator as indicated in this RFP. The award of the Arbitrator shall be final and binding on the parties.
- ➤ The Arbitration and Conciliation Act 1996, the rules there under and any statutory modification or re-enactments thereof, shall apply to the arbitration proceedings.
- > The venue of arbitration shall be Raipur, India.
- ➤ GAD may terminate this contract by giving the Selected Bidder a written notice of termination of at least thirty days if the Selected Bidder fails to comply with any decision reached consequent upon arbitration proceedings pursuant to the above Clause.

5.36 Continuance of the Contract:

Notwithstanding the fact that settlement of dispute(s) (if any) under arbitration may be pending, the parties hereto shall continue to be governed by and perform the work in accordance with the provisions under the Scope of Work to ensure continuity of operations.

5.37 Conflict of interest

The Bidder shall disclose to GAD in writing all actual and potential conflicts of interest that exist, arise, or may arise (either for the Bidder or the Bidders team) in the course of performing the Service(s) as soon as practical after it becomes aware of that conflict.

5.38 Severance

In the event any provision of the Contract is held to be invalid or unenforceable under the applicable law, the remaining provisions of this Contract shall remain in full force and effect.

5.39 Governing Language

The Agreement shall be written in English language. Subject to below Clause, such language versions of the Agreement shall govern its interpretation. All correspondence and other documents pertaining to the Contract that are exchanged by the parties shall be written in English language only.

5.40 "No Claim" Certificate

The Selected Bidder shall not be entitled to make any claim whatsoever against GAD, under or by virtue of or arising out of, the contract, nor shall GAD entertain or consider any such claim if made by the Selected Bidder after it has signed a "No claim" certificate in favor of GAD in such form as shall be required by it after the work is finally accepted.

5.41 Publicity

The Selected Bidder shall not make or permit to be made a public announcement or media release about any aspect of this Contract unless the GAD first gives its written consent to the selected bidder.

5.42 Force Majeure

above.

Force Majeure shall not include any events caused due to acts/omissions of such Party or resulting from a breach/contravention of any of the terms of the Contract, Proposal and/or the Tender. It shall also not include any default on the part of a party due to its negligence or failure to implement the stipulated/proposed precautions as were required to be taken under the Contract.

The failure or occurrence of a delay in the performance of any of the obligations of either party shall constitute a Force Majeure event only where such failure or delay could not have reasonably been foreseen or where, despite the presence of adequate and stipulated safeguards, the failure to perform obligations has occurred. In such an event, the affected party shall inform the other party in writing within five days of the occurrence of such an event. The GAD will make the payments due for Services rendered till the occurrence of Force Majeure. However, any failure or lapse on the part of the Selected Bidder in performing any obligation as is necessary and proper, to negate the damage due to projected force majeure events

or to mitigate the damage that may be caused due to the above mentioned events

or the failure to provide adequate disaster management/recovery or any failure in

setting up a contingency mechanism would not constitute force majeure, as set out

In case of a force majeure, all Parties will endeavor to agree on an alternate mode of performance to ensure the continuity of service of a party's obligations under the Contract and minimize any adverse consequences of force majeure.

5.43 Representations & Warranties on Agreement

In order to induce the GAD, Government of Chhattisgarh, Raipur, CG to enter into this Contract, the Selected Bidder hereby represents and warrants as of the date hereof, which representations and warranties shall survive the term and termination hereof, the following:

That the Selected Bidder is not involved in any major litigatio or legal proceedings, pending, existing, and potential or threated, that may have an impact of affecting or compromising the performance or delivery of Services under this Contract.

- 2) That the representations and warranties made by the Selected Bidder in the proposal or will be made in this contract are and shall continue to remain true and fulfill all the requirements as are necessary for executing the obligations and responsibilities as laid down in the Contract and the Tender and unless the Govt. of Chhattisgarh specifies to the contrary, the Selected Bidder shall be bound by all the terms of the Proposal and the contract through the term of the contract.
- 3) That the Selected Bidder has the professional skills, personnel and resources/authorizations that are necessary for providing all such services as are necessary to fulfill the Scope of Work stipulated in the Tender and this Contract.
- 4) That there shall not be any privilege, claim or assertion made by a third party with respect to right or interest in, ownership, mortgage or disposal of any asset, property, movable or immovable as mentioned in any intellectual Property Rights, Licenses and permits.
- 5) That the Selected Bidder shall use such assets of the Govt. of Chhattisgarh as the Govt. of Chhattisgarh may permit for the sole purpose of execution of its obligations under the terms of the Proposal, Tender or this Contract. The Selected Bidder shall, however, have no claim to any right, title, lien, or other interest in any such property, and any possession of property for any duration whatsoever shall not create any right in equity or otherwise, merely by the fact of such use or possession during or after the term hereof.
- 6) That the Selected Bidder shall procure all the necessary permissions and adequate approvals and licenses for the use of various software and any copyrighted process/product free from all claims, titles, interests, and liens thereon and shall keep the Govt. of Chhattisgarh indemnified in relation thereto.
- 7) That the execution of the Services and the Scope of work herein are and shall be in accordance and in compliance with all applicable laws.
- 8) That all conditions precedent under the Contract have been satisfied.
- 9) That neither the execution and delivery by the Selected Bidder of the Contract nor the Selected Bidder's compliance with or performance of the terms and provisions of the Contract (i) will contravene any provision of any Applicable Law or any order, writ, injunction or decree of any court or Governmental Authority binding on the Selected Bidder, (ii) will conflict or be inconsistent with or result in any breach of any or the

terms, covenants, conditions or provisions of, or constitute a default under any Contract, Contract or instrument to which the Selected Bidder is a party or by which it or any of its property or assets is bound or to which it may be subject or (iii) will violate any provision of the Memorandum and Articles of Association of the Selected Bidder.

- 10) That the Selected Bidder certifies that all registrations, recordings, filings and notarisations of the contract and all payments of any tax or duty, including, without limitation, stamp duty, registration charges or similar amounts which are required to be affected or made by the Selected Bidder which is necessary to ensure the legality, validity, enforceability, or admissibility in evidence of the Contract have been made.
- 11) That the Selected Bidder owns, has a license to use, or otherwise has the right to use, free of any pending or threatened liens or other security or other interests, all its Intellectual Property Rights, which are required or desirable for the performance of its services under this contract and regarding the same the Selected Bidder does not, so far as the Selected Bidder is aware, in carrying on its business and operations, infringe any Intellectual Property Rights of any person. So far as the Selected Bidder is aware, none of the Intellectual Property Rights, owned or enjoyed by the Selected Bidder or which the Selected Bidder is licensed to use, which are material in the context of Selected Bidder's business and operations for the performance of this contract are being infringed nor, so far as the Selected Bidder is aware, is there any infringement or threatened infringement of those Intellectual Property Rights licensed or provided to the Selected Bidder by any person. All Intellectual Property Rights (owned by the Selected Bidder or which the Selected Bidder is licensed to use) required by the Selected Bidder for the performance of the contract are valid and subsisting. All actions (including registration, payment of all registration and renewal fees) required to maintain the same in full force and effect have been taken thereon and shall keep the Govt. of Chhattisgarh indemnified in relation thereto.
- 12) That time is the essence of the Contract and hence the Selected Bidder shall at all times maintain sufficient manpower, resources, and facilities, to provide the Services in a work man like manner on a timely basis.
- 13) That its security measures, policies, and procedures are adequate to protect and maintain the confidentiality of the Confidential Information.
- 14) That in providing the Services, or deliverables or materials, neither Selected Bidder nor its agent, nor any of its employees, shall utilize information which may be

considered confidential information of, or proprietary to, any prior employer or any other person or entity.

5.44 General

a. Relationship between the Parties

- i) Nothing in the Contract constitutes any fiduciary relationship between the GAD and Selected Bidder/ Bidder's Team, or any employer, employee, principal and agent, or partnership relationship between the GAD and Selected Bidder.
- ii) No Party has any authority to bind the other Party in any manner whatsoever except as agreed under the terms of the Contract.
- iii) GAD will not be under any obligation to the Implementation Agency's Team except as agreed under the terms of the Contract.

b. No Assignment

The Selected Bidder shall not transfer any interest, right, benefit or obligation under the contract without the prior written consent of GAD.

c. Survival

The provisions of the clauses of the Contract in relation to documents, data, processes, property, Intellectual Property Rights, indemnity, publicity and confidentiality and ownership survive the expiry or termination of this Contract and in relation to confidentiality, the obligations continue to apply unless GAD Notify the Selected Bidder of its release from those obligations.

d. Entire Contract

The terms and conditions laid down in the Tender and all annexes thereto, as also the Proposal and any attachments/annexes thereto, shall be read in consonance with and form an integral part of the Contract. The Contract supersedes any prior contract, understanding or representation of the Parties on the subject matter.

e. Governing Law

This contract shall be governed by the laws of India.

f. Jurisdiction of Courts

The High Court of India in Bilaspur, Chhattisgarh, has exclusive jurisdiction to determine any proceeding related to the Contract.

g. Compliance with Laws

The Selected Bidder shall comply with the laws in force in India in the course of

performing the Contract.

h. Notices

a. A "notice" means:

i) a notice; or

ii) A consent, approval or other communication required to be in writing under the

Contract. All notices, requests or consent provided for or permitted to be given

under this Contract shall be in writing and shall be deemed effectively given when

personally delivered or mailed by pre-paid certified/registered mail, return receipt

requested, addressed as follows and shall be deemed received two days after

mailing or on the date of delivery if personally delivered:

To

The Secretary,

General Administration Department, Raipur

Mahanadi Bhawan, Atal Nagar, Nava

Raipur- 492 001 (Chhattisgarh)

Tel: +91 - 771 - 2519825

Fax: +91 - 771 - 2519825

Email: gad-secy@cg.gov.in

To Selected Bidder at:

Attn:

Address:

[Phone:]

[Fax:]

Any Party may change the address to which notices are to be directed, by giving a

notice to the other party in the manner specified above. A notice served on a

Representative is taken to be a notice to that Representative's Party.

i. Waiver

- ♦ Any waiver of any provision of this Contract is ineffective unless it is in writing and signed by the Party waiving its rights.
- ♦ A waiver by either Party in respect of a breach of a provision of this Contract by the other Party is not a waiver in respect of any other breach of that or any other provision.
- ♦ The failure of either Party to enforce at any time any of the provisions of this Contract shall not be interpreted as a waiver of such provision.

j. Modification

Any modification of the Contract shall be in writing and signed by an authorised representative of each Party.

k. Taxes

The Bidder shall pay service and other applicable taxes, if any, imposed on the services under this contract.

l. Application

These General Conditions shall apply to the extent that provisions in other parts of the Contract do not supersede them.

5.45 Fraud and Corrupt Practices

- i) Fraud and Corrupt Practices
- a. The Bidders and their respective officers, employees, agents, and advisers shall observe the highest standard of ethics during the Selection Process. Notwithstanding anything to the contrary contained in this RFP, the GAD shall reject a Proposal without being liable in any manner whatsoever to the Bidder, if it determines that the Bidder has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice, or restrictive practice (collectively the "Prohibited Practices") in the Selection Process. In such an event, the GAD shall, without prejudice to its any other rights or remedies, forfeit and appropriate the Bid Security or Performance Security, as the case may be, as mutually agreed genuine pre-estimated compensation and damages payable to the Authority for, inter alia, time, cost, and effort of the Authority, in regard to the RFP, including consideration and evaluation of such Bidder s Proposal.

- b. Without prejudice to the rights of the GAD under Clause above and the rights and remedies which the GAD may have under the LoA or the Agreement, if an Bidder, as the case may be, is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable restrictive practice during the Selection Process, or after the issue of the LoA or the execution of the Agreement, such Bidder shall not be eligible to participate in any tender or RFP issued by the GAD during a period of < period, suggested 2 (two) > years from the date such Bidder, as the case may be, is found by the GAD to have directly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as the case may be.
- c. For the purposes of this Section, the following terms shall have the meaning hereinafter respectively assigned to them:
- II. "corrupt practice" means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of any person connected with the Selection Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly, or indirectly, any official of the GAD who is or has been associated in any manner, directly or indirectly with the Selection Process or the LoI or has dealt with matters concerning the Agreement or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the GAD, shall be deemed to constitute influencing the actions of a person connected with the Selection Process); or (ii) save as provided herein, engaging in any manner whatsoever, whether during the Selection Process or after the issue of the LoI or after the execution of the Agreement, as the case may be, any person in respect of any matter relating to the Project or the LoI or the Agreement, who at any time has been or is a legal, financial, or technical consultant/adviser of the GAD in relation to any matter concerning the Project.
 - "Fraudulent practice" means a misrepresentation or omission of facts or disclosure of incomplete facts, in order to influence the Selection Process.
- III. "Coercive practice" means impairing or harming or threatening to impair or harm,

directly or indirectly, any persons or property to influence any person s participation or action in the Selection Process.

- IV. "Undesirable practice" means (i) establishing contact with any person connected with or employed or engaged by GAD with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Selection Process; or (ii) having a Conflict of Interest; and
- V. "Restrictive practice" means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Selection Process.

5.46 LIMITATION OF LIABILITY

- i. Neither Party; nor its subsidiaries or its affiliates will be liable to the other Party, whether in contract, tort (including negligence), strict liability or otherwise, for loss of business, revenue, profits, loss of goodwill or reputation; or indirect, consequential, or special loss, arising in connection with any order, product, service, related documentation, information and/or the intended use thereof, even if a Party has been advised, knew or should have known of the possibility of such damages.
- ii. Subject to the above and not withstanding anything to the contrary elsewhere contained herein, the maximum aggregate liability of the bidder for all claims under or in relation to this agreement shall be regardless of the form of claims shall be limited to 100% of the amount to be paid to SI by GAD under the applicable statement of work that gives rise to such liability (as of the date the liability arose).

5.47 Arbitration

GAD and the selected bidder shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

If, after thirty (30) days from the commencement of such informal negotiations, GAD and the selected Bidder have been unable to amicably resolve the dispute, either party may require that the dispute be referred for resolution to The Secretary, General Administration Department, Raipur, as single party Arbitrator in accordance with the Arbitration and Conciliation Act, 1996. The decision of the arbitrator shall be final and binding to all parties.

All Arbitration proceedings shall be held in Raipur, Chhattisgarh, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be in English.

ANNEXURE-I - PROPOSAL COVERING LETTER

(A copy to be enclosed with each part of the proposal)
Date:
To,
The Secretary,
General Administration Department
Mahanadi Bhawan , Atal Nagar,
Nava Raipur, Chhattisgarh
Dear Sir,
We(Name of the bidder) here by submitting our proposal in response to
notice inviting tender date and tender document no and
confirm that:
1. All information provided in this proposal and in the attachments is true and correct to the
best of our knowledge and belief.
2. We shall make available any additional information if required to verify the correctness of
the above statement.
3. Certified that the period of validity of bids is 180 days from the last date of submission of
the proposal and
4 777

- 4. We are quoting for all the services mentioned in the tender.
- 5. We, the Bidders, are not under a Declaration of Ineligibility for corrupt or fraudulent practices or blacklisted by any of the Government agencies.
- 6. General Administration Department, Raipur, may contact the following person for further information regarding this tender:
 - a. Name and full address of office, Contact No., Email ID, Company Name
 - b. Name and full address of office, Contact No., Email ID, Company Name
- 7. We are submitting our Eligibility Criteria proposal, bid documents and technical bid documents:
 - a. In soft format in the form of a CD/DVD clearly hyperlinking all the relevant scanned documents and highlighting relevant portions of the document for ease of evaluation.

b. The hard copy format is also similarly indexed, flagged, and highlighted at relevant places
Yours sincerely,
Signature
Full name of signatory
Designation
Name of the bidder (firm, etc.)

ANNEXURE-II - FORMAT FOR POWER OF ATTORNEY

(To be provided in original as part of Techno-Commercial Proposal (Envelope – B) on stamp paper of value required under law duly signed by 'Bidder' for the tender) Dated: **POWER OF ATTORNEY** To Whom It May Concern Know all men by these presents, we ______(name and registered office address of the Bidder) do hereby constitute, appoint, and authorize Mr. _____(Name of the Person(s)), domiciled at (Address), acting as (Designation and the name of the firm), as Authorized Signatory and whose signature is attested below, as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our Proposal for award of Agreement for "Implementation of revamped integrated communication infrastructure" as per agreement with GAD, vide Invitation for Tender (Tender Document) Document dated , issued by the Secretary, General Administration Department Raipur, including signing and submission of all documents and providing information and responses to clarifications / enquiries etc. as may be required by General Administration Department Raipur or any governmental authority, representing us in all matters before General Administration Department Raipur, and generally dealing with GAD in all issues in connection with our Proposal for the said Project. We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds, and things done by our aforesaid attorney shall and shall always be deemed to have been done by us. For (Signature) (Name, Title and Address) Accept (Attested signature of Mr.____

(Name, Title and Address of the Attorney)

Notes:

- To be executed by the Bidder.
- The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the appliable law and the charter documents of the executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.
- Also, wherever required, the executant(s) should submit for verification the extract of the charter

Documents and documents such as a resolution/power of attorney in favour of the Person executing this Power of Attorney for the delegation of power hereunder on behalf of the executants(s

ANNEXURE-III - FINANCIAL PROPOSAL FORMAT (Template)

Tender No.

To Date:-

The Secretary,
General Administration Department
Mahanadi Bhawan , Atal Nagar,

Nava Raipur, Chhattisgarh

Sir,

I/We hereby submit our Proposal for the "Selection of Agency for Implementation of revamped integrated communication infrastructure" mentioned in the Tender document within the time specified and in accordance with the special Terms and Conditions as well as the Scope of work. The rates are quoted in the prescribed format given below:

Summa	Summary of Bill of Material for Implementation of revamped integrated communication infrastructure of Mantralaya and HOD Building					
S. No.	Item Name	Total Amount Inclusive of Taxes (INR)				
1	Total of Table (A1) CAPEX for LAN + Wi-Fi					
2	Total of Table (A2) CAPEX for EPABX					
3	Total of Table (B) OPEX					
4	Total of Table (C) FMS					
	GRAND TOTAL COST= (A1+A2+B+C) IN FIGURE					
	GRAND TOTAL= (A1+A2+B+C) IN WORDS					

ANNEXURE-D: BILL OF MATERIAL (NEW EQUIPMENT's)

BILL OF Quantity for LAN and Wi-Fi- CAPEX (A1)

S.No.	Item Name	Technical Description	Qty	UNIT	Unit Rate inclusive of all taxes in INR	Total Amount inclusive of all taxes in INR
1	Firewall	Next Generation Firewall as per Technical Specifications of New Equipment	2	Nos.		
2	Wi-Fi Controller	Wi-Fi Controller as per Technical Specifications of New Equipment	2	Nos.		
3	Core Network Switch	96 Port Network Switch or 2 x 48 Port Switches as per Technical Specifications of New Equipment	2	Nos.		
4	Distribution Switch	24 Port Network Switch as per Technical Specifications of New Equipment	10	Nos.		
5	24P L2 PoE Switch	24 Port PoE Network Switch as per Technical Specifications of New Equipment	52	Nos.		
6	48P L2 Non PoE Switch	48 Port PoE Network Switch as per Technical Specifications of New Equipment	120	Nos.		
7	WiFi Indoor-AP	WiFi Indoor AP as per Technical Specifications of New Equipment	500	Nos.		
8	WiFi Outdoor- AP	WiFi Outdoor AP as per Technical Specifications of New Equipment	5	Nos.		
9	NMS	Network Management Solution as per Technical Specifications of New Equipment	1	Nos.		
10	Transceiver	Consider all required Transceivers module as per as per Technical Specifications of New Equipment	1030	Nos.		

11	Logs & Analytics	Logs & Analytics tool as per Technical Specifications of New Equipment	1	Nos.	
12	Server Hardware	Bidder need to consider HW infra in case if position Virtual Instances of any solution.	2	Nos.	
13	Server Rack	42U server Rack Dimensions 800mmx1000mm, Front Door- Glass, Rear Gate - Steel	1	Nos.	
14	Large Display Unit	55 inches or above, UHD 4K	1	Nos.	
15	65" HD Toch Screen TV (NOC Room)	65"or Higher UHD Touch Screen TV for NOC Room	1	Nos.	
16	Bandwidth ILL	Bandwidth (1 GB) ILL (redundant)1	1	Nos.	
17	Split AC	1.5 ton	2	Nos.	
18	SC- LC Fiber Patch cord 3 Mtr	SC- LC Fiber Patch cord 3 Mtr	221	Meter	
19	CAT 6 UTP cable	CAT 6 UTP cable 305-meter box	75	Вох	
20	CAT6 patch panel	24 port CAT6 patch panel fully loaded	20	Nos.	
21	PVC Conduit 25mm	PVC Conduit 25mm	7000	Meter	
22	CAT 6 patch cards.	1 Mtr CAT 6 patch cards.	480	Nos.	
23	1/0	I/O with Face Plate & Back Box	100	Nos.	
24	OFC 12 Core Armoured	OFC 12 Core Armoured	10000	Meter	
25	24 Port LIU	24 Port LIU Fully loaded	20	Nos.	
26	9U Rack	9U Rack	10	Nos.	
27	CAT6 Cable laying with Conduit	CAT6 Cable laying with Conduit	22800	Meter	
28	OFC Laying	OFC Laying	10000	Meter	

29	1 KVA Online UPS	1 KVA Online UPS with 30 minutes Backup	37	Nos.	
30	6 KVA Online UPS	6 KVA Online UPS with 30 minutes Backup	1	Nos.	
31	Installation, Testing and Commissioning Charges	Installation, Testing and Commissioning Charges	1	Nos.	
	BI	LL OF Quantity for LAN and EPAR	BX- CAP	EX (A2)	
32	IP-PBX	IP-PBX with IP Card 12-Trunk, 12-Slt card and 24-DKP Card	2	Nos.	
33	IP Card	IP Card for PE Model	14	Nos.	
34	Analog Extension card	Analog Extension card with 4- CO+4Slt	17	Nos.	
35	SIP Phone	SIP Phone with 16 OneTouch DSS Keys	73	Nos.	
36	IPSUB License	IPSUB License	73	Nos.	
37	IPEPABX with 10 Ports	IPEPABX with 10 Ports	5	Nos.	
38	8-Port L2 PoE Switch	8-Port L2 PoE Switch for EPABX	15	Nos.	
39	RJ-45 socket Cat-6, Tool Less	RJ-45 socket Cat-6, Tool Less	100	Nos.	
40	Analog Phone including cabling & accessories	Analog Phone including cabling & accessories	200	Nos.	
41	Supply, Laying & Splicing-4F OFC	Supply, Laying & Splicing-4F OFC	1525	Meters	
42	Installation, Testing and Commissioning Charges	Installation, Testing and Commissioning Charges	1	Nos.	

Note- Above is the indicative Bill of Materials. The bidder shall ensure that the proposed solution includes all necessary hardware, software, accessories, and related materials required for the complete and satisfactory functioning of the LAN,

Wi-Fi, and EPABX systems as per the scope defined in the tender document. It shall be the responsibility of the bidder to assess the requirements thoroughly and provide a comprehensive solution that aligns with the best industry practices. The bidder must account for and include the cost of any additional items, accessories, or components—whether explicitly mentioned in the tender or not—that are essential for the optimal, reliable, and uninterrupted operation of the systems. Any omission of such essential components shall be deemed to be included in the bidder's scope and cost, and no additional claims shall be entertained at a later stage on this account.

	Table (B): Bill of Quantity – OPEX						
S. No	Item Name	Qty	Unit	Unit Rate Inclusive of Taxes (in INR)	Total Amount Inclusive of Taxes (in INR)		
		Q	U	UR	TA=Q*N* UR		
	Operations and maintenance for Existing Hardware & Software equipment (LAN/WLAN/EPABX) at Mantralaya and HoD Bhawan's in Nava Raipur post-handover and takeover from current agency		Per quarter				
	Operations and maintenance of new/revamped Hardware & Software equipment (LAN/WLAN/EPABX) post Successful Final Acceptance Testing/Go-live		Per quarter				
	TOTAL B (OPEX) IN FIGU						

	Table (C): Bill of Quantity – FMS							
S. No	Item Name	Qty	Unit	Unit Rate Inclusive of Taxes (in INR)	Total Amount Inclusive of Taxes (in INR)			
		Q	U (Per Man- month)	UR	TA=Q*N* UR			
1	Project Manager	1	66					
2	Technical Lead/Network Architect	1	66					
3	Senior Network Engineer	2	132					
4	System Administrator	1	66					
5	Helpdesk Support Engineers	2	132					
6	Network Technicians	3	198					
7	Electrical Technician	1	66					
8	Network Operations Centre Engineer	1	66					
** T	TOTAL C (FMS) IN FIGU		-					

- 1. It will be the sole discretion of GAD to place an order for all or may hold some of the items whose rates are quoted by the bidder. The bidder/SI cannot claim over the quantities ordered by GAD.
- 2. GAD reserves the right to increase or decrease the number of items to be supplied at the time of placing the work orders.
- 3. GAD may place work order for additional quantity/Site (if required) during the contract period.
- 4. Total Cost (Z= A1+A2+B+C i.e. CAPEX + OPEX + FMS) would be considered for commercial evaluation of the bids.

Please note the following under ANNEXURE-III:

- 1. All quoted prices should be <u>inclusive of all taxes and duties</u> prevailing on the date of proposal submission.
- 2. Since the price proposal is in INR, GAD shall not consider any upward variation/ fluctuation on account of any foreign exchange at any time during the currency of the contract.
- 3. A bid shall be valid for a period of 180 Days from the date of submission of the Bid.
- 4. Other than what is given above, the bidder is expected to account for any other deliverable to make the Implementation/Operation and Maintenance successful and will be considered for commercial evaluation.
- 5. **System integrator** shall ensure support for 5 (Five) years from the date of FAT. The support shall be effective from the date of FAT.
- 6. GAD reserves the right to increase or decrease new equipment to be purchased, at the time of the Agreement or during the project.
- 7. The Above Bill of material is indicative in nature and shall be used for financial bid evaluation only. GAD may add or delete any line item or change the quantity. Payment will be made on an actual basis.
- 8. In case of any discrepancy in Financial proposal/price submitted as attachment for price discovery, and individual item wise price through web page, the price filled individual item wise price through web page will be considered for final commercial evaluation.

Signature of the bidder with seal

ANNEXURE-IV - DRAFT PERFORMANCE GUARANTEE

(To be issued by a Bank)

This Deed of Guarantee was executed at —	by	——— (Name of the
Bank), having its Head/Registered office at		
"the Guarantor"), which expression shall, unless it be re-	pugnant to the subject	or context thereof, include
its heirs, executors, administrators, successors, and ass	igns.	
In favor of the Secretary of the General Administrat	ion Department, Raip	our, having its office at the
Mahanadi Bhawan, Atal Nagar, Nava Raipur, Raipur (CG) (hereinafter called	d "Secretary, GAD Raipur,"
which expression shall, unless it is repugnant to the sub	ject or context thereof,	, include its heirs, executors,
administrators, successors, and assigns).		
Whereas M/sa company formed under	(speci	ify the applicable law) and
having its registered office at has been, consec	quent to conduct and	completion of
a competitive bidding process in accordance	with the letter of	of requirements document
Nodated//2022 issued by the	he Secretary, GAD Ra	ipur, has selected M/s
(hereinafter referred to as the Bidder) for the	Agreement by the	Secretary, GAD
Raipur, as more specifically defined in the aforemention		•
and the Agreement executed between the Secretary,	•	
Agreement requires the Bidder to furnish an uncondition		
amount of Rs/- (Rupees		as security for guaranteeing
the due and faithful compliance of its obligations under	ine Agreement.	
Will d D'11 1 1d C 4 1d 4	C . 1 1.	·1
Whereas the Bidder approached the Guarantor, and the	_	o provide a Guarantee being
these presents:		
Navy this Dand with a said that in a small anation of the m		Daulah ambay ayananta
Now this Deed witnessed that in consideration of the pr	termses, we,	— Bank hereby guarantee
as follows:		

1.	The Bidder shall implement the Project, in accordance with the terms and subject to the conditions of the Agreement and fulfil its obligations there under
2.	We, the Guarantor, shall, without demur, pay to Secretary, GAD Raipur, an amount not exceeding
	Rsonly) within 30 days of receipt of a written demand therefore from Secretary, GAD Raipur stating that the Bidder has failed to fulfil its obligations as stated in Clause 1 above.
3.	The above payment shall be made by us without any reference to the Bidder or any other person and irrespective of whether the claim of the Secretary, GAD Raipur is disputed by the Bidder or not.
4.	The Guarantee shall come into effect from(Start Date) and shall continue to be in full force and effect until the earlier of its expiry at 17:00 hours Indian Standard Time on(Expiry Date) (both dates inclusive) or until the receipt of a claim from the General Administration

- Department, Raipur, Government of Chhattisgarh under this Guarantee, which is one month after the expiry of the performance guarantee, whichever is earlier. Any demand received by the Guarantor from the Secretary, GAD Raipur, prior to the Expiry Date shall survive the expiry of this Guarantee until such time that all the money are payable under this Guarantee by the Guarantor to the SECRETARY, GAD Raipur.

 5. In order to give effect to this Guarantee, Secretary., GAD Raipur shall treat the Guarantor as the
- In order to give effect to this Guarantee, Secretary., GAD Raipur shall treat the Guarantor as the principal debtor. The obligations of the Guarantor shall not be affected by any variations in the terms and conditions of the Agreement or other documents by the Secretary, GAD Raipur, nor by any extension of time for performance granted to the Bidder, or by any postponement of the power exercisable by the Secretary, GAD Raipur against the Bidder. We shall not be relieved from our obligations under this Guarantee due to any such variation, extension, forbearance, or omission on the part of the Secretary, GAD Raipur or any indulgence granted by the Secretary, GAD Raipur to the Bidder.

	provision have the effect of so relieving us.
6. 7.	This Guarantee shall be irrevocable and shall remain in full force and effect until all our obligations under this guarantee are duly discharged.
8.	The Guarantor has the authority to issue this guarantee, and the undersigned is duly authorised to execute this Guarantee in accordance with the power granted under
	ness, whereof the Guarantor has set its hands hereunto on the day, month, and year first here-in-written.
Ū	and delivered by Bank by the hand of Shri its and authorised office.
Author	rised Signatory Bank

such matter or thing whatsoever which under the law relating to sureties would but for this

ANNEXURE-V: PARTICULARS OF THE BIDDERS

(To be provided in original as part of **Techno-Commercial Proposal (Envelope – B)** duly signed by bidder for the tender)

SI	Information Sought	Details to be Furnished
No.		
1	Name and address of the bidding Company	
2	Incorporation status of the firm (public limited /	
	private limited, etc.)	
3	Year of Establishment	
4	Date of registration	
5	ROC Reference No.	
6	Details of company registration	
7	Details of registration with appropriate authorities for service tax	
8	Name, Address, email, Phone nos. and Mobile Number of Contact Person	
9	Details of GST & TAN	

ANNEXURE-VI – PRE: CONTRACT INTEGRITY PACT

(To be provided in original as part of **Techno-Commercial Proposal (Envelope – B)**)

1. GENERAL

1.1. This pre-bid contract Agreement (he	ereinafter o	called the Inte	egrity Pact) is n	nade on	day of
the month 20 between,	the Go	vernment of	Chhattisgarh	acting through	Shri.
		. (Destination	of the officer, l	Department) Gov	ernment
of Chhattisgarh (hereinafter referred to	as the "T	ENDERING	AUTHORITY,	" which express	ion shall
mean and include, unless the context oth	erwise rec	quires, its succ	essors in office	and assigns) and	the First
Party propose to procure (name (of the	Stores/Equipm	ent/Work/Service	e) and
M/s					
represented	•			,	
called the "BIDDER/Seller", which exp	pression s	hall mean an	d include, unle	ess the context o	therwise
requires, his successors a permitted assig	gns) and th	e Second Part	ty is willing to	offer/ has offered	

1.2. WHEREAS the BIDDER is a Private Company/Public Company/ Government Undertaking/Partnership firm, constituted in accordance with the relevant law in the matter, and the TENDERING AUTHORITY is a Ministry/Department of the Government, performing its function on behalf of the Government of Chhattisgarh.

2. OBJECTIVES

NOW, THEREFORE, the TENDERING AUTHORITY and the BIDDER agree to enter into this precontract agreement, hereinafter referred to as Integrity Pact, to avoid all forms of corruption by following a system that is fair, transparent, and free from any influence/prejudiced dealings prior to, during and subsequent to the Contract to be entered into with a view to:-

- 2.1. Enabling the TENDERING AUTHORITY to obtain the desired Stores/Equipment/Work/Services at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement and
- 2.2. Enabling BIDDERs to abstain from bribing or indulging in any corrupt practices in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing any corrupt practices and the TENDERING AUTHORITY will commit to preventing corruption, in any form, by its official by following transparent procedures.

3. COMMITMENTS OF THE TENDERING AUTHORITY

The TENDERING AUTHORITY commits itself to the following:-

3.1. The TENDERING AUTHORITY undertakes that no official of the TENDERING AUTHORITY, connected directly or indirectly with the contract, will demand, take promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organisation or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting process related to the contract.

- 3.2. The TENDERING AUTHORITY will, during the pre-contract stage, treat BIDDERs alike, and will provide to all BIDDERs the same information and will not provide any such information to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to the other BIDDERs.
- 3.3. All the officials of the TENDERING AUTHORITY will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach. In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to the TENDERING AUTHORITY with the full and verifiable facts and the same prima fade found to be correct by the TENDERING AUTHORITY, necessary disciplinary proceedings, or any other action as deemed, fit, including criminal proceedings may be initiated by the TENDERING AUTHORITY and such a person shall be debarred from further dealings related to the contract process. In such a case, while an enquiry is being conducted by the TENDERING AUTHORITY, the proceedings under the contract would not be stalled.

4. COMMITMENTS OF BIDDERS

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

- 4.1. The BIDDER will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantages, commission, fees, brokerage, or inducement to any official of the TENDERING AUTHORITY connected directly or indirectly with the bidding process, or to any person, organisation or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting of the contract.
- 4.2. The BIDDER further undertakes that it has not given, offered, or promised to give, directly or indirectly, any bribe, gift, consideration, reward, favour, any material or immaterial benefit, or other advantages, commission, fees, brokerage, or inducement to any official of the TENDERING AUTHORITY or otherwise in procuring the Contract, for forbearing to do or having done any act in relation to obtaining or executing the contract or any other contract with the Government, for showing or forbearing to show favour or disfavour to any person in relation to the contract or any other contract with the Government.
- 4.3. The BIDDER further confirms and declares to the TENDERING AUTHORITY that the BIDDER in the original Manufacture/Integrator/Authorized government-sponsored export entity of the stores and has not engaged any individual or firm or company, whether Indian or foreign to intercede, facilitate or in any way to recommend to the TENDERING AUTHORITY or any of its functionaries, whether officially or unofficially to the award of the contract to the BIDDER nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
- 4.4. The BIDDER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payment he has made, is committed to or intends to make to officials of the TENDERING AUTHORITY or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.

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

- 4.5. The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means, and illegal activities.
- 4.6. The BIDDER shall not use improperly, for the purpose of competition or personal gain, or pass on to others any information provided by the TENDERING AUTHORITY as part of the business relationship regarding plans, technical proposals, and business details, including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information be divulged.
- 4.7. The BIDDER commits to refrain from giving any complaint directly or in any other manner without supporting it with full and verifiable facts.
- 4.8. The BIDDER shall not instigate or cause to instigate any third person to commit any of the acts mentioned above.

5. PREVIOUS TRANSGRESSION

- 5.1. The BIDDER declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify BIDDER's exclusion from the tender process.
- 5.2. If the BIDDER makes incorrect statement on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

6. EARNEST MONEY (SECURITY DEPOSIT)

- 6.1. Every BIDDER, while submitting a commercial bid, shall deposit an amount as specified in the RFP as Earnest Money/Security Deposit, with the TENDERING AUTHORITY through any of the following instruments:
- (i) Bank Draft or a Pay Order in favour of.....
- (iii) Any other mode or through any other instrument (to be specified in the RFP).
- 6.2. The Earnest Money/Security Deposit shall be valid upto a period of five years or the complete conclusion of the contractual obligations to the complete satisfaction of both the BIDDER and TENDERING AUTHORITY, including warranty period, whichever is later.
- 6.3. In the case of successful BIDDER, a clause would also be incorporated in the Article pertaining to Performance Bond in the Purchase Contract that the provisions of Sanctions for violation shall be applicable for forfeiture of Performance Bond in case of a decision by the TENDERING AUTHORITY to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.

6.4. No interest shall be payable by the TENDERING AUTHORITY to the BIDDER on the Earnest Money/Security Deposit for the period of its currency.

7. SANCTIONS FOR VIOLATIONS

- 7.1. Any breach of the aforesaid provisions by the BIDDER or anyone employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle the TENDERING AUTHORITY to take all or any one of the following actions, wherever required:-
- (i) To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.
- (ii) To forfeit fully or partially the Earnest Money Deposit (in the pre-contract stage) and/or Security Deposit/Performance Bond (after the contract is signed), as decided by the TENDERING AUTHORITY and the TENDERING AUTHORITY shall not be required to assign any reason, therefore.
- (iii) To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.
- (iv) To recover all sums already paid by the TENDERING AUTHORITY, and in case of the Indian BIDDER with interest thereon at 2% higher than the prevailing Prime Lending Rate while in case of a BIDDER from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the BIDDER from the TENDERING AUTHORITY in connection with any other contract, such outstanding payment could also be utilised to recover the aforesaid sum and interest.
- (v) To encash the advance bank guarantee and performance bond/warranty bond, if furnished by the BIDDER, in order to recover the payments already made by the TENDERING AUTHORITY, along with interest.
- (vi) To cancel all or any other contracts with the BIDDER and the BIDDER shall be liable to pay compensation for any loss or damage to the TENDERING AUTHORITY resulting from such cancellation/rescission, and the TENDERING AUTHORITY shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.
- (vii) To debar the BIDDER from participating in future bidding processes of the Government of Chhattisgarh for a minimum period of five years, which may be further extended at the discretion of the TENDERING AUTHORITY.
- (viii) To recover all sums paid in violation of this Pact by BIDDER(s) to any middlemen or agent or broken with a view to securing the contract.
- (ix) In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the TENDERING AUTHORITY with the BIDDER, the same shall not be opened.
- (x) If the BIDDER or any employee of the BIDDER or any person acting on behalf of the BIDDER, either directly or indirectly, is closely related to any of the officers of the TENDERING AUTHORITY, or alternatively, if any close relative of an officer of the TENDERING AUTHORITY has financial interest/stake in the BIDDER's firm, the same shall be disclosed by the BIDDER at the time of filling of

tender. Any failure to disclose the interest involved shall entitle the TENDERING AUTHORITY to rescind the contract without payment of any compensation to the BIDDER.

The term 'close relative' for this purpose would mean spouse whether residing with the Government servant or not, but not include a spouse separated from the Government servant by a decree or order of a competent court; son or daughter or stepson or step daughter and wholly dependent upon Government servant, but does not include a child or step-child who is no longer in any way dependent upon the Government servant or of whose custody the Government servant has been deprived of by or under any law; any other person related, whether by blood or marriage, to the Government servant or to the Government servant's wife or husband and wholly dependent upon Government servant.

- (xi) The BIDDER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the TENDERING AUTHORITY, and if he does so, the TENDERING AUTHORITY shall be entitled forthwith to rescind the contract and all other contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the TENDERING AUTHORITY resulting from such rescission and the TENDERING AUTHORITY shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.
- 7.2. The decision of the TENDERING AUTHORITY to the effect that a breach of the provisions of this pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the Monitor(s) appointed for the purposes of this Pact.

8. FALL CLAUSE

8.1. The BIDDER undertakes that he has not supplied/is not supplying similar product/systems or subsystems at a price lower than that offered in the present bid in respect of any other Department of the Government of Chhattisgarh or PSU and if it is found at any stage that the BIDDER supplied similar product/systems or subsystems to any other Department of the Government of Chhattisgarh or a PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to the TENDERING AUTHORITY, if the contract has already been concluded.

9. INDEPENDENT MONITORS

- 9.1. The TENDERING AUTHORITY will appoint Independent Monitors (hereinafter referred to as Monitors) for this Pact.
- 9.2. The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.
- 9.3. The Monitors shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
- 9.4. Both parties accept that the Monitors have the right to access all the documents relating to the project/procurement, including minutes of meetings. The Monitor shall be under contractual obligation to treat the information and documents of the BIDDER/Sub Selected Bidder(s) with confidentiality.
- 9.5. As soon as the Monitor notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the TENDERING AUTHORITY.

9.6. The Monitor will submit a written report to the designated Authority of TENDERING AUTHORITY/Secretary in the Department/within 8 to 10 weeks from the date of reference or intimation to him by the TENDERING AUTHORITY/BIDDER and, should the occasion arise, submit proposals for correcting problematic situations

10. FACILITATION OF INVESTIGATION

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

11. LAW AND PLACE OF JURISDICTION

14. The parties hereby sign this Integrity Pact

This Pact is subject to Indian Law, the place of performance and jurisdiction shall be the seat of the TENDERING AUTHORITY.

12. OTHER LEGAL ACTIONS

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

13. VALIDITY

- 13.1. The validity of this Integrity Pact shall be from the date of its signing and extend up to 3 years or the complete execution of the contract to the satisfaction of both the TENDERING AUTHORITY and the BIDDER/Seller, whichever is later. In case BIDDER is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract.
- 13.2. If one or several provisions of this Pact turn out to be invalid, the remainder of this Pact shall remain valid. In such a case, the parties will strive to come to an agreement to their original intentions.

aton	
TENDERING AUTHORITY	BIDDER
Name of the Officer	
Designation	
Witness 1)	Witness 1)
2)	2)

ANNEXURE-VII: CORE PROJECT TEAM

(To be provided in original as part of **Techno-Commercial Proposal (Envelope – B)** duly signed by the bidder for the tender)

Description of Core Project Team

Bidder shall provide a detailed description of the proposed Core Project Team to be deployed for the WLAN/LAN/EPBAX Infrastructure project. The description should include details about the Project Team Hierarchy and a detailed explanation of the role to be played by each individual that would be part of the WLAN/LAN/EPBAX Infrastructure project.

ANNEXURE-VIII: SOFTWARE MANUFACTURER AUTHORIZATION & **SUPPORT FORM**

(To be provided in original as part of the Techni Commercial Proposal(Envelope - B) on letterhead, signed by the authorized representative of OEM in favor of bidder for the tender)

To,

The Secretary,

General Administration Department

Mahanadi Bhawan , Atal Nagar,
Nava Raipur, Chhattisgarh
Subject: Tender for the Project "Selection of Agency for Implementation of revamped
integrated communication infrastructure".
Dear Sir,
This is with reference to the above Tender & requirements therein, we authorize
to offer their prices for our products as listed below -
1. Product / Components
a)
b)
2. Product / Components
a)
b)
We would be responsible for support of providing updates, patches,
security updates, and bug fixes for the entire period of the contract for all the locations for the above
products as required in the Tender. Confirm that the products meet the technical & functional
requirements & the Products quoted are the latest version/specification and not the end of life.
We also assure you that weindemnifies Information Technology
Department, Government of Chhattisgarh against all third party claims of infringement of patents,
trademarks arising from the use of the above software for the entire period of contract.
Date: SIGNATURE OF AUTHORISED PERSON

Place: FULL NAME OF SIGNATORY

DESIGNATION AND SEAL OF SIGNATORY

Date:	COUNTER SIGNATURE OF BIDDER			
Place:	NAME	DESIGNATION AND SEAL		

ANNEXURE-IX: HARDWARE MANUFACTURER AUTHORIZATION & SUPPORT FORM

(To be provided in original as part of **Techno Commercial Proposal(Envelope – B)** on letter head signed by the authorized representative of OEM in favor of 'Bidder' for the tender)

O.

The Secretary,

General Administration Department

Mahanadi Bhawan , Atal Nagar,

Nava Raipur, Chhattisgarh

We have gone th	rough the	tender	docume	nt for t	the said	d NIT,	and w	e auth	norize 1	M/s
	((name	of the	bidde	er to	said	NIT)	with	office	e at
	to s	ubmit to	ender in	respon	nse to	the sa	id NIT	with	equipn	nent
pro	oduced by u	is on the	understa	nding a	nd with	the und	lertaking	from	our side	that
the product offered i	is not at the	end of	its life cy	cle and	we sha	all provi	ide expe	ditious	ly all s _l	pares
and full maintenance	e support to	the equ	ipment's	supplie	ed by th	e bidde	r for this	tender	r throug	hout
a period of five year	r of warran	ty as rec	uired by	the ten	der do	cument.	Confirm	1 that 1	the prod	ducts
meet the technical &	tunctional	l require	ments &	Produc	ts quot	ed are la	atest vers	sion / s	pecific	ation
and not the end of lit	fe.									
This is also to certif	fy that all p	products	are ISO	9001, I	nternat	ional Co	ertified,	and Re	estrictio	n of
hazardous substance	s (RoHS) c	omplian	t .							
Date:		S	IGNATU	JRE OF	AUTH	IORISE	D PERS	ON		
Place:		F	ULL NA	ME OF	SIGNA	ATORY				
		D	ESIGNA	ATION A	AND S	EAL OF	SIGNA	TORY	7	
Date:		C	OUNTE	R SIGN	IATUR	E OF B	IDDER			
Place:		N	AME							

DESIGNATION AND SEAL

ANNEXURE-X: UNDERTAKING FOR LOCAL OFFICE IN STATE

(To be provided in original as part of Techno-Commercial Proposal (Envelope-B))

Date
To,
The Secretary,
General Administration Department
Mahanadi Bhawan , Atal Nagar,
Nava Raipur, Chhattisgarh
Dear Sir,
Ref.: Tender No.
I/Wehereby confirm that our firm has a local office in the state.
Address of local office: -
Contact no: -
Email address: -
Or
I/Wehere by confirm that our firm undertakes to arrange for a local
office in the state within one month of the award of the work order.
Signature of Bidder
Place:
Name
Date:
Designation
Seal

ANNEXURE-XI: PRE-BID QUERY FORMAT

Pre-bid query format:

Sr.	Clause Ref	Description	Query	GAD
No.				Response

ANNEXURE-XII- DECLARATION FOR NOT BLACKLISTED

(To be provided in original as part of Techno-Commercial Proposal (Envelope – B))

Date		
To, The Secretary,		
General Administration Department Mahanadi Bhawan , Atal Nagar,		
Nava Raipur, Chhattisgarh		
Dear Sir,		
Ref.: Tender No.		
I/Wehereby confirm that our firm has not been banned or blacklisted by any government organization/Financial institution/Court /Public sector Unit /Central Government.		
Signature of Bidder	Place:	
Name	Date:	
Designation		
Seal		

ANNEXURE-XIII: UNDERTAKING FOR LOCAL OFFICE IN STATE

(To be provided in original as part of Techno-Commercial Proposal (Envelope – B))

Date
To,
The Secretary,
General Administration Department
Mahanadi Bhawan , Atal Nagar,
Nava Raipur, Chhattisgarh
Dear Sir,
Ref.: Tender No.
I/Wehere by confirm that our firm has a local office in the state.
Address of local office: -
Contact no: -
Email address: -
Or
I/Wehere by confirm that our firm undertakes to arrange for a local
office in the state within one month of award of the work order.
Signature of Bidder
Place:
Name
Date:
Designation
Seal

ANNEXURE-XIV - DRAFT PERFORMANCE GUARANTEE

(To be issued by a Bank)

This Deed of Guarantee executed at —	by	(Name of the Bank)
having its Head/Registered office at —		—— (hereinafter referred to as "the
Guarantor") which expression shall unless it be rep	ougnant to the su	ibject or context thereof include its
heirs, executors, administrators, successors, and as	signs.	
In favor of The Secretary of General Administration	on Department, R	aipur, having its office at Mahanadi,
Atal Nagar, Nava Raipur, Raipur (CG) (hereinafte	r called "Secreta	ry, GAD, Raipur" which expression
shall unless it be repugnant to the subject or conte	xt thereof include	e its heirs, executors, administrators,
successors, and assigns).		
Whereas M/sa company formed unde	r	(specify the applicable law) and
having its registered office at has been, con	nsequent to cond	luct and completion of
a competitive bidding process in accordan	nce with the	letter of requirements document
Nodated//2022 issued	by Secretary, GA	D Raipur, and selected M/s
(hereinafter referred to as the Bidder) for the	Agreement	by Secretary, GAD Raipur as
more specifically defined in the aforementioned Do	ocument includin	g statement of work and the
Agreement executed between the Secretary,	GAD Raip	our and Bidder. The Agreement
requires the Bidder to furnish an unconditional and	d irrevocable Ban	k Guarantee for an amount of Rs
/- (Rupees	only) by way o	f security for guaranteeing the due
and faithful compliance of its obligations under the A	Agreement.	
Whereas the Bidder approached the Guarantor, and	the Guarantor has	agreed to provide a Guarantee being
these presents:		
Now this Deed witnessed that in consideration of the	ne premises, we, -	Bank hereby guarantee
as follows:	-	, -

9.	The Bidder shall implement the Project, in accordance with the terms and subject to the condition		
	of the Agreement, and fulfil its obligations there under		
10.	We, the Guarantor, shall, without demur, pay to Secretary, GAD Raipur an amount not exceeding		
	Rsonly) within 30 days of receipt of a written demand therefore from Secretary, GAD Raipur stating that the Bidder has failed to fulfil its obligations as stated in Clause 1 above.		
11.	The above payment shall be made by us without any reference to the Bidder or any other person and irrespective of whether the claim of the Secretary, GAD Raipur is disputed by the Bidder or not.		
12.	The Guarantee shall come into effect from(Start Date) and shall continue to be infull force and effect till the earlier of its expiry at 1700 hours Indian Standard Time on(Expiry Date) (both dates inclusive) or till the receipt of a claim, from the General Administration Department, Raipur, Government of Chhattisgarh under this Guarantee, whichis one month after the expiry of performance guarantee, whichever is earlier. Any demand received by the Guarantor from Secretary GAD Raipur prior to the Expiry Date shall survive the expiry of this Guarantee till such time that all the moneys payable under this Guarantee by the Guarantor to Secretary GAD Raipur.		
13.	In order to give effect to this Guarantee, Secretary GAD Raipur shall be entitled to treat the Guarantor as the principal debtor and the obligations of the Guarantor shall not be affected by any variations in the terms and conditions of the Agreement or other documents by SECRETARY, GAD Raipur or by the extension of time of performance granted to the Bidder or any postponement for any time of the power exercisable by SECRETARY, GAD Raipur against the Bidder or forebear or enforce any of the terms and conditions of the agreement and we shall not be relieved from our obligations under this Guarantee on account of any such variation, extension, for bearance or omission on the part of Secretary, GAD Raipur or any indulgence by Secretary, GAD Raipur to the Bidder to give such matter or thing whatsoever which under the law relating to sureties would but for this		
14.	provision have effect of so relieving us. This Guarantee shall be irrevocable and shall remain in full force and effect until all our obligations under this guarantee are duly discharged.		
15.	The Guarantor has power to issue this guarantee and the undersigned is duly authorized to execute		
	this Guarantee pursuant to the power granted under		

In witness, whereof the Guarantor has set its above written.	hands hereunto on the day, month, and year first here-in-
Signed and delivered byand authorized office.	Bank by the hand of Shri
Authorized SignatoryBank	_

ANNEXURE-XV-BANK GUARANTEE FORMAT FOR EARNEST MONEY DEPOSIT

(To be provided in original on stamp paper of value required under law duly signed by authorized representative of Bank in Envelope-A)

This Deed of Guarantee executed at	by	(Name of the Nationalised
This Deed of Guarantee executed at	arantor") which	, and having one of its branches at a expression shall, unless it be repugnant
to the subject or context thereof include its heirs, execute	ors, administrat	cors, successors and assigns;
In favour of the Secretary, General Administration De Technology and Biotechnology, Government of Chhair Raipur, 02nd floor, Near Nava Raipur Police Station, F which expression shall unless it be repugnant to the sadministrators, successors and assigns;	ttisgarh, having Raipur, Chhattis	g its office at Mahanadi Bhawan, Nava sgarh (hereinafter referred to as "GAD")
Whereas Name of the bidder	_Ltd., a Con	npany/partnership firm / proprietorship
concern registered under the	of the relevant a er called "Bidd executors, adn gency for Imp der Document	net/law under which incorporated) having der" which expression shall unless it be ministrators, successors and assigns) has plementation of revamped integrated
Whereas in terms of the Invitation for Tender Documereferred to as Tender Document) issued by GAD, the Birirevocable Bank Guarantee for an amount of INR 53, 00 Deposit and the Guarantor has at the request of the Bidde	dder is required), 000 (INR Fi f	l to furnish to GAD an unconditional and fty Three Lakhs only) as Earnest Money
Now this Deed witnessed that in consideration of the declare, undertake and guarantee as follows:	premises, we,	Bank hereby agree,
1. We as primary obligor hereby irrevocably, unconditionally faithful fulfilment and compliance of the terms and unconditionally and irrevocably undertake to pay forthw (INR Fifty Three Lakhs only) without any demur, resert to the Bidder, if the Bidder has failed to comply with an in the tender. A letter from GAD stating that the Bidder compliance with the terms and conditions contained in Bank, in respect of the forfeiture of the Earnest Mone Guarantee.	d conditions of with to GAD and wation, recoursed fulfil all or a der is in default the tender shall	of the tender by the said Bidder and amount not exceeding INR 53, 00, 000 e, contest or protest and without reference my of the terms and conditions contained it in the due and faithful fulfilment and I be final, conclusive and binding on the
2. This Guarantee shall remain in full force and effect for the(Proposal Due Date).	or a period of 1	20 (One hundred and Twenty) days from

declaration by GAD.
4. We
5. GAD shall have the full liberty without affecting in any way the liability of the Bank under this Guarantee from time to time to vary any other terms and conditions of the said Tender document or to extend the time frame for completion of bidding process or the period of fulfilment and compliance with the terms and conditions contained in the said Tender document by the said Bidder or to postpone for any time and from time to time any of the powers exercisable by it against the said Bidder and either to enforce or forbear from enforcing any of the terms and conditions contained in the said Tender document or the securities available to GAD and the bank shall not be released from its liability under these presents by any exercise by GAD of the liberty with reference to the matters aforesaid or by reason of time being given to the said Bidder or any other forbearance, act or omission on the part of GAD or any indulgence by GAD to the said Bidder or of any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of releasing the Bank from its such liability.
6. Any notice by way of request, demand or otherwise hereunder shall be sent by courier or by registered mail to the Bank, addressed as aforesaid.
7. We undertake to make the payment on receipt of your notice of claim on us addressed to(name of Bank along with branch address) and delivered at our above branch that shall be deemed to have been duly authorised to receive the said notice of claim.
8. It shall not be necessary for GAD to proceed against the said Bidder before proceeding against the bank and the Guarantee herein contained shall be enforceable against the bank, notwithstanding any other security which GAD may have obtained or obtained from the said Bidder, shall at the time when proceedings are taken against the bank hereunder, be outstanding or unrealised.
9. We, Bank, lastly, undertake not to revoke this guarantee during its currency except with the previous express consent of GAD in writing and agree that any change in the constitution of the Bank or the said Bidder shall not discharge our liability hereunder.
10. The Bank declares that it has the power to issue this guarantee and the undersigned have full powers to do so on behalf of the Bank.
Dateday of2016
Signature of the Issuing / Authority with seal
CORPORATE SEAL
ForBank
Note: A covering letter of confirmation is also to be given by the bank along with this bank guarantee.

3. Subject to clause 1 above, any claim for payment under this Guarantee shall be in the form of a written

END of Document



REQUEST FOR PROPOSAL (RFP) Volume - II

For

Selection of Agency for Implementation of revamped integrated communication WLAN/LAN/EPBAX
Infrastructure

General Administration Department (GAD)

Mahanadi Bhawan, Atala Nagar , Nava Raipur, Chhattisgarh Tel.: +91-771-42510825

Email: <u>gad-secy@cg.gov.in</u>, Website: <u>www.gad.cg.gov.in</u>

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1. EXECUTIVE - SUMMARY

The Mahanadi and Indravati Bhawans in Nava Raipur require revamped WLAN/LAN/EPBAX to enhance integrated connectivity in Mahanadi Bhawan and provide WLAN services in Indravati Bhawan. This will be designed per the affordable WLAN/LAN/EPBAX infrastructure standard. The main objective of this project is to ensure seamless connectivity, thereby improving administrative efficiency and facilitating hassle-free e-office implementation. This scheme is part of the good governance initiative under "e-Office."

The government of Chhattisgarh intends to upgrade and maintain WLAN, LAN, and EPBAX networks at Mantralaya and Indravati Bhawan in Nava Raipur. It aims to use the benefits of an e-office to change the execution of various processes currently in place, enhancing accountability, transparency, and effectiveness in government administration. The core objective of this initiative is to enable employees to access web-based services using their desktops, laptops, and handheld devices at Mantralaya and Indravati Bhawan in Nava Raipur.

2. OVERVIEW OF EXISTING LAN INFRASTRUCTURE

The project's objective is to provide local area connectivity and wireless access to the departments of Mahanadi Bhawan (Mantralaya) in Nava Raipur, enabling them to access eGovernance services and applications of state and central governments, as well as the online services required by the department to carry out official tasks. This also allows users under the EPBAX infrastructure to connect with other users through intercom systems.

Existing LAN Infrastructure Status: The entire networking system of Mantralaya was implemented and funded by the GAD department in 2011-2012, accompanied by a five-year warranty. The warranty for all LAN equipment and devices installed on each floor of Mantralaya has expired, and the lifespan of all switches has reached its end, rendering them obsolete. The installed LAN switches require urgent replacement to ensure the smooth functioning of the Internet and the network in Mantralaya.

Existing LAN Switches: The existing LAN switches operational in Mantralaya under this project are

Sr. No.	Description	Make and Model	Qty.
01	Core Switch	Cisco WS-6509-E	02
02	Access Switch	Cisco WS-C2960S-48TS-L	75

Need to upgrade LAN Infrastructure: The existing LAN infrastructure of Mantralaya was established about 11 years ago. According to the condemnation and disposal guidelines of the DoT (IT Cell), the prescribed lifespan of data communication equipment, LAN switches, routers, and data cables is five years. Compared to the last decade, technology has advanced significantly, achieving higher gigabit and terabit speeds with improved efficiency. Therefore, Mantralaya's LAN infrastructure requires an upgrade for both active and passive components. For the active components, LAN switches will be prioritised for replacement once a service provider is selected, while passive components, such as cables and other accessories, will be replaced based on timely requirements.

The following works will be executed under LAN Infrastructure:

- a) Operation and Maintenance of Complete LAN Infrastructure for 5 years from FAT date.
- b) Operation and maintenance support by the service provider for all active and passive components under this project for five years from the FAT date.

Brief Network Connectivity Diagram of LAN Infrastructure at Mantralaya: The network connectivity diagram of LAN switches in various floors of Mantralaya is given below in brief:

CONNECTIVITY SCHEMATIC DIAGRAM Utility BLOCK ES Firewall NOC (NIC) Room NOC (NIC) Room Edge Svitches Edge Svitches SECTION BLOCK SEGRETARIET BLOCK

3. OVERVIEW OF EXISTING WLAN INFRASTRUCTURE

The existing WLAN Infrastructure at Mantralaya and Indravati Bhawan in Nava Raipur provides Wireless network connectivity to the users of these two Bhawans. Through this Wi-Fi infrastructure, the users can access e-government and other internet services related to official work and capacity building.

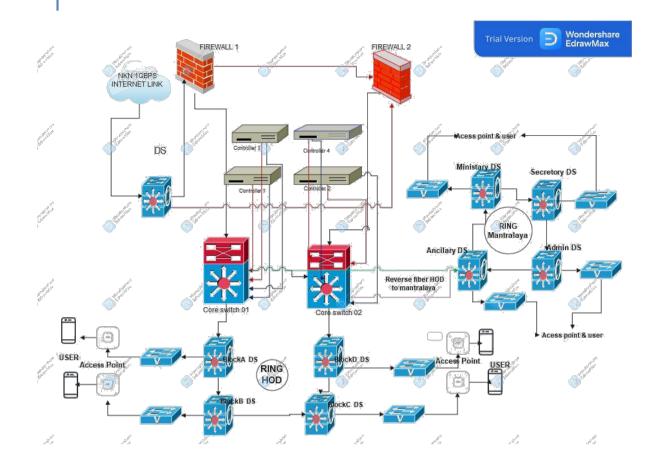
3.1 EXISTING WLAN NETWORK ARCHITECTURE

The WLAN Infrastructure has been divided into two buildings/Bhawans namely:

- o Mantralaya / Secretariate / Mahanadi Bhawan, Atal Nagar, Nava Raipur (C.G.)
- o Head of Departments / Indravati / Indravati Bhawan, Atal Nagar, Nava Raipur (C.G.)

The Internet connectivity for the WLAN infrastructure is established at Indravati Bhawan in Nava Raipur and is terminated on the firewall. The internet connectivity for the Wi-Fi infrastructure is currently provided by GAD.

WLAN Infrastructure at Mantralaya and Indravati Bhawans in Nava Raipur is beneficial for government employees to access eGovernance and other related services for their official purposes. This creates a "Smart Office" environment in the connected areas of both Bhawans. All government-enabled citizen-centric services should now be available on e-office, e-HRMS, SPARROW, and other ICT eGovernance services. A brief network connectivity diagram of the Wi-Fi infrastructure at Mantralaya and Indravati Bhawan is provided below:



A BRIEF - NETWORK DIAGRAM OF WLAN INFRASTRUCTURE

3.2 The Devices located at Indravati Bhawan are: -

- Access Control Server
- Network Monitoring Server
- Domain Server (AD/DHCP/DNS)
- Internet Security Firewall
- Primary Level Router
- Secondary Level Router
- Internal Wireless Access Points
- Wireless LAN Controller
- Wireless Controller for High Availability
- Wireless Network Monitoring System
- Core Switches Layer 3
- 24-Port Switches Layer 3
- Single mode fiber modules
- PoE Switches Layer 2

3.3 The Devices located at Mantralaya Bhawan are: -

- Internal Wireless Access Points
- External Wireless Access Points
- Wireless Controller for High Availability
- Wireless Network Monitoring System
- 24-Port Switches Layer 3
- Single mode fiber modules
- PoE Switches Layer 2

3.4 IP Network Design

Wi-Fi Infrastructure at Mantralaya and Indravati Bhawan are using IP segments for its operation.

3.5 Existing Equipment Configuration:

- Access Control Server:- Windows based server in which access control policies have been defined for types of computers or roles of users to be allowed to access areas of the network, and enforce them in switches, routers, and network middle boxes.
- Network Monitoring Server: Windows based server for network devices monitoring purpose.
- Domain Server (AD/DHCP/DNS):- Windows based server for Active Directory, DHCP and DNS purpose.
- Internet Security Firewall:- NKN/NIC link is connected on firewall of this Wi-Fi infrastructure through a L2 switch. Necessary configuration for protecting internal network from outside is done here. VLAN is also configured here for internal network. Source NAT has been configured for internal users to access eGovernance, Departmental, and other online services. Data Traffic inspected and filtered here on the basis of policies created inside the firewall for this network. Other security related parameters are configured to provide protection to Wi-Fi infrastructure.
- Primary Level Router:- For Routing purpose.
- Secondary Level Router:- For Routing purpose.
- Internal Wireless Access Points:- As transceiver for data traffic to connect with wired and/or wireless network.
- Wireless LAN Controller:- WLAN controller manages wireless network access points that allow wireless devices to connect to the network.
- Wireless Network Monitoring System:- Windows based server for wireless network devices monitoring purpose.
- Core Switches Layer 3:- Mainly for switching purpose.
- 24-Port Switches Layer 3:- For switching purpose.
- Single mode fiber modules: For optical to electrical conversion, and vice versa.

- PoE Switches Layer 2:- For switching purposes with electrical power to Access Points.
- Bandwidth Provider: Bandwidth provided by NKN/NIC/CGSWAN or any other Internet Service

Provider for Internet and Other eGovernance services for Wi-Fi infrastructure

3.6 Existing WLAN Infrastructure Equipment:

	BILL OF MATERIALS & SERVICES				
SN	ITEM DESCRIPTION	Total QTY	UNIT	Mantralaya	INDRA VATI
	Access Control Server HP-IMC-UAM Softwa	re + HP MI	110 Gen 7 s	erver	_
1	Security Appliance- Access Control Server	1	Nos.	0	1
	Network Monitoring Server HP IMC STD. EDN. Se	oftware + H	IP ML110 G	Gen 7 server	•
1	Network Controller Appliance With 100 Clients Support	1	Nos.	0	1
2	License for 25 Clients Add on	18	Nos.	12	6
	Domain Server (AD/DHCP/DNS) with OS License - 1	HP ProLian	t ML350P (Gen 8 Server	_
1	Server with monitor, keyboard 12GB RAM, Xeon500, 2.6Ghz, 4 Core Processor and 1 TB HDD	2	Nos.	0	2
	Security (Make-Cyberoam, Model -	CR - 500IN	G- XP)		•
1	Internet Security Firewall	2	Nos.	0	2
	Router		•	1	1
1	Primary Level Router	1	Nos.	0	1
2	Secondary Level Router	1	Nos.	0	1
	Wireless Access poi	nts			•
1	Internal Access point (HP MSM 430)	472	Nos.	280	192
2	External Access point with 8 Dbi Dual Band 3 x 3 MIMO Omni Antenna (HP MSM 466-R)	4	Nos.	4	0
	Wireless LAN Controller HP - MSM760 Pro	emium Mob	ility Contro	ller	
1	Wireless Controller	1	Nos.	0	1
2	Wireless Controller - 50 Access Point with License	8	Nos.	6	2
	Wireless Controller for high Availability - HP-MSM	1760 Premiu	ım Mobility	Controller	L
1	Redundant Controller for High Availability	3	Nos.	2	1
	Wireless Network Monitori	ng System		l	L
1	Network Controller Appliance With 100 Clients Support	1	Nos.	2	1
2	License for 25 Clients Add on	18	Nos.	12	6
	Core Switches (Layer 3) HP 750	0 Switch Sei	ries	l	L
1	Core Switches (Layer 3) HP A7500-24Port - Switch Series Chassis Based	2	Nos.	0	2
2	24 Port Switch - Layer 3 (Make & Model - HP A5500- 24G-4SFP) (Product ID - JG311A)	20	Nos.	11	9
3	Single mode fiber Modules (1G/10G)	221	Nos.	96	125
	Switches (Layer 2)	-1	1	1
1	24 port PoE Switch and 2 Fiber uplinks (Make & Model - HP 5120 24G-PoE E1) (Product ID - J4263A)	34	Nos.	34	0
2	24 port PoE Switch and 2 Fiber uplinks (Make & Model - HP 5120 24G-PoE E1) (Product ID - J4263A)	27	Nos.	0	27
3	24 port PoE Switch and 2 Fiber uplinks (Make & Model - HP 5120 24G-PoE E1) (Product ID - J4263A)	7	Nos.	0	7

WLAN Infrastructure - TO-BE DESIGN

GAD is intended to hire an Implementing Agency that can manage existing Wi-Fi Infrastructure with Comprehensive AMC of all the IT and Non-IT equipment along with survey, design, supply, installation, testing, commissioning, and support of new equipment, up to 5 years for the entire Wi-Fi setup at Mantralaya and Indravati Bhawan in Atal Nagar, Nava Raipur, Chhattisgarh. From an IP Schema and Connectivity point of view, this network should be managed and configured in such a way that it should be integrated with CGSWAN, BharatNet, NKN and NIC infrastructures in the future. The successful bidder will be responsible for IPv4, IPv6, and their intercommunication. GAD will instruct the successful bidder to conduct a survey at Mantralaya and Indravati Bhawan and its surroundings, focusing on areas where wireless network coverage is weak or unavailable. The successful bidder will perform the survey and submit a report to GAD, including a detailed proposed network design to improve wireless coverage in those weak areas. GAD will analyse the survey report and the proposed network design to determine the new wireless supporting equipment needed to enhance network reachability in these dark areas. The survey report must be submitted by the successful bidder within 30 days following GAD's confirmation letter or email for the survey. GAD will evaluate the survey report and issue a work order accordingly. The successful bidder must supply, install, test, commission, and provide operation and maintenance for the new equipment for five years from the date of the Final Acceptance Test (FAT).

3.7 EXISTING FACILITY MANAGEMENT SERVICES

The deployment of the manpower is as follows:

Location Category	Number of Engineers deployed
Mantralaya	1
Indravati bhawan	1
Total	2

- **a.** The Purchaser reserves the right to require security clearances for the sub-contractors and all personnel of the sub-contractor before their appointment to the project. as deeed necessary
- b. The successful bidder shall be responsible for strict compliance of and shall ensure strict compliance by its sub-contractors, of all laws, rules or regulations having the force of law affecting the relationship of employer and employee between the-contractors successful and their respective employees and/or otherwise concerning labor, social welfare and provident fund, pension, bonus,

gratuity, and other benefits.

c. The Purchaser may ask the successful bidder to replace the sub-contracted employee(s) owing to his/her poor performance.

3.8 EXISTING EPABX INFRASTRUCTURE

The EPABX being used in Mahanadi Bhawan is currently a mixture of older EPABX like Panasonic and NEC and newer IP-PBX of Matrix make. The total quantity is 58. All EPABX systems are working in distributed mode. During the extensive survey carried out by our team, we came to know that approximately 42 nos of IP-PBX of Matrix make are working (old EPABX were replaced recently within a year), and 16 nos of EPABX of NEC/Panasonic are working, which are KTS systems. The support of NEC is about to expire by April '25. Hence, it is required to replace these older EPABX systems. It is expected that the new deployment will retain the existing numbering plan. The above details are non-exhaustive, and the bidder is required to carry out a survey to access the actual position.

3.9 AS-IS AND GAP ANALYSIS

The successful bidder is required to carry out an extensive AS-IS study as part of the site survey and submit a comprehensive site survey report within 30 days of receiving the GAD confirmation letter/mail for the survey.

The AS-IS report will cover the detailed status of both IT and non-IT infrastructure at Mantralaya and Indravati Bhawan. It will also outline the actions necessary to address the gaps, along with their associated timelines and dependencies.

3.10 TEAM MOBILISATION

The successful bidder shall submit a manpower deployment schedule within four weeks of Issuance of the work order.

3.11 SECURITY SOLUTIONS & SERVICES

The successful bidder shall be required to provide comprehensive support to the department during the Third-Party Audit, Security Audit, Audit of Tools, etc. The successful bidder shall be responsible for getting the required readiness built in the network during an audit for security solutions.

The successful bidder shall monitor the network's security and submit deliverables such as Antivirus Reports, a Denial-of-Service Attack Log, an Intrusion Log, a Compromise log, and a defacement log, as mentioned under the SLA and Penalty clause in the RFP.

The GAD reserves the right to inspect, monitor, and assess the progress and performance of the project either directly or through another designated agency as it deems fit throughout the course of the Contract. The GAD may demand, and upon such demand being made, shall be provided with any document, data, material, or other information required per the tender/contract terms and conditions to enable it to assess the project's progress.

The GAD shall also have the right to conduct, either itself or through another agency it deems appropriate, an audit to monitor the performance of the successful bidder in fulfilling its obligations and functions according to the standards committed to or required by the GAD. The successful bidder undertakes to cooperate with and provide the GAD or any other agency appointed by GAD with all necessary information.

Documents and other details as may be required by them for this purpose. Any deviations or contraventions identified as a result of such audit/assessment would need to be rectified by the successful bidder, failing which the GAD may, without prejudice to any other rights that it may have, issue a notice of default.

3.12 - FACILITY MANAGEMENT SERVICES

The successful bidder shall deploy manpower as stated in this RFP at Mantralaya and Indravati Bhawan. The manpower to be deployed in this project must be approved by GAD. The CV of every resource must be shared with GAD before deployment. GAD will approve the resources to be deployed in this project.

The staff deployed by the successful bidder shall be trained and well-versed in wired and wireless network troubleshooting, network security, system administration, desktops, printers, and other peripherals. The personnel shall collaborate with the OEM vendors and bandwidth service providers to ensure the proper operation of the network. The qualifications, roles, and responsibilities of the personnel shall be as stated in this RFP.

The only exceptions allowed are:

- a) The resource is separated from the successful bidder's organisation.
- b) The resource is changed at the request of the GAD.
- c) The resource is not able to attend the office due to prolonged sickness or death.

3.13 HELPDESK MANAGEMENT SERVICES

Manpower deployed at the help desk shall log calls regarding the queries/complaints of Wi-Fi service users under this project.

3.14 OVERALL OPERATIONS AND MAINTENANCE

The successful bidder shall have the responsibility to administer the Operations and Maintenance of the network components as specified in this RFP.

The successful bidder shall plan and conduct periodic preventive maintenance of all IT and non-IT components of the project and share preventive maintenance reports quarterly with GAD. The SI must prepare the format for the maintenance reports and approve them.

3.15 The preventive maintenance shall include, but not be limited to below activities:

- a. Dust cleaning on and inside all the active equipment with a Blower.
- b. Maintenance of UPS and UPS batteries.
- c. Draining of UPS battery per month to maintain the charge-discharge cycle.
- d. Maintenance of structured cabling.
- e. Asset tagging.
- f. Earthing check for NOC room. If found improper, its SI responsibility to maintain proper earthing.
- g. Maintenance of inventory register.

3.16 MANPOWER REQUIREMENTS

The successful bidder shall deploy adequate manpower to meet the SLA. The network and helpdesk engineers must be available at Mantralaya and Indravati Bhawan from 10 AM to 6 PM on all working days. The successful SI will be responsible for managing manpower and ensuring adherence to their roles and responsibilities as defined in this RFP SLA.

The team shall consist of the network engineers and helpdesk support staff deployed on the project at Indrvati Bhawan (NOC) and Mantralaya, as needed. The network engineers and helpdesk support staff must attend to the calls and complaints logged by the departmental Wi-Fi infrastructure users at Mantralaya and Indravati Bhawan. The successful bidder shall deploy a dedicated team for day-to-day activities related to the project as defined in the RFP. The team members shall operate from Mantralaya and Indravati Bhawan and shall be responsible for assessing the effectiveness of the defined standards and procedures for the Wi-Fi infrastructure, resolving issues, monitoring the project, and periodically assessing the Wi-Fi infrastructure and related activities as specified in the scope of work outlined in this RFP. The Indravati Bhawan (NOC) team shall carry out all activities related to NMS, NOC management, operation, and maintenance of the complete Wi-Fi infrastructure setup, including field visits related to the Wi-Fi network.

3.16.1 Number of team members required shall be as specified below:

Sr. No.	Function	Role	Key Indicative Responsibilities
1	Project Manager	Project Manager	 Oversee entire project execution & planning. Budget management and risk assessment. Coordinate with stakeholders & vendors. Ensure timely delivery and SLA compliance.
2	Technical Lead / Network Architect	Technical Lead / Network Architect	 Design network architecture & infrastructure. Plan IP schema, security, and optimization. Integrate with CGSWAN, BharatNet, NKN, and NIC. Review technical compliance of new equipment.
3	Senior Network Engineer	Senior Network Engineer	 Configure routers, switches, and firewalls. VLAN, VPN, QoS, and IP management. Troubleshoot & optimize network performance.
4	System Administrator	System Administrator	 Manage Active Directory, DHCP, DNS, and Firewall. Implement and monitor network security measures. Ensure system availability and performance tuning.
5	Helpdesk Support Engineers	Helpdesk Support Engineers	 Log and track user complaints and issues. Provide L1 support and escalate critical issues. Coordinate with field engineers for issue resolution.
6	Network Technicians	Network Technicians	 Proactively Monitoring of entire Wi-Fi Infrastructure. Monitoring of IT and Non-IT equipment utilization. Monitoring of Wi-Fi Infrastructure through NMS. Receiving complaints/calls on phone, e-mail, cell and phones. Resolution of these complaints/calls

3.16.2 - QUALIFICATION OF THE RESOURCES

Sr.	Profile	Required	Qualification	and	Relevant Experience	
No.		Resources	Certifications			
1	Project	1	BE/BTech/MCA i	in Computer	10+ years in IT/ networking	
	Manager		Science, IT, or	Electronics;	projects, project execution, and	
			MBA.		stakeholder coordination in.	

2	Technical Lead/Network Architect	1	Computer Science, IT, or	8+ years in enterprise networking, network design, and implementation.
3	Senior Network Engineer	2	Computer Science, IT, or	8+ years in enterprise networking, network design, and implementation.
4	System Administrator	1		5+ years in IT network administration, configuration of routers, switches, and firewalls.
5	Helpdesk Support Engineers	2	-	4+ years in managing Active Directory, DHCP, DNS, and firewall configurations.
6	Network Technicians	3	Diploma/ITI or relevant degree in Electronics, IT, or Networking.	2+ years in IT support/helpdesk operations.

7	Electrical	1	ITI/Diploma or relevant 3+ years in structured cabling,
	Technician		degree in Electrical installation of routers,
			Engineering. switches, and access points.
0	NT / 1	1	DE/DE 1/MGA/D: 1
8	Network	1	BE/BTech/MCA/Diploma in 3+ years in power supply
	Operations Centre		Computer Science, IT, or management, UPS, and earthing maintenance.
	Engineer		Electronics.
	Engineer		

4. SCOPE OF WORK

The invitation for proposals is for services, upgrading, integration of new equipment, and operation and maintenance of existing WLAN/LAN/EPBAX infrastructure at Mantralaya and Indravati Bhawan in Atal Nagar, Nava Raipur (Chhattisgarh) for the following deliverables:

- 1. Operation & Maintenance of Existing WLAN/LAN/EPBAX at Mantralaya and Indravati Bhawan.
- 2. Survey, Design, Supply, install, test, and commission new equipment under WLAN/LAN/EPBAX setup.

The services, components, equipment, and tasks relevant to the successful bidder are listed below. All of these will be covered under the Scope of Work for Upgradation, Operation & Maintenance for the successful bidder:

- a. A bidder will be selected to act as the System Integrator (SI) for the operation and maintenance of the existing WLAN/LAN/EPBAX at Mantralaya and Indravati Bhawan in Nava Raipur, as well as for the upgrade and/or new procurement of devices in this WLAN/LAN/EPBAX setup. This will include survey, design, supply, installation, testing, and commissioning of various hardware and software as per the scope, and subsequently provide warranty and facility management services for a period of five years in accordance with the contract or agreement. For newly procured equipment, the five-year period will commence from the FAT date onward. The operation and maintenance of each device and equipment covered under the existing WLAN/LAN/EPBAX, along with upgraded or newly procured devices, will be supported comprehensively for five years, up to the duration of the contract.
- b. The NOC has been established at Indravati Bhawan, Nava Raipur. It will include various network and security components such as routers, core switches, servers, firewalls, wireless controllers, and more, all designed to manage and control the Wi-Fi for outdoor sites and the Wi-Fi system for indoor areas across the Mantralaya and Indravati Bhawan environment. The successful bidder should provide comprehensive operation and maintenance for all these components.
- c. The successful bidder will manage the optical fiber connectivity established between NIC/NKN Mantralaya in Nava Raipur and the NOC room at Indravati Bhawan, also located in Nava Raipur, under this WLAN/LAN. Additionally, they will oversee the OFC connectivity among the switches installed in Mantralaya and Indravati Bhawan as part of the WLAN/LAN/EPBAX setup.

d. All the new equipment to be procured should be IPv4 and IPv6 ready from day 1

The successful bidder should be responsible for successfully migrating the complete WLAN/LAN/EPBAX from IPv4 to IPv6 (if required).

- e. The Network Monitoring System for both wireless and wired device monitoring and control is established at the Indravati Bhawan Network Operation Centre (NOC) Room. The successful bidder will be responsible for managing the NMS throughout the entire contract period.
- f. Reports related to Wi-Fi services in terms of Availability of access points, connected users, network utilization, bandwidth utilization, would be submitted by successful bidder on quarterly basis.
- g. The successful bidder will be responsible for providing technically qualified manpower in this project who can use firewalls, servers, wireless controllers, wireless access points, switches, routers, and wireless NMS software with clients in a way that can provide excellent output on these equipment.
- h. The successful bidder must provide all the services related to upgradation, Comprehensive AMC, and operation and maintenance of WLAN/LAN/EPBAX as mentioned above in the Scope of Work up to the contract period.
- i. Successful bidder has to provide new wireless controllers and access points as per requirement, which must be integrated with necessary existing infrastructure for smooth operations.
- j. Internet bandwidth at NOC end will be subscribed as per initial assessment of estimated aggregate user base in the proposed network. The same will be periodically reviewed and enhanced based on overall usage in the reviewed period as well as increase in aggregate user base in the network.
- k. LED Display units shall be installed at a central NOC room at Indravati Bhawan wherein all the network, security and system related components can be proactively monitored. LED display units should be directly connected with NMS tool and will display live network status of NMS tool for this complete WLAN/LAN.
- 1. A survey report, along with a network design proposal for the new equipment to be installed in Mantralaya and Indravati Bhawan as per requirements, will be submitted to GAD by the successful bidder within 30 days of receiving the GAD request letter or email for the survey. GAD will review the survey report. The successful bidder will supply, install, test, and commission the new equipment within the timeline specified in this RFP. The successful bidder will also be responsible for the operation and maintenance of the newly procured equipment for

five years from the FAT date.

- m. The SSIDs would be managed and created as per requirement and need to provide uninterrupted connectivity to the connected users while moving under this WLAN/LAN.
- n. The proposed wireless solution aims to deliver 24*7*365 wireless Internet access services.
- o. The offered solution shall allow seamless roaming among different access points in a particular SITE, provided the user remains within a Minimum 85-foot radius of the nearby wireless access point(s).
- p. Necessary electrical power shall be made available by GAD to SI of 1-phase/230VAC type. It will be SI's responsibility to extend the electrical power within each location up to every active component under WLAN/LAN/EPBAX setup as per requirement.
- q. Offered solution shall support grouping of wireless access points (both indoor as well as outdoor) for superior management and control so that any wireless device can be taken offline for configuration and/or change management.
- r. Selected System Integrator(SI) shall be responsible for the following activities in brief:
 - i. Operation and Maintenance of existing WLAN/LAN/EPBAX at Mantralaya and Indravati Bhawan in a comprehensive manner for each and every equipment related to WLAN/LAN/EPBAX setup for the period of 5 years from "day one" (after HOTO) of the contract period.
 - ii. Upgradation/new procurement of equipment under existing WLAN/LAN/EPBAX at Mantralaya and Indravati Bhawan and its comprehensive operation and maintenance along with existing equipment for the period of 5 years after FAT of new equipment.
 - iii. Site survey to assess and confirm exact requirement of equipment in Mantralaya and Indravati Bhawan after confirmation from GAD.
- iv. Preparation of Site Survey report with Bill of Quantity (BoQ) and shall be approved by GAD.
 - v. The supply of hardware and software as per the scope is separate for Mantralaya and Indravati Bhawan.
 - vi. Installation and configuration of supplied hardware and software at Mantralaya and Indravati Bhawan.
- vii. Testing and commissioning of supplied hardware and software.
 - viii. Maintenance & facility management for the installed hardware and software for a period of 5 years from FAT date.

- ix. Deployment of Manpower as per the requirement mentioned in this RFP.
 - x. GAD may ask SI (System Integrator) for Supply, Installation, Commissioning & Operation and Maintenance of WLAN/LAN/EPBAX services at Additional locations/sites based on the price discovered in this tender
 - xi. Replacement of NEC/Panasonic EPABX with IP-EPABX Matrix system is required, ensuring seamless intercom connectivity across floors. It is to be ensured that the existing numbering scheme doesn't change.

xii. EPABX Upgradation and Maintenance:

- (a) The SI shall propose the replacement of obsolete NEC/Panasonic EPABX systems with a new IP-EPABX system that is fully compatible with the existing Matrix make IP-EPABX. All non-obsolete Matrix-made EPABX units should continue to function with extended support. If the SI is unable to integrate the existing EPABX into the upgraded setup, they must replace the entire system at their own cost, ensuring that the existing setup remains operational without disruption.
- (b) All individual IP-EPABX systems shall be integrated into a unified network to enable a single number schema for the entire Mantralaya.
- (c) Seamless intercom connectivity shall be established between all individual IP-EPABX systems.
- (d) The EPABX/IP-EPABX system shall be designed to ensure that the existing numbering scheme remains unchanged
- (e) The IP-EPABX network shall be designed to accommodate future intercom extensions as required, while maintaining the same number schema

4.1 - Broad Outline of Scope of Work, Deliverables and Timelines

1) Site survey:

- a SI shall undertake a site survey for the network dark area of Mantralaya and Indravati Bhawan and submit a Bhawan-wise survey report separately for Mantralaya and Indravati Bhawan to GAD, mentioning the quantities of items to be installed and their locations at each Bhawan.
- b. SI shall also incorporate changes (if any) suggested by GAD and submit the final Mantralaya and Indravati Bhawan survey reports for approval.
- c. The mentioned BOQ (Bill of Quantity) in this tender document is tentative. However, the actual BOQ shall be finalised after the Site Survey report is submitted SI.

2) Supply of hardware/software:

- a SI shall supply all required hardware/software/software licenses as per scope and in compliance with technical specifications as per RFP at GAD respective location within the stipulated time period.
- b. SI shall ensure that all software licenses are in the name of GAD.
- c. GAD may conduct an inspection of the delivered items in accordance with the RFP.
- 3) Installation & configuration of supplied hardware/software at Mantralaya and Indravati Bhawan:
 - a SI shall install and configure hardware/software, such as wireless access points, switches, servers, firewalls, wireless controllers, access points, UPSs, PDUs, and related Electrical components (passive items) at approved locations in the NOC, Mantralaya, and Indravati Bhawan.
 - b. SI shall configure all equipment at NOC, Mantralaya and Indravati Bhawan in consultation with GAD. The IP schema for all locations and NOC items, and DHCP scopes will be provided by NIC or GAD.
 - c. Monitoring of active items in WLAN/LAN/EPBAX must be on a proactive basis through NMS.
- 4) Integration of the proposed solution under upgradation:
 - a SI shall be responsible for integration with existing networks at GAD-decided networks, if required.

5) Testing & commissioning:

- a SI shall be responsible for the preparation and submission of detailed FAT plans/schedules/procedures/formats. After the acceptance of FAT reports, the entire solution would be deemed to have been commissioned.
- b. FAT of each location shall include following essential tests:
 - i. Footprint test: minimum coverage area should be 85-foot radius in ideal condition.
 - ii. SSID: The SSID given by GAD should be discoverable by any 802.11n wireless enabled

device.

- iii. Security: compliance to security requirements as defined by GAD.
- iv. Logs: compliance of authentication, usage, and other required logs defined by GAD.
- v. Performance: a file download test from any http/ftp server installed at NOC using FTP would be done to verify the effective bandwidth/throughput per authenticated user.
- c. After a successful FAT, GAD will issue an installation and commissioning certificate (sign-off) of the complete network within 10 days of FAT.
- d. The overall solution or any part thereof, if any, not passing the FAT, shall be rectified by SI in a timely manner with a request for a re-test. If the failure happens repeatedly, it may be removed from the overall solution without any claim for payment to SI.
- e. On successful FAT, the event shall be marked as "DoC" for the solution (upgradation) in its entirety. However, in case of delay/non-completion of works by SI any location or NOC due to reasons not attributable to SI, GAD may it its own discretion, treat the last day of the successful FAT of the commissioned network (excluding the delayed and non-feasible sites) as the "DoC" of the project.
- f. For item(s) which are commissioned after the "DoC" of the project, the "DoC" of the network for such location(s) shall be the date of FAT of the wireless network.
- 6) Maintenance and facility management:
 - a SI shall be responsible for providing maintenance and facility management services for a period of 5-years from "DoC" of the project for equipment's under upgradation, and from "HOTO" for existing WLAN/LAN/EPBAX equipment.
 - b. Comprehensive onsite operations and maintenance with spare parts/devices:
 - i. SI will provide comprehensive onsite operations and maintenance, including spare parts, system software, firmware, signature updates, patches, and more, for all the IT infrastructure supplied and installed under this project, ensuring the required SLA is maintained for a period of five years from the Go-Live date.
 - ii. SI shall ensure that adequate spares are retained at all times to meet onsite warranty/support and SLA requirements.
 - iii. SI shall provide a standby system of similar or higher configuration (which should be compatible with existing Wi-Fi network) when the faults are not rectified within the stipulated timeframe.
 - iv. The maintenance services involves comprehensive maintenance of all component covered under the contract, including repairing, replacement of parts, modules, sub-modules,

assemblies, sub-assemblies, spares part, updating, security alerts and patch uploading etc. to make the system operational, for existing, and new installed equipment in WLAN/LAN/EPBAX at NOC, Mantralaya and Indravati Bhawan. In case, if any of the equipment of existing infrastructure is not repairable, SI may upgrade the same with the equipment (equivalent or higher variant) proposed for upgradation.

c. Preventive maintenance:

- i. SI shall provide preventive maintenance services for all the installed items at least once in every quarter.
- ii. Preventive maintenance shall include, check loose contacts in the cables and connectors, and cleaning/removal of dust/dirt from the interior/exterior of equipment.

d. Helpdesk support:

- i. SI has to maintain the existing centralised helpdesk administration tool or establish a new helpdesk tool for complaints logging through the website and/or Voice Call and/or email. This Helpdesk Administration tool may be on open source software/platform, which must be secure and approved by GAD. The system should be able to acknowledge a receipt as proof of having lodged a complaint. If a Helpdesk administration tool is available with the NMS system, it should be accepted. However, the NMS and Helpdesk administration tool should work smoothly while both are in use simultaneously.
- ii. After rectifying the said complaint, SI shall update the resolution/call-closure date and time through web access to the centralised CRM software/Helpdesk administration tool.

e. Reconfiguration and change management:

i. Whenever required, SI shall reconfigure the equipment /software installed under the project to meet the needs of GAD. The reconfiguration would be required for any of the equipment covered under the contract. The SI must be responsible for Reconfiguration and Change Management required for entire WLAN/LAN/EPBAX setup.

5. ROLES AND RESPONSIBILITIES:

R	Responsible – Responsible for Working
A	Accountable – Responsible for Decision
С	Consulted – Whom to consult before work
I	Informed – To whom work is to be reported
S	Support – To be assisted in the course of work

Sr. No.	Work/Task Description	GAD	Existing SI	New SI		
110.	Hand Over- take Over (HOTO)					
1	Handover of Exit Management Plan on Current Agency to New Agency	A	R	R		
2	Knowledge transfer sessions	I/A	R	R		
3	Documentation of Knowledge Transfer and Signoff	I	R	R		
4	Shadowing of Operations by existing Agency	I	R	R		
5	Operations takeover by New Agency from existing Agency	С	S	R		
6	Exit of existing Agency	A	R	I		
	Infrastructure & Op	erations Migra	ition			
7	Resource mobilization for the Gap assessment study	С	S	R		
8	Migration of existing infrastructure and services to Proposed Model	I	S	R		
9	Upgradation & Capacity Augmentation Plan	A	-	R		
	Operations and Maintenance Phase					
10	Operations & Management of the WLAN/LAN/EPBAX infrastructure as per SLA	-	-	A		

5.1 - Responsibilities of GAD:

Identifying & appointing the concerned Officer(s) for this project who shall coordinate between GAD and SI for the timely establishment of the Wi-Fi Network. During the site survey, provide the requisite site information to SI so that the identification of a suitable installation site can be completed by SI. To provide the requisite space and power to SI and allow installation of equipment. Conduct FAT and release payments in a timely manner.

5.2 - Responsibilities of SI:

- 5.2.1 Survey, Design, Supply, install, configure, operate, and maintain a Wi-Fi network.
- 5.2.2 Comprehensive support of Existing and New Hardware/Software supplied under the project up to the contract period.
- 5.2.3 To provide Facility Management service.
- 5.2.4 To provide Helpdesk support service.

6. TIMELINES

The milestones, deliverables, and time schedule for the project would be as follows:

- A) The time specified for delivery and other activities as mentioned in the table below shall be deemed to be the essence of the contract and the SI shall arrange supplies and provide the required services within the specified period.
- B) It should be noted that any delay in the project timelines shall attract Liquidated Damages (LD_ to the SI as per the details mentioned in subsequent sections for this bidding documents.

6.1 PROJECT EXECUTION PLAN:

The following delivery schedule shall be strictly adhered to:

Phase	Work	Deliverable	Time (in Days)
Handover Takeover of	Exit Management Plan	Handover Takeover completion Report signoff	T+15
O&M from Existing Agency/SI	Documentation & Knowledge Transfer	by GAD	
(Existing Infrastructure)	Operations takeover by New Agency from Existing Agency		
	Exit of existing Agency		
Upgradation/ Comprehensive	Site Survey	Site survey report by SI	T+30
AMC (New Equipment's)	Vetting of Design document by GAD	Approval of design document and work order	T+40
	Supply of Hardware Installation and commissioning (I&C)	Delivery challan I&C Report	T+160
	FAT	FAT Report	T+180
Operations and Maintenance	Operations and Maintenance of WLAN/LAN/EPBAX Infrastructure	Reports as agreed with GAD	Т+ 2006

Note:-

- a) 'T' denotes date of issuance of work for O&M of Existing WLAN/LAN/EPBAX infrastructure
- b) 'T3' denotes date of Go Live
- c) The operation & Maintenance for existing WLAN/LAN/EPBAX would be started by successful bidder from the date of completion of HOTO.

7. GENERAL GUIDELINES

7.1 Locations for the supply of goods and services

The Goods and Services under this contract shall be supplied and commissioned at Mantralaya and Indravati Bhawan in Nava Raipur (Chhattisgarh) as specified in this RFP. The Bidder shall adhere to all the technical as well as commercial terms, irrespective of the location of the site. The location for installation of new equipment under the upgradation part of this RFP would be in the area/circumstances/surroundings covered under Mantralaya and Indravati Bhawan in Nava Raipur (Chhattisgarh).

7.2 - Quality of goods and services

- 7.2.1 The goods supplied under the contract shall conform to the standards mentioned in the technical specifications of the related products and submitted along with the Bid.
- 7.2.2 The Goods must conform to the highest quality and standard. The Bidder shall guarantee that the Goods delivered to the Purchaser/Indenter are brand new. In case of software, the Bidder should guarantee that the software supplied to the Purchaser/Indenter is genuine.
- 7.2.3 Consistency must be maintained for the entire lot of the Goods ordered. The Bidder should not substitute any internal components or subsystems of the Goods by similar items from a different Manufacturer.
- 7.2.4 The Bidder shall be responsible for liaising with ISP/OEM / Other stakeholders for the required Wi-Fi network infrastructure and its connectivity.

7.3 - Parameters of the site design

The Bidder will be responsible to design and layout of the proposed Wi-Fi network:

- Future expansion of around 20% shall be provided in the design.
- Copper (UTP) cable should be considered for all premise / indoor requirements, and fiber cable for switch-to-switch cascading purpose.
- For all the locations, which require connectivity between buildings, usually outdoor/armored fiber

cable should be used. For all locations within a building/premise, only indoor fiber should be used. In case of a possibility of rodents cutting fiber cable, armored rodent resistant cable should be used even for internal purpose.

- Copper cables should be routed through casing capping or conduits. Wherever cable paths are provided in the furniture, they should be used.
- Outdoor Fiber cable should be routed as follows:
 - ➤ Under hard/soft soil, the fiber should be passed through an ISI-marked PVC pipe.
 - ➤ For fiber being laid under less traffic road (road within campus) should be passed through ISI mark GI pipes.
- Indoor fiber should be passed through a PVC conduit.
- The vendor shall label all cables, cords, distribution frames and information outlets.
- For the purpose of measurement of the final cable length of copper cable, the testing results from the electronic cable tester will be final. However, fiber length will be measured physically.
- The cabling solution should be flexible and capable of including new facilities or technologies as they become required or available.
- Fiber optic transceivers modules will be provided by SI for fiber based connectivity in the WLAN/LAN.
- All the passive components/accessories like CAT5/6 Cables, OFC Cables, Electrical Cables
 (Extension from GAD supplied electrical point to exact active device location), CAT & OFC
 supporting equipment, Electrical supporting equipment etc. should be provided by successful
 bidder/SI under WLAN/LAN/EPBAX setup.

7.4 Approval of design

The purchaser and or Intender reserves the right to approve the design with any modifications that it may deem necessary. The Bidder shall assist the Purchaser/Intender and or Purchaser in carrying out such modifications in the design till it is finally approved.

7.5 - Documentation of delivery of goods

Delivery of the Goods shall be made by the Bidder at the address mentioned in the purchase order of the Purchaser/Indenter. The documents to be furnished by the Bidder along with the products will be as follows:

1. Three copies of the Bidder invoice showing goods description, quantity, unit price, and total amount.

2. Product literature, manuals, brochures etc.

7.6 - Installations and commissioning

Installation of all ordered equipment including active components and configuring of all network equipment shall be the responsibility of the Successful Bidder.

7.7 - Technical documentation after installation

The Bidder shall submit the following documentation after installation of the equipment:

- > Site diagram showing exact location of connects, placement of racks and active components.
- ➤ Bill of Material used for the site.
- Number of data connects which are active and those, which are not.
- > IP Schema & Network Architecture.
- ➤ Warranty indicating 5 year's warranty from the Principal Bidder for Active Components (newly installed).
- > Contact details of the contractor's nearest office to the site.

7.8 - Inspection and tests

- a) The Purchaser, or the Purchaser/Indenter, or both shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the purchaser.
- b) The inspections and tests may be conducted on the premises of the Bidder or its subcontractor(s), at the point of delivery, and/or at the final destination. If conducted on the premises of the Bidder or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data, shall be provided to the inspectors at no cost to the Purchaser.
- c) Should any inspected or tested goods fail to conform to the specifications, the Purchaser/Indenter or the Purchaser may reject the goods and the Bidder shall either replace the rejected goods or make alterations necessary to meet specification requirements free of cost to the Purchaser/Indenter.
- d) The Purchaser/Indenters right to inspect test and, where necessary, reject the Goods after the goods arrival at the project site shall in no way be limited or waived by reason of the Goods having previously been inspected, tested, and passed by the Purchaser/Indenter / Purchaser or its representative prior to the shipment.

7.9 - Acceptance tests

The Bidder in the presence of Purchaser/Indenter and/or its nominated agency will conduct acceptance test at the site. The tests will include installation and commissioning and trouble free operation of the Wi-Fi network along with the integration of hardware like wireless end points, mobiles, handheld devices, computers, network printers etc. This shall be apart from physical verification and testing. No additional charges shall be payable by the Purchaser/Indenter for such integration and carrying out these acceptance tests.

7.10- Completeness of contract

The contract will be deemed as incomplete if any component of the WLAN/LAN/EPBAX or any documentation / media relating thereto is not delivered or is delivered but not installed and /or not operational, or not integrated or not acceptable to the Purchaser/Indenter after acceptance testing/examination.

In such an event, the supply and installation will be termed as incomplete, and it will not be accepted. The goods will be accepted after complete commission and satisfactory functioning of equipment for a minimum period of 10 days. The operations and maintenance period will commence only on acceptance (based on acceptance test) of equipment by the Purchaser/Indenter.

7.11 - Delays in the bidder's performance

Delivery of the goods and performance of the services shall be made by the Bidder in accordance with the time schedule specified in this Scope of Work. If at any time during the performance of the contract, the Bidder should encounter conditions impeding timely delivery of the goods and performance of services, the Bidder shall promptly notify the Purchaser/Indenter and the Purchaser in writing of the fact of the delay, its likely duration, and its cause(s). As soon as practicable after receipt of the Bidder's notice, the Purchaser/Indenter, in consultation with the Purchaser, shall evaluate the situation and may, at its discretion, extend the Bidder's time for performance with or without a penalty. The decision of the purchaser in this matter shall be final.

7.12 - Product warranty

The Bidder shall provide a comprehensive on-site warranty for all active and passive components, including UPS, for upgradation work for a period of five (5) years from the date of successful installation and commissioning.

The Bidder shall be fully responsible for the Manufacturer's warranty for all equipment, accessories, spare parts etc., against any defects arising from design, material, manufacturing, workmanship, or any act or omission of the manufacturer / Bidder or any defect that may develop under normal use of supplied equipment during the warranty period

7.13 - Repeated failure

If, during the warranty period, any equipment has any failure on three or more occasions, it shall be replaced by equivalent new equipment by the Bidder at no cost to the purchaser/Indenter.

7.14- Right to use defective equipment

If the operation or use of the equipment proves to be unsatisfactory after delivery, acceptance, and installation and within the guarantee and warranty period, the purchaser shall have the right to continue to operate or use such equipment until rectification of defects, errors, or omissions by repair or partial or complete replacement is made without interfering with the purchaser's operation.

7.15 - Protection against risk of obsolescence

The Bidder will make the spare parts for the systems available for a minimum period of five years from the time of acceptance of the system. If the product/equipment supplied by the bidder is discontinued (i.e., End-of-Sale or End-of-Support or End-of-Life), the same has to be replaced with product/equipment (not discontinued) with equivalent or higher specs at no additional cost. If any of the components are not available or difficult to procure, or the procurement is likely to be delayed for replacement, the replacement shall be carried out with state-of-the-art technology equipment of equivalent or higher capacity at no additional charges to the purchaser or Purchaser/Indenter.

7.16-Bidders obligations

- 6.17.1 The Bidder shall work closely with the Purchaser/Indenter and the Purchaser and abide by directives issued by them or their staff.
- 6.17.1 The Bidder will abide by the job safety requirements prevalent in India and shall indemnify the Purchaser / the Purchaser/Indenter from any demands or liabilities that may arise during the execution of the contract, including those from accidents or loss of life. The Bidder shall be solely liable for any compensation that may become payable as a result of such incidents and will not hold the Purchaser/Indenter responsible or obligated.
- 6.17.1 The Bidder is responsible for managing the activities of its personnel or subcontracted personnel and will hold itself responsible for any misdemeanours.
- 6.17.1 The Bidder will treat as confidential all data and information obtained in the execution of his responsibilities about the purchaser or the Purchaser/Indenter in strict confidence and will not reveal such information to any other party without the prior written approval of the purchaser.

7.17- Reports purchaser

A report of the progress of work shall be submitted to GADby every quarter.

7.18- Other terms and conditions

- a. GAD will sign the Contract with the successful bidder and release the Agreement/Work Order/Purchase Order after the Design is approved by GAD or NIC.
- b. The bidder will be required to deliver the items at the respective location mentioned in the Agreement/Purchase Order.
- c. The successful bidder shall have to supply, install, test and commission all necessary accessories along with the supplied goods, appropriate licenses, device drivers, data sheets and documentation, which may be required, whether mentioned or not mentioned in the tender, for successful acceptance of the quoted equipment to GAD.
- d. The bidders are expected to accept all technical/commercial terms and conditions mentioned in the bid document. Any deviations in the terms and conditions should be clearly mentioned. GAD, however, reserves the right to reject any or all of the offers that deviate from the terms and conditions of the tender document.
- e. The user Acceptance Test will be done by GAD or any Third Party Auditor nominated by GAD.

8. TECHNICAL SPECIFICATIONS FOR NEW EQUIPMENT:

The Minimum Technical Specification required for new components to be purchased under this contract on the basis of survey reports of successful bidder/SI.

The Bidder should provide the Compliance for the following Equipment as per table below:

1) Wireless LAN Controller

Sr.No.	Technical Specification	Compliance (Yes / No)
1	Controller must support HA	
2	Controller should have 6× 2.5 Gbps network Ports, 4*10G optical port and 1× USB 3.0 Port or Higher	
3	Controller support WDS or MESH networking	
4	Controller shall support QoS and WMM latest technology	
5	Controller Supports Free Authentication Policy and Captive Portal Advertisement	
6	Controller shall support Band Steering, Beamforming, Airtime Fairness and Load Balance features	
7	Controller shall support rogue access point detection	
8	Controller Must Support Support 15000 Clients	
9	Controller should support management VLAN	
10	Controller should support Captive portal and Rate limit feature	
11	Controller shall support Reboot Schedule, Wireless Schedule and Wireless Statistics based on SSID/Controller/Client	
12	Intelligent RF control plane for self-healing, and self-optimization	
13	Controller Shall support Wireless Mac Address Filtering, Wireless Isolation Between Clients and SSID to VLAN	
14	Controller shall support 802.1X authentication and external radius server	
15	Controller shall be able to assign end User the IP address as received from backend core DHCP Server.	
16	Controller shall support Cloud Manageability and SDN Ready	
17	Controller shall come with Minimum capacity of 500 AP	
18	Controller shall come with life time no Recurring or renewal cost	
19	Inbuilt or separate authentication solution to Support authentication like radium, LDAP, Social database and SMS gateway integration.	

Sr.No.	Technical Specification	Compliance (Yes / No)
20	Supports Layer 3 Adoptation	
21	Controller shall Manage Multiple Sites over Web with the Centralized Controller in a Single Location	
22	Controller shall Intuitive Real Time Monitoring and data usage	
23	Controller shall support remote upgrade and access control features	
24	Controller Shall support L3 management, SNMP, Email notification	
25	Controller Shall Support Auto-backup	
27	Controller shall support Rack Mounting	
28	Controller shall have CE, FCC, RoHS	
29	Device OEM must be must be ISO 9001 & 14001 Certified at the time of bidding	

2) Wireless Access Point: Type – I (Indoor)

Sr. no	Specifications	Compliance Yes/No
1	AP shall have hardened enclosures for indoor deployment and shall have a robust design for durability	
2	It shall have dual radios for concurrent dual band (5 GHz / 2.4 GHz) operation	
3	Minimum one number of 2.5 Gbps Ethernet port RJ-45 and 1 USB port	
4	AP shall support UL/DL Mu-MIMO with OFDMA	
5	AP Shall Support 1024 QAM for More Data Encoding	
6	AP Shall Support BSS Coloring and TWT (Target Wake Time)	
7	AP Shall Support support WPA-PSK /WPA2 -PSK /WPA3-PSK Wireless Security	
8	AP shall support Outfitted with the latest 802.11ax technology	
9	The AP shall comply with IEEE 802.11ax backwards compatible to IEEE 802.11a/b/g/n/ac standards.	

Sr. no	Specifications	Compliance Yes/No
10	AP shall operate at least in full 2x2 service on 5Ghz and 2x2 on 2.4Ghz or more mode without any loss of features or capabilities	
11	AP shall Support PoE 802.3at and DC Jack for convenient and affordable installation	
12	AP must support 20 MHz, 40 MHz 80 MHz and HE160 channel Width	
13	Each AP must support High Density Environment for Larger Device Association.	
14	The AP shall support configurable EIRP up to the maximum permissible limit as per regulatory guidelines.	
15	AP shall support WDS or MESH networking	
16	AP shall support QoS and WMM latest technology	
17	AP shall support Multiple operating modes including managed AP and standalone AP mode or managed through cloud	
18	AP shall support Band Steering, Beamforming, Airtime Fairness and Load Balance features	
19	AP shall support rogue access point detection	
20	AP shall have dual-Band Omni-directional Antenna, either internal or external.	
21	AP should be compatible for Simple mounting on any wall or ceiling surface	
22	AP should support management VLAN and SSID VLAN	
23	AP should support Captive portal and Rate limit feature	
24	AP shall support Reboot Schedule, Wireless Schedule and Wireless Statistics based on SSID/AP/Client	
25	Intelligent RF control plane for self-healing, and self-optimization	
26	AP Shall support Wireless Mac Address Filtering, Wireless Isolation Between Clients and SSID to VLAN Mapping	
27	AP shall support 802.1X authentication and external radius server	
28	AP shall be able to assign end User the IP address as received from backend core DHCP Server.	
29	AP shall support Hardware controller or software controller and must be SDN Ready	
30	AP Shall support ZTP (Zero Touch Provisioning) for seamless Installations	
31	Shall support L3 management, SNMP, Email notification and Telnet feature	

Sr. no	Specifications	Compliance Yes/No
32	Device OEM must have operation and their establishment for more than 10 Years in India	
33	Device OEM must be ISO 9001 and 14001 Certified	

3) Wireless Access Point : Type – II (Outdoor)

Sr. no	Specifications	Compliance Yes/No
1	AP shall have hardened enclosures for indoor and Outdoor	
1	deployment and shall have a robust design for durability	
2	It shall have dual radios for concurrent dual band (5 GHz / 2.4 GHz)	
<i>L</i>	operation	
3	It shall have Simultaneous 574Mbps on 2.4GHz and 1201 Mbps on 5GHz Wi-Fi speeds	
4	Minimum one number of 1 Gbps Ethernet port RJ-45.	
5	The AP must have weather proof design with IP67 weatherproof enclosure	
6	The AP must have Dedicated high-power amplifier and smart antennas or dual band antenna	
7	AP shall support Mu-MIMO with OFDMA	
8	AP Shall Support 1024 QAM for More Data Encoding	
9	AP Shall Support BSS Coloring and TWT (Target Wake Time)	
10	AP Shall Support support WPA-PSK /WPA2 -PSK /WPA3-PSK Wireless Security	
11	AP shall support Outfitted with the latest 802.11ax technology	
12	The AP shall comply with IEEE 802.11ac at a minimum and be backwards compatible to IEEE 802.11a/b/g/n/ac standards.	
13	AP shall operate at least in full 2x2:2 MIMO or more mode without any loss of features or capabilities	
14	The AP supports both 802.3at PoE+ and Passive PoE power supply. It can be either powered by a PoE switch or the provided PoE adapter for convenient deployment.	
15	AP must support 20 MHz, 40 MHz and 80 MHz channels.	
16	Each AP must support High Density Environment for Larger Device Association.	
17	The AP shall support configurable EIRP up to the maximum permissible limit as per regulatory guidelines	
18	AP shall support WDS or MESH networking*	

Sr. no	Specifications	Compliance Yes/No
19	AP shall support QoS and WMM latest technology	
20	AP shall support Multiple operating modes including managed AP and standalone AP mode or managed through cloud	
21	AP shall support Band Steering, Beamforming, Airtime Fairness and Load Balance features	
22	AP shall support rogue access point detection	
23	AP shall have dual-Band Antenna, either internal or external.	
24	AP should be compatible for Simple mounting on any wall or ceiling surface	
25	AP should support management VLAN and SSID VLAN	
26	AP should support Captive portal and Rate limit feature	
27	AP shall support Reboot Schedule, Wireless Schedule and Wireless Statistics based on SSID/AP/Client	
28	Intelligent RF control plane for self-healing, and self-optimization	
29	AP Shall support Wireless Mac Address Filtering, Wireless Isolation Between Clients and SSID to VLAN Mapping	
30	AP shall support 802.1X authentication and external radius server	
31	AP shall be able to assign end User the IP address as received from backend core DHCP Server.	
32	AP shall support Hardware controller or software controller and must be SDN Ready	
33	AP Shall support ZTP (Zero Touch Provisioning) for seamless Installations	
34	Shall support L3 management, SNMP, Email notification and Telnet feature	
36	Device OEM must be ISO 9001 and 14001 Certified	

4) Wireless Network Management Solution (NMS/EMS)

S. No.	Technical Specification	Compliance (Yes / No)
1	The Solution should offer following functionality encompassing all IT Infrastructure in an integrated single deployment. a) Fault Management b) Performance Management c) Centralized Log Management (optional) d) Flow based Traffic Analyzer (optional) e) Network Configuration and Change Management (optional) f) Centralized and Unified Dashboard g) Centralized and Customizable Reporting	

S. No.	Technical Specification	Compliance (Yes / No)
2	The solution should be capable of running in Linux platform with open source database as backend with option to support both IPv4 and IPv6 Networks	
3	The OEM should have a support center in India with 24 X 7 Dedicated Toll Free Telephone No. as well as email Id for Service Support and ticket creation and should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service group in INDIA for attending the service.	
4	OEM must provide continuous support and required upgradation and updation, within the contract period at no extra cost to buyer.	
5	Stores data for a minimum duration of time configurable by the user, default is 1 year. Flexibility to store the Raw polled points to summarized data reduction based on the customer's compliance requirements in terms of data storage period without any restrictions.	
6	The solution should be a unified system which can monitor Networking devices, firewalls, servers, Wi-Fi, RF devices and any IT or Non-It Communicable device, and should be vendor agnostic.	
7	The solution should be completely multi-tenant where in every module and system being used can be assigned to a specific set of users or a group of users with full-fledged Role-Based-Access-Control	
8	The system should be capable to retrieve and show fault, performance, inventory and SLA data in a single dynamic view.	
9	System should have Node Tags for device grouping and resource/interface tagging for element grouping. Apart from Node Tags additionally system should have options to do device grouping based on default fields and customer fields. No restriction in the number of level of grouping for the devices should be supported and provide the option to increase the grouping based on the need without affecting the existing grouping structure. System should also provides the option to create the grouping based on the service offered to customer and map all the devices involved in the specific service till the component / resource level.	
10	System should support 850 AP's, 50 Switches, 2 firewalls and 5 Servers from day-1. Existing and new devices to be integrate with proposed solutions.	
11	System should have a bi-directional integrated NCCM tool with option to use NCCM features in future easily by enabling the license for it without having to do any additional installations. The integration should allow assets and topology to sync from the NMS module to the NCCM features for helping in Root-Cause-Analysis of faults	
12	The system should be able to set minute level configuration to the element level. Polling interval, hierarchical thresholds, report dashboards should be configurable to very component in a single node or across nodes.	
13	Provides the option to have the portal account to the end customers with restricted views limits to their specific infrastructure.	

S. No.	Technical Specification	Compliance (Yes / No)
14	System should have option for CSV based discovery for bulk discovery and it should allow options to add customer fields to support customer specific data to upload during discovery	,
15	The system should fetch topology via SNMP for ARP tables from routers , MAC tables from layer 2 switches, cisco Discovery Protocol, Link Layer Discovery Protocol, Foundry Discovery Protocol or SynOptics Network Management Protocol. The discovery should be automated and continuous.	
16	The system should have capability to manually add any additional topology in the network. Options to add via GUI or tabular should be available. The system should also allow downloading of topology connections.	
17	Discovery has to work intelligently by identifying the device in the network by the given IP range and categorize into network devices and servers with vendor and model details.	
18	Detect & highlight faults (abnormal situations) occurring anywhere within the network	
19	System should have an option to provides Filtering, De-duplication, Holding, Suppression and Correlation capability to let user focus on the critical event that affects the business and business processes	
20	Provides multi-level (preferably four-level) Severity definition, will handle events automatically and inform the designated person as per operational Requirement	
21	System should support separate Rule Engine based alarms apart from the generic threshold. a. Should have capability to configure Device Group based, Node Based, Resources/Interface based, Aggregation link based. b. On Selection of Nodes/Resources/Aggregation links it have flexibility to filter based on fields available in node information c. Rules should have option to apply configuration on top of performance value or based on configured threshold alarms d. Rules should have option configure the breach based on min, max and average values e. Should have option to configure rules n repeat counters f. Should have options to select custom alarm and clear alarm messages for individual configured rules g. Should have option to send severity levels like error, warning and information h. Notifications support based on configured rules	
22	Monitors all traffic from all the interfaces of the network device. Provides traffic Utilization based on individual interface level, nodes level or based on the group by location, branch, departments etc as an Avg, Min and Max bandwidth, utilization, throughput or any custom monitoring parameters.	
23	Provision to change the polling interval to any frequency depending on the priority till the individual component / resource level like each interface might have the different polling interval in the same device based of the criticality and importance of service customer	

S. No.	Technical Specification	Compliance (Yes / No)
24	System should have capability to configure business, non-business hours or custom time polling. These configurations should be available for every device as well as every component in the device. System should also have provision to disable and enable the polling of specific type of devices. System should have capability to configure the maintenance period for any device. When device is in maintenance period there is no polling done and the SLA clock on the device is stopped.	
25	System support sends alert via E-mail, SMS, Execute Batch file, SNMP Trap, XML notification, Pop-up window and Audio alert	
26	Provide in-built auto correlation mechanism for Root-Cause Analysis and Service Impact Analysis	
27	Provide standard reports that display current status of nodes and interfaces. Reports could be viewed on daily graph (5 minute average), weekly graph (1 hour average minute average), monthly graph (1 hour average) and yearly graph (1 day average)	
28	Provide online and offline reports that allow the user to view the present usage of their devices. Reports generates should be exportable in the format of HTML, PDF, Excel and CSV. System should automatically generate daily reports that provide a summary of the network as well as custom Reports and that are automatically sent by email at a pre-defined schedule to any recipient or save into any specific folder or drive.	
29	Allows end-users to browse all reports using any web browser like Internet Explorer, Mozilla Firefox, Google Chrome etc. without the need to install any report specific software. Provides the option to get the required report as an all hours, business and non business hours for detailed analysis. Also Provide report on single or multiple statistical split based on the operation need as option during the configuration	
30	Supports instant diagnosis of the node status through Ping, Telnet and SNMP	
31	System should have capability to create a user level repository of all the issued being faced. Users should have the rights to add data to this repository and system should be intelligent to automatically retrieve back information from here based if same issue re-occurs	
32	Automatically learn devices that supports SNMP, HTTP, Ping, SMTP, POP3, WMI,JMX, SOAP, REST API,PDC, SSH and Telnet along with any required protocol to communicate to the devices.	
33	System should provide many different types of topology representation. To perform the following: 1. Display physical connections of the different devices being monitored in the system 2. Display flat maps of the entire network or networks in a single view 3. Display customer maps based on user configurations 4. Display maps based on geo locations	

34	Provision to search specific device or resources in a view, map to specific background for each level of the network, upload and change icons of devices/background of the network layers. It should also show the status of the connections based on the dependent connections and the utilization of the links by displaying connection with different width	
35	Filter topology view based on device group	
36	The device status, Red for all node down and orange for one or more node down and Green for all node up.	
37	System should support Integrated Web based (Drag & Drop) Network Diagram builder, Dynamically Upload Images, Customizable objects to support multiple vendors, capability to export maps in an XML format and upload to any other system. No separate client window should be needed to configure network Diagram. The builder should be a Visio like system with all pre-loaded shapes and icons.	
38	Any graph or network diagram configured should have functions to associate every component in the diagram to an existing node or resource.	
39	System should have an option to configure Network Device Panel View: a. Panel view should look similar to the actual device front panel b. System should automatically detect the device model display the right panel without any additional configuration c. Panel should show all the monitored interface with status d. Fan status with live fan icon and LED status for power	
40	Tool should be able to cover geographically distributed networks through multi-level scalable distributed deployment architecture	
41	Tool should have ability to add new pollers at no extra cost.	
42	System should have option to perform device configuration backup, maintain history by tracking changes, and compare versions from a centralized web GUI across devices with option to highlight the changes in useful categories like added/changed/removed. System should have option to generate alerts for failed configuration backup, and to generate configuration backup reports, Provision for approval based system to change the configuration of target network devices	
43	System should have option to Automate bulk configuration changes to network devices - create standardized configurations, and use the built-in workflows to review, approve, schedule, and push bulk configuration updates across network devices. System should have option to monitor device configuration and generate alerts when configuration change occurs	
44	System should have option to maintain audit trail of configuration changes: when and where a configuration change occurred, who made the change, and what specific additions or deletions were made to a configuration, Support compliance auditing of configuration files, Provision to perform standard compliance checks across all target network devices. System should have option to support base-lining of specific version of the running configuration file of each device. System should also have option to Support loading of a predefined configuration file on to a specific device	

45	System should have option to Measure & monitor QoS based on specific parameters including: Latency, Packet Loss, Probes, Packets, Delay, MOS, Jitter,RTT (Round-Trip-Time) and Detect quality deterioration by tracking QoS parameters. System should also have option to monitor Class-Based Quality of Service (CBQoS) to find out if traffic prioritization policies are effective and if business-critical applications have network traffic priority. Should also support CBQoS Nested policies	
46	System should have option to monitor network traffic by capturing flow data from network devices, including Netflow, J-Flow, IPFIX, sFlow, NetStream data and also sampled Netflow data with option to store ALL flows without any rollups or loss for retention period - for security and audit purposes. System should have capability to alternatively capture traffic data via packet capture. System should have option to identify which users, applications, protocols, countries, AS numbers, top routers, and top interfaces are consuming the most bandwidth. It should also have option to monitor Type of Service (ToS), Differentiated Services Codepoint (DSCP), and Per-Hop Behavior (PHB),BGP AS and NEXT HOP	
47	System should have option to provide flow analysis with 1-minute granularity and the solution should be able to monitor up to 5 million flows per second, and should employs advanced optimization metIndravati s. System should also have option to provide real time flow and traffic analysis with 5 second granularity and user should be able to specify data retention periods as per organization compliance requirements	
48	System should have option to Collect & display syslogs from network devices, servers, desktops etc. and Group syslog's based on severity (Critical, Major, Normal, Minor)	
49	System should have option to monitor industry standard web server like IIS / Tomcat / Web server statistics and Database Services – Monitor various critical Relational Database Management System (RDBMS) parameters such as database tables / table spaces, logs etc. System should have option to monitor HTTP service, HTTPS service, FTP server statistics, POP/SMTP services, ICMP services or any customer specific port based systems	
50	System should have option to Monitor VMWare ESXi servers, Hyper-v Servers, Xen servers, KVM and all market standard virtualization environment with option to monitor cloud environments like AWS, Azure, etc.	
51	System should have option to provide AI/ML capabilities for better capacity planning and suggestions for better optimization. System should have option to Predict business critical alerts with the help of AI/ML	
52	System should have option to Identify the impact on different business critical services	

5) Layer-2 8 port POE Switch

Sr.	Specification	Compliance Yes/No
1	Device must have at least 8 gigabit RJ45 Ports with 2 SFP Ports	
2	Device should support IEEE 802.1w, IEEE 802.1q, IEEE 802.1p, IEEE 802.1x, IEEE 802.3ad, IEEE 802.3x, IEEE 802.1d, IEEE 802.1s, IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab Standards and Protocols	
3	Device should support auto negotiation/auto MDI/MDIX	
4	Device must support POE 802.3af/at with Minimum 61W of Supply	
5	Device should have Switching Capacity of 20Gbps	
6	Device should have Packet Forwarding Rate 14.9Mpps or more	
7	Device should have mac address table of 8K or more	
8	Device should support jumbo frame of 9KB	
9	Device should Support QOS features like Port-based, 802.1p and DSCP priority	
10	Device should Support QOS features like 8 priority queues	
11	Device should Support QOS features Queue scheduling: SP, WRR, SP+WRR	
12	Device should Support QOS features Port/Flow- based Rate Limiting	
13	Device should Support Voice VLAN	
14	Device should Support Layer 2 features like IGMP Snooping V1/V2/V3	
15	Device should Support 802.3ad LACP and Up to 8 aggregation groups containing 8 ports per group	
16	Device should Support Spanning Tree features like STP/RSTP/MSTP	
17	Device should Support BPDU Filtering/Guard and TC/Root Protech	
18	Device should Support Loop back detection and 802.3x Flow Control	
19	Device should Supports 4K VLAN IDs	
21	Device should support ACL features like L2 to L4 package filtering based on source and destination	
22	Device should support ACL features like MAC address, IP address, TCP/UDP ports, 802.1p, DSCP, protocol and VLAN ID Time Range Based	
23	Device should support security features like SSH v1/v2 and SSL v2/v3/TLSv1	
24	Device should support features like Broadcast/Multicast/Unknown unicast Storm Control	

25	Device should support security features like 802.1x and Radius Authentication, IP-Mac-Port-VID Binding, ARP Inspection, DHCP Snooping and DoS Defend	
26	Device should support AAA	
27	Device should support Web-based GUI and CLI management	
28	Device should support SNMP v1/v2c/v3, compatible with public MIBs	
29	Device should support RMON	
30	Device should support health Monitoring	
31	Device should support Time Setting like SNTP	
32	Device should support TFTP & Web	
33	Device should support System Diagnose feature	
34	Device should support SYSLOG & Public MIBS	
35	Device shall support Hardware controller or Software controller and Zero-Touch Provisioning (ZTP)‡, Centralized Cloud Management, and Intelligent Monitoring.	
36	Device should certified by FCC, CE and RoHS	
37	Device OEM must have operation and their establishment for more than 10 Years in India	
38	Device OEM must be must be ISO 9001 & 14001 Certified at the time of bidding	

6) Layer-2 16 port POE Switch

Sr. no	Specifications	Compliance Yes/No
1.	Should have 16× PoE+ gigabit RJ45 ports, 2× gigabit non-PoE RJ45 ports and 2× combo gigabit SFP slots	
2.	Should have High PoE power budget with up to 30W for each PoE port and 250W for all PoE ports	
3.	Should have at least 36 Gbps switching fabric.	
4.	Should have support Packet Forwarding of 26.78 Mpps and Packet buffer of 4.1Mbit	
5.	Should have support L2 Features like IGMP Snooping V1/V2/V3, Static Link Aggregation, Port Mirroring, Cable Diagnostics, Loop Prevention	
6.	Should support at least 8Kentries in the MAC table.	
7.	Should Support up to 4K VLANs simultaneously out of 4K VLAN IDs	
8.	Switch should support IEEE 802.3af & IEEE 802.3at on Ethernet ports & Min 192 PoE Power Budget.	
9.	Should have AC Power Supply 100 to 240 V AC with 50 to 60 Hz and equipped with 3 pin plug.	
10.	Switch should come with Rack mounting kit and all accessories	
11.	Switch must be managed by WEB-GUI	

12.	Device OEM must have operation and their establishment for more than 10 Years in India	
13.	Device OEM must be must be ISO 9001 & 14001 Certified at the time of bidding	

7) Layer-2 24 port POE Switch

Sr. No.	Technical Specification	Compliance (Yes / No)
1	Physical Specification:	
	The LAN switch shall be rack mountable with 24 Nos. 10/100/1000 Base-T ports with 4 Nos. SFP+ Ports	
2	General Specification:	
	The LAN switch shall be available with minimum 128 Gbps Gbps Switching Fabric.	
	The LAN switch shall have minimum packet forwarding rate of 95.23 Mpps.	
	The LAN switch shall support minimum 16K MAC addresses or Higher. There shall be 512 IGMP groups.	
	The switch shall be able to work on both IPv4 and IPv6 (dual stack) from day one.	
	The Lab Switch must have 24× 802.3at/af-compliant PoE+ ports with a total power supply of 380 W or higher.	
	All ports in the switch shall operate at wire-speed / line-rate.	
	The switch shall be capable of working with AC Power Supply with a voltage varying from 170-240Volts at 50 +/-2 Hz.	
	The switch shall support 19 inch rack mounting.	
3	Layer - 2 Features:	
	The LAN switch shall support IEEE 802.1Q VLAN encapsulation. Maximum 4K VLAN Groups.	
	It shall support for Automatic Negotiation of Trunking Protocol, to help minimize the configuration & errors.	
	It shall support 802.1d, 802.1p, 802.1Q, 802.1s, 802.1w, 802.1x, 802.1ab,802.3ad.	
	It shall support spanning-tree root guard or any other industry standard protocol to prevent other edge switches becoming the root bridge.	
	It shall support IGMP snooping v1, v2 and v3.	
	It shall support Link Aggregation Protocol (LACP).	
	It shall Support spanning tree loops	

	It shall be able to discover the neighboring device of the same vendor giving the details about the platform, IP Address, Link connected through etc, thus helping in troubleshooting connectivity problems.	
	The switch shall support automatic recovery of ports disabled due to network errors	
	It shall support Multicast VLAN registration.	
	It shall support LLDP / LLDP-MED including client location information. It shall exchange link and device information in multi vendor networks.	
	It shall support configuration rollback to replace current configuration with any saved configuration file.	
	It shall support Jumbo frames.	
	It shall support auto sensing speed on 10/100/1000 ports, auto negotiating half/full-duplex on all ports and Auto-MDIX.	
4	QoS Features:	
	The LAN switch shall have per-port broadcast, multicast, and unicast storm control.	
	It shall have standard 802.1p CoS and DSCP classification using marking and reclassification on a per-packet basis by source and destination IP address, source and destination MAC address, or Layer	
	4 TCP or UDP port number. There shall be eight egress queues per port to enable differentiated management of up to eight traffic types.	
	There shall be weighted round robbin (WRR) or any other industry standard protocol to provide congestion avoidance.	
	There shall be strict priority queuing mechanisms.	
	Granular Rate Limiting functions should be available.	
	Rate limiting support based on source and destination IP address, source and destination MAC address, Layer 4 TCP and UDP information, or any combination of these fields, using QoS ACLs (IP ACLs (IPv4 and IPv6) or MAC ACLs), class maps, and policy maps shall be available.	
	There shall be support for ingress policing and egress shaping.	
	There shall be support for Automatic Quality of Service for easy configuration of QoS features for critical applications.	
5	Network Security Features:	
	The LAN switch shall support IEEE 802.1x to allow dynamic, port-based security, providing user authentication.	
	It shall support ACLs functionalities.	
	1	

It shall support	MAC filtering.	

Sr. No.	Technical Specification	Compliance (Yes / No)
	It shall support unknown unicast and multicast port blocking to allow	
	tight control by filtering packets that the switch has not already learned	
	how to forward.	
	It shall support IGMP filtering	
	It shall support for SSHv2, SNMPv3 to provide network security	
	by encrypting administrator traffic during Telnet and SNMP sessions.	
	The switch shall support Port Mirroring.	
	It shall support RADIUS authentication to enable centralized control of	
	the switch and restrict unauthorized users from altering the	
	configuration.	
	It shall support MAC address notification to allow administrators to be	
	notified of users added to or removed from the network / It shall	
	support SNMP Trap for new MAC notification.	
	It shall support DHCP snooping to allow administrators to ensure	
	consistent mapping of IP to MAC addresses. This can be used to prevent	
	attacks that attempt to poison the DHCP binding database,	
	and to rate limit the amount of DHCP traffic that enters a switch port.	
	It shall support DHCP Interface Tracker (Option 82) to augment	
	a host IP address request with the switch port ID.	
	It shall support port security feature.	
	T. 1 11	
	It shall support multilevel security on console access to prevent	
	unauthorized users from altering the switch configuration.	
	It shall support BPDU Guard feature, to shut down Spanning Tree	
	Protocol Port Fast-enabled interfaces when BPDUs are received to	
	avoid accidental topology loops.	
	It shall support Spanning-Tree Root Guard (STRG) to prevent edge	
	devices not in the network administrator's control from becoming	
	Spanning Tree Protocol root nodes.	
	It shall support for up to 512 access control entries (ACEs).	
6	Management:	

The LAN switch shall have CLI support to provide a common user	
interface and command set with all routers and switches of the same	
vendor.	
It shall have support for RMON groups support.	
It shall have layer 2 trace route to ease troubleshooting by	
identifying the physical path that a packet takes from source to	
destination or it shall support OAM 802.3ah.	
It shall support Trivial File Transfer Protocol (TFTP) and File Transfer	
Protocol (FTP) to reduce the cost of administering software	
upgrades by downloading from a centralized location.	
It shall support Simple Network Time Protocol/Network	
Timing Protocol (SNTP/NTP) to provide an accurate and	
consistent timestamp to all intranet switches.	
It shall support RMON standards.	
It shall support SNMPv1, SNMPv2, and SNMPv3 and Telnet interface	
to deliver comprehensive in-band management, and a CLI-based	
management console to provide detailed out-of-band management.	
It shall support IPV4/IPV6 management.	
It Shall Support SDN Platform and have Provision to be Work	
Standalone or Controller Based and support Zero-Touch Provisioning	
(ZTP	
Device OEM must have operation and their establishment for more	
than 10 Years in India	
Device OEM must be must be ISO 9001 & 14001 Certified at the time	
of bidding	

8) Layer-3 24 port Switch

Sr. No.	Technical Specification	Compliance (Yes / No)
1	Physical Specification:	,
2	Layer 2/3 switch controller-compatible switch with 24 x GE/10GE SFP/SFP+ slots and 6 x 100GE QSFP28, Dual AC power supplies.	
3	The LAN Switch should have 1 x USB 2.0 Ports, 1 x RJ 45 Ports MGMT Port, 1x RJ45 Console Port with hot swapable redundant power supply	
4	General Specification:	
5	The switching capacity of the proposed switch should be minimum 800 Gbps with 900 Mpps packet forwarding rate.	
6	The LAN switch shall have minimum packet forwarding rate of 95.23 Mpps million packets per second or higher	
7	The LAN switch shall support minimum 64K MAC addresses.	
0	The LAN Switch must Support Stacking/ M C L A G or	
8	equivalent feature.	
9	There shall be IGMP group support.	
10	The switch shall be able to work on both IPv4 and IPv6 (dual stack) from day one.	
11	The LAN Switch should support Layer 3 Features like RIP , OSPF $v2/v3$, VRRP $v2/v3$ and ECMP	

12	All ports in the switch shall operate at wire-speed / line-rate.	
	The switch shall be capable of working with AC Power Supply	
	with a voltage varying from 170-240Volts at 50 +/-2 Hz	
13		
14	The switch shall support 19 inch rack mounting.	
15	The switch must have dual power supply from day-1	
16	Layer - 2 Features:	
	The LAN switch shall support IEEE 802.1Q VLAN encapsulation.	
17	Maximum 4K VLAN Groups.	
	It shall support for Automatic Negotiation of Trunking Protocol, to help	
18	minimize the configuration & errors.	
	It shall support 802.1d, 802.1p, 802.1Q, 802.1s, 802.1w, 802.1x,	
19	802.1ab,802.3ad.	
20	It shall support 1k Routing Entries.	
0.1	It shall support spanning-tree root guard or any other industry standard	
21	protocol to prevent other edge switches becoming the root bridge.	
22	It shall support IGMP snooping v1, v2 and v3.	
23	It shall support Link Aggregation Protocol (LACP).	
24	It shall Support ,STP,MSTP,RSTP, PIM-DM	
	It shall Support health monitoring.	
25		
25	T. 1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	It shall be able to discover the neighboring device of the same vendor	
26	giving the details about the platform, IP Address, Link connected through etc, thus helping in troubleshooting connectivity problems.	
20	It shall support for Switch port auto recovery (err disable) to	
	automatically re- enable a link that is disabled because of a network	
27	error.	
28	It shall support Multicast VLAN registration.	
	It shall support LLDP / LLDP-MED including client location	
	information. It shall exchange link and device information in multi	
29	vendor networks.	
	It shall support configuration rollback to replace current	
30	configuration with any saved configuration file.	
	It shall support configurable maximum transmission unit (MTU) of	
	up to 9000 bytes, with a maximum Ethernet frame size of 9018	
31	bytes (Jumbo frames) for bridging on Gigabit Ethernet ports.	
	It shall support auto sensing speed on 10/100/1000 ports, auto	
32	negotiating half/full-duplex on all ports and Auto-MDIX.	
33	QoS Features:	
2.4	The LAN switch shall have per-port broadcast, multicast, and	
34	unicast storm control.	
	It shall have standard 802.1p CoS and DSCP classification using	
	marking and reclassification on a per-packet basis by source and	
35	destination IP address, source and destination MAC address, or Layer	
33	4 TCP or UDP port number. There shall be eight agrees groupes per port to enable differentiated.	
36	There shall be eight egress queues per port to enable differentiated management of up to eight traffic types.	
50	management of up to eight traffic types.	

27	There shall be weighted round robbin (WRR) or any other industry	
37	standard protocol to provide congestion avoidance.	
38	There shall be strict priority queuing mechanisms.	
39	Granular Rate Limiting functions should be available.	
39	Rate limiting support based on source and destination IP address, source	
	and destination MAC address, Layer 4 TCP and UDP information,	
	or any combination of these fields, using QoS ACLs (IP ACLs (IPv4	
	and IPv6) or MAC ACLs), class maps, and policy maps shall be	
	available.	
40		
	There shall be support ingress policing	
41	and egress shaping.	
41	There shall be support for Automatic Quality of Service for easy	
42	configuration of QoS features for critical applications.	
43	Network Security Features:	
15	The LAN switch shall support IEEE 802.1x to allow dynamic,	
44	port-based security, providing user authentication.	
	It shall support port-based ACLs	
	filters.	
46		
	It shall support unicast MAC filtering	
47	•	
47	It shall assess at subsection described as the ship of a allower	
	It shall support unknown unicast and multicast port blocking to allow tight control by filtering packets that the switch has not already learned	
48	how to forward.	
	It shall support IGMP feature	
49		
	It shall support for SSHv2, SNMPv3 to provide network security	
50	by encrypting administrator traffic during Telnet and SNMP sessions.	
	The switch shall support Port Mirroring	
	•	
51		
<i>3</i> 1	It shall support RADIUS authentication to enable centralized control of	
	the switch and restrict unauthorized users from altering the	
52	configuration.	

Sr. No.	Technical Specification	Compliance (Yes / No)
	It shall support MAC address notification to allow administrators to be	
	notified of users added to or removed from the network / It shall support	
53	SNMP Trap for new MAC notification.	
	It shall support DHCP snooping to allow administrators to ensure	
	consistent mapping of IP to MAC addresses. This can be used to prevent	
	attacks that attempt to poison the DHCP binding database, and	
54	to rate limit the amount of DHCP traffic that enters a switch port.	
	It shall support DHCP Interface Tracker (Option 82) to augment	
55	a host IP address request with the switch port ID.	
	It shall support port security to secure the access to an access or	
	trunk port based on MAC address. After a specific timeframe, the aging	
	feature should remove the MAC address from the switch to allow	
56	another device to connect to the same port.	
	It shall support multilevel security on console access to prevent	
57	unauthorized users from altering the switch configuration.	
	It shall support BPDU Guard feature, to shut down Spanning Tree	
	Protocol Port Fast-enabled interfaces when BPDUs are received to	
58	avoid accidental topology loops.	
	It shall support Spanning-Tree Root Guard (STRG) to prevent edge	
	devices not in the network administrator's control from becoming	
59	Spanning Tree Protocol root nodes.	
60	It shall support for up to 2K access control entries (ACEs).	
61	Management:	
	The LAN switch shall have CLI support to provide a common user	
	interface and command set with all routers and switches of the same	
62	vendor.	
	It shall have support for RMON groups support.	
63		
	It shall have layer 2 trace route to ease troubleshooting by	
	identifying the physical path that a packet takes from source to	
65	destination or it shall support OAM 802.3ah.	
	It shall support Trivial File Transfer Protocol (TFTP) and File Transfer	
	Protocol (FTP) to reduce the cost of administering software	
66	upgrades by downloading from a centralized location.	
	It shall support Simple Network Time Protocol/Network Timing	
	Protocol (SNTP/NTP) to provide an accurate and consistent	
67	timestamp to all intranet switches.	
68	It shall support RMON v1 and v2 standards.	
	**	
69		
	It shall support IPV6 management. ACL and QoS and IPv6 Neighbor	
70	Discovery.	

Sr. No.	Technical Specification	Compliance (Yes / No)
	Device OEM must have operation and their establishment for more than	
71	10 Years in India	
	Device OEM must be must be ISO 9001 & 14001 and 27001 Certified	
72	at the time of bidding	

9) Server

Sr. No.	Specification	Compliance (Yes/No)
1	Form Factor - Max. 2U rack mounted with sliding rails	
2	Configured CPU - 2 Nos. Intel Xeon Silver Processor with 24-core, 2.1GHz	
3	Memory slots - 16 DDR4 DIMM slots, speed up to 3200MT/s	
4	Memory configured - 192GB DDR4 RDIMM, scalable to 3TB	
5	Disks supported - Up to 8 slots supporting 2.5" SAS/SATA/NVMe HDD	
6	RAID Controller - 12Gbps PCIe 3.0 with RAID 0, 1,& 5 with 4GB Cache in single controller.	
7	Disks configured - 3 x 1.92TB SSDs	
8	I/O slots - 2 PCIe slots	
9	Ethernet ports - 2 x 10GB	
10	FC ports - For future requirement supported	
11	Certified for - Windows Server, VMWare, Red Hat Enterprise Linux, SUSE Linux Enterprise Server	
12	Power Supply - 1000W Redundant Power Supply and above	
13	GPU - Support for GPU for future requirement.	
14	Management integration - Support for integration with Microsoft System Center, VMware.	
15	Power & temperature - Thermal and power management. Temperature monitoring.	
16	Pre-failure alert - Should provide predictive failure monitoring & proactive alerts of actual or impending component failure for Fan, Power supply, Memory, CPU, VRMs, Disk etc.	
	Configuration & management	
17	Real-time out-of-band hardware performance monitoring & alerting.	
18	Agent-free monitoring, driver updates & configuration, power monitoring, RAID management, external storage management, monitoring of FC, HBA & system health.	
19	Out-of-band hardware & firmware inventory.	

Sr. No.	Specification	Compliance (Yes/No)
	Management (continued)	
20	Continual runtime firmware verification.	
21	Immutable silicon root of trust.	
22	Common criteria certification.	
23	Support for Redfish API for simple and secure management of scalable platform hardware.	
24	Automated hardware configuration and Operating System.	
25	Should have dashboard for firmware baselines while performing minimum required firmware checks and highlighting out-of-compliance devices for updates with the selected firmware baseline.	
26	HTML5 support - HTML5 support for virtual console & virtual media without using Java or ActiveX plugins	
27	Sub-component quality assurance - All subcomponents quoted within the server should be from the same OEM	
	(excluding devices like monitor, keyboard & mouse)	
	Server security	
	Should provide effective protection, reliable detection & rapid recovery using:	
28	Silicon-based Hardware Root of Trust	
29	Signed firmware updates	
30	Secure default passwords	
31	Configuration and firmware drift detection	
32	Persistent event logging including user activity	
33	Secure alerting	
34	Configuration upgrades should be only with signed firmware and software	
35	Must Support : RoHS Directive, FCC, Energy Star 2.1	
36	Warranty - OEM onsite comprehensive support with 24x7x365 and 4 Hr. Response hardware support.	

10) Online UPS 5KVA

Sr. No.	Specification	Compliance (Yes/No)
	Make	
1	Bidder/Vendor to Specify (Online UPS)	
	Model	
2	Bidder/Vendor to Specify	

3 India Capacity (in kVA / kW) 4 5 KVA - Online UPS, 0.8 or Better O/P power factor Technology and Capability a) True Online configuration with double conversion VFI SS 111 b)Microprocessor /DSP based control, using IGBT devices and high switching frequency PWM (>10kHz) c) Should have Inbuilt Isolation Transformer Input facility -Phases / Wires 6 1 Phase IN & 1 Phase Out Input Voltage Range 7 170 – 280 V AC Input Frequency Range 8 50 Hz ± 0.05 Hz (Crystal Controlled)
4 5 KVA - Online UPS, 0.8 or Better O/P power factor Technology and Capability a) True Online configuration with double conversion VFI SS 111 b)Microprocessor /DSP based control, using IGBT devices and high switching frequency PWM (>10kHz) c) Should have Inbuilt Isolation Transformer Input facility -Phases / Wires 6 1 Phase IN & 1 Phase Out Input Voltage Range 7 170 – 280 V AC Input Frequency Range 8 50 Hz ± 0.05 Hz (Crystal Controlled)
Technology and Capability a) True Online configuration with double conversion VFI SS 111 b) Microprocessor /DSP based control, using IGBT devices and high switching frequency PWM (>10kHz) c) Should have Inbuilt Isolation Transformer Input facility -Phases / Wires 6 1 Phase IN & 1 Phase Out Input Voltage Range 7 170 – 280 V AC Input Frequency Range 8 50 Hz ± 0.05 Hz (Crystal Controlled)
a) True Online configuration with double conversion VFI SS 111 b) Microprocessor /DSP based control, using IGBT devices and high switching frequency PWM (>10kHz) c) Should have Inbuilt Isolation Transformer Input facility -Phases / Wires 6 1 Phase IN & 1 Phase Out Input Voltage Range 7 170 – 280 V AC Input Frequency Range 8 50 Hz ± 0.05 Hz (Crystal Controlled)
b)Microprocessor /DSP based control, using IGBT devices and high switching frequency PWM (>10kHz) c) Should have Inbuilt Isolation Transformer Input facility -Phases / Wires 6 1 Phase IN & 1 Phase Out Input Voltage Range 7 170 – 280 V AC Input Frequency Range 8 50 Hz ± 0.05 Hz (Crystal Controlled)
switching frequency PWM (>10kHz) c) Should have Inbuilt Isolation Transformer Input facility -Phases / Wires 6 1 Phase IN & 1 Phase Out Input Voltage Range 7 170 – 280 V AC Input Frequency Range 8 50 Hz ± 0.05 Hz (Crystal Controlled)
Input facility -Phases / Wires
6 1 Phase IN & 1 Phase Out Input Voltage Range 7 170 – 280 V AC Input Frequency Range 8 50 Hz ± 0.05 Hz (Crystal Controlled)
Input Voltage Range
7 170 – 280 V AC Input Frequency Range 8 50 Hz ± 0.05 Hz (Crystal Controlled)
Input Frequency Range 8 50 Hz ± 0.05 Hz (Crystal Controlled)
8 50 Hz ± 0.05 Hz (Crystal Controlled)
Lucia December Feeder
Input Power Factor
9 > 0.8 on Full Load
Generator Compatibility
10 Compatibility to Genset supply required
Input Protection (Thru In-built 1P MCB)
Should be provided at the input of the UPS suitable for the full rated capacity of the UPS
Nominal Output voltage
12 230VAC
Output Voltage Regulation
13 1% max. for full linear load and 4% max. for full non linear load (100% VA, 0.8 PF)
Nominal Output Frequency
14 50 Hz ± 0.05 Hz (Crystal Controlled)
Output Efficiency
15 >93% for 180 DC
Output Wave Form
16 Pure sine wave
Output Voltage Harmonic Distortion

Sr. No.	Specification	Compliance (Yes/No)
17	Less than 3%	
	Crest Factor	
18	>4:1 On Full Load (Minimum)	
	Output Short circuit Protection	
19	Electronic / Fused	
	Transfer Time (Mode of operation)	
20	Nil from Mains mode to Battery Mode	
20	Nil from Battery Mode to Mains mode	
	Transfer Time (Inverter to Bypass / Bypass to Inverter)	
21	< 4 ms (Synchronized Mode)	
	By-pass (In-built)	
22	To be provided	
	Overall Efficiency (AC to AC) - Online (Double Conversion)	
22	>= 93% for 180 DC	
23 a.	>= 98% in Green ECO mode	
	Transient Recovery	
23 b.	Within 3 Cycles	
	Measurements (On LCD)	
	Input: Voltage / Frequency	
24	Output: Voltage / frequency	
24	Battery: Remaining time / Voltage	
	Load: Percentage / kW	
	Fault Indication (On LCD)	
	Charger Failure	
2.5	Battery Failed	
25	Battery Low	
	Overload	
	Indications (LED/LED)	
26	AC indicator/Battery Mode of Operation / Bypass feeding the load / UPS Fault	
	Audible Alarms	
27	Battery Low beep / DC Fault beep/ UPS Overload beep/ o/p short circuit fault beep/ Shutdown beep	
	Backup Required	
20	30 Min back up at 0.8 PF.	
28	15 Nos. Batteries of 26AH SMF With Battery Rack	
	Battery Bank Voltage	
29	180V DC	
	Batteries Type	
30	Sealed Maintenance Free (SMF) - 12V Cells	

Sr. No.	Specification	Complia (Yes/N
	Battery Makes	0)
31	Exide/Panasonic/Quanta	
	Battery recharge time (After complete discharge) to 90% capacity	
32	8-10 hours	
	Communications	
33	RS232 Standard	
	Interface to DCS (Distributed Control System)	
34	Relay I/O Card or PFC (Potential free contacts) for connecting to UPS to DCS / PLC / SCADA system for communicating UPS operating status option shall be available	
	Cold Start	
	UPS should start up	_
35	On AC Supply (Mains) without DC Supply (Batteries)	
	On DC Supply (Batteries) without AC Supply (Mains)	
	Operating Temperature	
36	0 to 50 deg C	
	Storage Temperature	
37	0 to 60 deg C	
	Operating Humidity	
38	0% ~ 95%RH (No Condensing)	
	Operating Elevation	
39	Upto 2000 meters	
	Type of Cooling	
40	Natural Convection Cooling through air vents	
	Noise Level	
41	< 60 db at 1 meter distance	
	Form Factor	
42	Rack mountable	
	Dimension (w x d x h) in mm	
43	To be furnished by the vendor	
	Weight - in kg	
44	To be furnished by the vendor	
	Product Certificates	
	BIS Certification	
45	1) OEM should have own centralized Help Desk (24 X 7 support) with Toll Free Number.	
43	2) OEM should have Branch Office and Service Centres at Local Raipur City.	

11) Large Display Unit

Display Size 1 55 inches or above Native Resolution 2 UHD 4K Brightness 3 Minimum 350 cd/m2 or above Viewing Angle 4 Minimum 178*178 Input Ports 5 HDMI-2, USB 2.0 - 1, RS232C-1,RJ45-1 Output Ports 6 Digital audio out Smart Share / Screen Share 7 Required CMS supersign compatible 8 Required Built is Standard Operating System 9 WebOS/ Andorid SoftAP/Hotspot feature 10 Required Buetooth 11 Required Wi-Fi 12 built-in Wi-Fi required Audio 13 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories 10 Accessories 10 Accessories 10 10 10 10 10 10 10 1	C. N	G *6" 4*	Compliance
1	S. No.	Specification	(Yes/No)
1		Display Size	
2 UHD 4K	1		
Brightness 3 Minimum 350 cd/m2 or above Viewing Angle 4 Minimum 178*178 Input Ports 5 HDMI-2, USB 2.0 - 1, RS232C-1,RJ45-1 Output Ports 6 Digital audio out Smart Share / Screen Share 7 Required CMS supersign compatible 8 Required Built is Standard Operating System 9 WebOS/ Andorid SoftAP/Hotspot feature 10 Required Bluetooth 11 Required Wi-Fi 12 built-in Wi-Fi required Audio 13 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories		Native Resolution	
3 Minimum 350 cd/m2 or above Viewing Angle 4 Minimum 178*178 Input Ports 5 HDMI-2, USB 2.0 - 1, RS232C-1,RJ45-1 Output Ports 6 Digital audio out Smart Share / Screen Share 7 Required CMS supersign compatible 8 Required Built is Standard Operating System 9 WebOS/ Andorid SoftAP/Hotspot feature 10 Required Bluetooth 11 Required Bluetooth 12 built-in Wi-Fi required Audio 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories Accessories	2	UHD 4K	
Viewing Angle 4 Minimum 178*178 Input Ports 5 HDMI-2, USB 2.0 - 1, RS232C-1,RJ45-1 Output Ports 6 Digital audio out Smart Share / Screen Share 7 Required CMS supersign compatible 8 Required Built is Standard Operating System 9 WebOS/ Andorid SoftAP/Hotspot feature 10 Required Bluetooth 11 Required Wi-Fi 12 built-in Wi-Fi required Audio 13 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories		Brightness	
4 Minimum 178*178 Input Ports 5 HDMI-2, USB 2.0 - 1, RS232C-1,RJ45-1 Output Ports 6 Digital audio out Smart Share / Screen Share 7 Required CMS supersign compatible 8 Required Built is Standard Operating System 9 WebOS/ Andorid SoftAP/Hotspot feature 10 Required Bluetooth 11 Required Wi-Fi 12 built-in Wi-Fi required Audio 13 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories	3	Minimum 350 cd/m2 or above	
4 Minimum 178*178 Input Ports 5 HDMI-2, USB 2.0 - 1, RS232C-1,RJ45-1 Output Ports 6 Digital audio out Smart Share / Screen Share 7 Required CMS supersign compatible 8 Required Built is Standard Operating System 9 WebOS/ Andorid SoftAP/Hotspot feature 10 Required Bluetooth 11 Required Wi-Fi 12 built-in Wi-Fi required Audio 13 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories		Viewing Angle	
5 HDMI-2, USB 2.0 - 1, RS232C-1,RJ45-1 Output Ports 6 Digital audio out Smart Share / Screen Share 7 Required CMS supersign compatible 8 Required Built is Standard Operating System 9 WebOS/ Andorid SoftAP/Hotspot feature 10 Required Bluetooth 11 Required Wi-Fi 12 built-in Wi-Fi required Audio 13 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories	4	Minimum 178*178	
5 HDMI-2, USB 2.0 - 1, RS232C-1,RJ45-1 Output Ports 6 Digital audio out Smart Share / Screen Share 7 Required CMS supersign compatible 8 Required Built is Standard Operating System 9 WebOS/ Andorid SoftAP/Hotspot feature 10 Required Bluetooth 11 Required Wi-Fi 12 built-in Wi-Fi required Audio 13 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories		Input Ports	
6 Digital audio out Smart Share / Screen Share 7 Required CMS supersign compatible 8 Required 9 WebOS/ Andorid SoftAP/Hotspot feature 10 Required Bluetooth 11 Required Wi-Fi 12 built-in Wi-Fi required Audio 13 20W (10W * 2) Power Supply 14 100-240V∼, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories	5		
Smart Share / Screen Share Required CMS supersign compatible Required Built is Standard Operating System WebOS/ Andorid SoftAP/Hotspot feature Required Bluetooth Required Wi-Fi built-in Wi-Fi required Audio 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories		Output Ports	
Smart Share / Screen Share Required CMS supersign compatible Required Built is Standard Operating System WebOS/ Andorid SoftAP/Hotspot feature Required Bluetooth Required Wi-Fi built-in Wi-Fi required Audio 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories	6	Digital audio out	
CMS supersign compatible Required Built is Standard Operating System WebOS/ Andorid SoftAP/Hotspot feature Required Bluetooth Required Wi-Fi built-in Wi-Fi required Audio 13 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories			
8 Required Built is Standard Operating System 9 WebOS/ Andorid SoftAP/Hotspot feature 10 Required Bluetooth 11 Required Wi-Fi 12 built-in Wi-Fi required Audio 13 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories	7	Required	
8 Required Built is Standard Operating System 9 WebOS/ Andorid SoftAP/Hotspot feature 10 Required Bluetooth 11 Required Wi-Fi 12 built-in Wi-Fi required Audio 13 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories		CMS supersign compatible	
9 WebOS/ Andorid SoftAP/Hotspot feature 10 Required Bluetooth 11 Required Wi-Fi 12 built-in Wi-Fi required Audio 13 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories	8		
SoftAP/Hotspot feature Required Bluetooth Required Wi-Fi built-in Wi-Fi required Audio 13 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories		Built is Standard Operating System	
10 Required Bluetooth 11 Required Wi-Fi 12 built-in Wi-Fi required Audio 13 20W (10W * 2) Power Supply 14 100-240V∼, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories	9	WebOS/ Andorid	
Bluetooth		SoftAP/Hotspot feature	
11 Required Wi-Fi 12 built-in Wi-Fi required Audio 13 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories	10	Required	
Wi-Fi 12 built-in Wi-Fi required Audio 13 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories		Bluetooth	
12 built-in Wi-Fi required Audio 13 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories	11	Required	
Audio 13 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories		Wi-Fi	
13 20W (10W * 2) Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories	12	built-in Wi-Fi required	
Power Supply 14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories		Audio	
14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories	13	20W (10W * 2)	
14 100-240V~, 50/60Hz, 24X7 running Power Consumption (Typ) 15 175W or less Accessories		Power Supply	
Power Consumption (Typ) 15 175W or less Accessories	14	100-240V~, 50/60Hz, 24X7 running	
Accessories			
	15	175W or less	
16 Table stand. Remote and standard cables		Accessories	
	16	Table stand, Remote and standard cables	

12) 2U 19" Server Rack

Sr. No.	Technical Specification	Complian ce (Yes / No)
1	42U server Rack Dimensions 800mmx1000mm	
2	Front Door- Glass	
3	Rear Gate - Steel	
4	Side panels and Castor Wheels	
5	Cooling Fan- 230VAC 90 CFM-4 Nos.	
6	PDU- PDU with 12 Indian socket 15/15 Amp & 16Amp MCB- 02 nos.	
7	Shelf Tray- 04 Nos	
8	Mounting Hardware screw- 10 set	
9	Sliding Key board tray -01 No. and Cable manager -3 Nos.	

13) 65" UHD Touch Screen TV (NOC Room)

SN	Specifications	Compliance (Yes/No)
1.	65" or Higher UHD Touch Screen TV for	
1.	NOC Room	
Make Offer	red	
Model Offe	red	
1	Screen Size-65" or Higher	
2	Native Resolution-3840 x 2160 (UHD)	
3	Brightness	
	350cd/m2 or Higher	
4	Contrast Ratio-1,100:1	
5	Viewing Angle (H x V)	
	178 x 178	
6	Surface Treatment	
	Hard coating, Anti-glare	
	treatment of the front polarizer	
7	Input ports	
	HDMI-3,USB(3.0)-3,USB- (2,0)-2,OPS Slot-1,RGB- 1,LAN-1	
8		
	Output Ports HDMI/DB 1 Andio 1	
9	HDMI/DP-1,Audio-1 External Control	
	Rs-232	
	KS-232	

10	D '1.' T 1.
10	Built in Touch type
11	IR spread
11	Accuracy
12	2mm or less
12	Interface
13	USB 2.0 Protection Glass
13	Thickness
1.4	4T (Anti-Glare)
14	Operating System Support
	Windows 7/8/10/Windows XP/Linux/ Mac/Android
	(WindowsXP/Linux/Mac
	Support one point touch)
15	Multi touch point
	Min 20 Points or Higher
16	
	Embedded Interactive White Board Software
1.5	PC Less Interactive White Board mode feature for teaching
17	Interactive Features
	Writing, Pen, Palm Erasor
	, Save, Screen Capture, Storage, Tool Bar, Air Class etc.
18	Built in OS
	Android 8.0/Windows10
19	Puilt is SOC Quadaara Pracessar
	Built is SOC Quadcore Processor,
20	3GB DDR,16GB Storage
20	Media share Screen Share/Mira cast to Connect
	TAB/Mobile, Web Browser
21	Power Supply-100-240V~, 50/60Hz
22	Power Consumption (Typ.)-250 W or less
23	Built in Audio Power-22W(12W x 2)
24	STANDARD(CERTIFICATION)
	UL,BIS,FCC,ROHS
25	AccessoryRemote Controller(include battery 2ea), Power
	Cord, QSG, Regulation Book, Touch
	Pen(2)
26	Installation
	Wall mount

10. IP EPBAX

9. (O) IP EPABX	
Specification	Compliance (Y/N)
Universal slots 6	
FXS ports (SLT) 48	
DKP port 16	
IP users 100	
FXO ports (CO) 16	
PRI ports 2	
GSM/3G/4G VoLTE ports 8	
SIP Trunks 50	
Max. VoIP Channel 64	
Max. VMS Channel 16	
Max. IP to IP Call (Transcoding) 32	
Max. IP to IP Call (DRTP/Relay RTP) 64	
Max. IP to TDM Call 64	
Max. TDM to TDM - Non blocking	
No. of Voice module -16	
Simultaneous Voice Module Playback-5	
Max. Audio conference participants (System wide)- 48	
Max. Audio conference participants (In a single multi-party conference) 15	
Max. Number of simultaneous 3-party conference 16	
VoIP Protocol SIP, SDP, RTP, SRTP	
Network Protocol IPV6, IPV4, TCP, UDP, VLAN, DHCP, PPPoE, QoS, STUN	
Transport Protocol UDP, TCP, TLS	
Codec G.711 (A-law, μ-Law), G.723, G.729AB, GSM-FR, iLBC	
DTMF RTP (RFC2833), SIP Info, IN-Band Gigabit port	
LAN - Gigabit port	
WAN - Gigabit port	
Voicemail – Yes	

Call recording - 2170 Hr	
USB storage capacity- 64 GB	
Internal USB port -1	
External USB port -1	

11 SIP PHONE

(P) SIP Phone			
	Specifications	Compliance (Y.N)	
Audio Features	Codec: G.722, G.711(A/µ), G 729, G.723.1 DTMF: In-band, Out-band (RFC 2833) & SIP INFO Full-duplex Hands-free Speaker Phone		
Phone Features	2 SIP accounts		
	Call Hold, Mute, DND Local 3-way Conferencing Call Transfer, Call Forward Auto Answer Dial Plan Speed Dial LDAP Local Phone Book up to 200 entries Call History: Dialed/Received/Missed/Rejected		
Network and Security	SIP v2 (RFC3261) Proxy Mode and Peer-to-Peer Mode IPv4 IP Assignment: DHCP, Static SRTP		
Feature Keys	Mute, Headset, Hands-free Speaker Phone, DND, Hold, Redial, Transfer, Conference, Voicemail 4 Context Sensitive Keys Volume Control Keys Navigation Keys 16 DSS Programming Keys		
IP-PBX Features	Anonymous Call, Anonymous Call Rejection Emergency Call Message Wait Indication Voice Mail, Call Park, Call Pick-up Intercom, Paging		
Display and Indicator	240*64 Pixels Graphical LCD LED for Call and Message Waiting Indication Caller ID with Name and Number		
Interface	2 x RJ45 10/100/1000 Ethernet Ports Power over Ethernet (IEEE 802.3af)		

12 Firewall

Sr. No.	Technical Specification	Compliance (Y/N)
1	General Requirement	
1	The proposed solution must be an on-premise hardware appliance	
1.2	Appliance must have following interfaces from day one. All these interfaces should be available simultaneously. 4 x 100/40GE, 4 x 25G, 8 x 10 GE/1GE SFP/SFP+ Ports and additional HA and Management Port.	
1.3	Appliance Must have the Internal dual hot swappable power supplies from day 1	
1.4	Shall have Temper proof module and hardened operating system	
1.5	Proposed firewall or its Operating System should be IPv6 or USv6 or IPv6 logo ready certified. Bidder need to submit public website link or documentary proof along with the technical bid.	
2	Firewall Features	
2.1	Threat Prevention (including FW, IPS, Application Control & Antivirus) throughput must be at least 30 Gbps with enterprise mix / App mix	
2.2	The proposed firewall must support at least 20 Gbps of SSL throughput	
2.3	NGFW should support more than 600K new sessions per second	
2.4	NGFW should support at least 35 Million concurrent sessions	
2.5	The NGFW solution should support NAT64, NAT46, NAT66, DNSv6 & DHCPv6	
2.6	The NGFW should support WAN links load balancing and fail-over for multiple links	
2.7	In the proposed should allow the use of the most preferred link based upon Link characteristics (Latency, Jitter, Packet loss) for critical applications as defined in policy from day 1.	
2.8	The proposed system should have integrated Traffic control functionality for both inbound and outbound traffic.	
2.9	The proposed NGFW solution should support logical separation or segmentation of security policies and traffic within the same appliance, either through virtual firewall instances (contexts) or equivalent functionality.	
2.10	The NGFW should have both SSL and SSH Inspection capabilities	
2.11	The system should provide IPv6 IPsec feature to support for secure IPv6 traffic in an IPsec VPN.	
2.12	Should support TLSv1.3 decryption in all modes (SSL Forward Proxy, SSL Inbound Inspection etc.)	
2.13	The NGFW shall be able to support various form of user Authentication methods simultaneously, including: Local Database, LDAP, RADIUS, Windows AD and support for Single Sign On and SAML	
2.14	Should have inbuilt feature for two factor authentication via OTP (email or mobile) for at least two admin users access from day 1.	
3	Intrusion Prevention System	

	The IPS should be able to inspect SSL sessions by decrypting the traffic without requiring external ssl offloader	
3.2	The IPS system should have at least 10,000 IPS rules	
	IPS solution should have capability to protect against Denial of Service (DOS) and DDOS attacks. Should have flexibility to configure threshold values for each of the Anomaly. DOS and DDOS protection should be applied and attacks stopped before firewall policy look-ups.	
	Signatures should have severity level defined to it so that the administrator can understand and decide which signatures to enable for what traffic (e.g. for severity level: high medium low)	
	Application Control Features	
	The appliance should have at least 4000 application signatures database	
	Should have the intelligence to identify & control of popular IM & P2P applications like KaZaa, Bit Torrent, Skype, You Tube, Facebook, LinkedIn etc.	
	Firewall must have capability to do Cloud application based routing not by means of manually adding IPs and or FQDNs i.e. firewall should have database of O365 readily available to select as destination address in firewall policy and destination address in static route configuration to give particular ISP path	
5	Anti-Malware & Advanced Persistent Threat	
	NGFW must include Anti-bot capability using IP reputation DB, terminates botnet communication to C&C servers also. Vendor needs to add additional license if it is required.	
	NGFW should support protection against active content in file attachments using techniques such as Content Disarm and Reconstruction (CDR) or equivalent threat prevention technologies capable of mitigating threats in real time.	
	URL filtering	
	The NGFW must have in-built Web Filtering Functionality	
	Admin should create policies based on user and groups	
	The NGFW must have support Newly Registered Domains, Newly Observed Domains, Dynamic DNS based websites.	
	Uses ML models to analyze images in webpages to determine whether they are imitating brands commonly used in phishing attempts.	
	Solution should be able to analyze live web content and capable to identify the true nature of malicious sites hiding behind evasive techniques.	
6.6	The proposed firewall shall have custom URL-categorization	
6.7	The proposed firewall shall customizable block pages	
	Proposed vendor should have an in-house threat intelligence team and offer built-in capabilities on firewall to integrate with various	
7	security threat feeds using STIX/TAXII/API	
	High Availability	
7.1		

7.3	The device shall support stateful session maintenance in the event of a fail-over to a standby unit.	
7.4	The device shall event log, send snmp traps, send alert email when fail-over occurs.	
7.5	High Availability configuration should support both IPv4 and IPv6	
7.6	Solution must be offered with required security subscriptions and OEM 24x7 warranty support	

Logs & Analytical Tool			
Technical Specifications	Compliance (Y/N)		
Solution must offer separate appliance(s) either Physical or Virtual for centralized management & reporting to store logs and reports. In case of Virtual Appliance, necessary hardware & software, Consider storage size for 6 months will be provided by Organization Name.			
Solution must collect logs from all devices networking and security solution. Should be sized at least to handle minimum 50 Gbps logs per day . Should be scalable in case logs volume increase in future requirement			
Should Deliver single-pane visibility, also have reporting facility to generate reports on virus detected over different protocols, top sources for viruses, destination for viruses, top viruses etc.			
Should support various widgets for wireless network like rogue ap, Top clients etc			
Should have options to generate Predefined or customized Advance reports in different formats			
The solution should have configurable options to schedule the report generation			
Solution should offer Centralized NOC (Wired and Wireless Network) /SOC Visibility for the Attack Surface.			
The solution should be able to deliver essential security orchestration, automation, and response features with inbuilt playbooks to take immediate take automated action on events . In case require additional licence or solution consider from day 1			
It should have Drill-down capabilities to follow the trail of a user session, trace transactions, and gain new insights			
Shall have pre defined template to generate various report			
The Proposed Solution should have provide Powerful Network & Security Visibility with customizable interactive Dashboard and summary views			

Layer 2 - 48 x1G + 4	SFP (Non POE)	
Technical		Compliance
Specification		(Y/N)
General	Manageable switch should have minimum 48 x GE RJ45	
Requirements	POE ports and 4x 10 GE SFP + ports	

	Proposed switch should have a RJ-45 Serial console port	
	The form factor of the proposed switch should be 1 RU	
	Rack-Mount Appliance	
	Proposed switch OS must be Ipv6 Certified. Certificate /	
	reference link need to provide for validation.	
	Switching capacity of the proposed switch should be	
	minimum 150 Gbps	
	Packet per second capacity of the switch should be	
	minimum 200 Mpps	
	Proposed Switch should support minimum 32K MAC	
	address storage	
	Proposed switch should support 4000 VLANs ID	
	Should support min 512MB, maximum to be specified	
Layer 2		
Requirements	Should support Jumbo frames and link auto-negotiation	
	Should support Spanning Tree Protocol MSTP native, and	
	backwards compatible with RSTP, STP and STP Root Guard	
	Should support Edge Port (Rapid edge transition)	
	IEEE 802.1AX Link Aggregation	
	IEEE 802.1q VLAN tagging, Private VLAN, Voice VLAN	
	Should support IEEE 802.3ad Link Aggregation with LACP	
	with maximum 8 Link Aggregation Group size	
	should support Unicast/Multicast traffic balance over	
	trunking port for dst-ip, dst-mac, src-dst-ip, src-dst-mac,	
	src-ip, src-mac	
	Should support IEEE 802.3x Flow Control and Back-	
	pressure, IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX,	
	IEEE 802.3z , 1000Base-SX/LX, IEEE 802.3ab 1000Base-T	
	Should support virtual wire between two ports for	
	troubleshooting	
Authentication		
Requirements	Admin Authentication Via RFC 2865 RADIUS	
	Should support 802.1x port-based authentication	
	Should support 802.1x MAC-based authentication, IEEE	
	802.1x MAC Access Bypass (MAB)	
	Should support IEEE 802.1x Guest and Fallback VLAN	
	Should support IEEE 802.1x Dynamic VLAN Assignment,	
	MAC-IP Binding	
	Should support Radius CoA (Change of Authority) and	
	Radius Accounting	
	Switch should support local user database and can	
	integrate with LDAP, RADIUS, TACACS+ servers	
	should support LLDP, LLDP-MED, inter-chassis link	
Security	aggregation(Multi-chassis link aggregation.	
	should support Storm Control, Loop Guard	
	Should support IGMP snooping, DHCP snooping(entry limit	
	per port) and Dynamic ARP Inspection	

	Should support Port mirroring, sFlow or equivalent flow monitoring, advanced cable diagnostics (e.g., time-domain reflectometry). Should support Port security with static MAC binding and MAC Limit	
	Switch should support 512 ACL entries Switch should support Device Detection to understand the type of device operating systems, display the IP address.	
	Switch should support Policy Control of Users and Devices	
Qos	Should support IEEE 802.1p Based Priority Queuing	
	Should support IP TOS/DSCP Based Priority Queuing	
Switch Management	Should support Telnet, SSH, HTTP, HTTPS with IPv4 and IPv6 Management	
	Switch should support SNMP v1, v2c and v3	
	Software download/upload: TFTP/FTP/GUI	
	Proposed switch should be managed via both, GUI and CLI	
	MUST support multiple configuration files with Dual-firmware image support	
	Switch should support IP conflict detection and notification	
Central Management	Managed from proposed centralized Switch Management/Controller Solution	
Accessories	Solution must be proposed with Fully Populated with 10G Modules	

96 Port	Network Switch or 2 x 48 Port Network Switches			
Unit	Unit DESCRIPTION			
General	L3 Managed Switch should have minimum 96 x 25Gbps Ports & minimum 6 x 100/40GE Gbps uplinks Ports, Dual Hot swappable Power supply . Note: If a single-unit switch with 96 x 25Gbps ports is not available from the proposed OEM, the bidder may quote 2 Nos. of 48 x 25Gbps port switches (with minimum 3 x 100/40GE uplinks each and dual hotswappable power supply) to fulfil the required specification.			
Requirements	The proposed switch shall be rack mount and should have one RJ-45 Serial			
	console or any other type of console port.			
	Switching capacity of the proposed switch should be minimum 4TBPS and			
	2500 Mpps Packet per second .			
	Proposed switch should support routing protocol -static route, RIP, OSPF, BGP from day 1			
	Proposed Switch should support minimum 96K MAC address and 4000 VLAN's			
	Proposed switch should have the high availability options and support multi- chassis link aggregation (active-active) or equivalent			
	Switch latency < 1 μs .			
Layer 3	Proposed switch OS must be IPv6 Certified. Certificate / reference link need to provide for validation.			
Features	Should support DHCP Server and Relay			
	should support dynamic routing protocol OSPF, RIP ,VRRP and BGP , Policy based routing , Static routing hardware based , Vxlan			
	Must have IP conflict detection and notification of conflict			

	Minimum IPv4 route entries 16K support & minimum 16K host entries	
	Must support jumbo frame	
	Should support Spanning Tree Protocol MSTP native, and backwards compatible with RTSP, STP and STP Root Guard	
	Should support IEEE 802.1ad Link Aggregation, IEEE 802.1q VLAN tagging, LLDP/MED. Should support LACP to aggregate 2x25/10 Gig ports to achieve higher backbone bandwidth.	
	Should support 802.1p support, QoS support prioritizing the traffic	
Layer 2 & Authentication	Should support 802.1x port-based authentication	
Requirements	Should support 802.1x MAC-based authentication, IEEE 802.1x MAC Access Bypass (MAB).	
	Should support IEEE 802.1x Guest and Fallback VLAN	
	Should support IEEE 802.1x Dynamic VLAN Assignment	
	Should support TFTP, NTP,	
	Switch should support local user database and can integrate with RADIUS, Radius CoA,TACACS+ servers	
	Should support SSH, HTTP,HTTPS with IPv4 and IPv6 Management	
Management	Switch should support SNMP v1, v2c and v3, IGMP, RMON.	
	Proposed switch should be managed via both, GUI and CLI	
	Should have support storm control and STP root and BPDU guard protection	
	should support ACL and minimum support minimum 3K entries	
Security	Switch should support port security with static MAC binding, Wake on Lan features	
	Shall support IP source Guard	
Central Management	Managed from proposed centralized Switch Management/Controller Solution	
Accessories	Solution must be proposed with fully populated with 10G Modules and 4 nos 40G SFP / DAC Cable and 4 x 25G Module or DAC Cable	

Note- The bidder shall treat this compliance sheet as indicative in nature. It is the responsibility of the bidder to ensure that proposed solution shall be best-in-industry practices, and aligns with the overall scope, objectives as well as intent of the bid.

10. FINAL ACCEPTANCE TEST

The Bidder, in the presence of GAD and/or its nominated agency, will conduct acceptance tests at the site. The tests will involve installation, commissioning, and trouble-free operation of the Network with the integration of hardware like computers, network printers, servers, etc. No additional charges shall be payable by the GAD for such integration and carrying out these acceptance tests.

11. DELAYS IN THE BIDDER'S PERFORMANCE

Delivery of the Network component and the services shall be made by the Bidder in accordance with the time schedule specified in this Scope of Work. If at any time during the performance of the contract, the Bidder should encounter conditions impeding timely delivery of the services, the Bidder shall promptly notify the

GAD in writing of the fact of the delay, its likely duration, and its cause(s). As soon as practicable after receipt of the Bidder's in consultation with notice, the Bidder shall evaluate the GAD situation and may, at its discretion, extend the time for performance with or without a penalty Bidder's. The decision of the GAD in this matter shall be final.

12. BIDDER'S OBLIGATIONS

The Bidder shall work closely with the GAD, existing SI (during HOTO process), TPA, Bandwidth provider and Data Centre Operator (DCO) and abide by directives issued by them or their staff.

The Bidder will abide by the job safety requirements prevalent in India and shall indemnify the GAD from any demands or liabilities that may arise during the execution of the contract, including those from accidents or loss of life. The Bidder shall be solely liable for any compensation that may become payable as a result of such incidents and will not hold the GAD responsible or obligated.

The Bidder is responsible for managing the activities of its personnel or subcontracted personnel and will hold itself responsible for any misdemeanors.

The Bidder will treat as confidential all data and information obtained during the execution of his responsibilities about the GAD in strict confidence and will not reveal such information to any other party without the prior written approval of the GAD.

13. REPORTS TO PURCHASER

A monthly report of the progress of work shall be submitted to GAD.

14. SIGN OFF DELIVERABLE / EXIT CRITERIA

- 1. Detailed Project Plan
- 2. Detailed System Study Report
- 3. List of Services, Service Definitions, Service Levels
- 4. Updated/vetted FRS
- 5. SRS/GAP document
- 6. Network architecture documents.
- 7. Change Management and Capacity Building Plans.
- 8. SLA and Performance Monitoring Plan.
- 9. Training and Knowledge Transfer Plans.

10. Issue Logs.

14.1 - EXIT MANAGEMENT

14.1.1 - Purpose

- I. This sets out the provisions, which will apply on expiry or termination of the MSA, the Project Operation and Management of SLA.
- II. In the case of termination of the Project, Operation and Management, the Parties shall agree at that time whether, and if so during what period, the provisions of this Schedule shall apply.
- III. The Parties shall ensure that their respective associated entities carry out their respective obligations set out in this Exit Management Schedule.

14.1.2 - Transfer of Assets

GAD shall be entitled to serve notice in writing on the Selected Bidder at any time during the exit management period as detailed herein above requiring the Selected Bidder and/or its sub-Selected Bidders to provide the GAD with a complete and up-to-date list of the Assets within 30 days of such notice. GAD shall then be entitled to serve notice in writing on the Selected Bidder, at any time prior to the date that is 30 days prior to the end of the exit management period requiring the

Selected Bidder to sell the Assets, if any, to be transferred to GAD or its nominated agencies at book value as determined as of the date of such notice in accordance with the provisions of relevant laws:

- a) In case of the contract being terminated, GAD reserves the right to ask the Selected Bidder to continue running the project operations for a period of 6 months after termination orders are issued.
- b) Upon service of a notice under this Article, the following provisions shall apply:
 - i. In the event, if the Assets to be transferred are mortgaged to any financial institutions by the Selected Bidder, the Selected Bidder shall ensure that all such liens and liabilities have been cleared beyond doubt, prior to such transfer. All documents regarding the discharge of such lien and liabilities shall be furnished to the GAD.
 - ii. All risk in and title to the Assets to be transferred / to be purchased by the GAD pursuant to This Article shall be transferred to GAD on the last day of the exit management period.

- iii. GAD shall pay to the Selected Bidder on the last day of the exit management period such sum representing the Net Block (procurement price less depreciation as per provisions of the Companies Act) of the Assets to be transferred as stated in the Terms of Payment Schedule.
- iv. Payment to the outgoing Selected Bidder shall be made to the tune of the last set of completed services/deliverables, subject to SLA requirements.
- v. The outgoing Selected Bidder will transfer to GAD and/or the Replacement Selected Bidder the existing rights in any leased properties or licensed products on terms no less favourable to GAD or the Replacement Selected Bidder than those enjoyed by the outgoing Selected Bidder.

14.1.3 - Cooperation and Provision of Information

During the exit management period:

- I. The Selected Bidder will allow the GAD or its nominated agency access to information reasonably required to define the then-current mode of operation associated with the provision of the services, enabling the GAD to assess the existing services being delivered.
- II. Promptly on reasonable request by the GAD, the Selected Bidder shall provide access to, and copies of all information held or controlled by them, which they have prepared or maintained in accordance with this agreement relating to any material aspect of the services (whether provided by the Selected Bidder or sub-Selected Bidders appointed by the Selected Bidder). The GAD shall be entitled to copy all such information. Such information shall include details pertaining to the services rendered and other performance data. The Selected Bidder shall permit the GAD or its nominated agencies to have reasonable access to its employees and facilities as reasonably required by the Program Management Committee (PMU) to understand the delivery of the services employed by the Selected Bidder and to assist the appropriate knowledge transfer.

14.1.4 - Confidential Information, Security and Data

- I. The Selected Bidder will promptly, on the commencement of the exit management period, supply to the GAD or its nominated agency the following:
 - A. Information relating to the current services rendered and the customer and performance data relating to the performance of sub-selected bidders in relation to the services
 - B. Documentation relating to the Computerisation Project.
 - C. Documentation relating to sub-selected Bidders.
 - D. All current and updated data as is reasonably required for GAD or its nominated agencies to

- transition the services to its Replacement Selected Bidder in a readily available format nominated by GAD or its nominated agency.
- E. All other information (including but not limited to documents, records and agreements) relating to the services reasonably necessary to enable GAD or its nominated agencies, or its Replacement Selected Bidder to carry out due diligence in order to transition the provision of the Services to GADor its nominated agencies, or its Replacement Selected Bidder (as the case may be).
- II. Before the expiry of the exit management period, the Selected Bidder shall deliver to the GADor, its nominated agency, all new or updated materials from the categories set out in the Schedule above and shall not retain any copies thereof, except that the Selected Bidder shall be permitted to retain one copy of such materials for archival purposes only.
- III. Before the expiry of the exit management period, unless otherwise provided under the MSA, the GADor its nominated agency shall deliver to the Selected Bidder all forms of Selected Bidder confidential information in the possession or control of the GAD, or its users.

14.1.5 - Employees

- I. Promptly on reasonable request at any time during the exit management period, the Selected Bidder shall, subject to applicable laws, restraints, and regulations (including in particular those relating to privacy) provide to the GADor its nominated agency, a list of all employees and (with job titles) of the Selected Bidder dedicated to providing the services at the commencement of the exit management period.
- II. Where any national, regional law or regulation relating to the mandatory or automatic transfer of the contracts of employment from the Selected Bidder to the GAD or its nominated agency, or a Replacement Selected Bidder ("Transfer Regulation") applies to any or all of the employees of the Selected Bidder, then the Parties shall comply with their respective obligations under such Transfer Regulations.
- III. To the extent that any Transfer Regulation does not apply to any employee of the Selected Bidder, department, or its Replacement Selected Bidder may make an offer of employment or contract for services to such employee of the Selected Bidder and the Selected Bidder shall not enforce or impose any contractual provision that would prevent any such employee from being hired by the GAD or any Replacement Selected Bidder.

14.1.6 - Transfer of Certain Agreements

Upon request from the GAD or its nominated agency, the Selected Bidder shall execute assignments, transfers, licenses, and sub-licenses to the GAD or its Replacement Selected Bidder

regarding any equipment lease, maintenance, or service provision agreements between the Selected Bidder and third-party lessors or vendors that are related to the services and are reasonably necessary for the execution of replacement services by the GAD, its nominated agency, or its Replacement Selected Bidder.

14.1.7 - Rights of Access to Premises

I. At any time during the exit management period, where Assets are located at the System Selected Bidder premises, the Selected Bidder will be obliged to give reasonable rights of access to (or, in the case of Assets located on a third party's premises, procure reasonable rights of access to) the GADor its nominated agency and/or any Replacement Selected Bidder in order to make an inventory of the Assets.

14.1.8 - General Obligations of the Selected Bidder

- I. The Selected Bidder shall provide all such information as may reasonably be necessary to effect as seamless a handover as practicable in the circumstances to the GADor, its nominated agency, or its Replacement Selected Bidder and which the Selected Bidder has in its possession or control at any time during the exit management period.
- II. For the purposes of this Schedule, anything in the possession or control of any Selected Bidder, associated entity, or sub-selected Bidder is deemed to be in the possession or control of the Selected Bidder.
- III. The Selected Bidder shall commit adequate resources to comply with its obligations under this Exit Management Schedule.

14.1.9 - Exit Management Plan

- I. The Selected Bidder shall provide the GADor, its nominated agency, with a recommended exit management plan ("Exit Management Plan"), which shall deal with at least the following aspects of exit management in relation to the MSA as a whole and in relation to the Project Operation and Management SLA
 - A. A detailed program of the transfer process that could be used in conjunction with a Replacement. Selected Bidder includes details of the means to ensure continued provision of the services throughout the transfer process or until the cessation of the services and of the management

- structure to be used during the transfer.
- B. Plans for communication with the Selected Bidder's sub-Selected Bidders, staff, suppliers, customers, and any related third party as necessary to avoid any material detrimental impact on the GAD operations.
- C. (If applicable) Proposed arrangements for the segregation of the Selected Bidder's networks from the networks employed by GAD and identification of specific security tasks necessary at termination.
- D. Plans for the provision of contingent support to GAD, and Replacement Selected Bidder for a reasonable period after transfer.
- II. The Selected Bidder shall re-draft the Exit Management Plan annually thereafter to ensure that it is kept relevant and up to date.
- III. Each Exit Management Plan shall be presented by the Selected Bidder to and approved by the GAD or its nominated agencies.
- IV. The terms of payment as stated in the Terms of Payment Schedule include the costs of the Selected Bidder complying with its obligations under this Schedule.
- V. In the event of termination or expiry of MSA, each Party shall comply with the Exit Management Plan.
- VI. During the exit management period, the Selected Bidder shall use its best efforts to deliver the services.
- VII. Payments during the Exit Management period shall be made in accordance with the Terms of Payment Schedule.
- VIII. The existing SI has to handover all the IT and non-IT assets, which are covered under contract, in working condition. GAD will handover these assets to the new Successful bidder with agreed-upon terms and conditions.

<u>Note:-</u> The Successful bidder will hand over all the data compiled/recorded during the period of the contract to the GADin a readable digital format along with the data structure design for migration into any other system at the end of the contract.

14.1.10 - General Terms & Condition:

help of existing SI. The process of handover has to be se services.	eamless without any disruptions to the existing			
Bidder shall undertake phase-wise takeover of equipment's and operations from the existing SI upon proper due diligence. The bidder shall ensure that no downtime of network is attributed due to takeover.				
ANNEXURE -A: UNDERTAKING ON	TOTAL RESPONSIBILITY			
Tender Ref.	Date:			
To:				
Secretary,				
General Administration Department,				
Mahanadi Bhawan, Atal Nagar,				

Sub: Self-certificate regarding Total Responsibility

Nava Raipur, Chhattisgarh

Dear Sir,

This is to certify that we undertake total responsibility for the successful and defect free operation of the proposed Project, as per the requirements and terms and condition of the RFP for Selection of Service Provider for Upgradation, Operation & Maintenance of Existing WLAN/LAN/EPBAX at Mantralaya and Indravati Bhawan in Atal Nagar, Nava Raipur (Chhattisgarh).

Thanking you,

Yours faithfully

(Signature of the Authorized signatory of the Bidding Organization)

Name :

Designation :

Date :

Seal :

Business Address:

ANNEXURE- B: HELPDESK AND FAULT CORRECTION PLAN

Bidder shall provide a detailed description of the proposed Helpdesk and Fault Correction plan for this WLAN/LAN/EPBAX project. The description should include the following details about the metIndravati ology to be used in implementing the Helpdesk System:

- (i) A brief about the basic responsibilities of the Helpdesk and what it plans to achieve.
- (ii) Description of the Helpdesk procedures and processes.

- (iii) Detailed Roles and responsibilities of the Helpdesk personnel.
- (iv) A description about how a fault would be typically attended to and rectified.
- (v) Various faults that could be expected and measures that would be taken to alleviate or rectify them.

ANNEXURE- C: EXISTING EQUIPMENT DETAILS

BILL OF MATERIALS & SERVICES						
SN	ITEM DESCRIPTION	Total QTY	UNIT	Mantralaya	INDRA VATI	
	Access Control Server HP-IMC-UAM Software	+ HP ML1	10 Gen 7 sei	rver		
1	Security Appliance- Access Control Server	1	Nos.	0	1	
	Network Monitoring Server HP IMC STD. EDN. Sof	tware + HF	ML110 Ge	n 7 server		
1	Network Controller Appliance With 100 Clients Support	1	Nos.	0	1	
2	License for 25 Clients Add on	18	Nos.	12	6	
Domain Server (AD/DHCP/DNS) with OS License - HP ProLiant ML350P Gen 8 Server						
1	Server with monitor, keyboard 12GB RAM, Xeon500, 2.6Ghz, 4 Core Processor and 1 TB HDD	2	Nos.	0	2	
Security (Make-Cyberoam, Model - CR - 500ING- XP)						
1	Internet Security Firewall	2	Nos.	0	2	
	Router		•			

1	Primary Level Router	1	Nos.	0	1
2	Secondary Level Router		Nos.	0	1
	Wireless Access point	S			
1	Internal Access point (HP MSM 430)	472	Nos.	280	192
2	External Access point with 8 Dbi Dual Band 3 x 3 MIMO Omni Antenna (HP MSM 466-R)	4	Nos.	4	0
	Wireless LAN Controller HP - MSM760 Prei	nium Mobil	ity Controll	er	•
1	Wireless Controller	1	Nos.	0	1
2	Wireless Controller - 50 Access Point with License	8	Nos.	6	2
	Wireless Controller for high Availability - HP-MSM7	60 Premiun	n Mobility C	Controller	
1	Redundant Controller for High Availability	3	Nos.	2	1
	Wireless Network Monitorin	g System			
1	Network Controller Appliance With 100 Clients Support	1	Nos.	2	1
2	License for 25 Clients Add on	18	Nos.	12	6
	Core Switches (Layer 3) HP 7500	Switch Seri	es		•
1	Core Switches (Layer 3) HP A7500-24Port - Switch Series Chassis Based	2	Nos.	0	2
2	24 Port Switch - Layer 3 (Make & Model - HP A5500-24G-4SFP) (Product ID - JG311A)	20	Nos.	11	9
3	Single mode fiber Modules (1G/10G)	221	Nos.	96	125
Switches (Layer 2)					
1	24 port PoE Switch and 2 Fiber uplinks (Make & Model - HP 5120 24G-PoE E1) (Product ID - J4263A)	34	Nos.	34	0
2	24 port PoE Switch and 2 Fiber uplinks (Make & Model - HP 5120 24G-PoE E1) (Product ID - J4263A)	27	Nos.	0	27
3	24 port PoE Switch and 2 Fiber uplinks (Make & Model - HP 5120 24G-PoE E1) (Product ID - J4263A)	7	Nos.	0	7

THANKS