REQUEST FOR PROPOSAL

FOR

SELECTION OF IMPLEMENTING AGENCY FOR IMPLEMENTATION OF Wi-Fi INFRASTRUCTURE & IP CAMERAAT VARIOUS PUBLIC PLACES AND GOVERNMENT OFFICES IN THE STATE OF CHHATTISGARH



CHhattisgarh infotech & biotech Promotion Society (CHiPS)
State Data Centre Building, Near Police Control Room,
Civil Lines, Raipur, Chhattisgarh–492001
Tel.: +91-771-4014158
Email:ceochips@nic.in, Website:www.chips.gov.in

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Table of Contents

NOTICE INVITING TENDER		6
DISCLAIMER		8
1.	Executive summary	9
2.	Tender Schedule	9
3.	Background information	11
3.1.	About Chhattisgarh	11
3.2.	About CHiPS	12
3.3.	About this Request for Proposal (RFP)	12
4.	Eligibility criteria	13
4.1.	Terms and condition for Consortium Partner	16
5.	Instruction to the Bidders	17
5.1.	General	17
5.2.	Compliant Tenders / Completeness of Response	17
5.3.	Pre-Bid Meeting & Clarifications	18
5.3.1.	Bidders Queries	18
5.3.2.	Responses to Pre-Bid Queries and Issue of Corrigendum	19
5.4.	Key Requirements of the Bid	19
5.4.1.	Right to Terminate the Process	19
5.4.2.	RFP Document Fees	19
5.4.3.	Earnest Money Deposit (EMD)	20
5.4.4.	Submission of Responses	20
5.4.5.	Authentication of Bids	21
5.5.	Preparation and Submission of Proposal	22
5.5.1.	Proposal Preparation Costs	22
5.5.2.	Language	22
5.5.3.	Late Bids	22
5.6.	Evaluation process	22
5.6.1.	Tender Opening	23
5.6.2.	Tender Validity	23
5.6.3.	Tender Evaluation	23
5.7.	Prequalification and Technical Proposal	30
5.8.	Modification and withdrawal of Bids	30

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

5.9.	Proposal Forms	31
5.10.	Local Conditions	31
5.11.	Contacting the CHiPS, Raipur	32
5.12.	Eligibility Criteria	32
5.13.	Tentative Schedule of Events	32
5.14.	Opening of Proposal	32
5.15.	Deciding Award of Contract	33
5.16.	Confidentiality	34
5.17.	Publicity	35
5.18.	Execution of Contract	35
5.19.	Duration of the contract:	35
5.20.	Terms and Conditions: Applicable Post Award of Contract	35
5.20.1.	Termination Clause	35
5.20.2.	Liquidated Damages	37
5.20.3.	Acceptance Tests	37
5.20.4.	Audit by Third Party	37
5.20.5.	Penalty	38
5.20.6.	Dispute Resolution Mechanism	38
5.20.7.	Notices	39
5.20.8.	Force Majeure	39
5.20.9.	Failure to agree with Terms and Conditions of the RFP	41
5.21.	Service Levels	41
5.22.	Category of SLAs	41
5.23.	SLAs	42
5.24.	Man Power Deployment	44
5.25.	Contract Performance Security	44
5.26.	Statutory Requirements	44
5.27.	Contract administration	45
5.28.	Right of Monitoring, Inspection and Periodic Audit	45
5.29.	Chhattisgarh Infotech& Biotech Promotional Society, Raipur's Obligations	46
5.30.	Information Security	46
5.31.	Indemnity	46
5.32.	Prices	47

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

5.33.	Special Conditions of Contract	47
5.34.	Payment Schedule	47
5.35.	Events of Default by the Selected Bidder	48
5.36.	Liquidated Damages	50
5.37.	Dispute Resolution	50
5.38.	Continuance of the Contract:	51
5.39.	Conflict of interest	51
5.40.	Severance	51
5.41.	Governing Language	51
5.42.	"No Claim" Certificate	52
5.43.	Publicity	52
5.44.	General	52
5.45.	Fraud and Corrupt Practices	55
5.46.	Arbitration	57
6.	Scope of work	58
6.1.	Definitions	58
6.2.	Broad scope	58
6.3.	Broad Outline of Scope of Work, Deliverables and Timeline	64
6.4.	Locations for supply of goods and services	70
6.5.	Quality of goods and services	70
6.6.	Parameters of the site design	71
6.7.	Approval of design	73
6.8.	Documentation of delivery of goods	73
6.9.	Installations and commissioning	73
6.10.	Technical documentation after installation	73
6.11.	Training	74
6.12.	Inspection and tests	74
6.13.	Acceptance tests	75
6.14.	Completeness of contract	75
6.15.	Delays in the bidder's performance	75
6.16.	Product warranty	76
6.17.	Insurance	76
6.17.1.	Insurance Cover	76

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

6.17.2. Evidence of Insurance Cover 76
6.17.3. Remedy on failure to Insure 77
6.18. Repeated failure 77
6.19. Right to use defective equipment 77
6.20. Protection against risk of obsolescence 77
6.21. Bidders obligations 78
6.22. Reports purchaser 78
6.23. Assignment 78
6.24. Other terms and conditions 78
7. Minimum Specification for Wi-Fi Components 79
8. Bill of Material 130
Annexure I– Proposal Covering Letter 137
Annexure II: Format for Power of Attorney 139
Annexure III-Authorisation Letter from Original Equipment Manufacturer (OEM) 141
Annexure IV-Commitment Letter for support from original equipment manufacturer (OEM) 142
Annexure-V- Bank Guarantee format for Earnest Money Deposit 143
Annexure-VI- Declaration for Not Black listed 146
Annexure VII– Software Manufacturer Authorization & Support form 147
Annexure VIII – Equipments Manufacturer Authorization & support form 149
Annexure IX–Draft Performance Guarantee 150
Annexure X: Format of Sending Pre-bid queries 153
Annexure XI: Technical Specification Compliance 154
Annexure XII: Financial Proposal Format 155
Annexure-XIII–Deed of Consortium 165
Annexure XV: Pre-contract integrity pact 169
Annexure XVI: Core Project Team 179

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

NOTICE INVITING TENDER

FOR

SELECTION OF IMPLEMENTING AGENCY FOR IMPLEMENTATION OF Wi-Fi INFRASTRUCTURE &IP CAMERA AT VARIOUS PUBLIC PLACES AND GOVERNMENT OFFICES IN THE STATE OF CHHATTISGARH

NIT No. **05/CEO/CHiPS/WiFi/2015** Raipur, Dated 23/ 02 /2015

The invitation for Request for Proposal is for "Selection of Agency for Implementing Wi-Fi Infrastructure at different Public Places and Government Offices in the Sate of Chhattisgarh", from eligible, reputed system integrators of networking, who are authorized to **"Design, Supply, installation, commissioning, and maintenance of Wi-Fi Infrastructure & IP Camera in the State of Chhattisgarh",** and have their Local office in the state of Chhattisgarh as mentioned in the tender document. The document can be downloaded from the CHiPS website www.chips.gov.in or State Portal www.cgstate.gov.in, response to this tender shall be deemed to have been done after careful study and examination of this document with full understanding of its implications. The tender document cost of Rs. 20,000/- is to be submitted vide crossed demand draft on any Nationalized bank/ Scheduled Bank in favour of CEO, Chhattisgarh Infotech& Biotech Promotional Society payable at Raipur.

1.1 **Issuer**

The CEO

Chhattisgarh Infotech& Biotech Promotional Society, Raipur

State Data Centre Building, Near Police Control Room,

Civil Lines, Raipur,

Chhattisgarh–492001

Tel: + 91 – 771 – 4014158

Fax: + 91 – 771 – 4014158

Email: ceochips@nic.in

Website: www.chips.gov.in

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

1.2 Address for Bid Submission and Correspondence

The CEO,

Chhattisgarh Infotech& Biotech Promotional Society, Raipur

State Data Centre Building, Near Police Control Room,

Civil Lines, Raipur,

Chhattisgarh–492001

Tel: + 91 – 771 – 4014158

Fax: + 91 – 771 – 4014158

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

DISCLAIMER

The information contained in this Request for Proposal (hereinafter referred to as "RFP") document provided to the Bidders, by the Chhattisgarh Infotech& Biotech Promotional Society Raipur, hereinafter referred to as CHiPS, 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 purport to contain all the information each Bidder may require. This RFP document may not be appropriate for all persons, and it is not possible for the CHiPS, 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.

CHiPS, 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.

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

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

1. Executive summary

The Wi-Fi City project is a major initiative taken by Government of Chhattisgarh aimed at creation of an enabling environment for wireless services within the educational, government, and visitor sectors across the State of Chhattisgarh. The project will be based upon the exploitation of the rapidly maturing wireless/mobile networking sector and end-user access device technologies and designed around the affordable Wi-Fi Networking standard. IP Cameras shall also be installed at outdoor location.

As part of this RFP it is aimed to enable Wi-Fi infrastructure at following locations -

1) Vidhan Sabha Campus, Raipur
2) Thakur Pyarelal Institute of Panchayat& Rural Development (TPIPRD) Campus, Nimora, Raipur
3) Nagar Nigam Campus, Raipur
4) Mekahara Hospital Campus, Raipur
5) 20 locations including areas such as educational, business, garden etc. having high public footprint across the Greater Raipur Region
6) 20 locations including areas such as educational, business, garden etc. having high public footprint across the State of Chhattisgarh

2. Tender Schedule

1	**Tender No.**	**05/CEO/CHiPS/WiFi/2015**
2	Name of the tender issuer	CEO, CHiPS
3	Date of issue of tender document	23/02/2015
4	Last date for sending Pre Bid Query	04/03/2015
5	Pre Bid Meeting	A pre-Bid meeting will be held on dated04/03/2015 at 11:30 AM at CHiPS office Raipur as per address of Communication mentioned below.
6	Last Date for Submission of	24/03/2015 up to 03:00 PM

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

	Bids	
7	Date of Opening of Tech-commercial Bids	24/03/2015 at 03:30 PM
8	Date of Commercial Bid opening	To be Informed Later
9	Place of Submission & Opening of Bids	The CEO, CHiPS State Data Center Building, Near Police Control Room, Civil Lines, Raipur, Chhattisgarh–492001 Information on the outer envelope should also include : < Name of the RFP >& "DO NOT OPEN BEFORE < insert the date & time >
10	Address of Communication	State Data Center Building, Near Police Control Room, Civil Lines, Raipur, Chhattisgarh–492001
11	Cost of Tender Document	Rs 20,000 (Rs. Twenty Thousand only) through Demand draft from any Nationalized / Scheduled Bank in favor of "CEO, Chhattisgarh Infotech& Biotech Promotional Society payable at Raipur" payable at Raipur
12	Purchase of Tender Document	RFP can be Collected from the following address on or before 24/03/2015 : **The CEO,** **Chhattisgarh Infotech& Biotech Promotional Society (CHiPS), Raipur** State Data Centre Building, Near Police Control Room, Civil Lines, Raipur 492001 by paying the document Fee of Rs. 20,000 by Demand Draft in favour of CEO, Chhattisgarh Infotech& Biotech Promotional Society payable at Raipur from any of the Nationalized / Scheduled Bank or

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

		Downloaded from www.chips.gov.inor www.cgstate.gov.in. However in this case, the bidders are required to submit the tender cost in the form of a demand draft (details mentioned in above paragraph) along with the Proposal.
13	Validity of Proposal	Proposals must remain valid 180 days after the submission date.
14	Bid Submission	Bidders must submit an **original** and **One** additional copies of each proposal along with one number of non-editable CD

3. Background information

3.1. About Chhattisgarh

Chhattisgarh, a 21st century State, came into being on November 1, 2000. Larger than Tamil Nadu, it is just the right size, and is also fortunate to have a low population density. Good Governance is the highest priority in this Fast Track State. There is both policy stability as well as political stability. Government has been kept small and the State is in excellent fiscal health.

Chhattisgarh is truly a land of opportunities. With all major minerals including diamonds in abundance, it is the richest State in mineral resources. There are mega industries in Steel, Aluminium and Cement. Chhattisgarh contributes substantially to the Human Resources of India. Several hundred students from the State qualify for admissions in prestigious academic institutions every year. Bhilai, the knowledge capital of the State, alone sends over 50 students to the elite Indian Institutes of Technology every year.

Its' large power surplus is attracting power-intensive industries, and the State is poised to become the power-hub of the nation. Its central location helps easy power transmission to any part of the country.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

12% of India's forests are in Chhattisgarh, and 44% of the State's land is under forests. Identified as one of the richest bio-diversity habitats, the Green State of Chhattisgarh has the densest forests in India, rich wildlife, and above all, over 200 non-timber forest produces, with tremendous potential for value addition.

One third of Chhattisgarh's population is of tribes, mostly in the thickly forested areas in the North and South. The central plains of Chhattisgarh are known as the "Rice Bowl" of Central India. Female literacy has doubled in the last decade, and male literacy is higher than India's average. Gender ratio is next only to Kerala. Bastar is known the world over for its unique and distinctive tribal heritage. The Bastar Dashera is the traditional celebration of the gaiety of tribals. Many virgin, unexplored tourism destinations are there is all the parts of Chhattisgarh.

3.2. About CHiPS

CHiPS, a Registered Society promoted by the Government of Chhattisgarh, is the nodal agency and prime mover for propelling IT growth and implementation of IT plans in the State. The Hon'ble Chief Minister heads the High Powered Governing Council of **CHiPS.** It includes Minister for Finance & Commercial Taxes, Minister for Commerce & Industry (including IT), Minister for Education, Minister for Panchayat& Rural Development, Chief Secretary, a representative from the Ministry of Information Technology in Government of India and eminent persons from IT industry.

CHiPS is involved as State Designated Agency (SDA) in NeGP MMP's implementation of some mega IT Projects like CHOiCE, e-Gram Suraj, GyanVinimay (e-classroom), e-Procurement, SWAN, SSDG, e-District, Bhuiyan and GIS, CSC'S. A professional approach is being adopted for the implementation of IT Projects using the services of e-governance experts and consultants from corporate and academia.

3.3. About this Request for Proposal (RFP)

CHiPS is SDA for implementing e- Governance Project in the state of Chhattisgarh. CHiPS invites on behalf of Department of Information Technology, Government of Chhattisgarh, sealed

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

bids (Technical offer / Commercial offer) from eligible, reputed System Integrators of networking, who are authorized to supply, install, commission, certify, operate and maintain Wi-Fi infrastructure for 40 Public places and 4 Government buildings across the Chhattisgarh State, for a period of Five (5) Years.

4. Eligibility criteria

The bidder must possess the requisite experience, strength and capability in providing the services necessary to meet the requirements as described in the tender documents. The bidder must also possess the technical know-how that would be required to successfully provide the services for **"Design, Supply, install, commission, and maintenance of Wi-Fi Infrastructure and IP Camera in various Public Places and Government offices across the State of Chhattisgarh",** and support services sought by the CEO, Chhattisgarh Infotech& Biotech Promotional Society, Raipur, for the entire period of the contract. The bids must be complete in all respect and should cover the entire scope of work as stipulated in the Tender document. The invitation to proposal is open to all bidders who qualify the eligibility criteria as given below:

S.No.	Specific Requirements	Documents Required
1	The Prime bidder (In case of Consortium not more than 1) should be a company registered in India under companies Act 1956, registered with the Service Tax Authorities and operating for the last Five years in IT/ITeS Services as of 31st March 2014.	Certificates of incorporation AND Service Tax Registration shall be enclosed as a proof.
2	The Prime Bidder, a single legal entity registered in India, should have an average annual turnover during each of the last three financial years (as per the last published Balance sheets), should have a minimum of **Rs. 50 Crore** that is **generated from IT Hardware supply** and their associated maintenance services,	1) Extracts from the audited Balance sheet and Profit & Loss 2) Certificate from the statutory auditor

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

	packaged software etc. The company should not be a loss making identity.	
3	The Prime Bidder (In case of Consortium) must have a proven track record of successfully implemented/implementing at least any one of the following project for, Supply, Commissioning and Maintenance of IT Infrastructure including Networking equipments in India: - One project of similar nature not less than the amount of Rs. 8 Crore; OR - Two projects of similar nature not less than the amount equal toRs.5 Crores each; for Central Government / any of the State/UT governments / PSU in India in last five years.	Completion Certificates from the client; OR Work Order + Ongoing Certificate from the client
4	The Prime Bidder and/or consortium partners should have experience of at least one order for Supply, Installation, Commissioning and Maintenance of 80 IP Cameras for Government of India/ any of the State/UT governments/ PSU.	a) Work orders confirming year and Area of activity, the value of services to be delivered to each of the projects b) Complete / Partial Completion / Satisfactory ongoing Certificate from Client

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

5	The Prime bidder should have executed/executing minimum of 1 project in India in the last three years involving the supply, installation, commissioning, AMC and Facility Management Services of WLAN active and passive components at the client site having at least 150 Nodes at Government/ Central Government/ PSU.	The bidder is required to submit documentary evidence (Purchase Order or Completion Certificate).
6	The Prime Bidder should have ISO 9001 : 2008	Copy of Valid certificate
7	The bidder has not been blacklisted by any Central / State Government (Central/State Government and Public Sector) under a declaration of ineligibility, for corrupt or fraudulent practices as of date of Bid Submission.	A Self Certified letter by an authorized signatory (must be submitted on original letter head of the bidder with signature and stamp)
8	The bidder should be authorized by original equipment manufacturing companies (or their dealers) of WLAN/ networking to supply the equipment and provide warranty on behalf of respective original equipment manufacturers confirming the following: • Authorization for bidder • Confirm that the products meet the technical & functional requirements & Products quoted are latest version / specification and not the end of sale and/or end of support and/or end of life. • OEM 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 bidder should submit the MAF (Manufacturer authorization Form) certified by the OEM for both active and passive components. The Bidder should provide the proof of the Warranty Support with the OEM.
9	The bidder should have presence in the State of Chhattisgarh with a local office. However, if the local presence is not there in the state, the selected bidder	Proof of Local presence or A Self Declaration letter by an authorized signatory for local

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

	should give an undertaking for arranging the same within one month of the award of the Empanelment.	office presence (in absence of local presence).
10	The bidder should have technical manpower (Minimum 10 certified engineers in Networking).	A List of CV with certificate of personnel on bidder's letter head
11	OEMs whose products have been offered in the bid shall have 24X7 Technical Assistance Centre (TAC) through Toll free number and the TAC is based in India.	Documentary evidence / certificate by OEM should be enclosed.
12	The bidder should furnish, as part of its proposal, an Earnest Money Deposit (EMD) of Rs. 30,00,000/-.(Rs. Thirty Lakhs only) The EMD should be in the form of a Demand Draft/ Bank Guarantee issued by a Nationalized / Scheduled Bank, in favour of CEO, Chhattisgarh Infotech& Biotech Promotional Society, payable at Raipur.	Attach original Bank Draft/ Bank Guarantee

4.1. Terms and condition for Consortium Partner

A Consortium of maximum one firm is allowed, subject to the following conditions.

- The bid shall be so as to be legally binding on all partners.
- One of the partners shall be nominated as being in charge (Prime Bidder), and submitting a power of attorney signed by legally authorized signatories of all partners as evidence of this authorization.
- The Prime Bidder shall be authorized to incur liabilities and receive instructions for and on behalf of any or all partners of the Consortium during the entire execution of the contract.
- All partners of the Consortium shall be liable jointly and severally for the execution of the contract in accordance with the contract.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

5. Instruction to the Bidders

5.1. General

All information supplied by Bidders may be treated as contractually binding on the Bidders on successful award of the assignment by the CHiPS on the basis of this RFP.

No commitment of any kind, contractual or otherwise shall exist unless and until a formal written contract has been executed by or on behalf of the CHiPS. Any notification of preferred bidder status by the CHiPS shall not give rise to any enforceable rights by the Bidder. The CHiPS may cancel this public procurement at any time prior to a formal written contract being executed by or on behalf of the CHiPS.

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

Bidders are advised to study all instructions, forms, terms, requirements 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.

Failure to comply with the requirements of this paragraph may render the Proposal non-compliant and the Proposal may be rejected. Bidders must:

- Comply with all requirements as set out within this RFP.
- Submit the forms as specified in this RFP and respond to each element in the order as set out in this RFP.
- Include all supporting documentations specified in this RFP

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

5.3. Pre-Bid Meeting & Clarifications

5.3.1. Bidders Queries

a. CHiPS shall hold a pre-bid meeting with the prospective bidders on Date & time and Address mentioned in Section 2 - "Tender Schedule" of this document.

b. The Bidders will have to ensure that their queries for Pre-Bid meeting should reach to CHiPS by email (Excel File only) on or before last date for sending pre bid queries mentioned in Fact Sheet of this document.

c. The queries should necessarily be submitted in the following format:

S. No.	RFP Document Reference(s) (Section)	RFP Page No.	Content of RFP requiring Clarification(s)	Nature of Clarification
1.				
2.				
3.				

d. CHiPS shall not be responsible for ensuring that the bidder's queries have been received by them. Any requests for clarifications post the indicated date and time may not be entertained by the CHiPS.

e. The Bidder or its official representative (maximum two representatives) will be invited to attend the pre-bid meeting. The date, time and venue of the meeting are already mentioned in this Tender Document.

f. Bidders may confirm their participation in advance.

g. The purpose of the meeting is to provide Bidders, information regarding the RFP, project requirements, and opportunity to seek clarification regarding any aspect of the RFP and the project. However, the 'CHiPS' reserves the right to hold or re-schedule the Pre-Bid meeting.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

5.3.2. Responses to Pre-Bid Queries and Issue of Corrigendum

a. The Officer notified by the CHiPS will endeavour to provide timely response to all queries. However, CHiPS makes no representation or warranty as to the completeness or accuracy of any response made in good faith, nor does CHiPS undertake to answer all the queries that have been posed by the bidders.

b. At any time prior to the last date for receipt of bids, CHiPS may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the RFP Document by a corrigendum.

c. The Corrigendum (if any) & clarifications to the queries from all bidders will be posted on the CHiPS website www.chips.gov.inor from State portal www.cgstate.gov.in

d. Any such corrigendum shall be deemed to be incorporated into this RFP

e. In order to provide prospective Bidders reasonable time for taking the corrigendum into account, CHiPS may, at its discretion, extend the last date for the receipt of Proposals.

5.4. Key Requirements of the Bid

5.4.1. Right to Terminate the Process

a) CHiPS may terminate the RFP process at any time and without assigning any reason. CHiPS 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 CHiPS. The bidders' participation in this process may result CHiPS selecting a bidder to engage towards execution of the contract.

5.4.2. RFP Document Fees

a) RFP document can be purchased at the address & dates provided in the Section 2 - "Tender Schedule" by submitting a non-refundable demand draft of Rs. 20,000/- drawn in favor of CEO, Chhattisgarh Infotech& Biotech Promotional Society payable at Raipur from any Nationalized bank/ Scheduled Bank.

b) The bidder may also download the RFP documents from the CHiPS website www.chips.gov.inor from State portal www.cgstate.gov.in. In such case, the demand draft of RFP document fees should be submitted along with Proposal. Proposals received without or with inadequate RFP Document fees shall be rejected.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

5.4.3. Earnest Money Deposit (EMD)

a) Bidders shall submit, along with their Bids, EMD of Rs. 30,00,000/- (Rs. Thirty Lakh only), in the form of a Demand Draft OR Bank Guarantee (in the format specified in Annexure V) issued by any nationalized/ Scheduled bank in favor of CEO, Chhattisgarh Infotech& Biotech Promotional Society, payable at Raipur, and should be valid for minimum 90 Days from the due date of the tender / RFP.

b) EMD of all unsuccessful bidders would be refunded by CHiPS within 60 Days on selection of successful bidder. The EMD submitted of successful bidder would be returned upon submission of Performance Bank Guarantee as per the format provided in Annexure IX.

c) EMD amount is interest free and will be refundable to the unsuccessful bidders without any accrued interest on it.

d) The bid / proposal submitted without EMD and tender fee, mentioned above, will be summarily rejected.

e) 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.

5.4.4. Submission of Responses

a. The bidders should submit their responses as per the format given in this RFP in the following manner

   i) EMD and Bid Document Fees : Original DD for Tender Document fee and EMD in the form of BG/DD original in first envelope

   ii) Eligibility Criteria & Technical Proposal - (1 Original + 1 Copy + 1 CD) in second envelope.

   iii) Commercial Proposal - (1 Original) in third envelope.

b. The Response to EMD, Technical Proposal and Commercial Proposal (As mentioned in previous paragraph) should be covered in separate sealed envelopes super-scribing “EMD”, "Technical Proposal" and “Commercial Proposal” respectively. Each copy of each bid should also be marked as "Original" OR "Copy" as the case may be.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of ‘The CEO’ Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

c. Please Note that Prices should not be indicated in the Technical Proposal but should only be indicated in the Commercial Proposal. Any bid with Commercial Proposal submitted along with Technical Proposal in same envelope will be summarily rejected.
d. The three envelopes containing copies of EMD, Technical Proposal and Commercial Proposal should be put in another single sealed envelope clearly marked "Response to RFP for < Name of the assignment > - < RFP Reference Number > and the wordings "DO NOT OPEN BEFORE < Date and Time >".
e. The outer envelope thus prepared should also indicate clearly the name, address, telephone number, E-mail ID and fax number of the bidder to enable the Bid to be returned unopened in case it is declared "Late".
f. All the pages of the proposal must be sequentially numbered and must contain the list of contents with page numbers. Any deficiency in the documentation may result in the rejection of the Bid.
g. The original proposal/bid shall be prepared in indelible ink. It shall contain no interlineations or overwriting, except as necessary to correct errors made by the bidder itself. Any such corrections must be initialled by the person (or persons) who sign(s) the proposals.
h. All pages of the bid including the duplicate copies, shall be initialled and stamped by the person or persons who sign the bid.
i. In case of any discrepancy observed by CHiPS in the contents of the submitted original paper bid documents with respective copies, the information furnished on original paper bid document will prevail over others.
j. Bidder must ensure that the information furnished by him in respective CDs is identical to that submitted by him in the original paper bid document. In case of any discrepancy observed by CHiPS in the contents of the CDs and original paper bid documents, the information furnished on original paper bid document will prevail over the soft copy.

5.4.5. Authentication of Bids

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

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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 conduct of informative and other diligence activities, participation in meetings/discussions/presentations, preparation of proposal, in providing any additional information required by CHiPS to facilitate the evaluation process, and in negotiating a definitive contract or all such activities related to the bid process.

CHiPS will in no case 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 English language only. If any supporting documents submitted are in any language other than English, translation of the same in English language is to be duly attested by the Bidders. For purposes of interpretation of the documents, the English translation shall govern.

5.5.3. 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) CHiPS shall not be responsible for any postal delay or non-receipt/ non-delivery of the documents. No further correspondence on the subject will be entertained.
d) CHiPS reserve the right to modify and amend any of the above-stipulated condition/criterion depending upon project priorities vis-à-vis urgent commitments.

5.6. Evaluation process

a) CHiPS will constitute a Proposal Evaluation Committee to evaluate the responses of the bidders.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

b) The Proposal Evaluation Committee constituted by the CHiPS shall evaluate the responses to the RFP and all supporting documents / documentary evidence. Inability to submit requisite supporting documents / documentary evidence, may lead to rejection.

c) The decision of the Proposal Evaluation Committee in the evaluation of responses to the RFP shall be final. No correspondence will be entertained outside the process of evaluation with the Committee.

d) The Proposal Evaluation Committee may ask for meetings with the Bidders to seek clarifications on their proposals.

e) The Proposal Evaluation Committee reserves the right to reject any or all proposals on the basis of any deviations.

f) Each of the responses shall be evaluated as per the criterions and requirements specified in this RFP.

5.6.1. Tender Opening

The Proposals submitted up to date and time mentioned in this RFP document by Proposal evaluation committee authorized by CHiPS, will be entitled for bid opening in the presence of such of those Bidders or their representatives who may be present at the time of opening.

The representatives (maximum two representatives) of the bidders should be advised to carry the identity card or a letter of authority from the tendering firms to identify their bonafide for attending the opening of the proposal.

5.6.2. Tender Validity

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

5.6.3. 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.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

b) Received without the Letter of Authorization (Power of Attorney)
c) Are found with suppression of details
d) With incomplete information, subjective, conditional offers and partial offers submitted
e) Submitted without the documents requested in the checklist
f) Have non-compliance of any of the clauses stipulated in the RFP
g) With lesser validity period

ii) All responsive Bids will be considered for further processing as below -

Proposal evaluation 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 define in this RFP document. The decision of the Committee will be final in this regard.

A. 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:
   I. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected.
   II. 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. The CHiPS 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/ implementation of the project including management period.
E. Proposal shall be opened in the presence of bidders representatives who intend to attend at their cost. The bidders' representatives who are present shall sign a register giving evidence of their attendance.
F. Proposal document shall be evaluated as per the following steps.
   i. Preliminary Examination of Pre-qualification/ Eligibility Criteria documents*:* The Pre-qualification document will be examined to determine whether the bidder meets the

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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 detailed evaluation of the bids shall be carried out in order to determine whether the bidders are competent enough and whether the technical aspects are substantially responsive to the requirements set forth in the Tender Document. Bids received would be assigned scores based on the parameters defined in the table below.

iii. QCBA (Quality and Cost Based Analysis.): Proposals will be evaluated as given below and the Bidders obtaining highest marks for their offering shall be declared as the Preferred Bidders. Upon acceptance of the Price of the 'Most Preferred Bidder' with or without further negotiations, CHiPS may declare the 'Most Preferred Bidder' as the 'Successful Bidder' against this RFP. The ratio of evaluation of Technical and Commercial will be 30:70 respectively.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

TECHNICAL EVALUATION MATRIX

S. No.	Criteria	Maximum Marks (weight ages)	Method of allotting marks	Required eligible document
Organization Capabilities of Bidder-				
1	Number of years of operation in India in IT/ITeS services in State Government/ Central Government/ PSU.	5	Minimum 3 years will be awarded 2 marks. For every additional completed 1 years of operation, 1 mark will be awarded to a maximum of total 5 Marks.	Enclose copy of documents of incorporation and oldest work order / agreement to execute work and work completion report
Project Experience				
2	a) Number of Project in India where Design, Supply, Commissioning and Maintenance of IT Infrastructure including Networking equipments& providing Annual Maintenance Services in India by the Prime bidder. Completed / Running /Awarded Projects. for Projects in State / Central Govt./ PSU/ Other Government Institutions	10	i) Summing up value 10 Crore of Maximum 3 Project =2 Marks ii) Summing up value 20 Crore of Maximum 3 Project =3 Marks iii) Summing up value 30 Crore of Maximum 3 Project =4 Marks	Enclose copy of work order / agreement to execute work and work completion report Mention number of project executed by the Prime bidder and enclose a list with detail of address of such project, contact person along with phone numbers

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

			iv) Summing up value 40 Crore of Maximum 3 Project =5 Marks	
	b) The Prime Bidder and/or consortium partners should have experience for Supply, Installation, Commissioning and Maintenance of 80 CCTV Cameras for Government of India/ any of the State/UT governments/ PSU.		i) 80 Cameras = 3 Marks ii)160 Cameras (Summing up of Maximum 3 Project) = 4 Marks iii) 240 Cameras (Summing up of Maximum 3 Project) = 5 Marks	Enclose copy of work order / agreement to execute work and work completion report
3(a)	Number of Projects in India where WLAN Networking Solutions for at least 150 Nodes implemented/ implementing by the the Prime Bidder and/or consortium partners in India in last three years. Completed / Running /Awarded Projects as on 31.01.15 in State / Central Govt./ PSU/ Other Government Institutions	5	i) >150 Nodes = 3 Marks ii)>300 Nodes (Summing up of Maximum 3 Project) = 4 Marks iii) >450 Nodes (Summing up of Maximum 3 Project) = 5 Marks	Enclose copy of work order / agreement to execute work and work completion report
3(b)	Single Project in India where no. of Sites for Completed / Running /Awarded for WLAN Networking Solutions as on 31.01.15 in State / Central Govt./ PSU/ Other Government	2	5 Sites =2 Marks	Enclose copy of work order / agreement to execute work and work completion report

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

	Institutions by Prime Bidder.			
3(c)	Number of Projects in India where Outdoor WLAN Networking Solutions implemented/ implementing by the Prime Bidder and/or consortium partnersin India in last three years. Completed / Running /Awarded Projects as on 31.01.15 in State / Central Govt./ PSU/ Other Government Institutions	3	i) >50-99 Nodes = 2 Marks ii)>=100 Nodes (Summing up of Maximum 2 Project) = 3 Marks	Enclose copy of work order / agreement to execute work and work completion report
Financial Capabilities				
4	Average annual turnover of last 3 FY in IT/ITeS solutions as on 31.03.2014	5	The bidders with average turnover of Rs. 50 Crore in each of last 3 years2011-12 and 2012-13 and 2013-14, will be awarded 2 marks. Thereafter 1 mark for every additional Rs. 50 (Fifty) crore will be awarded, subject to a maximum of total 5 Marks.	A certificate by Chartered Accountant along with 'Profit & Loss statements submitted with Income Tax returns' indicating sector-specific turnover is required.
Total		30		
Cost Consideration				

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

5	Consolidated rate quoted by the bidder for 5 years (including all taxes, duties etc.)	70	The bidder with the lowest quote will be awarded 70 marks and others bidders will be awarded proportionately less marks (e.g.) if the lowest quote is Rs. 1.00 lakh, the bidder quoting this price will get 70 marks. A bidder quoting R. 1.20 Lakh will get (1.0/1.2)x70=58.33 Marks.	
Grand Total		100		

Note: Minimum qualifying Marks in Technical is 70% or more out of 30 Technical Marks. Only those bidders securing more than 70% marks shall qualify for commercial proposal opening.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

5.7. Prequalification and Technical Proposal

i. Prequalification/Eligibility Criteria

Pre-qualification document has to be provided as per eligibility criteria specified under Section-4 above along with the following documentations:

a. The profile of the bidder along with required certifications that the period of validity of bids is 180 days from the last date of submission of 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 (Solution)
d. Proposed Project Plan and Implementation Schedule
e. Schedule of delivery
f. Annexure XI: Technical Specification Compliance

iii. Commercial proposal

a. Proposal letter
b. Proposal particulars including priced Bill of Material (BOM) Bidders should enclose, with their offers, full details of services offered as well as their latest on-going /completed projects.

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, by giving a written notice to the CHiPS.
b. Subsequent to the last date for receipt of bids, no modification of bids shall be allowed.
c. The Bidders cannot withdraw the proposal in the interval between the last date for receipt of bids and the expiry of the proposal validity period specified in the Proposal. Such withdrawal may result in the forfeiture of its EMD from the Bidder.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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. CHiPS 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 CHiPS shall not entertain any request for clarification from the Bidder regarding such local conditions.
c. It is the Bidder's responsibility that such factors have been properly investigated and considered before submitting the proposal. No claim, what-so-ever, including that for financial adjustment to the contract awarded under the bidding document will be entertained by the CHiPS. Neither any change in the time schedule of the contract nor any financial adjustments arising there-of shall be permitted by the CHiPS on account of failure of the Bidder to know the local laws / conditions.
d. The Bidder is expected to visit and examine and study the location of Govt. offices in CG and its surroundings and obtain all information that may be necessary for preparing the proposal at its own interest and cost.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

5.11. Contacting the CHiPS, 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 CHiPS officers after office hours and/or outside CHiPS office premises, from the time of the proposal opening till the time the Contract is awarded.

5.12. Eligibility Criteria

The bidder shall meet the criteria for eligibility mentioned in the Tender document. The bidder must have registration certificate, registration under Labour Laws Contract Act, valid sales tax registration certificate and valid service tax registration certificate, whichever is applicable, for this Tender. A Consortium of maximum one firm will be allowed.

5.13. Tentative Schedule of Events

Tentative schedule of events regarding this tender shall be as per the dates and time given in the Section-2 of this document.

5.14. Opening of Proposal

First, the envelope containing Earnest Money Deposit (EMD) will be opened, and if found, that the bidder has furnished all the documents in the prescribed manner, then the second envelope containing Technical Proposal will be opened. The commercial proposal would be opened in presence of technically short-listed bidders. The Evaluation Committee or its authorized representative will open the tenders. Sequence of opening is as follows:

a. EMD Envelope
b. Technical Proposals
c. Commercial Proposals

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

5.15. Deciding Award of Contract

a. The CHiPS reserves 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 CHiPS and its appointed representative on the date asked for, at no cost to the CHiPS. The CHiPS may at its discretion, visit the office of the Bidder any-time before awarding the contract.

b. CHiPS shall inform those Bidders whose proposals did not meet the eligibility criteria or were considered non-responsive, informing that their Commercial Proposals will be returned unopened after completing the selection process. CHiPS shall simultaneously notify those Bidders who qualify for the Evaluation process as described in this Tender Document, informing the date and time set for opening of Commercial Proposals. The notification may be sent by mail or fax

c. The bidder's name, the Proposal Price, the total amount of each proposal and other such details as the Tendering Authority may consider appropriate, will be announced and recorded by the CHiPS at the opening of bid

d. CHiPS shall inform the Bidder whose proposal is accepted via issuance of Letter of Intent (LoI) in duplicate copy. Bidder shall acknowledge the LoI and return the duplicate copy duly sealed and signed, within seven days from the issue of LoI by CHiPS

e. After acceptance of LoI the bidder will be conduct site survey for list of location provided in LoI. After Approving of Site Survey report and Bill of Material (BoM) by CHiPS, Performance Security shall be deposited as specified in this document for entering into a Contract with CHiPS

f. Special Condition for Awarding the Contract -

   i. CHiPS will issue the LoI to only one successful bidder.

   ii. CHiPS will sign the contract after Site Survey report and BoM will be approved by CHiPS.

   iii. CHiPS reserves the right to issue work order / purchase order for additional sites on the same terms and conditions as specified in the contract/agreement with in 1 Year from date of issuance of Agreement.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

iv. The prices for all the Items shall be valid for one year period from date of Agreement. CHiPS may its own discretion extend the validity of prices for one more year after satisfactory performance found in first year.

5.16. Confidentiality

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 process and methods used by the Bidder in rendering the services hereunder are the Confidential Information of the Bidder

a. 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 what-so-ever
b. 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 term of this tender and such rules, policies, standards, guidelines and procedures by its employees or agents
c. 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.
d. The obligations of confidentiality under this section shall survive rejection of the contract

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

5.17. Publicity

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

5.18. Execution of Contract

After acceptance of LoI the bidder will be conduct site survey for list of location provided in LoI. After Approving of Site Survey report and Bill of Material (BoM) by CHiPS, Performance Security shall be deposited as specified in this document for entering into a Contract with CHiPS

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 date of signing of contract. CHiPS will direct to selected bidder for start the work partially/ fully subjected to release of Agreement/ purchase order/ work order.

5.20. Terms and Conditions: Applicable Post Award of Contract

5.20.1. Termination Clause

i. Right to Terminate the Process

CHiPS reserves the right to cancel the contract placed on the selected bidder and recover expenditure incurred by CHiPS 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 time lines prescribed in the RFP and the extension if any allowed, it will be a breach of contract. The CHiPS reserves its right to cancel the order in the event of delay and forfeit the bid security as liquidated damages for the delay.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

d. If deductions of account of liquidated damages /Penalty exceeds more than 20% of the total contract price.

e. In case the selected bidder fails to deliver the quantity as stipulated in the delivery schedule, CHiPS reserves the right to procure the same or similar product from alternate sources at the risk, cost and responsibility of the selected bidder.

f. After award of the contract, if the selected bidder does not perform satisfactorily or delays execution of the contract, CHiPS 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 the additional expenditure, which CHiPS may have to incur in executing the balance contract. This clause is applicable, if for any reason, the contract is cancelled.

g. CHiPS reserves 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

a. In the event of termination of the Contract due to any cause whatsoever, whether consequent to the stipulated term of the Contract or otherwise, CHiPS shall be entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective business continuity of the Service(s) which the Vendor shall be obliged to comply with and take all available steps to minimize loss resulting from that termination/breach, and further allow the next successor Vendor to take over the obligations of the erstwhile Vendor in relation to the execution/continued execution of the scope of the Contract.

b. Nothing herein shall restrict the right of CHiPS to invoke the Guarantee and other guarantees, securities furnished, enforce the Deed of Indemnity and pursue such other rights and/or remedies that may be available CHiPS under law or otherwise.

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

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

5.20.2. Liquidated Damages

a. Notwithstanding CHiPS s right to cancel the order, liquidated damages for late delivery at 1% (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 the value of the order value. For eg. If Server is delivered but delivery of power cord, to be supplied along with Server, is delayed then LD would be calculated on the total cost of the Server and not on the cost of the power cord alone.
b. Liquidated damages for late commissioning at 1% (One percent) of the order value per week will be charged for every week s delay in commissioning to a maximum of 10% of the value of the order value.
c. Please note that the above LD for delay in delivery and delay in commissioning are independent of each other and shall be levied as the case may be.
d. CHiPS reserve its right to recover these amounts by any mode such as adjusting from any payments to be made by CHiPS to the bidder. Liquidated damages will be calculated on per week basis.

5.20.3. Acceptance Tests

The selected bidder in presence of the CHiPS authorized officials will conduct acceptance test at the site. The test will involve installation and commissioning and successful operation of the hardware, software, communication equipment etc. No additional charges shall be payable by the CHiPS for carrying out these acceptance tests.

5.20.4. Audit by Third Party

CHiPS at its discretion may appoint third party for auditing the activities of onsite services and operations of entire services provided to the CHiPS.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

5.20.5. Penalty

a. The Bidder shall perform its obligations under the agreement entered into with the CHiPS, in a professional manner.
b. In the event of failure of maintaining the SLA, penalty should be imposed on basis of the cost of concerned hardware equipment as per mentioned in SLA would be levied subject to a maximum of 20% of the total hardware / supply/service cost.
c. CHiPS may recover such amount of penalty from any payment being released to the Bidder, irrespective of the fact whether such payment is relating 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 CHiPS has to take corrective actions to ensure functionality of its property, the CHiPS reserves the right to impose penalty, which may be equal to the cost it incurs or the loss it suffers for such failures.
    i. CHiPS 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 Bidder.
    ii. The CHiPS shall implement all penalty clauses after giving due notice to the bidder.
    iii. If the Bidder fails to complete the due performance of the contract in accordance with the specification and conditions of the offer document, the CHiPS 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 CHiPS shall endeavour 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 seven (7) days of receipt of the notice.
b. Matter will be referred for negotiation between Officer nominated by CHiPS 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, does not settle by negotiation in the manner as mentioned above, the same may be resolved exclusively by arbitration and such dispute may be

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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 Arbitration and Conciliation Act, 1996 or any statutory modification or re-enactment thereof. Each Party to the dispute shall appoint one arbitrator each 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/e-mailed 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 on date of delivery if hand delivered & if sent by registered post than on 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 CHiPS as the case may be which they could not foresee or with a reasonable amount of

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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 occurrence of such a cause, notifies the other in writing of such causes. The bidder or CHiPS 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 termination of contract by parties and all obligations expressed quantitatively shall be calculated as on date of termination. Notwithstanding this, provisions relating to indemnity, confidentiality survive termination of the contract.

Force Majeure shall not include any events caused due to acts/omissions of such Party or result 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 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 event. The CHiPS 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 above.

In case of a Force Majeure, all Parties will endeavour to agree on an alternate mode of

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

performance in order to ensure the continuity of service and implementation of the obligations of a party under the Contract and to minimize any adverse consequences of Force Majeure.

5.20.9. Failure to agree with 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 CHiPS 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 Service Level Agreement (hereinafter referred to as SLA) is to clearly define the levels of services which shall be provided by the successful bidder to the CHiPS for the duration of this contract. The benefits of this SLA are to:

a. Trigger a process that applies to successful Bidder's and CHiPS when that service provided falls below an agreed upon threshold, or target level.
b. Makes explicit the performance expectations that CHiPS has from the Successful bidder.

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

5.22. 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 services will be as follows:

a. **Delay in execution of project:** If the successful bidder does not complete the project within the stipulated period given in the Scope of Work, a penalty at the rate of 1% per week of the corresponding contract value will be levied for a maximum period of eight weeks. If the services are not completed even within this eight-week period, then the contract will be

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

liable for termination, in part or whole, at the discretion of CHiPS and at the risk and cost of the selected Bidder.

b. **Delay in Site Design:** In case the Bidder fails to visit the site and complete the site design within the period allowed in Scope of Work, the Purchaser will be entitled to forfeit the 5% for each site from Security Deposit provided by the Bidder.

c. **Design and Acceptance Test:** If any variation found in the design approved by CHiPS at the time of Final Acceptance Test (FAT), a penalty at the rate of 2% of total value for that contract will be levied and the contract will be liable for termination, in part or whole, at the discretion of CHiPS and at the risk and cost of the successful bidder. CHiPS will pay the actual amount of work after deduction of penalty.

d. **Onsite Warranty Support:** The successful bidder will provide five Years on-site warranty support for all hardware parts supplied by the bidder. If any part/component is found defective during the contract period, the successful Bidder shall repair/ replace the defective device within 48 hours of complaint received from CHiPS. A penalty of Rs. 1000/- per call on Quarterly payment/ Performance Security Deposit will be levied and the contract will be liable for termination in part or whole at the discretion of CHiPS and at the risk and cost of the successful bidder.

e. **Helpdesk & Support:** Service support during the contract period - The supplier should provide post implementation support for five years. The Supplier shall provide a website or any suitable means for electronic logging of complaints by the User or Department or Purchaser. The system should be able to acknowledge a receipt as a proof of having lodged a complaint by the User or Department or the Purchaser. Alternatively the Supplier shall provide a telephone number at which complaints can be lodged.

** Note - The time taken by the contractor to trouble - shoot and fix the problem from the time the call has been logged at the Helpdesk till the time the problem has been fixed*

5.23. SLAs

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

- Downtime percentage for PBH(%)=(Total Downtime during PBH)x100 /Total PBH Time in a quarter

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

- Downtime percentage for ESH(%)=(Total Downtime during ESH)x100/ Total ESH Time in a quarter
- Up time Percentage (%)=100-Downtime percentage (%)

Description	**Availability during PBH**	**Penalty**	**Availability during ESH**	**Penalty**
Central & Site Equipment	>= 99.5%	Nil	>= 95%	Nil
	Less by 1%	0.5% of quarterly payment	Less by 1%	0.5% of quarterly payment
	Less by >1% but < 2%	1% of quarterly payment	Less by >1% but < 2%	1% of quarterly payment
	Less by >2% but <5%	2% of the quarterly payment	Less by >2% but <5%	2% of the quarterly payment
	Less by >5% but <20%	5% of the quarterly payment	Less by >5% but <20%	5% of the quarterly payment
	<80%	No quarterly payment	<75%	No quarterly payment

Limitation of Penalties after Starting of the work and services the maximum penalty should be levied as described below:

i. The total deduction should not exceed 20% of the total project cost.
ii. If bidder fails to deliver the services in stipulated time-frame on account of any reasons will be deemed to be an event of default and termination. This shall be governed by the terms & conditions defined in subsequent sections in General Conditions of the Contract.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

5.24. Man Power Deployment

SI has to depute from the (Date of Commissioning) "DoC", One (1) dedicated Network Administrator cum Manager at Network Operation Centre (NOC). Additionally, One (1) Network support engineer on per-district basis shall also be provided for handling day-to-day issues/problems/monitoring of the wireless network and to co-ordinate with CHiPS/other government offices. Two (2) Network support engineer shall be deployed for Raipur District during the contract period. The Selected Bidder shall be deployed Two (2) Help Desk Support Executive at Raipur for 16x7x365 days call centre operation during the contract period.

5.25. Contract Performance Security

1. Within 21 days after the receipt of notification of award of the Contract from the CHiPS, the successful Bidder shall furnish Contract Performance Guarantee to the CHiPS, Raipur (CG), which shall be equal to 10% of the contract value has to deposit in the form of FDR/TDR/DD/BG of any nationalized /Scheduled Bank in the name of CEO, Chhattisgarh Infotech& Biotech Promotional Society payable at Raipur, valid for a Period of Five year.
2. The proceeds of the performance guarantees shall be payable to the Purchaser as compensation for any loss / penalties resulting from the Suppliers failure to complete its obligations under the contract.
3. The performance guarantee will be discharged by the purchaser and returned to the Supplier within 60 days following the date of completion of the Suppliers performance obligations, including any warranty obligations under the Contract.

5.26. 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, there-under or any amendment thereof governing inter-alia customs, stowaways, foreign exchange etc. and shall keep CHiPS indemnified in this regard.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

5.27. Contract administration

a. Either party may appoint any individual / organization as its authorized representative through a written notice to the other party. Each Representative shall have the authority to:
   i. 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
   ii. 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 authorized 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 CHiPS 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 CHiPS representative during the course of this contract in relation to the performance of its obligations under the terms of this contract and the Tender.

d. A committee comprising of representatives from the CHiPS and the Selected Bidder shall meet on a quarterly basis to discuss any issues / bottlenecks being encountered. The Selected Bidder shall draw the minutes of these meetings and circulate to the CHiPS.

5.28. Right of Monitoring, Inspection and Periodic Audit

The CHiPS 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 CHiPS may demand, and upon such demand being made, the selected bidder shall provide with any document, data, material or any other information required to assess the progress of the project.

The CHiPS shall also have the right to conduct, either itself or through any another agency as it may deem fit, an audit to monitor the performance by the Selected Bidder of its obligations/functions in accordance with the standards committed to or required by the CHiPS

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

and the Selected Bidder undertakes to cooperate with and provide to the CHiPS/ any other Consultant/ Agency appointed by the CHiPS, all documents and other details as may be required by them for this purpose. Any deviations or contravention identified as a result of such audit/assessment would need to be rectified by the Selected Bidder failing which the CHiPS may, without prejudice to any other rights that it may have, issue a notice of default.

5.29. Chhattisgarh Infotech& Biotech Promotional Society, Raipur's Obligations

The CHiPS 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.

CHiPS shall ensure that timely approval is provided to the selected Bidder, where deemed necessary, which should include diagram / plans and all specifications related to services required to be provided as part of the Scope of Work.

5.30. 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 CHiPS, out of premises, without prior written permission from the CHiPS.

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

5.31. Indemnity

The Selected Bidder shall execute and furnish to the CHiPS, a Deed of Indemnity in favour of the CHiPS, in a form and manner acceptable to the CHiPS, indemnifying CHiPS 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,

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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 it's team or any Agency/ Third Party in connection with or incidental to this Contract; or
b. Any breach of any of the terms 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 project cost in favour of the CHiPS.

5.32. Prices

Prices quoted must be firm and shall not be subject to any upward revision on any account what-so-ever throughout the period of contract. CHiPS however reserve the right to review and negotiate the charges payable.

The Selected Bidder shall provide "Most Preferred Customer" status to CHiPS.

5.33. Special Conditions of Contract

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

5.34. Payment Schedule

All bills will be submitted to Purchaser accordance to procedure mentioned in this tender document.

The fee amount will be equal to the amount specified in 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:

S. No.	Payment Schedule	Fee Payable	Remarks

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

1.	On Supply of Equipment at NOC and Site provided as per Agreement/ Purchase Order/Work Order	40% of the Agreement/ Purchase Order /Work Order Value on Per Site Basis.	The Bidder should provide delivery Challan's for successful delivery and Invoices
2.	On Supply and Successful Installation of WLAN and Camera System, including Design, site preparation, Supply and installation as per Purchase Order/Work Order with Final Acceptance Test Per Site Basis	40% of the Purchase Agreement/ Order/Work Order Value on Per Site Basis.	The Bidder should provide Final Acceptance Test Report for Site wise with Invoice.
3.	After Installation of WLAN set up and Final Acceptance test as per Agreement/ Purchase Order/Work Order	1% Per on QGR basis (total 20 instalment) for Five years.	Quarterly Invoice's

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

5.35. 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 CHiPS which it deems proper and necessary to execute the scope of work under the Contract, or

b. The Selected Bidder has failed to adhere to anything as laid down in the Contract, or if the Selected Bidder has fallen short of matching such standards/targets as the CHiPS may have

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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 CHiPS;

c. The Selected Bidder has failed to remedy a failure to perform its obligations in accordance with the specifications issued by the CHiPS, 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 CHiPS; 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 work of this Tender document or has failed to adhere to any amended direction, modification or clarification as issued by the CHiPS during the term of this Contract and which the CHiPS deems proper and necessary for the execution of the scope of work under this Contract;

e. The Selected Bidder has failed to demonstrate or sustain any representation or warranty made by it in this Contract, with respect to any of the terms of its Proposal, the Tender and this Contract

f. There is a proceeding for bankruptcy, insolvency, winding up or there is an appointment of receiver, liquidator, assignee, or similar official against or in relation to the Selected Bidder.

g. The Selected Bidder / Bidder's Team has failed to comply with or is in breach or contravention of any applicable laws.

Where there has been an occurrence of such defaults inter alia as stated above, the CHiPS 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 issuance of a default notice to the Selected Bidder by the CHiPS and the Selected Bidder fails to remedy the default to the satisfaction of the CHiPS, the CHiPS 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 CHiPS.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

5.36. Liquidated Damages

Subject to clause for Force Majeure, if the bidder fails to complete the services under Project scope of work before the scheduled completion date or the extended date or if the Selected Bidder repudiates the contract before completion of the work, the CHiPS, at its discretion, may without prejudice to any other right or remedy available to it under the contract, recover a maximum of 10 percent of the project cost from the Selected Bidder, as Liquidated Damages (LD).

In case it leads to termination, CHiPS 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 days notice period, the Selected Bidder initiates remedial action acceptable to the CHiPS.

The CHiPS 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 CHiPS 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.

5.37. Dispute Resolution

The CHiPS 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 CHiPS and the Selected Bidder are unable to resolve amicably a contract dispute, either party may require that the dispute be referred for resolution to the formal mechanism specified in clauses below.

- In the case of a dispute or difference arising between the CHiPS 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 Arbitrator as indicated in this RFP. The award of

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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 the Raipur, India.
- The CHiPS may terminate this contract, by giving a written notice of termination of minimum thirty days, to the Selected Bidder, if the Selected Bidder fails to comply with any decision reached consequent upon arbitration proceedings pursuant to above Clause.

5.38. 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.

5.39. Conflict of interest

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

5.40. 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.

5.41. 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 parties shall be written in English language only.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

5.42. "No Claim" Certificate

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

5.43. 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 CHiPS first gives its written consent to the selected bidder.

5.44. General

a. Relationship between the Parties

i) Nothing in the Contract constitutes any fiduciary relationship between the CHiPS and Selected Bidder/ Bidder's Team or any relationship of employer employee, principal and agent, or partnership, between the CHiPS 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) CHiPS 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 CHiPS.

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

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

survive the expiry or termination of this Contract and in relation to confidentiality, the obligations continue to apply unless CHiPS notifies the Selected Bidder of its release from those obligations.

d. Entire Contract

The terms and conditions laid down in the Tender and all annexures 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 in accordance with the laws of India.

f. Jurisdiction of Courts

The High Court of India at Bilaspur, Chhattisgarh has exclusive jurisdiction to determine any proceeding in relation 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 "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

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

follows and shall be deemed received two days after mailing or on the date of delivery if personally delivered:

To
The CEO,
Chhattisgarh Infotech& Biotech Promotional Society, Raipur
SDC Building, Near Police Control Room,
Civil Lines Raipur- 492 001 (Chhattisgarh)
Tel: + 91 – 771 – 4014158
Fax: + 91 – 771 – 4014158
Email: ceochips@nic.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 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.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

j. Modification

Any modification of the Contract shall be in writing and signed by an authorized 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 CHiPS 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 CHiPS 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 CHiPS under Clause above and the rights and remedies which the CHiPS may have under the LoI or the Agreement, if an Bidder or

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Systems Implementation Agency, 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 practice or restrictive practice during the Selection Process, or after the issue of the LoI or the execution of the Agreement, such Bidder or Hardware Bidder shall not be eligible to participate in any tender or RFP issued by the CHiPS during a period of < period, suggested 2 (two) > years from the date such Bidder or Hardware Bidder, as the case may be, is found by the CHiPS 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:

- "corrupt practice" means
  (a) 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 CHiPS who is or has been associated in any manner, directly or indirectly with the Selection Process or the LoA 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 CHiPS, shall be deemed to constitute influencing the actions of a person connected with the Selection Process); or
  (b) 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 CHiPS 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;

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

- "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;
- "undesirable practice" means
  (a) establishing contact with any person connected with or employed or engaged by CHiPS with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Selection Process; or
  (b) having a Conflict of Interest; and
- "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. Arbitration

CHiPS 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, CHiPS 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 Chief Executive Officer, Chhattisgarh Infotech& Biotech Promotional Society, Raipur, as single party Arbitrator in accordance with the Arbitration and Conciliation Act, 1996. Decision of arbitrator shall be final and binding to all parties.

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

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

6. Scope of work

6.1. Definitions

In this document, the following terms shall be interpreted as indicated:

a) "The Contract" means the agreement entered into between the CHiPS and the Bidder, as recorded in the Contract Form signed by the parties, including all the attachments and appendices thereto and all documents incorporated by reference therein.

b) "The Contract Price" means the price payable to the Bidder under the Purchase Order for the full and proper performance of its contractual obligations.

c) "The Goods" means all the hardware / networking equipment, machinery and/or other materials which the Bidder is required to supply to the purchaser under the contract.

d) "Services" means services ancillary to the supply of the Goods, such as transportation and insurance and any other incidental services, such as installation, commissioning, technical assistance, training and other obligations of the Bidder covered under the Contract.

e) "The Purchaser" means The Chief Executive Officer, Chhattisgarh Infotech& Biotech Promotion Society on behalf of Department of Information Technology, Government of Chhattisgarh.

f) "The Bidder" means the successful firm supplying the Goods and Services under this Contract.

g) "Day" means a working day.

h) "ITB" means Instructions to Bidders.

6.2. Broad scope

1) Government of Chhattisgarh, as part of its on-going IT reforms, intends to establish public wireless networks in various government buildings and other public places in Raipur and few other municipalities of the state. It aims to utilize the benefits of IT to bring about radical changes in the way various processes are carried out presently to improve the accountability, transparency & effectiveness in Government administration. Emphasis to be given on 24x7 delivery of G2C services through this public wireless platform.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

2) Proposed wireless network will provide access to different categories of users – government officials and citizens. The core aim behind this initiative would be to enable citizen's access to G2C services with their handheld devices at designated public/utility/municipality facilities such as parks, tourist spots, government offices, important market complexes and hospitals.
3) A bidder will be selected to act as the System Integrator (SI) for establishment of wireless Internet access service (Wi-Fi) and IP Camera through supply, installation, testing and commissioning of various hardware/software as per scope and thereafter to provide warranty as well as facility management services for a period of 5 years from the date of commissioning.
4) As part of this RFP it is aimed to enable Wi-Fi infrastructure& IP Camera at following locations –
   a. Wi-Fi infrastructure at Vidhan Sabha Campus, Raipur (Indoor Location)
   b. Wi-Fi infrastructure at Thakur Pyarelal Institute of Panchayat& Rural Development (TPIPRD) Campus, Nimora, Raipur (Indoor Location)
   c. Wi-Fi infrastructure at Nagar Nigam Campus, Raipur (Indoor Location)
   d. Wi-Fi infrastructure at Mekahara Hospital Campus, Raipur (Indoor Location)
   e. Wi-Fi infrastructure& IP Camera at 20 locations including areas such as educational, business, garden etc. having high public footprint across the Greater Raipur Region (Outdoor Location)
   f. Wi-Fi infrastructure & IP Camera at 20 locations including areas such as educational, business, garden etc. having high public footprint across the State of Chhattisgarh (Outdoor Location)
5) Proposed wireless network will be in a clustered architecture spanning across few designated areas in a municipality where as specific location of public use/importance will be called as "SITE" and the overall centralized location for control and command will be called as "NOC" (Network Operations Centre).
6) NOC shall be established at SDC Building, Civil Lines, Raipur. The NOC shall comprise of various Network components like Core Switch, Server, Firewall, Controller, Video Management System (VMS), etc. capable to command and control the Wi-Fi and IP Camera for Outdoor sites and Wi-Fi system for Indoor sites.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

7) The Internet Bandwidth of minimum 10Mbps per site shall be made available at NOC by CHiPS. The SI shall be responsible to establish connectivity from NOC to each Site through leased/MPLS/RF connection for traffic requirements relating to wireless access for citizens, NMS, EMS and IP Camera. The proposed solution should be capable to provision a bandwidth of minimum 10Mbps from NOC to each SITE and upgradable to 20 MbPS.
8) 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.
9) The Web based user access Portal Solution requirement for User registration, authentication etc. will be as follows:
    a. User registration through captive portal and/or self-service portal for first time users. Integration capability for validating a new user based on his primary identification attribute such as "Aadhaar" and related secondary attributes such as mobile phone number will be required.
    b. The Portal shall be capable to manage any no. of sites and users considering future up-gradation/scalability requirement.
    c. The proposed solution should be capable to register any no. of users. Whenever any registered user connects to the wireless network, he/she should be asked for providing user name and password and then he/she should be authenticated centrally through an external user Database. The infrastructure for establishing the external database shall be provided by CHiPS.
    d. Offered solution should be configured and integrated with SMS gateway for intimating username and password / One Time Password (OTP) through SMS on user's mobile phone number post his registration is successful.
    e. Offered solution should support different charge plans for Internet access based on lease time, bandwidth, charges, validity period etc.
    f. Offered solution should support payment gateway integration for online payment by users to avail selected plans.
    g. Offered solution should maintain a log of such users by storing his user name, MAC & IP addresses, access time and duration, sites visited etc.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

h. Offered solution shall have requisite capability to provide suitable self-service Web based user access Portal facility for registered users in respect of their user profile and plan management.

i. Unauthorized users shall not anyway be allowed Internet/Intranet access. The proposed system should have facility to block such users permanently.

j. Offered solution shall allow wireless access through various kinds of devices such as smart phones, laptops, pads, and desktops.

k. The proposed solution shall be capable of generating MIS reports like site wise report, periodic report, etc.

10) VMS shall be installed at NOC to manage, monitor and control the entire IP Cameras. The VMS should provide a comprehensive set of video management features and capabilities. Centralized VMS solution shall be deployed at the NOC for storage of IP Camera footages.

11) The offered solution should be capable of storing the footage backup up to 15 days, The 72TB Raw storage capacity of server should be provided from day 1. If any additional internal storage is required, than 4 TB storage will be provided in available slots.

12) A LED Display shall be installed at a central location wherein all the feeds from various IP cameras can be viewed 24x7.

13) As the SITE can be an indoor area typically that inside of a building or a moderate-to-heavily populated outdoor, proposed solution should be able to cater two of the important problems in such areas on a per-SITE basis – density and connectivity.

14) Indoor access points shall be installed at indoor sites to provide seamless wireless Internet connectivity within the indoor site. The user(s) inside the indoor site shall be categorised in two categories (SSID) –

    a. Employee login

    b. Guest Login

15) The New/ Existing user shall be authenticated by the Web based user access Portal installed at NOC.

16) Proposed wireless solution is basically intended to provide 24x7 wireless Internet access service in the Indoor SITE(s)

17) Outdoor access points shall be installed at Outdoor sites to provide seamless wireless Internet connectivity within the Indoor site.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

18) SI shall erect RCC base for outdoor enclosure and antenna masts including required ground-earth at SITE.
19) Offered solution shall allow seamless roaming between different access points in a particular SITE provided he/she remains in the Minimum 85-foot radius of the nearby wireless access point(s).
20) Proposed wireless solution is basically intended to provide wireless Internet access service in Outdoor SITE(s) with inbuilt provision for limited-time free access or charged access based on pre-paid charge plans.
21) Keeping all the factors such as highest permissible gain from the wireless access point plus it's antenna, relative gain of the radio module in handheld devices such as smart phones, pad and laptops, relative interference issues in indoor versus outdoor, it is highly desired that a wireless access point mounted atop of a 10 feet antenna mast must be able to cater to wireless access requirements in the surrounding area of 85-foot radius in the outdoor and 45-foot radius in open indoor.
22) IP Cameras shall be installed at all or few Outdoor location.
23) Each SITE will also offer IP Camera for remote monitoring of such outdoor SITE(s) on a 24x7 basis. Centralized VMS solution shall be deployed at the NOC for storage of footages of IP Camera for regulatory compliance as well as administrative purposes.
24) Necessary electrical power shall be made available by CHiPS to SI of 1-phase/230VAC type. It will be SI's responsibility to extend the electrical power within each Site as per requirement.
25) IP based management platforms based on managed PDUs shall be deployed in SITE(s) for comprehensive remote management and monitoring of facilities including electrical power, temperature, humidity, and power backup devices. Centralized management platform for monitoring and management of such PDUs shall be adopted.
26) Proposed wireless solution should conform to applicable WPC regulations for both indoor and outdoor use of license-free spectrums in terms of EIRP. A declaration to this effect must be submitted which must be supplemented by periodic compliance reports during the project period.
27) Proposed wireless network shall utilize dual-band dual radio wireless access points based on the IEEE 802.11n standard with minimum 3x3:3 MIMO configuration for the outdoor to

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

achieve an over-the-air data rate of 450Mbps per-radio and minimum 2x2:2 configuration in the indoor to achieve an over-the-air date rate of 300Mbps per-radio.

28) Only Omni-directional antennas based on MIMO will be used along with the wireless access points except in few cases directional/sectorized antennas will also be considered. The basic rule of thumb to be adopted here is that antennas of minimum 6dBi gain in 2.4GHz and 8dBi gain in 5GHz are to be used in outdoor. Similarly, antennas of minimum 4dBi gain in 2.4GHz and 5dBi gain in 5GHz are to be used in indoor. Higher gain antennas can be used, but overall allowable EIRP as well as wireless coverage area should not be compromised.
29) Proposed wireless solution will have inbuilt provision to block IEEE 802.11a/b/g clients to ensure the overall performance level at IEEE 802.11n only. However, support for 802.11a/b/g clients must be there in the offered solution.
30) Necessary power backup arrangements are to be made by SI at SITE(s) with minimum standby duration of 1 hour.
31) Offered solution shall support grouping of wireless access points (both indoor as well as outdoor) on a per-SITE basis for superior management and control so that a particular SITE or any wireless device on any of the SITE(s) can be taken offline for configuration and/or change management.
32) NOC will house all centralized services such as DNS, Proxy, Web based user access Portal in HA configuration along with other required facilities like NMS, EMS and Wireless controllers. Link load balancers as well as Internet Security firewalls will also be deployed in the NOC in HA configuration.
33) Selected System Integrator(SI) shall be responsible for the following activities in brief:
    a. Site survey to assess and confirm exact requirement on a per-site basis after issuance of LoI.
    b. Preparation of Site Survey report with Bill of Material (BoM) and shall be approved by CHiPS
    c. Supply of hardware and software as per scope on site/location basis.
    d. Installation and configuration of supplied hardware and software at NOC and SITE(s).
    e. Integration of installed hardware/software with payment gateway and SMS gateway as per scope.
    f. Testing and commissioning of supplied hardware and software.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

g. Maintenance & facility management for the installed hardware and software for a period of 5 years from the date of commissioning.
h. Deployment of Manpower as per requirement mentioned in this RFP.

6.3. Broad Outline of Scope of Work, Deliverables and Timeline

1) Site survey:
    a. SI shall undertake site survey of specified SITE(s) and submit a SITE-wise survey report to CHiPS mentioning the quantities of items to be installed and their location at each SITE.
    b. SI shall also incorporate changes (if any) suggested by CHiPS and submit a final site survey report for approval.
    c. After approval the Survey report CHiPS will sign the contract with selected bidder.
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 CHiPS/ respective location within the stipulated time period.
    b. SI shall ensure that all software licenses are in the name of CHiPS.
    c. CHiPS may conduct inspection of the delivered items in accordance with the RFP.
3) Installation & configuration of supplied hardware/software at SITE:
    a. SI shall erect RCC base for outdoor enclosure and antenna masts including required ground-earth at SITE.
    b. SI shall lay STP cables from outdoor enclosure to each antenna mast in an underground PVC duct.
    c. SI shall install and configure hardware/software such as wireless access point, IP CCTV camera, switch, UPS, and PDU at approved locations in the SITE(s).
    d. Required electrical power shall be made available to IP of 1-phase/230VAC type.
4) Installation & configuration of NOC hardware/software:
    a. SI shall install the wireless controllers, security firewalls, link load balancers, switches, servers, and other software at the NOC facility.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

b. Web based user access Portal server shall be configured using an existing external database (Oracle/MS SQL) from SDC (if required).
c. All necessary infrastructures like rack space, database, power and cooling would be provided at the NOC. But patch cords and power cables shall have to be provided by SI.
d. SI shall configure all SITE items in consultation with CHiPS. The IP schema for all SITE and NOC items, and DHCP scopes will be provided by CHiPS.

5) Standards and policies:
   a. SI shall ensure a secure wireless connectivity and intranet/Internet access through user name and password to all the subscribers with centralized authentication mechanism.
   b. SI shall ensure the uniqueness of usernames and simultaneous multiple logons shall not be allowed in any case.
   c. Wireless access points shall be configured with relevant cryptographic keys to ensure that only authorized and authenticated users can use the wireless service.
   d. Proposed wireless network shall be secure and in compliance to relevant industry standard security requirements. SI shall suggest and help in deploying various policies at various levels to prevent any intrusion/attack in the wireless network.
   e. SI shall be liable for legal proceeding/penalties as per applicable law/act in force, in case of misuse of the wireless network.
6) Integration of proposed solution:
   a. SI shall be responsible for integration with existing networks at CHiPS, if required.
   b. SI shall be responsible for integration with existing or 3rd party payment gateway.
   c. SI shall be responsible for integration with existing or 3rd party SMS gateway.
7) Testing & commissioning:
   a. SI shall be responsible for preparation and submission of detailed FAT plans/schedules/procedures/formats. After acceptance of FAT reports, entire solution would be deemed to have commissioned.
   b. FAT of each SITE shall include following essential tests.
      i. Footprint test: minimum coverage area should be 85-foot radius in ideal condition.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

ii. SSID: The SSID given by CHiPS should be discoverable by any 802.11n wireless enabled device.

iii. IEEE 802.11a/b/g/n: wireless network should support IEEE 802.11a/b/g/n standards.

iv. Security: compliance to security requirements as defined by CHiPS.

v. Logs: compliance of authentication, usage, and other required logs defined by CHiPS.

vi. Performance: a file download test from nay http/ftp server installed at NOC using FTP would be done to verify the effective bandwidth/throughput per authenticated user.

c. After successful FAT, SI shall be responsible for obtaining installation and commissioning certificate (sign-off) of the complete network from CHiPS.

d. 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 re-test. If the failure happens repeatedly, it may be removed from the overall solution without any claim for payment to SI. The clauses relating to LD shall be applicable in such a case for respective SITE/item.

e. On successful FAT, the event shall be marked as "DoC" for the solution in entirety. However, in case of delay/non-completion of works by SI any SITE or NOC due to reasons not attributable to SI, CHiPS may it its own discretion, treat the last day of the successful UAT of the commissioned network (excluding the delayed and non-feasible sites) as the "DoC" of the project.

f. For SITE(s) which are commissioned after the "DoC" of the project, the "DoC" of the network for such SITE(s) shall be the date of FAT of the wireless network.

g. Documentation: SI shall provide technical documentation with equipment supplied. The technical documentation should include technical and operation manuals.

8) 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.

b. Comprehensive onsite warranty and maintenance with spare parts/devices:

i. SI shall provide comprehensive onsite warranty and maintenance with spare parts, system software/ firmware/ signature updates, patches etc. for all the IT

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

infrastructure supplied and installed under this project and to maintain the required SLA for a period of 5 years from the date of commissioning.

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 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.

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's'.

d. Facility management services:

i. SI has to depute from the "DoC", One (1) Network Administrator cum Manager at NOC. Additionally, One (1) Network support engineer on per-district basis shall also be provided for handling day-to-day issues/problems/monitoring of the wireless network and to co-ordinate with CHiPS/other government offices. Two (2) Network support engineer shall be deployed for Raipur District.

ii. The availability of such persons should be between 9:30AM to 5: 30 PM on all working days.

iii. SI shall be required to immediately provide a replacement of support person, in case the deputed person in of leave due to any reasons.

iv. Technical person deployed shall have to provide troubleshooting and management of supplied hardware/software.

v. SI shall have to provide L3 (high end) support services on a 24x7 basis.

e. Helpdesk support:

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

i. SI has to establish and maintain a Centralized Helpdesk for complaints logging through website and/or Voice Call and/or email. The system should be able to acknowledge a receipt as a proof of having lodged a complaint.

ii. After rectifying the said compliant, SI shall update the resolution/call-closure date and time through web-access to the centralized CRM software.

f. Reconfiguration and change management:

i. Whenever required, SI shall reconfigure the equipment /software installed under the project to meet the needs of CHiPS. The reconfiguration would be required for IP Schema of Wi-Fi Network, Payment Gateway, SMS Gateway, Modifications/ addition in internet access plans for users, routing tables, Web based user access Portal server/database etc.

9) Roles and Responsibilities of Stakeholders:

a. Responsibilities of CHiPS:

i. Identifying & appointing concerned Officer(s) for each SITE & NOC who shall co-ordinate between CHiPS and IP for the timely establishment of Wi-Fi Network.

ii. During the site-survey, providing the requisite site information to SI so that the identification of a suitable installation site can be completed by SI.

iii. To provide the requisite space, LAN Points & power to SI and allowing installation of equipment.

b. Responsibilities of SI:

i. Supply, Installation, Configuration of Wi-Fi network

ii. Maintenance of Hardware/Software supplied under the project

iii. To provide Facility Management service.

iv. To provide Helpdesk support service.

10) Timeline: The milestones, deliverables, and time schedule for the implementation of 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.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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 of this bidding document.

c. The following delivery schedule shall be strictly adhered to:

S.No.	Scope of work	Deliverables	Timeline
1	Site survey	• Site survey as per List provided in LoI • Submission of Site Survey report	2Weeks from date of issuance of LoI
2	Signing of contract	• Signing of contract agreement • Submission of performance security	3 Weeks from Issuance of LoI
3	Supply, of hardware/software Site Wise	• Delivery challan/note • Invoice copy • Warranty certificate issued by respective OEMs for each hardware/software •	9 Weeks from Issuance of LoI
3	Installation and Commissioning of hardware/software Site Wise	• Device wise Configuration report stating IP Schema, Routing details • In case of Software, the report should consist of Software Installation Guide and checklist. • Complete set of Technical/Operation and Maintenance Manual.	15 Weeks after Issuance of LoI.
5	Testing & commissioning	• FAT report and successful commissioning certificate	2 Weeks (indicative) after successful

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

			Installation report submitted by bidder.
6	Maintenance support and facility management services	• Quarterly helpdesk cum SLA compliance reports • Quarterly preventive maintenance reports • Quarterly configuration change reports • Quarterly location-wise inventory reports • Other reports as desired by CHiPS	After each quarter for 5 years from the "DoC"

6.4. Locations for supply of goods and services

The Goods and Services under this contract shall be supplied and commissioned in any or all the Public locations and /or Government building in the State of 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 and /or Government building may increase or decrease during One Year from date of issuance of LoI.

6.5. Quality of goods and services

a) 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.

b) In case one or some Goods are discontinued, Goods shall replace the same with equivalent or higher specification at the same price as in the RFP. The decision of the Purchaser whether the Goods are equivalent or of higher specifications shall be final and binding on the Bidder.

c) The Goods must conform to the highest quality and standard. The Bidder as well as the Manufacturer shall guarantee that the Goods delivered to the Purchaser/Indenter are brand

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

new. In case of software, the Bidder should guarantee that the software supplied to the Purchaser/Indenter is licensed and legally obtained. All Goods must be supplied with their original and complete printed documentation.

d) Consistency must be maintained for the entire lot of the Goods ordered. All the required quantity of an item in schedule of requirement must be of the same brand and same model number. Part numbers also must be same for all pieces of an item. The Bidder should not substitute any internal components or subsystems of the Goods by similar items from a different Manufacturer.

e) The Bidder shall be responsible for liaising with ISP/ OEM for the required Wi-Finetwork connectivity.

6.6. 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.
- The Network Administration location needs to be suggested in each of the premises. This usually will be the control/server room.
- Copper (UTP) cable should be considered for all premise / indoor requirements and fiber cable for external use. However in case of offices with more than hundred connects in a wide spread or multi floored office, fiber may be considered for backbone connectivity (connectivity between the floors).
- 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 ISI marked PVC pipe.
  - For fiber being laid under less traffic road (road within campus) should be passed through ISI mark GI pipes.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

  - For fiber being laid under heavy traffic road, (public roads) should be passed through ISI mark GI pipe, which in turn should be passed through Hume pipe.
  - Inspection chambers of 4'x3'x2' (l x b x h) be provided as required.
  - At every entry of fiber cable into a building a ramp of 1'x3' should be constructed.
- Indoor fiber should be passed through PVC conduit
- All passive components should be of the same make as specified in the tender document.
- The vendor shall label all cables, cords, and distribution frames and information outlets.
- Level 2 testers like micro test scanner, fluke meter etc should be used and two ways testing for each link of copper and fiber should be done.
- For purpose of measurement of 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 system proposed should meet the specifications as prescribed in ANSI/EIA/TIA 568-C.2, ISO and EN standards.
- The cabling solution should be flexible and capable of including new facilities or technologies, as they become required or available.
- Unmanaged switches should be used only where the number of connects is restricted to less than 12 connect and future expansion is also not possible. Managed switches should be used at all locations where the current number of connects is more than 12 connects. Also at offices where external fiber is required to be used, only managed switches are suggested irrespective of the number of connects.
- Fiber optic transceivers should not be used along with switches for connectivity between buildings.
- Racks used in the network for terminating the passive (cable and Jack panel) and active components (switches) shall be of the following.
- Standard for Size: IS 9606 – 1980
- Standard for specifications of Electroplated Coatings of Zinc on Iron and Steel Powder Coatings: IS 1573
- Standard for Steel sheet (Hot Rolled low, medium and high tensile structural steel): IS 2062
- Standard for Ready Mixed Paint: IS 2074
- Specification for Air Drying, Red Oxide Zinc Chrome, Priming: DIN : 41494, IEC 60297

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

- Vertical and horizontal cable trays shall be used to assure neat and well-dressed rack.
- Proper earthling of the racks shall be done
- Dust covers need to be provided for unutilized ports of the faceplate.
- Patch panels shall be used for purpose of LAN connectivity from managed switch, routers, switch, network equipments, etc.

6.7. Approval of design

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

6.8. 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.

Note:- Goods will not be accepted without the above documents.

6.9. Installations and commissioning

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

6.10. 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.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

- IP Schema & Network Architecture
- Warranty certificate indicating 5 year's warranty from the Principal Bidder for Active Components.
- Contact details of the contractors nearest office to the site.

6.11. Training

The Bidder shall provide user training for duration of one day to at least 5 representatives of the Purchaser/Indenter. The Purchaser/Indenter shall have the option to increase the number of persons to be trained as long as the total duration does not exceed the above period of one day, or is mutually agreed between the Bidder and the Purchaser/Indenter. The training should cover the following:

- Basics of Local Area Networking
- Structured Cabling Overview
- Overview of Networking and Components
- Overview of IP addressing and machine Naming Convention
- Simple WLAN//equipment troubleshooting

6.12. 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 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 furnished to the inspectors at no charge 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.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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.

6.13. 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 network along with the integration of hardware like computers, network printers, servers 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.

6.14. Completeness of contract

The contract will be deemed as incomplete if any component of the network devices 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 and the warranty period will not commence. The goods will be accepted after complete commission and satisfactory functioning of equipment for a minimum period of 10 days. The Warranty period will commence only on acceptance (based on acceptance test) of equipment by the Purchaser/Indenter.

6.15. 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 any time during 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

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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.

6.16. Product warranty

The Bidder shall provide comprehensive on-site warranty for all the Components including Active and passive for a period of five (5) years from the date of successful installation and commissioning of equipment.

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. In case the Bidder is unable to fulfill his obligations during the warranty period, the warranty obligations will fully and automatically devolve upon the Manufacturer of the goods. The Bidder shall be fully responsible for getting the product replaced from the principle company or coordinating the same with the principle company during the warranty period.

6.17. Insurance

6.17.1. Insurance Cover

The bidder shall fully and comprehensively including third parties insure the Supplies and Services against loss, theft or damage, including loss, theft or damage during transportation, storage, delivery, installation and operations and Maintenance. The period of insurance shall be up to the date the ownership and possession is transferred to CHIPS provided in the agreement.
The bidder shall provide a copy of the necessary insurance policy to CHIPS.

6.17.2. Evidence of Insurance Cover

All insurance obtained by the bidder in accordance with this section 6.17.1 shall be maintained with insurers / re-insurers and on terms consistent with Good Industry Practice. Within 15 (fifteen) days [3 (three) days in respect of CHiPS Receipts] of obtaining any insurance cover, the bidder shall furnish to CHiPS, copies of certificates of insurance, copies of the insurance policies

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

signed by an authorized representative of the insurer and copies of all premium payment receipts in respect of such insurance received from each insurance carrier.

6.17.3. Remedy on failure to Insure

If the bidder shall fail to effect and keep in force the insurance for which it is responsible pursuant hereto, CHiPS shall have the option to keep in force any such insurance, and pay such premium and recover all costs thereof from the bidder. Provided however, that any failure on part of the bidder to adhere to the stipulations of Clause 6.17.2 in respect of the CHiPS Receipts shall be construed as a bidder event of default under the terms of this Agreement and CHiPS may forthwith terminate this Agreement.

6.18. 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.

6.19. Right to use defective equipment

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

6.20. 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/equipments 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

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

state of the art technology equipment of equivalent or higher capacity, at no additional charges to the purchaser or Purchaser/Indenter.

6.21. Bidders obligations

a) The Bidder shall work closely with the Purchaser/Indenter and the Purchaser and abide by directives issued by them or their staff.
b) 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 that 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.
c) The Bidder is responsible for managing the activities of its personnel or sub-contracted personnel and will hold itself responsible for any misdemeanors.
d) 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.

6.22. Reports purchaser

A report of the progress of work shall be submitted to CHiPS every 15 days.

6.23. Assignment

The Bidder shall not assign to any third party, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.

6.24. Other terms and conditions

a. CHiPS will sign the Contract with successful bidder and release Agreement/Work Order/Purchase Order after Design will approve by the CHiPS.
b. The bidder will be required to deliver the items at respective location mentioned in Agreement/Purchase Order.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

c. The successful bidder shall have to supply 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 CHiPS.

d. The bidders are expected to accept all technical/commercial terms & conditions mentioned in the bid document. Any deviations in the terms and conditions should be clearly mentioned. CHiPS however, reserve the right to reject any or all of the offers that deviate from the terms and condition of the tender document.

e. User Acceptance test will be done by CHiPS or any Third Party Auditor nominated by CHiPS.

7. Minimum Specification for Wi-Fi Components

- All equipments should be IPv6 ready from day 1.
- All routers and switches should have EAL-2 or NDPP (Network Device Protection Profile) certification.
- The Bidder should provide Router and Switches (exclude Outdoor Router & Outdoor Switch) based on top 5 companies/OEM as per IDC report in last 2 years so that manageability can be lowered.
- All Active Devices like Indoor Router, Indoor Switches, Wireless Indoor APs, Wireless Controller, Core Switch and NMS, should be from the same manufacturer so that manageability can be lowered.
- Outdoor Fixed IP Camera - Preferred Make from Axis, Palco, Hikvision, Bosch, Sony, Honeywell, Verint, Cisco, Canon, Panasonic & Samsung

1) CORE L3 SWITCH

S. No.	Specification
1	Modular switch in data centre design withIPv6 ready from day 1.
2	Should have minimum 24x 10G SFP+ interfaces populated with 10G-Base-SR transceivers and 12x 1GE.
3	Should support minimum 320000 MAC address entries and minimum 1000 VLANs.
4	Should have required accessories for rack mounting. Switch should support minimum 8 payloads and 2 slot for controller/management module.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

5	Should have redundant power supplies with readiness to meet the fully populated chassis requirement. Should have redundant fan trays.
6	Should have minimum switching capacity of 480 Gbps per slot, and minimum packet forwarding rate of 357 Mpps -1000 mpps from day 1.
7	Should support virtual switching or equivalent for achieving active-active HA using 2 or more physical switches together into a single logical managed fabric without the need to run complex protocols like STP and ECMP.
8	Should support UDLD or equivalent.
9	Should support dynamic routing protocols like OSPF and BGP from day 1 for both IPv4 and IPv6.The same switch should also support data centre Ethernet bridging and data centre interconnect. Shall support minimum 128K IPV4, IPV6 unicast routes
10	Should support L2, L3 and L4 access control filters and should have complete IPv6 routing and management from day 1
11	Should support front-to-back/back-to-front airflow for hot/cold aisles
12	Should support MSTP, per-port QoS, minimum eight hardware queues per port, SP queuing or equivalent, cross-module link aggregation.
13	Should support management over GUI, CLI, RMON (minimum 4 groups), SNMP, and Netflow/equivalent.
14	Should deliver wire-speed, line-rate performance on all ports.
15	Should have RoHS compliance, EAL 2 or NDPP.

2) ACCESS L2 SWITCH

S. No.	Specification
1	24 x 1G UTP with additional 4 x 1G SFP ports.
2	Minimum 56 Gbps switching capacity & minimum 41 Mpps forwarding rate. Switch should have dedicated stacking port separate from uplink port with 28GBPS of dedicated stacking bandwidth.
3	Should have required accessories for rack mounting.
4	Should have minimum 8000 MAC address entries and minimum 250 VLANs.
5	Should be IPv6 ready from day 1.
6	Should support UDLD or equivalent.
7	Should support L2, L3 and L4 access control filters from day 1.
8	Should support MSTP, per-port QoS, minimum four hardware queues per port, SP

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

	queuing or equivalent, and link aggregation.
9	Should support management over GUI, CLI, RMON (minimum 4 groups), and SNMP.
10	Should have RoHS compliance, EAL2 or NDPP.

3) ACCESS L2 POE+ SWITCH

S. No.	Specification
1	24 x 1G POE+ UTP with additional 4 x 1G SFP ports.
2	Minimum 56 Gbps switching capacity & minimum 41 Mpps forwarding rate. Should support dedicated stacking
3	Should have required accessories for rack mounting.
4	Should have minimum 8000 MAC address entries and minimum 250 VLANs.
5	Should have IPv6 management ready from day 1.
6	Should support UDLD or equivalent.
7	Should support L2, L3 and L4 access control filters from day 1.
8	Should support MSTP, per-port QoS, minimum four hardware queues per port, SP queuing or equivalent, and link aggregation.
9	Should support management over GUI, CLI, RMON (minimum 4 groups), and SNMP.
10	Should have RoHScompliance.EAL 2 or NDPP certification.

4) WIRELESS CONTROLLER

S. No.	Specification
A	**Architecture**
A1	Should have 2 or more x 10G SFP+ ports populated with 10G-Base-SR transceivers.
A2	Should support both centralized as well as distributed traffic forwarding architecture with L3 roaming support from day 1. Should have IPv6 ready from day 1 too.
A3	should have redundant power supplies. Should have adequate flash and RAM for scalable deployment in 24x7 running configuration.
A4	Should support minimum 25000 concurrent users
A5	Should support minimum 100 802.11a/b/g/n/ac access points from day 1 and should be upgradeable up to 1000 access points without any hardware or software upgrade.
A6	Should support 1+1, 1+N, and N+N backup configurations.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

A7	Should support synchronization of 802.1X state information and wireless client's 802.11 information from master to backup controller.
A8	Shall support WIPS, and spectral analysis from day 1.
A9	Should be rack-mountable. Required accessories for rack mounting to be provided.
A10	Should support IPv6 features including IPv6 host, Dual stack (IPv4 and IPv6)and IPv6 ACL/QoS
A11	Should support Static IP routing for both IPv4 and IPv6 networks
A12	**S**hould support minimum 250 VLANs
B	**Wireless Controller Features**
B1	Should support L3 roaming as well as fast roaming
B2	Should support IEEE 802.1p priority tag based on IP address, IP Type of Service (ToS), Layer 3 protocol, TCP/UDP port number, source port, DiffServ, and IPv6 QoS.
B3	Should ensure WLAN reliability by proactively determining and adjusting to changing RF conditions.
B4	Should provide real-time radio power adjustments based on changing environmental conditions and signal coverage adjustments.
B5	Should support automatic radio channel adjustments for intelligent channel switching and real-time interference detection.
B6	Should support client load balancing to balance the number of clients across multiple APs to optimize AP and client throughput.
B7	Should support airtime fairness feature to ensure equal RF transmission time for wireless clients
B8	Should support wireless clients in the same SSID to be dynamically assigned to different VLANs.
B9	Should support policy based forwarding to classify data traffic based on ACLs
B10	Should support minimum 100 SSIDs.
C	**Security**
C1	Should support web-based authentication to provide a browser-based environment to authenticate clients that do not support the IEEE 802.1X supplicant.
C2	Should support port-based and SSID-based IEEE 802.1X authentication and accounting.
C3	Should support MAC authentication to provide simple authentication based on a user's MAC address.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

C4	Shall support AES or TKIP encryption to secure the data integrity of wireless traffic
C5	Should support AP location-based user access to control the locations where a wireless user can access the network
C6	Should support Public Key Infrastructure (PKI) to control access
C7	Should support a user role based or SSID based firewall embedded in WLAN Controller
D	**Management**
D1	Should support SNMPv3, SSHv2 and SSL for secure management.
D2	Should provide visibility between a wired and wireless network using IEEE 802.1AB Link Layer Discovery Protocol (LLDP) and sFlow/equivalent.
D3	Should support AP Plug and Play (PnP) deployment with zero-configuration capability
D4	Should support AP grouping to enable administrator to easily apply AP-based or radio-based configurations to all the APs in the same group
D5	Should support selective firmware upgrade APs, typically to a group of APs minimize the impact of up-gradation
D6	Should have a suitable serial console port.

5) OUTDOOR WIRELESS AP

S. No.	Specification
1	Should be an IEEE 802.11n compliant concurrent dual radio and dual band outdoor access point.
2	Should be a three spatial-stream 802.11n access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 2X2 MIMO configuration.
3	Should be ready for both pole or wall mount. Required mounting accessories to be provided.
4	Should have two RJ-45 auto-sensing 10/100/1000 Mbps PoE(802.3af/at) port and a console port.
5	Should be Wi-Fi alliance certified for interoperability with all IEEE 802.11a/b/g/n client devices.
6	Should have IP67 compliant with operating temperature in the range of -10°C to 55°C.
7	Should support up to 16 SSID/VSC profiles per radio and each profile shall be independently configurable for authentication, encryption, VLANs, and QoS levels.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

8	Should support simultaneous detection & prevention of wireless threats on 2.4GHz & 5GHz frequency bands.
9	Should provide L2 wireless client isolation
10	Should support auto-selection of RF channel and transmit power
11	Should support SNMP, CLI, and web-based management interfaces
12	Should support packet capture for Ethernet and IEEE 802.11 interfaces
13	Should support data rates up to 300 Mbps per radio under 802.11n
14	Should support either of wireless operation modes: client access, local mesh, or packet capture
15	Should support self-healing, self-optimizing local mesh extending network availability to areas without an Ethernet infrastructure
16	Should support direct source-to-destination traffic forwarding (distributed traffic forwarding) to maximize application delivery
17	Should support both centrally controlled mode (configured and updated via wireless controller) and autonomous mode (without controller) which is software selectable
18	Should support L2 and L3 controller discovery

6) INDOOR WIRELESS AP

S. No.	Specification
1	Should be an IEEE 802.11ac compliant dual radio and dual band indoor plenum rated access point.
2	Should be a two spatial-stream 802.11ac access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 3X3 MIMO configuration.
3	Should be ready for both pole or wall mount. Required mounting accessories to be provided.
4	Should have two RJ-45 auto-sensing 10/100/1000 Mbps port and a console port.
5	Should be Wi-Fi alliance certified for interoperability with all IEEE 802.11/b/g/n/ac client devices.
6	Should have minimum antenna gain of 4dBi in 2.4GHz and 5dBi in 5GHz.
7	Should support up to 16 SSID/VSC profiles per radio and each profile shall be independently configurable for authentication, encryption, VLANs, and QoS levels.
8	Should support simultaneous detection & prevention of wireless threats on 2.4GHz & 5GHz frequency bands.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

9	Should provide L2 wireless client isolation
10	Should support auto-selection of RF channel and transmit power
11	Should support SNMP, CLI, and web-based management interfaces
12	Should support WMM and L2/L3/L4 classification
13	Should support packet capture for Ethernet and IEEE 802.11 interfaces
14	Should support data rates up to 866Mbps on the 802.11ac radio and up to 300Mbps on the 802.11n radio.
15	Should support either of wireless operation modes: client access, local mesh, or packet capture
16	Should support self-healing, self-optimizing local mesh extending network availability to areas without an Ethernet infrastructure
17	Should support direct source-to-destination traffic forwarding (distributed traffic forwarding) to maximize application delivery

7) WIRELESS NMS

S. No.	Specification
1	Should be a comprehensive management platform that delivers integrated, modular management capabilities across fault, configuration, accounting, performance, and security (FCAPS) needs
2	Should support minimum 100 wired and wireless devices from day 1 and the solution should be scalable upto 1000 wired and wireless devices without any hardware or software up-gradation.
3	Should allow automatic topology discovery and creation of network maps for layer 2 as well as layer 3 networks including all the available VLANs.
4	Should have network inventory polling capability for IP network nodes, available line cards, modules, ports, physical links, VLAN interfaces and all the other SNMP capable devices in the network.
5	Should allow extensive fault management with real time event and alarm notifications including system logs.
6	Should allow centralized creation and management of VLAN, QoS, and ACL policies.
7	Should have scheduled device configuration back-up and restore functionality.
8	Should have automatic detection of configuration changes for easy trouble shooting

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

	and isolation.
9	Should allow monitoring and management of 3rd party devices and end points.
10	Should have the functionality of scheduled configuration roll out.
11	Should have the functionality to perform scheduled or unscheduled network wide software or firmware upgrades.
12	Should have the ability to customize NMS dash board.
13	Should allow grouping of devices for applying any particular change/task.
14	Should include suitable service operation management flexibility for the network administrator to assign task to an Individual network engineer and assign ownership / track the status of the issue resolution in adherence to ITILv3.0. Should have service flow management from ticket creation, status checks, and execution to resolution, close, and after-audit operations
15	Should have 64-bit support.
16	Should support extending the NMS deployment to HA mode in 1+N redundancy configuration through optional add-on license/software in future. Should support centralized as well as distributed deployment.
17	Should support virtualization management
18	Should support role based access control
19	Should be with software update and upgrade assurance during the warranty period.
20	Should have minimum support for monitoring and management of offered switches, wireless controller, and wireless access points
21	Should facilitate enable centralized management of proposed network elements with a variety of automated tasks, including discovery, categorization, baseline configurations, software images, configuration comparison tools, version tracking, change alerts, and more
22	Should support centralized VLAN Management to view current VLAN configuration, VLAN topology, bulk VLAN deployment etc
23	Should offer following wireless management features:
	a) Automatic discovery and classification of WLAN devices, including wireless controllers
	b) WLAN device configuration
	c) WLAN performance monitoring
	d) RF heat mapping

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

	e) WLAN service reporting
	f) Should display radio information including radio type, channel being used, maximum transmission power, admin status, operation status, service policies, and radio policies
	g) Should display information about wireless client including client name, MAC address, emission rate set, up time, signal strength, RSSI value, VLAN ID, SSID
	h) Should provide radio policy management for adding, modifying, deleting, and binding radio policies
	i) Should provide integration of wireless devices into wired topology display views for unified wired-wireless management
	j) Should provide historical reporting to monitor how wireless network usage, performance, and roaming patterns have changed over months or years.
24	Offered software should have compatibility with Microsoft Windows and Linux operating systems
25	Offered software should be scalable up to 1500 wireless access points and 1500 wired devices.

8) SWITCHED RACK PDU

S. No.	Specification
1	Horizontal remotely managed PDU with readiness for 19" mounting in single-phase 230V AC power design
2	Should support metering and switching capability at outlet level including environmental sensor (integrated/external) support such as temperature and humidity.
3	Should have minimum 6 x 230V AC outlets (NEMA/IEC). Matching equipment power cords (minimum 5A, 230V AC, Single-phase) to be provided.
4	Should have a digital LED meter to provide local current monitoring
5	Should have an Ethernet interface for remote monitoring and control.
6	Should provide individual outlet control (switching capability)
7	Should preferably have an Onboard data log for individual PDU activity logs and historical data
8	Should support integration with centralized EMS solution (same OEM or 3rd party) for multi-location PDU management over IP networks.
9	Should have on-board web interface

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

10	Should preferably have over current protection to turn off individual outlets first.

9) EMS SOLUTION FOR SWITCHED RACK PDU

S. No.	Specification
1	Should provide a consolidated management and control interface for PDU infrastructure deployed across different sites over an IP network.
2	Should have the ability to monitor and measure energy consumption including remote power control for individual outlets on a per-PDU basis.
3	Should have a secure unified browser-based interface for providing visibility into energy usage data including, but not limited to insight for capacity planning and proactive power management.
4	Should help in real time access to power and environmental alarms.
5	Should support for both monitoring and management of offered SWITCHED RACK PDUs.
6	Should have license support from day 1 for up to 50 PDUs and scalability support for up to additional 50 PDU's.
7	Should run on either of Windows and/or Linux (Red Hat) operating system.
8	Should have diversified client supported operating systems such as Windows, Linux and Mac.
9	Should have client supported browsers such as Internet Explorer and any one of Firefox or Chrome.
10	Should not preferably ask for other third party plug-in for browser based interface.

10) LINK LOAD BALANCER

S. No.	Specification
1	**Architecture**
1.1	Should be an appliance with minimum 8 GB RAM and minimum 256 GB SSD drive to meet desired performance as well as to support multiple load balancing features.
1.2	Should have minimum 4 x 1G UTP ports, 2 x 1G SFP ports, 2x 10G SFP+ ports
1.3	Should have minimum 10 Gbps throughput from day 1.
1.4	Should support minimum 4 million concurrent connections from day 1
1.5	Should have IPv6 ready from day 1
2	**Load Balancing Features**

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

2.1	Should support multiple links in active-active load balancing and active-standby failover modes.
2.2	Should support outbound and inbound load balancing algorithms like round robin, weighted round robin, target proximity and dynamic detection.
2.3	Should support static NAT, port based NAT and advanced NAT for transparent use of multiple links.
2.4	Should detect link failure in less than 30 seconds and divert traffic to other available links. Should provide individual link health check based on physical port, ICMP, user defined ports, and destination path health check. Should support binding multiple health check, application specific VIP health check, and next gateway health check.
2.5	Should support persistency including RTS and IP flow persistence.
2.6	Should support application load balancing without additional license cost.
3	**Failover and HA**
3.1	Should provide comprehensive support for HA based on per-VIP based active-active & active-standby unit redundancy. Should support stateful session failover with connection mirroring.
3.2	Should have support for secondary communication link for backup. Should support floating IP addresses and groups for stateful failover. Should support minimum 256 floating IP addresses for a floating group. Should support inbuilt failover decision conditions including unit failover, group failover and reboot. Should support defining customized rules for gateway health check. Should support configuration synchronization at boot time and during run time to keep consistence configuration on both units
3.3	Should support software based site selection feature to provide global load balancing features on same appliance.
3.4	Should have Redundant Power Supply (RPS).
4	**SSL**
4.1	Should have minimum 3 Gbps SSL through-put from day 1. Should have 5000 SSL TPS/CPS @ 2048 bit encryption from day 1. Should have integrated SSL offloading/acceleration for 1024 and 2048 bit certificates. Should support use of password protected certificate/private key backup /restore to/from local disk or remote TFTP server, and through browser.
4.2	Should support SSL error page customization and HTTP-t0-HTTPS location header

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

	rewrite. Should have end-to-end SSL support for acting as a SSL server or SSL client.
5	**Security & Application Acceleration**
5.1	Should support performance optimization using TCP connection multiplexing, TCP buffering and IEEE 802.3ad link aggregation. Should support TCP optimization options including windows scaling, timestamp &selective acknowledgement for enhanced TCP transmission speed. Should provide real time dynamic web content compression to reduce server load for TEXT, HTML, XML, DOC, Java Scripts, CSS, PDF, PPT, and XLS MIME types
5.2	Should support defining policies to skip compression for selected URLs for the specified virtual server. Should provide memory/packet based web cachefully integrated with HTTP/HTTPS. Should provide support for customized cache rules including maximum object size, TTL objects, and refresh time interval.
5.3	Should provide detailed cache access statistics based on IP or HTTP hosts. Should support cache refresh and layer 7 transparent proxy.
5.4	Should support layer 7 rule based application firewall to protect internal applications. Should provide application acceleration features.
5.5	Should have security features like reverse proxy firewall, sys-flood and denial-of-service attack protection from day 1
6	**Management**
6.1	Should support extensive reporting features like http squid or customized http logging with inbuilt tcp dump and syslog.
6.2	Should have console, SSH, and GUI management interface.
6.3	Should be dual bootable to fall back to last known good configuration.

11) <u>INTERNET SECURITY FIREWALL</u>

S. No.	Specification
	The appliance should have following certifications EAL/FIPS-level-2
1	**Hardware Architecture**
1.1	The appliance based security platform should be capable of providing firewall / IPS /Botnet and VPN (IPSec and SSL) functionality in a single appliance from day one
1.2	The appliance should support atleast 12 10/100/1000Gigabit ports with 2 10Gigabit ports from Day one

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

1.3	The appliance should support atleast one 10/100/1000 dedicated management interfaces to configure/manage the firewall policies, perform image upgrades even in case of failure of the data interfaces. Data ports should not be used for management purpose
1.4	The appliance hardware should be a multicore CPU architecture with a hardened 64 bit operating system to support higher memory
1.5	Proposed Firewall should not be proprietary ASIC based in nature & should be open architecture based on multi-core cpu's to protect & scale against dynamic latest security threats.
1.6	The appliance should support redundant inbuilt power supplies from day one
2	**Performance & Scalability**
2.1	Firewall should support atleast 1.5 Gbps of Multi-protocol real-world throughput based on protocols like HTTP, SMTP, FTP, IMAP , DNS (Only UDP based performance nos. will not be considered)
2.2	Firewall should support atleast 900 mbps of combined Firewall & IPS throughput
2.3	Firewall should support 3Des/AES IPSec VPN throughput of atleast 400 mbps
2.4	Firewall should support atleast 1500 concurrent VPN peers both IPSec & SSL
2.5	Firewall should support atleast 700,000 concurrent sessions
2.6	Firewall should support atleast 25,000 connections per second
2.7	Firewall should support atleast 250 vlans
2.8	Firewall should support 2 virtual firewalls from day one & support licensed based scalability upto 50 virtual firewalls as & when required with licenses. Firewall should be provisioned with the required memory & CPU to support 50 virtual firewalls from day one.
3	**Firewall Features**
3.1	Firewall should support IPv4 & IPv6 dual stack functionality to be able to use IPv4 & IPv6 simultaneously
3.2	Firewall should support creating access-rules with IPv4 & IPv6 objects simultaneously eg: Ipv4 source & Ipv6 destination
3.3	Firewall should support operating in routed & transparent mode
3.4	Firewall should support mixed mode with virtual firewalls where virtual firewall should support routed & transparent mode simultaneously
3.5	In transparent mode firewall should support arp-inspection to prevent spoofing at

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

	Layer-2
3.6	Firewall should provide application inspection for DNS, FTP, HTTP. SMTP,ESMTP, LDAP, MGCP, RTSP, SIP, SCCP, SQLNET, TFTP, H.323, SNMP
3.7	Application inspection engine for DNS should support matching specific flag in the DNS header, DNS type including Query & RR type, DNS class, DNS Question, resource-record, Authority RR, DNS message domain name list, & setting actions like drop all packets, drop connection, send-protocol-error, reset the connection & send logs.
3.8	Application inspection for FTP should support dynamically opening the secondary/data channels for FTP data transfer, preventing sending FTP embedded commands in web browsers, enforce RFC compliance of FTP, filtering of FTP traffic based on FTP commands & FTP usernames
3.9	Application inspection engine for HTTP should support enforcing confirmance to RFC 2616, filtering based on content-type mismatch, HTTP request method, text matching in http request body, maximum HTTP request message body length & more parameters
3.10	Firewall should support DOS protection functionalities like TCP intercept/TCP Syn cookie protection, Dead Connection Detection/ TCP sequence randomization, TCP normalization to clear tcp packets of anomalies like clearing or allowing selective tcp options, reserved bits, urgent flags & provide TTL evasion protection.
3.11	Firewall should support setting connection limits based on max embryonic-connections, per-client embyonic connections, per-client max connections, setting embronic connection timeouts & idle-timeouts. These settings should be applicable on web servers & clients.
3.12	Firewall should be able to create access policies based on the User/group info from the Active Directory either through clientless or agent based mechanism .
3.13	Firewall should support static nat, pat, dynamic nat, pat & destination based nat
3.14	Firewall should support Nat66 (IPv6-to-IPv6), Nat 64 (IPv6-to-IPv4) & Nat46 (IPv4-to-IPv6) functionality
3.15	Firewall should support integration with Radius, Tacacs+, RSA, Ldap v3 Directory servers, Kerberos, NT server & Local Database
4	**High-Availability Features**
4.1	Firewall should support stateful failover of sessions in Active/Standby &

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

	Active/Active mode
4.2	Firewall should support etherchannel functionality for the failover control & date interfaces for provide additional level of redundancy
4.3	Firewall should support the functionality for allowing Asymmetrically Routed Packets in active/active mode
4.4	Firewall should support redundant interfaces to provide interface level redundancy before device failover
4.5	Firewall should support 802.3ad Etherchannel functionality to increase the bandwidth for a segment.
4.6	Firewall should support failover of IPv4 & IPv6 sessions
4.7	Firewall should replicate Nat translations, TCP,UDP connection states, ARP table, HTTP connection states, ISAKMP & IPSec SA's, SIP signalling sessions
5	**VPN Features**
5.1	Firewall should support atleast 2500 client based SSL vpn peers from day one internally or externally. Required licenses for the same should be provisioned from day one.
5.2	Firewall should support RFC 6379 based Suite-B Cryptography Suites/algorithms like AES-GCM/GMAC support (128-, 192-, and 256-bit keys), ECDH support (groups 19, 20, and 21), ECDSA support (256-, 384-, and 521-bit elliptic curves) for enhanced VPN security.
5.3	Firewall should support latest IKEv2 standards for supporting SHA-2 256, 384 & 512 bit message integrity algorithms in hardware to ensure there is no performance bottleneck & higher security.
5.4	For Mobile devices the SSL VPN/IPSEC client software should also be available for download from the Mobile Application Store/Market/OEM webesite other than the Firewall/Device.
5.5	Should support pre-shared keys & Digital Certificates for VPN peer authentication
5.6	Should support perfect forward secrecy & dead peer detection functionality
5.7	Should support Nat-T for IPSec VPN
6	**Routing Features**
6.1	Firewall should support IPv4 & IPv6 static routing, RIP, OSPF v2 & v3 and BGP
6.2	Firewall should support PIM multicast routing
6.3	Should support stateful failover for ospfv3

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

6.4	Firewall should support SLA monitoring for static routes
7	**Botnet Filtering capabilities**
7.1	Botnet Filtering capabilities should include but not limited to following:
7.2	Firewall solution should support reputation/ dynamic database to provide dynamic filter database about Botnets providing protection against the following types of addresses
7.3	Reputation/ dynamic database should include advertising Networks delivering banner ads, rich media ads, pop-ups for websites, spyware, adware & Data Tracking websites that offer data tracking & metric services to websites & other online entities.
7.4	Reputation/ dynamic database should include malware source that deliver malware & various exploits to victim devices& deliver deceptive anti-malware/spyware software.
7.5	Reputation/ dynamic database should include sources of Rogue systems that are controlling infected computers as Bots. Command & Control servers of conficker & Zeus Botnets.
7.6	Should also support creating static blacklists & whitelists or equivalent
8	**IPS Functionalities**
8.1	The integrated IPS functionality should provide real-time threat-detection & prevention capabilities
8.2	The Firewall with integrated IPS module should provide atleast 900 mbps of combined throughput without any extra hardware.
8.3	Support for global correlation and provide real-time updates on the global threat environment beyond the perimeter by adding reputation analysis, reducing the window of threat exposure using OEM own intelligence & database
8.4	Should support the functionality to assign target value rating to network assets to calculate risks rating value for each alert
8.5	IPS should support alert output by reporting the victim OS, the source of the OS identification, and the relevance to the victim OS in the alert.
8.6	Anamoly detection to provide powerful protection against day-zero attacks
8.7	The IPS should support syslog/SDEE for logging events & support sending alerts via SMTP & SNMP
8.8	IPS should support the functionality of summarizing the events to prevent dos on the IPS itself
8.9	IPS should support anti-evasive techniques like fragment-reassembly to ensure attacks

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

	are detected
8.10	The integrated IPS should support automatic fail-open & fail-close functionality incase of failure of the IPS hardware module
8.11	IPS should support functionality of creating custom signatures internally on box without requiring any external or conversion tools with support for virtualization.
8.12	IPS should support the functionality for passive OS fingerprinting to determine the OS that the hosts are running in the network.
8.13	Employs full seven layer protocol analyses of network protocols. Should analyze and decode of all major protocols.
8.14	IPS should support inspection of IPv6 and IPv4
9	**IPS should be able to block atlleast following kind of attacks** :
9.1	Buffer Overflow attacks
9.2	Sql Injection
9.3	Cross Site Scripting attacks
9.4	Trojans, Spyware, Malware, Worms,
9.5	Dos protection
9.6	*Remote Procedure Calls*
10	**Management Capabilities**
10.1	Firewall should support management of firewall/IPS/SSL VPN via Cli, Telnet, SSH & inbuilt GUI management interface or using External Management Server
10.2	Firewall should support syslog with the functionality of sending syslog messages via email to different teams based on syslog severity
10.3	Firewall should support SNMP logging & specify which messages are to be sent to SNMP servers
10.4	Firewall should support the functionality of identifying issues quickly with continuous monitoring & providing notifications of potential problems in which a service request has been raised with all diagnostic data attached.
10.5	Firewall Gui management interface should support backing up & restoring configurations
10.6	Firewall Gui should support inbuilt function to simulate network traffic to check firewall rules & for troubleshooting network access issues
10.7	Firewall should support packet capturing functionality to send the packet capture to ethereal/wireshark for detailed packet analysis

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

10.8	Firewall should support the functionality of Auto-Update to check for latest software versions & download the same & replicate the image to the standby unit

12) <u>OUTDOOR ENCLOSURE</u>

S. No.	Specification
1	Minimum 24U Weather proof NEMA-4X/IP65 compliant UV resistant outdoor metallic enclosure in conformance with DIN 41494
2	Vandal proof design single side door and with minimum IP55 compliant industrial lock
3	Provision for floor standing, pole mount, and wall mount from day 1
4	Enclosure design to include roof canopy
5	gland cable entry provision from day 1
6	HDG OR CRCA IS:513 grade equivalent or higher steel body construction
7	80 micron pure polyester powder coating
8	Air inlet provision with external IP Hood. Filter media shall be of "Synthetic non-woven" with an efficiency of 80% to 90% down to 20microns particle size. Filter arrangement shall be provided on the door.
9	19" mounting angles should be provided in pairs at front and rear of the enclosure
10	Horizontal PDU of 1U design with minimum 6 x 5A sockets and 1 x 16A MCB
11	Enclosure shall have suitable cooling arrangement for visibility in low light conditions
12	Should have required depth clearance for telecom and data com equipment mounting.
13	Horizontal cable manager (2 nos) and equipment tray (2 nos) to be provided.
14	Shall have RoHS compliance
15	Suitable drawing of the offered enclosure to be submitted.

13) <u>EARTHING</u>

S. No.	Specification
1	Chemical Earthing with base chamber of 4x10 ft.
2	Metal strip with copper plate, charcoal and salt at depth of 7 feet
3	GI pipe – 7 feet
4	Earthing resistance: 2 Ohm
5	Should include suitable wired connection between earthing strip and outdoor

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

	enclosure.

14) ANTENNA POLE

S. No.	Specification
1	Self-supported monopole type standard design made up of hot dipped galvanized steel
2	Cable outlet opening with direct water ingress protection towards the bottom and top of the pole.
3	Corrosion free paint applied on the whole pole.
4	Suitable pole base for solid erection to withstand wind speeds.
5	Suitable design for mounting of minimum 2 numbers of offered omni/panel antenna and 6 numbers of offered outdoor fixed IP camera.
6	Under operation wind speed, torsion and sway of the structure shall be limited to 0.5 degrees when carrying full or intermediate complement of antenna/camera.
7	Required length of the pole: minimum 15 feet from ground excluding underground base.
8	Shall include a suitable pole-mountable outdoor weather proof cabinet for housing one CAT5e/CAT6 IO.

15) Tower at POP

S. No.	Specification
1	Should be self-support mast.
2	Should have minimum height of 6 meter upto 30 meter as per requirement. The tower should have 6 meter sections at bottom and 3 meter section at the top.
3	The foundation for mounting the mast should be properly cemented as per IS 456
4	The foundation should have a base plate as per IS800.
5	The Mast should be made of GI pipes as per IS (IS –1161 for properties of tubular sections and IS 806 –1968 for design of leg members
6	Loading on the masts as per IS-875-1987 (part 3)
7	Tower material should be galvanized
8	All the bolts and Nuts should be properly secured and should have anti rusting coating.
9	Aviation light and Lighting arrestor should be provided at the top of the mast
10	The mast should withstand the wind load speed of atleast 140 Kmph

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

11	A ladder shall be provided externally right through from the ground level up to Top of Tower (for tower height of 9 meter and above).
12	The tower should comply recent standards

16) Tower/pole at Remote

S. No.	Specification
1	Note: If vendor proposes to erect pole based on the feasibility study, then the pole should be made of G.I. pipe having 1" diameter and it should be firmly clamped to the wall appropriately.
2	Should be self-support mast.
3	The height of the mast shall be proposed as per the feasibility study done at every remote site.
4	The foundation for mounting the mast should be properly cemented as per IS 456
5	The foundation should have a base plate as per IS800.
6	The Mast should be made of GI pipes as per IS (IS –1161 for properties of tubular sections and IS 806 –1968 for design of leg members)
7	Loading on the masts as per IS-875-1987 (part 3)
8	Tower material should be galvanized.
9	All the bolts and Nuts should be properly secured and should have anti rusting coating.
10	Aviation light and lighting arrestor should be provided at the top of the mast
11	The mast should withstand the wind load speed of atleast 140 Kmph
12	For the towers that are at least 9 meter in height, a ladder shall be provided externally right through from the ground level up to Top of Tower.
13	The tower should comply recent standards

17) PLB HDPE DUCT

S. No.	Specification
1	Compliant to DoT GR no. G/CDS-08/01, Dec 99 or RDSO specification no. RDSO/SPN/TC/45/2012.
2	Minimum inner diameter of 26mm HDPE pipes for burial applications with through sealing of duct joints with coupler and post-installation sealing plug for cable ends to prevent ingress of dirt and water.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

3	Minimum wall thickness of 3mm and lubricated layer thickness should be minimum 10% of wall thickness.
4	Silicon coated permanently lubricated HDPE duct construction
5	Highly resistant to corrosion from water and aggressive soil.

18) STP CABLE

S. No.	Specification
1	CAT6 STP/SFTP cable compliant with TIA/EIA-568-C2
2	Minimum 23 AWG solid bare copper conductor with HDPE insulation
3	Aluminium/Polyester foil with tinned copper braiding
4	FR-PVC/LSZH sheath
5	Should be in 305 meter box/roll.

19) UTP CABLE

S. No.	Specification
1	CAT6 UTP cable compliant with TIA/EIA-568-C2
2	Minimum 23 AWG solid bare copper conductor with HDPE insulation
3	Should be in 305 meter box/roll.

20) Outdoor Armoured Cat 6 cable

S. No.	Specification
1	Conductor : 23(1) AWG, Solid bare copper
2	Insulation : High density polyethylene
3	No of pairs : 4
4	1^{ST} Jacket : Polyvinyl Chloride, Grey
5	2ND JACKET ARMOURE : Galvanised steel wire
6	3^{RD} JACKET : Polyethylene
7	Conductor Resistance < 7.3 Ω/100M @ 20°C
8	Max DC Resistance unbalanced < 2.5% @ 20°C
9	Max capacitance unbalanced < 330 pF/100M @ 20°C (Pair to Pair ground)
10	Characteristic Impedance (1-350MHz) 100 +/- 15Ω
11	Mutual capacitance < 5.6 nF/100M
12	Max delay skew < 45 nS/100M
13	Temperature rating -15 to +75°C

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

21) STP PATCH PANEL

S. No.	Specification
1	CAT6 STP 24-port patch panel compliant with TIA/EIA-568-B2 in rack mount configuration and suitable for 22-24 AWG stranded and solid wire
2	Compatible with both 110 and krone punch down tool.
3	Phosphor bronze with nickel plated RJ45 jack contact and bronze with nickel plated RJ45 jack shield. Minimum 50 micro-inches gold plated on plug contact area.
4	Minimum 18 AWG ground wire

22) UTP PATCH PANEL

S. No.	Specification
1	CAT6 UTP 24-port patch panel compliant with TIA/EIA-568-B2 in rack mount configuration and suitable for 22-24 AWG stranded and solid wire
2	Compatible with both 110 and krone punch down tool.
3	Phosphor bronze with nickel plated RJ45 jack contact and bronze with nickel plated RJ45 jack. Minimum 50 micro-inches gold plated on plug contact area.

23) STP I/O

S. No.	Specification
1	CAT6 shielded single IO loaded with STP keystone jack compliant with TIA/EIA-568-C2 and suitable for 22-24 AWG stranded and solid wire
2	Compatible with both 110 and krone punch down tool.
3	Thermoplastic/equivalent shuttered faceplate
4	Suitable backbox to be provided

24) UTP I/O

S. No.	Specification
1	CAT6 UTP single IO loaded with keystone jack compliant with TIA/EIA-568-C2 and suitable for 22-24 AWG stranded and solid wire
2	Compatible with both 110 and krone punch down tool.
3	Thermoplastic/equivalent shuttered faceplate
4	Suitable backbox to be provided

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

25) STP PATCH CORD

S. No.	Specification
1	CAT6 shielded minimum 24 AWG stranded 4-pair twisted bare copper cable (1 meter) compliant with TIA/EIA-568-C2 factory terminated with RJ45 shielded modular plugs at both ends
2	Suitable for 100Base-TX and 1000 Base-T PoE application
3	HDPE insulation
4	Minimum 26 AWG drain wire

26) UTP PATCH CORD

S. No.	Specification
1	CAT6 UTP minimum 24 AWG stranded 4-pair twisted bare copper cable (1 meter) compliant with TIA/EIA-568-C2 factory terminated with RJ45 modular plugs at both ends
2	Suitable for 100Base-TX and 1000 Base-T PoE application
3	HDPE insulation

27) OUTDOOR MIMO ANTENNA

S. No.	Specification
1	Should be a single assembly or a pair of separate antenna assemblies for use in 2.4Ghz and 5GHz bands under 802.11n MIMO applications and suitable for three spatial stream outdoor wireless access points.
2	Necessary mounting hardware to be included for pole and wall mounting
3	Each antenna assembly to have either of three or six dual band elements in an weather proof rugged radome/equivalent outdoor enclosure
4	Should be of omni directional type with minimum gain of 8dBi in 5GHz and 6dBi in 2.4GHz. Gain mentioned should be with required outdoor rated coax pigtail cable (minimum 3ft low loss cable). Should have uniform and symmetrical radiation patterns
5	Operating frequency range: 5GHz (5.150 – 5.875) and 2.4GHz (2.400 – 2.500)
7	Wind gusting survival: minimum 250 km/h
8	Ingress protection: IP67

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

28) ANTENNA LIGHTNING ARRESTER

S. No.	Specification
1	Should be of same make as that of outdoor MIMO antenna for interoperability and compatibility.
2	Maximum insertion loss: 0.4 dB
3	50 Meg Ohm insulation resistance
4	Frequency: 100 – 6000 MHz
5	Gas discharge lightning arrester in nickel plated brass enclosure and with shunting capacity up to 5000 Amperes of impulse current
6	Should have a ground lead
7	Lighting arresters to be provided for all RF connectors in the offered antennas

29) NETWORK RACK (24U)

S. No.	Specification
1	24U floor standing powder-coated metal body construction suitable for mounting 19" wide equipment's, minimum 600 mm depth
2	Transparent door with lock and key, top and bottom side cable entry with proper covering
3	All opening and cable entry points should have proper cap/sealing for dust and rodent protection
4	Accessories: Power strip with spike guard (5 x 5/15A sockets, 16A MCB), Minimum 1 x equipment tray, Minimum 1 x Cable manager
5	RoHS compliant

30) NETWORK RACK (12U)

S. No.	Specification
1	12U wall mountable powder-coated metal body construction suitable for mounting 19" wide equipment's, minimum 600 mm depth
2	Transparent door with lock and key, top and bottom side cable entry with proper covering
3	All opening and cable entry points should have proper cap/sealing for dust and rodent protection
4	Accessories: Power strip with spike guard (5 x 5/15A sockets, 16A MCB), Minimum

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

	1 x equipment tray, Minimum 1 x Cable manager
5	RoHS compliant

31) SERVER (Server for VMS)

S. No.	Specification
1	**Housing – should be** 2-RU from factor , 12 × SAS front-loading drive bays or better
2	**Motherboard -** Dual Intel E5-2620 2.0 GHz Xeon 6-core CPU, dual 8 GB DDR3 RAM
3	**RAID Controller -** Embedded RAID 1/5 4 ports SAS/SATA
4	**LEDs -** Power, hard-drive activity, network activity, system overheat/fan fail
5	**Power supply -** Server should have min 2 power supply
6	**Operating temperature -** 32 to104°F (0to40°C)
7	**Non-operating temperature** -40 to 158°F (-40 to 70°C)
8	**Operating humidity** 10 to 90% non condensing
9	**Non-operating humidity** 5 to 93% non condensing
10	**Internal/external storage option** storage SAS hard-disk drive and storage should support minimum RAID 6 - 9 x 4 TB with RAID 6 ~ 27 TB storage
11	**On-board storage repositories** – Server should have min 1 for RAID-5 configuration for video surveillance application

32) SERVER (Server for NMS, IPS and SMS Gateway)

S. No.	Specification
1	**Housing – should be** 2-RU from factor , 12 × SAS front-loading drive bays or better
2	**Motherboard -** Dual Intel E5-2620 2.0 GHz Xeon 6-core CPU, dual 8 GB DDR3 RAM

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

3	**RAID Controller -** Embedded RAID 1/5 4 ports SAS/SATA
4	**LEDs -** Power, hard-drive activity, network activity, system overheat/fan fail
5	**Power supply -** Server should have min 2 power supply
6	**Operating temperature -** 32 to104°F (0to40°C)
7	**Non-operating temperature** -40 to 158°F (-40 to 70°C)
8	**Operating humidity** 10 to 90% non condensing
9	**Non-operating humidity** 5 to 93% non condensing

33) Outdoor Fixed Camera

S.No.	Feature	Specification
1	Image Sensor	1/2.8 Inch CCD/CMOS Progressive Scan 2 MP or Better
3	Minimum Illumination	Color: 0.2 Lux & 0 Lux When IR is ON. B/W: 0.04 Lux & 0 Lux when IR is ON
4	Shutter speed	1/5 to 1/10,000 S or Automatic as per Image.
5	Lens	Vari focal 2.8-9 mm/ 3.6-9mm
6	Horizontal angle of view	35^0 - 93^0
7	Day and night	Automatic
8	Video compression	Motion jpeg, H.264
9	Resolution	2 MP (1920x1080)
10	Frame rate	25 FPS for 1920x1080
12	Signal to noise ratio	65 DB or better
13	Video streaming	Individually Configured 02 Video Streams (H.264, MJPEG)
15	Network security	Password protection, IP address filtering, HTTPS encryption, user access log
16	Supported protocols	TCIP/IP, ICMP/DHCP, PPPoE/DDNS/ DNS or equivalent, UDP/HTTP,,SMTP, RTP/RTSP, SNMP,

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

		protocols.
17	System integration	Open API (Application programming interface)
18	Intelligent video	Video motion detection, tampering alarm
19	Casing	IP67/NEMA 4xRated Outdoor Housing
20	Connectors	RJ 45 for 10BASE-T/100BASE-TX, IP67-rated RJ-45 connector kit
21	Power	PoE (802.3af compliant (Class 3)), AC24V/DC12V, 100-230VAC
22	Regulatory standards	CE, UL,EN, FCC
23	Support materials	Manual, Installation guide, Technical service manual, recording software, installation and management tools, windows decoder 1-user license
24	I/O Port	01 IN, 01 OUT
25	Accessories	Should include required accessories for complete outdoor installation including mounting bracket/leg for pole and wall mount.
26	Operational Temperature	0 deg C to 50 deg C
27	Upgrade	Through Web Browser, Online, Firmware Upgrade
28	Alarm Events	Events/alerts send via FTP/SMTP, HTTP, email, Pre-Post alarm buffering.

34) 40" LED Professional Display

S. No.	Feature	Specification
1	Diagonal Size	40"
2	Type	Full HD
3	Resolution	1920 x 1080
4	Brightness (Typ.)	450 cd/m^2
5	Aspect Ratio	16 : 9
6	Dynamic C/R	100,000 : 1 (AV Mode)
7	Contrast Ratio	5000:01:00
8	Viewing Angle (H/V)	178:178
8	Response Time (G-to-G)	8ms maximum
10	Display Colors	16.7M

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

11	Connectivity (Input)	Analog D-SUB , DVI-D, Component, CVBS, HDMI, USB
12	Audio (Speakers)	20W (10WX2)
13	External Control	RS232C (in /out), RJ45
14	Media Player Option Type	Embedded
15	Special Features	Built in Software to Play JPEG, Flash Player, Video, PPS File through USB, Built in Speaker (10W + 10W), Internal Memory-4 GB (For User at least 2.8GB Free), PIP/PBP
16	Power Supply	100-240V~, 50/60Hz
17	Compatible	should be compatible to Thin Client or CPU
18	Energy Star	Energy Star 5.1
19	Safety certification	UL,CE, cUL, CB Scheme, TUV
20	Accessory	Remote Controller, Power Cable, RGB Cable, Manual, wall mounting panel accessory, 10 mtr. HDMI cable.
21	Warranty	Five Years On Site

35) <u>Indoor Router</u>

S. No.	Feature	Specification
1	**Architecture**	The Router should have complete security suite by supporting IPSec & SSL VPN, Firewall (Zone based & Stateful firewall), IPS, Content Filtering functionalities into a single box along with full support for dynamic routing protocols. If any of the mentioned features can't be provided into a single box solution by any vendor, multiple boxes must be quoted to achieve these features from day one.
2	**Interface Support**	Router should have minimum 4 slots to accommodate large variety of interface & should support FE, GE (both Ethernet based & fiber based), Serial V.35, ports, G.703 ports, E1, Chn E1, PRI etc.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

3	**Performance**	The router should support minimum 50 Mbps of WAN link termination with minimum 350 kpps of forwarding rate for both IPv4 & IPv6.
4	**Layer 3 Protocol Support**	The router shall have the following IPv4 Interior Gateway Protocols (IGP) – Static Route, Default Route, RIPv2, OSPFv2 and IS-IS, BGP4 from day one. All necessary licenses if any, to be provided to enable Static Route, OSPF V3, BGPV4 for IPv6. IP Multicast Routing Protocols to facilitate applications such as streaming, webcast, command & control etc must be enabled from day one along with PIM SM, MPLS features – LDP etc.
5	**Management**	The router shall have SLA monitoring tools to measure state of the network in real time. The SLA operations shall provide information on TCP/UDP delay, jitter, application response time, VoIP MOS score, Packet Loss etc.
6	**Interface Requirements:**	3 x 1 Gigabit Ethernet Interfaces from day one, out of which minimum 1 port should be SFP based.
7	**Industry Standards & Certifications**	The Router should be minimum EAL2 or NDPP certified

36) <u>Outdoor Router</u>

S.No.	Specification
1	**General requirements**
1.1	Router should be ruggedized modular in nature with IP30 or above certification.
1.2	Should support Firewall, IPS features.
2	**Hardware and interface requirements**
2.1	Routers should support LAN and WAN connectivity options including Gigabit Ethernet, Fast Ethernet, Serial (V.35) and 3G Wireless.
2.2	Router should have minimum 4x10/100 FE ports
3	**Quality of Service (QoS) requirements**
3.1	Routers should support Class-based queuing

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

3.2	Routers should support marking, policing and shaping
4	**Security features**
4.1	Routers should have AAA using RADIUS and TACACS+ feature
4.2	Routers should support Tunnels (GRE, IPSec) from day one
4.3	Routers should support DES, 3DES, AES encryption from day one
4.4	Routers should support Network address translation (NAT) from day one
5	**Industry Standards & Certifications**
5.1	The Router should be minimum EAL2 or NDPP certified

37) L2 Switch POE 8-port (Indoor)

S. No.	Specification
1	Minimum 8 No's of 10/100/1000 Base-Tx PoE ports (Duplex, Full, Half) and additional 2 x 1GE SFP based Uplink port
2	All ports should have features of auto- negotiate, flow control (802.3x), port based network access control (802.1x), port security, MAC filtering etc.
3	Minimum Switching capacity of 10 Gbps or more
4	Switch should support 4000 VLAN ID, Minimum 512 VLAN's
5	Switch should support IGMP, MLD, MSDP, PIM, static routing, RIP from day one
6	Switch should support UDLD, Auto-Smart ports, Resilient Ethernet Protocol from day one
7	Minimum Packet Forwarding rate of 14.88 Mpps or higher
8	MAC address table of minimum of 8k per switch
9	Should be IPv4 and IPv6 ready from day one
10	Should have IEEE 802.1.d STP, IEEE 802.1Q VLAN, IEEE 802.1p QoS, IGMP snooping
11	Features of ACLs, DHCP, NTP, SNMPv1,v2 & v3, TELNET/ SSH
12	Should have console port for administration & management, CLI and web based GUI for easy management
13	Switch should be EAL2 or NDPP certified

38) L2 Switch POE 8-port (Outdoor)

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

S. No.	Specifications
1	The switch should be manageable Industrial Grade ruggedized in nature that provides minimum 8 x 10/100BASE TX PoE access ports from day one, with additional 2 x 1000 BaseX SFP Uplink ports.
2	Switch should have non-blocking wire-speed architecture with support for both IPv4 & IPv6 from day one having switching fabric of minimum 8 Gbps or more with forwarding rate of minimum 6 Mpps
3	Switch should have Dual Field Replaceable & upgradable Power Supplies
4	802. 1Q VLAN on all ports with support for minimum 100 active VLANs & minimum 2k MAC address
5	Spanning Tree Protocol as per IEEE 802.1d, Multiple Spanning-Tree Protocol as per IEEE 802.1s, Rapid Spanning-Tree Protocol as per IEEE 802.1w
6	Switch should support IGMP v1/v2/v3 as well as IGMP snooping.
7	Static, Inter-VLAN routing must be enabled from day one
8	Static & Inter-VLAN routing enabled from day one with future scalability to support OSPF, RIP for both IPv4 & IPv6
9	Switch should support classification and scheduling as per IEEE 802.1P on all ports with minimum four egress queues per port
10	Strict priority queuing guarantees that the highest-priority packets are serviced ahead of all other traffic.
11	Switch should support ACLs, Extended IP ACLs, support RADIUS and TACACS+ for access restriction and authentication.
12	Should support a mechanism to shut down Spanning Tree Protocol Fast-enabled interfaces when BPDUs are received to avoid accidental topology loops.
13	Switch should support static ARP, Proxy ARP, UDP forwarding and IP source guard, DHCP Snooping, DHCP Option 82, Dynamic ARP Inspection (DAI)
14	(0to +55ºC) continuous operating temperature range
15	Operating relative humidity: 5% to 80% non-condensing
16	Switch with Protection Class - IP 20 with support for rack and wall mount options.

39) <u>UPS Online 1KVA with 1 Hour Back Up</u>

S.No.	Description	Specifications

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

1	Capacity	Capacity700Watts/ 1KVA or better
2	Technology	SPWM, IGBT/MOSFET
3	Input voltage	230V AC, Single Phase, 3 wire
4	Input Voltage Range	160V AC to 282V AC
5	Input Frequency Range	47 /63 Hz +/-3 Hz (auto sensing)
6	Input Over Voltage Protection	280V AC
7	Input Under Voltage Protection	155V AC
8	Over Voltage cut off	Should be offered internally/externally
9	Output voltage	230V AC Single phase ±1%
10	Frequency	50 Hz ± 1%
11	Load power factor	0.7 Lag to Unity
12	Output Over Voltage Protection	245V AC Single Phase
13	Output Under Voltage Protection	210V AC Single Phase
14	Over load capacity	125% of rated load for 60 sec
15	Total Harmonic Distortion	Less than 3%
16	Short circuit protection	Soft Shut down should occur without blowing any fuse
17	Crest Factor	up to 2 : 1/ 3:1or better
18	Static Switch	Automatic Bi-directional should take care of 100% uninterrupted transfer of load from UPS
19	Transfer Time	<4 m sec
20	Overall Efficiency	>85%
21	Inverter Efficiency	>90%
22	Metering	Separate/Single Digital Meter
23	DC Voltage , DC Current Charge/discharge,	Display Required

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

	Output Voltage, Input Voltage	
24	Digital three/three & half freq. Meter (for Both input & output)	Display Required
25	Battery	Maintenance-free sealed Lead-Acid battery with suspended electrolyte : leak proof
26	Period of Backup	1Hr. with 100% Load
27	DC Bus Ripple	<1%
28	Total DC Bus Voltage	As per requirement
29	No. of Battery Banks	Single
30	No. of Battery	To be specified
31	Operating Temperature	0 - 50 °C
32	Humidity	0 -95% (non-condensing)
33	Noise Level	<50 dB at full Load from 1 Mtr distance

40) <u>Help Desk Support Software</u>

- The Solution and Service Provider will provide qualified and trained person for Help Desk cum call centre support executive at the Raipur location for a period of 60 Months to attend the call from users in the District/ Different Government Offices, end users etc. Help desk support would be required only after the successful commissioning. The Help Desk support software will be provided by the Selected Bidder which shall be integrated with Web based user access Portal.
- The Selected Bidder will run this Help Desk call center 16x7x365 days between 7:00 AM to 11:00 PM. CHiPS will provide required space, desktop, electricity, furniture and telephone lines to run the call center.
- The Selected Bidder Shall provides 2 nos. Help Desk Support Executive with minimum 1 year experience in Call center operation for five years.
- In this City Wi-fi project it is envisaged to provide the free, Secure and stable internet connectivity to the citizen for the specific time. It is expected from the Selected Bidder to

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

build the Helpdesk to assist the citizen for accessing the wi-fi Network. Helpdesk will be with the Following Features.

- Envisaged Helpdesk should be equipped with experienced and qualified technical staff & Helpdesk executive should assist Help seeker to resolve their problem

S. No.	Specification
1	Helpdesk should be equipped with a platform wherein all the Complaints will be registered
2	Application should have an option to get the complete detail of the caller, from where Caller is calling, Device details he is accessing the Internet, Detail of the Problems caller is facing, etc.
3	This would enable the Helpdesk staff to log complaints and take action as per the severity of the reported problem
4	User should be able to register the Complaint from his mobile or handheld
5	Helpdesk application should be able to give the call resolution time and Detail of the Resolution
6	Application Should generate the MIS report through the application which should provide the status and result of the calls attended report, call resolved report etc.
7	Helpdesk application should be web based & end user can log the call from anywhere.
8	The Selected Bidder should configure the Helpdesk application and train the identified resources on Help-Desk operation.

41) RF Connectivity Point to Multipoint

S. No.	Specification
	Microwave Point-to-Multipoint RF: IP Radios
1	Frequency Range: 2.4 GHz/5.8 GHz or in combination as per requirement, ISM un licensed free band.
2	The proposed network architecture shall have Base Station Sector at the central location and Subscriber Units at the outdoor Location.
3	The offered radio systems should be of IPv4/IPv6 compliant and should have 64/128 bit encryption.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

4	System standards: All the radio equipments shall comply fully with all customers defined mandatory requirement and conforming to the latest version of ETSI/FCC/ IEEE & must have TAC (Type Approval Certificate) approval of WPC. All certificates to be submitted with Technical Bid.
5	Network Management: Report generation, Performance Monitoring and Trend Reports, SNMP v1 & v3 shall be supported. QoS Shall be supported. The network management system to be deployed at central location to manage and configure base stations and remote station unit. The functionality includes automatic and manual device discovering of all network elements such as base stations, remote stations etc and system shall keep details of all network elements.
6	Collocated Radios should have an efficient mechanism to eliminate mutual Interference at sites with multiple radios.
7	Network Interface should support GbE Port to enable transporting more than 100Mbps asymmetric traffic
8	IP Protection: IP 67 or better certified by International Accredited Lab
9	Operating temperature for ODUs: Minimum 60 deg. Celsius or better
10	VLAN Support: It should be based on IEEE 802.1Q, 802.1P and QinQ
11	Quality of Service: System should support QoS based on 4 Queue according to 802.1p/Diffserve
12	Point to Multi Point Base Stations and Point to Multi Point CPEs should be of same Make and Manufacturer to enabling configuration and fault management with single NMS
13	Offered Radio should be of proven track record and should have been deployed for 200 or more CPEs in one Single Project for more than Two Years with Govt/Public Sector Undertaking. OEM should provide to Bidder PO and documentary evidence regarding deployment and satisfactory performance
14	OEM of Radios should have own local RMA repair centre in India for more than 5 Years. OEM should provide to Bidder documentary evidence regarding Service Tax registration and Service Tax Number
15	The offered system should have capabilities of self-backhaul by using one of the high capacities CPE to act as back haul to base station eliminating additional PtP link for back haul requirements

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

	Point to Multi Point Radios:
1	System consisting of outdoor and indoor equipment, antenna, cables (RF/IF) with connectors, system software and all other hardware and software required for operation, monitoring & configuration of the link.
2	Modulation technology: OFDM/TDMA – MIMO 2x2 /Diversity
3	It shall be carrier type point to multi point broad band wireless access radio system.
4	Collocated Radios should support TDD intra site synchronization to eliminate mutual Interference at sites with multiple radios of same vendor with Synchronization using Ethernet port of GbE Ethernet Switch.
5	Collocated Radios should support TDD inter site synchronization to eliminate mutual Interference at sites with multiple radios of same vendor with GPS Based Synchronization support
6	Network Interface should support GbE Port 10/100/1000 to enable transporting more than 100Mbps
7	Channel Bandwidth: 05/10/20/40 MHz with 5 MHz steps.
8	Through put at BTS location : Should be min. 200 Mbps (aggregated).
9	Radio should cover distance of 25 Kms.
10	Should support SNMPv3& Telnet.
11	No of CPE per base station: Min 30 CPE per base station.
12	PtMP System should support dual stack IPv4 & IPv6 IP Address
	CPE Radios:
1	System consisting of outdoor and indoor equipment, antenna, cables (RF/IF) with connectors, system software and all other hardware and software required for operation, monitoring & configuration of the link.
2	It shall be carrier type point to multi point broad band wireless access radio system.
3	Channel Bandwidth: 05/10/20/40 MHz with 5 MHz steps.
4	Radio should cover distance of 25 Kms.
5	Modulation technology: OFDM/TDMA– MIMO 2 x 2 / Diversity
6	Throughput: Upto20 Mbps Aggregated and scalable up to 50 Mbps

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

42) RF Connectivity Point to Point

S. No.	Feature	Specification
1	Frequency Range	2.4 Ghz and 5.8 GHz band
2	Channel Width	5/10/20/40mhz
3	Radio Technology	TDD, **OFDM**, Built in packet aggregation of Radio
4	Wireless Data Rate	20 Mbps. Should be scalable up to 100 Mbps without any hardware or software up-gradation.
5	Rf Modulation Scheme	BPSK, QPSK, CCK, QAM4, QAM64 and OFDM
6	Duplex Format	Time division Duplexing (TDD) /TDM Polling
7	Range	Upto 25 Km point to point
8	Output Power	adjustable 0 to 27dBm
9	Watch Dog Timer (for un-manned monitoring)	Software/Hardware/Temperature
10	Bandwidth Management and QOS	Required
11	Router	Required
12	Management Options	Preferably Telnet/ SNMP Based/ NMS
13	Packet Format	IEEE 802.3 and Ethernet II
14	Network Connection	Ethernet interface should be 10/100/1000
15	802.1x support	Shall Support 802.1X
16	Bridge Functionality	Shall support Bridge functionality
17	Network Topologies	Point to point
18	MIMO Support	2X2 MIMO
19	Repeater Mode	Built-in Mode
20	RF Collision Management	Combined TDD / OFDM and FEC
21	Remote Management	http web,ssh,telnet
22	Management Port	Ethernet,ssh , Telnet
23	SNMP (Read &Write) with Traps	V2
24	MPLS Pass thru support	Yes
25	Management Port Functionality	Full configuration/management from any station

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

		through a command line
26	Software Management	File download over RF for firmware updates
27	Power Adapter Requirement	230 VAC and +/- 48AC
		7V - 18V DC, +/- 48v DC
28	Operational Temperature	60 degree Celcius or more
29	Humidity	Humidity 0-95% non condensing

43) Video Management System (VMS)

S. No.	Specification
A	**General**
1	The proposed video management system (VMS) shall be able to support up to 1000 CCTV Camera at each Control Centres so as to accommodate any future expansion. Totally Scalable solution with no limitation whatsoever on software, unlimited Camera & Unlimited Clients & Unlimited components like servers & sites, etc
2	System shall support viewing of video from multiple locations and by multiple users.
3	System shall support Recording of Multiple Camera fully independent of each other and individually configurable
4	In event of any network issue, the VMS System shall have seamless synchronization to automatically merge all the local recording in the camera with the central recording, once the network is restored and provide the operator with continuous recording.
5	Each recording server shall be capable of handling at least 200 Mbps traffic and shall provide sufficient spare capacity. These servers shall not be overloaded. And the CPU Load shall not exceed 50% with all features enabled
6	Proposed system shall provide seamless integration capabilities with Video Analytical and Other System like Emergency communication system, Face Recognition, Automatic, Face Search, Object Classification system and including third party software systems proposed.
7	Proposed System shall be possible to have 2 way communications from the location of the camera to the central viewing / monitoring station, through Audio Inputs and Outputs on the camera or Independent SOS Stations Deployed
8	The system should be easy to install, learn, operate and manage:

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

9	The VMS must have rich user interface that provides one-click access, drag-drop, context menu, shortcut keys, customizable GUI etc. to enhance operational efficiently in daily tasks and maintain. The VMS shall have ability to respond fast & shall be applicable to all processes, functions, features, and screens of a video management system.
10	The VMS shall have ability to enforce custom settings for event detection, alarm notification, recording, input/out (I/O) control, and other features in response to events. The alarm management module shall support graphical displays with interactive icons to display the status of the cameras & other inputs.
11	The VMS shall have ability to connect and integrate other technologies and third party software systems (e.g. ANPR, RLVD) and act as a cohesive platform for entire surveillance and security system. The system should be able to bi-directionally and dynamically exchange data between various software applications in real-time as well as schedule transfer.
12	Well documented Software Development Kit (SDK): The SDK should include a rich, easy-to-use Application Programming Interface (API) for most common programming languages.
13	The VMS shall have ability to maintain independently from any one vendor & shall support open standard protocol i.e. ONVIF (Open Network Video Interface Forum) and or PSIM (Physical Security Information Management)
14	The VMS shall have IT industry technologies including SOAP, RTP, and Motion JPEG, MPEG-4, and H.264/H.265 video codecs and also covers storage and additional aspects of analytics.
15	All video streams supplied from analog cameras or IP cameras shall be digitally encoded in MPEG-4, M-JPEG, H.264 / H.265 or MxPEG compression formats and recorded simultaneously in real time. The VMS shall support Camera, Encoders, Network Video Recorders and Digital Video recorders from various manufacturers.
B	**Licensing**
1	The Bidder should provide at least 1 Admin perpetual License with 10 web based user perpetual licenses for viewing and other access according to their role & responsibility. The OEM should provide bug fixing, patches, any update, error fixing up to period of 5 years from date of installation.
C	**VMS Functional Specification (Video Management Server)**

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

1	The VMS shall be a highly scalable professional level software solution
2	The VMS will offer a complete video surveillance solution that will be scalable from one to 1000 of cameras that can be added on a unit-by-unit basis.
3	The VMS shall possess Client-Server architecture.
4	The VMS Server shall be a system service providing the following functionality:
a)	Configuration of all VMS components
b)	Video surveillance in four modes: Live Viewer, Alarm Viewer, Archive Viewer, Archive Search
c)	Advanced Archive Search/Exploring
d)	Interactive 3D map
e)	Alarm Monitoring and System Log
f)	Web Server
g)	Video Analytics
h)	A set of utilities (activation, support, log management, watermark check)
5	Client VMS provides access to the functionality provided by the Server
6	The VMS must be capable of using two independent streams from camera or IP encoder: one for visualization and one for recording. All settings for each stream including resolution, codec type, frame rate and compression level may be choose independently without affection overall system performance and IP device functionality.
7	Each camera bit rate, frame rate and resolution will be set independently from other cameras in the system, and altering these settings will not affect the recording and display settings of other cameras
8	The VMS shall be based on a true open architecture that shall allow for use of non-proprietary PC storage hardware that shall not limit the storage capacity and shall allow for gradual upgrades of recording capacity.
9	The VMS shall be able to use multiple CCTV keyboards and joysticks (with USB connection type) to operate the entire set of cameras throughout the system, including

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

	cameras of various manufacturer's brands, including their PTZ functionalities.
10	The VMS shall support the latest revisions of the ONVIF and PSIA standards
11	The VMS shall allow for the configuration of a time zone for each camera connected to a DVS and for each Server. For playback review, users shall have the ability to search for video based on the following options: 1) local time of camera 2) local time of the Server 3) local time of users (operator) workstation 4) other time zone
12	The VMS consists of the Server and Client.
13	The Server and Client may be installed on the following operating systems: Windows XP, Windows Server 20XX, Windows 7 / 8, and others. 32-bit and 64-bit versions should be supported.
14	The Server and Client can function on different networks.
15	Audio and Video storage configuration for the Server shall either be: 1) RAID configuration and Internal or external IDE organized 2) RAID configuration or Internal or external SCSI/Fibre Channel organized.
16	The Server shall not limit the actual storage capacity configured per server
17	The VMS support for widescreen displays and cameras, and touch screen displays
D	**VMS Servers Functionality**
1	Configuration of all VMS components, video surveillance in four modes: Live Viewer, Alarm Viewer, Archive Viewer, Archive Search (Advanced Archive Search/Exploring), Interactive 3D
2	Map, Event Control and the System Log, Video Analytics, a set of utilities (activation, support, log management, watermark check).
3	The Server shall offer the capability to be installed on several PCs to enable distributed archiving in a LAN or WAN environment. The Server shall not limit the number of PCs which can be networked together to form a distributed archive server system
4	The Server shall give the capacity to view all Camera/ Encoder / NVR / DVR in a network even if the Camera/ Encoder / NVR / DVR are assigned to different archive servers.
5	The Server, in the case that a camera signal is lost, shall detect the video loss and have the capability to alert the systems administrator.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

6	The Server shall receive all incoming events (motion detection and triggered digital input and relay output) in the system and take appropriate actions based on user defined event/action relationships.
7	The Server shall create an audit trail of events and user activities.
8	The Server shall authenticate users and give access to the VMS based on predefined user access rights.
9	**Alarm Events**
a)	Active / Hot
b)	Acknowledged and classified by operator
c)	Missed
10	**Application Events**
a)	Application Lost
11	**Archive Events**
a)	Archiving stopped
b)	Backup started
c)	Backup success
d)	Backup failed
12	**Camera Events**
a)	Auto-Start Recording
b)	Auto-Stop Recording
c)	Motion on
d)	Motion off
e)	Signal Lost
f)	Signal Recovered

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

g)	Digital Input Events
h)	Digital input opening
i)	Digital input closing
j)	Signal lost
k)	Signal recovered
l)	Unit discovered
m)	Unit lost
13	**User-defined Events**
a)	User-defined events
14	**Archiving Actions:**
a)	Start recording
15	**Monitoring Actions:**
a)	Switching to the layout with the minimum number of cells to display the camera generating the alert
b)	View a camera in Live Viewer
c)	View a map in Live Viewer
16	**PTZ Actions:**
a)	Go to preset
17	**User Notification Actions:**
a)	Send a SMS.
b)	Send an Email
c)	Send an alert sound
d)	Initiation of an alarm in the system for Standard Operating Procedure
18	**Output Relay Actions:**

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

a)	Set the output relay to on / off / Toggle
19	The VMS shall support multiple Servers connections. Grouping of Server is required and user defined. Connection between different Servers shall be done automatically if these Servers belong to the same servers group. Servers which belong to same servers group shall share their configuration database between each other and shall provide client application with access to any device (camera, server) related to this servers' group regardless which server was point of initial client application connection to the system.
20	The VMS shall allow users to connect to multiple Servers. Their access rights could be determined on a per Server basis or per servers' groups basis
21	The Server shall provide the functionality of storing of video and audio streams based on triggering events such as: a) Motion detection b) Camera tampering c) Loss of image quality d) Digital input activation e) Video Analytics Events
22	**Video quality settings:**
a)	Resolution
b)	Frame Rate
c)	Bit Rate
23	**Recording mode:**
a)	Continuous recording
b)	Alarm recording
c)	Recording off
24	**Scheduled recording: Time and date settings**
a)	Daily

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

b)	Weekly
c)	By flexible schedules
25	The Server shall support Advanced Alarm Management, which shall have the ability: (Standard Operating Procedure)
a)	To assign alarms and procedures to specific users or user groups
b)	To allow a user to queue alarms, and view alarm history
26	**Archives configuration and management**
a)	The Server shall support OS-independent file system to avoid fragmentation of hard drive part intended for archive use and access of OS applications to archive files.
b)	Communication between System Core and archive file system shall be processed on low level without involvement of any OS application.
c)	VMS video archive can be created at designated part of the hard drive in any partition, at specially assigned partition or at dedicated hard drive completely reserved for video archiving.
d)	File system used for video archive recording shall not be affected by hard disk cluster/sector damage and this sector shall be ignored by System Core for further usage to avoid possible harm for archive integrity.
e)	User shall have possibility to create unlimited number of virtual archives in the system with ability to add certain cameras to specific archives with different recording parameters without affecting overall system performance, archiving effectiveness and cameras general functionality.
f)	**Administration of Server Features**
g)	Administrator / Supervisor Client Functionality of the feature on VMS Server, configuration is to be confirmed provided the feature exist in the VMS server
h)	The system is configured by the administrator or users with the corresponding access rights. System configuration refers to the following feature of the VMS Server
i)	Configuring the distributed architecture and combining Servers into an domain
j)	Automatic search and addition of unassigned hardware and Servers.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

k)	Configuring the web server: control of startup, authentication, etc.
l)	Creating and configuring system hardware objects: cameras (including fisheye) and their sensors, relays, speakers, microphones, and PTZ units.
m)	Changing video stream parameters: compression level, frame rate, video codec, etc
n)	Configuring streams for multi stream-supporting cameras. Selecting the stream for displaying, configuring the stream for recording to the archive.
o)	Changing audio stream parameters: audio codecs, bit rate, I/O mode, etc.
p)	Combining cameras into groups and limiting access to particular groups on the server
q)	Configuring SMS, email, and audio notification.
r)	Creating and configuring archives: placement of an archive in a file or on an entire logical disk, configuration of recording to an archive, selection of the mode for recording to an archive, pre-alarm recording functionality.
s)	Creating schedules for recording to an archive. Creating flexible schedules.
t)	Configuring detection: configuration of core audio and video detection tools: video image degradation, change in camera position, start of motion in frame, signal threshold exceeded, absence of signal, and noise.
u)	Configuring situation analysis: configuration of detection tools for motion start/stop, loitering, object appearance and disappearance, abandoned objects and line crossing, writing of object trajectories to the database (tracking).
v)	Configuring embedded analytics on cameras (if integrated).
w)	Configuring actions to be performed in the system when a detection tool is triggered: writing to archive and archive initiation, switching to the layout with the minimum number of cells to display the selected camera, switching relays, jump to preset, email, SMS, or audio notification.
x)	Configuring users and roles. Each user belongs to a defined role. The role governs the level of access of its users to settings and management of the system and hardware.
y)	Configuring storage of the system log and metadata: setting of the period for storage and clearance, as well as archive capacity .

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

z)	Configuring export folders for snapshots and video.
aa)	Configuring alarm evaluation mode: setting of the alarm hot time and operator inactivity time.
a)	Configuring client interface: choice of localization, calendar type, type of timeline and layouts ribbon, display of hints/tooltips, hiding of toolbars, animations, display of video streams properties in viewing tiles, etc.
b)	Configuring client startup: use of the client instead of the OS shell, configuration of automatic identification on client start.
c)	Configuring camera layouts: use of standard layouts, editing of standard layouts, changing of number of viewing tiles in a layout, re-sizing of viewing tiles in a layout.
d)	Configuring the interactive map: addition of camera labels to the map, addition of sensors and relays to the map, addition of labels for switching between maps, setting camera (including fisheye) fields of view, setting the map image (.bmp, .jpg and/or .gif image formats), attaching a map to a layout.
e)	Configuring screens on a multi-monitor workstation (video wall): activation of additional monitors in the system, configuration of layouts on additional monitors (no SW limitation for number of monitors).
F	**Client / Operator Functions**
1	Real-time video surveillance is the main functionality of the operator consol along with the following key features. Its made clear that the Client / operator is an interface to the functionality of VMS Server, hence its implied that these features is part of the VMS server
a	Simultaneous viewing of video in real time (live) from multiple cameras
b	Scaling of viewing tiles and digital zoom. Virtual telemetry (dewarping the image into Regional/Single View) for fisheye cameras.
c	Functions for object tracking and autozoom: highlighting / outlining and focusing on moving objects.
d	Display of camera sensor status and relay control directly from a viewing tile.
e	Video image processing: application of contrast, sharpness, deinterlacing.
f	Freeze-frame/ snapshot function: "freezing" video and automatically exporting a snapshot.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

g	Selection of a layout for display on the monitor, selection of cameras for display in each viewing tile.
h	Manual initiation of alarms by the operator; arming/disarming of cameras.
i	Control of the volume of the audio signal of every camera: on/off, level change.
j	Control of a PTZ camera using the PTZ control panel.
k	Setting and use of PTZ camera presets.
l	Control of focus, iris, and optical zoom by using the corresponding controls.
m	Activation of patrol mode / camera tour: automatic change in position of a camera according to the route provided by the list of camera presets.
n	PTZ control both with a virtual joystick and with a standard PC-connected joystick.
o	Point & click functionality.
2	Video monitoring in alarm evaluation mode
a	Automatic (when a detection tool is triggered) and manual alarm initiation.
b	Ability to replay alarm events (PiP). Quick jump to the start of an alarm event.
c	Operator evaluation of alarms on a three-point scale: critical, safe, false alarm. Each alarm status corresponds to a particular color in the archive. Unclassified alarms are marked and tagged as missed. For a particular alarm, alarm evaluation is available only to the operator who first switched to alarm evaluation mode.
d	Playback of an alarm event at different speeds, forwards and backwards.
e	Display of the reason for the alarm: name of the detection tool or user who initiated the alarm.
f	Standard video surveillance functions: digital video zoom, video image processing, export of snapshots.
3	Archive Viewer functionality
A	Ability to play back audio and video recordings from any time range.
b	Quick selection of a camera and archive for viewing video.
c	Ability to play back archived video from multiple cameras in sync. Simultaneous playback of video footage for multiple cameras and viewing other cameras live.
d	Navigation within the archive by using two timelines (synchronized): Example: horizontal (matches the selected camera) and vertical (for all cameras that are in archive mode (Archive Viewer).
e	Keyboard-based navigation of the archive.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

f	Navigation within the archive by using the list of alarms: filtering of alarms by category and cause, quick switching between alarm recordings.
G	Different speeds for forward and reverse playback, support for frame-by-frame video viewing.
h	"Compressed" viewing of the archive (single camera simultaneous archive parts view): display of tracking objects from different times in the selected portion of the archive; ability to quickly view the archive to spot important events.
i	Export of any frame to .jpg and of any selected video fragment to .mkv with digital watermark.
j	Object tracking and auto zoom: highlighting / outlining and focusing on moving objects.
k	Standard video surveillance functionality: digital video zoom, video image processing.
4	Archive analysis mode.
a)	video recording is for evidential and to be used for Crime prevention by suitably modifying the standard operating procedure (SOP) hence the following features is required
b)	Three types of search of video in the archive: by time, by events, and smart search (Advanced Archive Search/Exploring).
c)	Analysis of the archive as a whole or of a selected part.
d)	Search for events by category, trigger cause, and initiator.
e)	Split the archive or a selected portion into equal-sized video fragments.
f)	Playback of found fragments in a viewing tile. Playback controls are the same as in Archive Viewer.
g)	Export and watermarking of found fragments into .mkv format.
h)	Tracking functionality: moving objects are highlighted when found fragments are played back.
i)	Standard video surveillance functionality: digital video zoom, video image processing.
5	Interactive 3D map

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

a)	Interactive 3D Map superimposes camera locations on a site map and displays camera views in the same window. This handy viewing mode allows operators to monitor situations without spending time to switch between windows. Operators can instantly pinpoint where a selected camera is located on the map and identify the corresponding location of interest.
b)	Display of the map in 3D; when the map is open, the layout is also present on a video surveillance screen.
c)	Ability to change plane tilt, map scale, and focus; display of the map in 2D.
d)	Automatic map scaling and focusing to an alarm camera.
e)	Control of devices from the map (cameras and relays) and display of status of devices (cameras, relays, sensors).
f)	Immersive map mode (as well as for fisheye video cameras): video from a selected camera is displayed above the map, while the map is displayed in such projection that the video image is located in the field of view of the camera that is specified on the map.
6	System Log
a)	Logging & Search for events based on specified conditions: time interval of event occurrence, type of event, key phrase. Four types of events: System heath event, Error event, Alarm event, Debug information.
b)	Events are shown in the form: date and time, type, description.
c)	Export of a list of events to a .txt file.
d)	Ability to quickly jump to video of an event.
7	Other Utilities
a)	these are to be provided as per the architecture of the VMS system Provided, and in confirmation of all the features mentioned above
b)	The activation of VMS license. Automatic activation over the Internet or Automatic activation of license by serial number. If no Internet connection is present, a file with an activation request is created. Expansion of VMS functionality by using license updates

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

c)	Utility for collecting system information: collection of information about hardware status and configuration. This information is necessary for the system support & maintenance system
d)	Utility for log management: settings for archives of external logs and logging levels of the VMS Server and Client.
e)	Utility for watermark verification: verification of the watermark added during export of snapshots and video.
8	Web Server
a)	The VMS Web Server provides remote access to the Server over the Internet.
b)	Authentication of users connecting to the Web Server.
c)	Video surveillance in two modes: Live Viewer and Archive Viewer
d)	Real-time control of PTZ cameras: presets, optical zoom, control of pan / tilt angle and positioning speed.
e)	Digital zoom in both Live and Archive Viewer.
9	Mobile Clients
a)	Android and iOS Client for VMS. Client for Android and iOS operation systems allows connecting to the Server via Internet or Local WiFi
b)	Android and iOS Clients are free for downloading on Google Play and on App Store respectively.
c)	Authentication of users connecting to the Web Server.
d)	Video surveillance in two modes: Live Viewer and Archive Viewer
G	**Live Streaming on Web Portal**
a)	Shall have a functionality to display the live streaming and through Web based Portal to the citizen without any licensing requirement.
b)	If any additional IP camera(s) of different/same make is integrated with the solution, the live feed from the same shall also be provided on the web portal.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

8. Bill of Material

S. No.	Description	Qty (Q)	Unit	Proposed Quantity by bidder	Make/ Model
NOC/ Central Location components - Wi-Fi + IP Camera (X)					
1	**Wi-Fi Components**				
1A	**Active Networking**				
A1	Link Load Balancer	1	Nos.		
A2	Internet Security Firewall	2	Nos.		
A3	Core L3 Switch	2	Nos.		
A4	Access L2 Switch (24 Port)	4	Nos.		
A5	Wireless Controller with 100 client license	2	Nos.		
A6	Wireless Controller - license for 50 clients add on	1	Nos.		
A7	Wireless NMS Software with 100 client license	1	Nos.		
A8	Wireless NMS Software - license for 50 clients add on	1	Nos.		
A9	Switched Rack PDU EMS Software	1	Nos.		
1B	**Server for NMS, IPS and SMS Gateway**				
B2	Server with Operating System	2	Nos.		
1C	**Portal Software**				
C1	Web based user access Portal Software and Services	1	L/S		
1D	**Helpdesk support**				
D1	Helpdesk support Software	1	L/s		
1E	**Services**				
E1	Installation and commissioning of all components under 1A , 1B, 1C and 1D including Testing and Documentation.	1	L/S		
E2	Operations & Maintenance and warranty support for components under 1A , 1B, 1C & 1D up to 5 years	5	Year		

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

S. No.	Description	Qty (Q)	Unit	Proposed Quantity by bidder	Make/ Model
E3	Onsite Network Administrator cum Manager at NOC (Manpower services, per-year)	1	Nos.		
E4	Network support Engineer (Manpower services, per-year)	2	Nos.		
E5	Helpdesk Executive (Manpower services, per-year)	2	Nos.		
2	**IP Camera Components**				
2A	**VMS Solution**				
A1	VMS Server Software with 10 user and 1 admin license	1	Nos.		
A2	VMS Server Software user license for 5 user - add on	1	Nos.		
A2	LED Professional Display (40")	1	Nos.		
2B	**Server & Storage for VMS**				
B1	Server with Operating System	2	Nos.		
B2	External Storage of 25 TB capacity in RAID 6 configuration	1	Nos.		
B3	Internal Storage of 4 TB capacity in RAID 6 configuration for server expansion slot	1	Nos.		
2C	**Services**				
C1	Installation and commissioning of all components under 2A & 2B, including Testing and Documentation.	1	L/S		
C2	Operations & Maintenance and warranty support for components under 2A & 2B up to 5 years	5	Year		
Indoor Location Components - Wi-Fi Network (Y)					
A	**Active Networking**				
A1	Indoor Wireless AP	70	Nos.		
A2	Access L2 PoE Switch (24 port)	4	Nos.		

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

S. No.	Description	Qty (Q)	Unit	Proposed Quantity by bidder	Make/ Model
A3	Access L2 PoE Switch (8 port)	4	Nos.		
A4	Online UPS 1 KVA (1 Hr. back up)	8	Nos.		
B	**Services**				
B1	Installation and commissioning of all components under A, including Testing and Dcoumentation and Operations & Maintenance (for 5 years) per site upto 70 access points and thereafter propotionate basis	1	L/S		
Outdoor Location Components - Wi-Fi + IP Camera (Z)					
A	**Active Networking**				
A1	Outdoor Wireless AP	4	Nos.		
A2	Access L2 PoE Switch (8 port)	1	Nos.		
A3	Switched Rack PDU	1	Nos.		
A4	Online UPS 1 KVA (1 Hr. back up)	1	Nos.		
A5	Outdoor MIMO Antenna	4	Nos		
B	**IP Camera**				
B1	IP Outdoor IR Camera (with neccesary outdoor enclosure)	4	Nos.		
C	**Passive Networking**				
C1	Outdoor Enclosure	1	Nos.		
C2	Antenna Pole	4	Nos.		
C4	Antenna Lightning Arrester	4	Nos		
D	**Services**				
D1	Active components Installation, configuration, testing, documentation and Operations & Maintenance per site for 5 years	1	L/S		

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

S. No.	Description	Qty (Q)	Unit	Proposed Quantity by bidder	Make/ Model
D2	IP Camera Installation, configuration, testing, documentation and Operations & Maintenance per site for 5 years	1	L/s		
D3	Commissioning of Outdoor Enclosure	1	L/S		
D4	Erection of Antenna Pole	4	L/S		
D5	Installation and Commissioning of Outdoor Antenna	4	L/S		
D6	Installation and Commissioning of Antenna Lightning Arrester	1	L/S		
Passive supply and Labour Components (Wi-Fi + IP Camera) (P)					
A	**Passive Supply**				
A1	Outdoor armoured 6 core Single mode Fiber cable- ISI Mark	3200	Mtr.		
A2	12 port single mode with SC.LIU with fully loaded	5	Nos.		
A3	5 Mtrs SC-LC patch cards	12	Nos.		
A4	1" HDPE pipe	300	Mtr.		
A5	Cat 6 cable 305 meters boxes	14	Boxes		
A6	Outdoor Armoured Cat 6 cable	10	Boxes		
A6	24 port Cat6 Jack panel unloaded	25	Nos.		
A7	I/O Ports	70	Nos.		
A8	Cable managers	21	Nos.		
A9	Cat 6 Dual face plate	50	Nos.		
A10	UTP Patch Panel	8	Nos.		
A11	SM box	120	Nos.		
A12	3 mtrs. cat 6 patch cords	140	Nos.		
A13	Weather proof metal enclosures with clamping	10	Nos.		
A14	Conduits/Cap & casing	4200	Mtr.		
A15	Network rack 12U	8	Nos.		
A16	Network rack 24U	1	Nos.		
A20	PLB HDPE Duct	300	Mtr		

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

S. No.	Description	Qty (Q)	Unit	Proposed Quantity by bidder	Make/ Model
A21	STP Cable (305m Box)	1	Nos		
A22	STP Patch Panel	1	Nos		
A23	STP IO	8	Nos		
A24	STP Patch Cord	20	Nos		
B	**Passive Labour**				
B1	Laying of Outdoor armed 6 core Single mode Fiber cable- ISI Mark	3200	Mtr.		
B2	Fixing of 12 port single mode with SC.LIU with fully loaded	5	Nos.		
B3	Fixing of 5 Mtrs SC-LC patch cards	12	Nos.		
B4	Laying of 1" HDPE pipe	3200	Mtr.		
B5	Laying of Cat 6 cable 305 meters boxes	14	Boxes		
B6	Fixing of 24 port Cat6 Jack panel unloaded	25	Nos.		
B7	Fixing of I/O Ports	70	Nos.		
B8	Fixing of Cable managers	21	Nos.		
B9	Fixing of Cat 6 Dual face plate	50	Nos.		
B10	Fixing of SM box	120	Nos.		
B11	Fixing of 3 mtrs. cat 6 patch cards	140	Nos.		
B12	Fixing of Weatherproof metal enclosures with clamping	10	Nos.		
B13	Laying of PVC Conduits/Cap & casing	4200	Mtr.		
B14	Fixing of 12U rack	8	Nos.		
B15	Fixing of 24U rack	1	Nos.		
B16	Laying of UTP Cable	500	Mtr.		
B17	Crimping on pp & I/O end	70	Nos.		
B18	Fixing of I/O box	70	Nos.		
B19	Fixing of Patch Panels	8	Nos.		
Electrical Supply and Labour Components (Wi-Fi + IP Camera) (Q)					

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

S. No.	Description	Qty (Q)	Unit	Proposed Quantity by bidder	Make/ Model
A	**Electrical Supply**				
A1	Supply of Plastic/Steel board (10x8 inch)with fixing 6 Amp. Switch 3 nos. Socket 3 Nos, 15 Amp. Switch 1 nos. Socket 1 Nos and 1 No of indicator (Make Anchor / Havells / L&T)	120	Nos.		
A2	Supply of 1x 1.5 Sq mm single core copper cable (Make Anchor / Havells / L&T)	800	Nos.		
A3	Supply of 40 Amp MCB DP ((Make Anchor / Havells / L&T) with fixing on wooden board	50	Nos.		
A4	Supply of 6 - 10 Amp MCB single pole ((Make Anchor / Havells / L&T) with fixing on wooden board	10	Nos.		
A5	Supply of 4 Sq mm copper cable (Make Anchor / Havells / L&T) Main switch to MCB.	120	Nos.		
A6	PVC Casing and Capping 1inch	250	Nos.		
B	**Electrical Labour**				
B1	Fixing of Steel/Plastic board on wall (Electrical supply sl. 1)	120	Nos.		
B2	Laying of cable with casing capping (Electrical supply sl. 2)	800	Mtr.		
B3	Fixing of MCB on(Electrical supply sl. 3)	50	Nos.		
B4	Fixing of MCB on(Electrical supply sl. 4)	10	Nos.		
B5	Laying of cable with casing capping (Electrical supply sl. 5)	120	Nos.		
B6	Earth Pit labour with material of 40 mm G I pipe-3 Mtr , 2'x 2' x 3 mm copper plate, 50 kg salt,50 kg charcoal, 10 feet deep earthing cutting & back filling,10 mm sq. copper cable from Pit to MCB, casing, capping consumable item, chamber, 2' x 2' with cover	5	Nos.		

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

S. No.	Description	Qty (Q)	Unit	Proposed Quantity by bidder	Make/ Model
RF Connectivity (Wi-Fi + IP Camera) (R)					
A	**RF Components**				
A1	RF Connectivity Antenna (Point to Multipoint Device) with required Accessories	3	Nos.		
A2	CPE Radio device with required Accessories	35	Nos.		
A3	RF Connectivity Antenna (Point to Point Device) with required Accessories	5	Nos.		
A4	Tower at POP	6	Nos.		
A5	Tower at Remote	39	Nos.		
B	**Services**				
B1	RF Connectivity Antenna (Point to Multipoint Device)- Installation, configuration, testing, documentation and Operations & Maintenance for 5 years	3	L/S		
B2	RF Connectivity Antenna (Point to Point Device)- Installation, configuration, testing, documentation and Operations & Maintenance for 5 years	5	L/S		
B3	CPE Radio device - Installation, configuration, testing, documentation and Operations & Maintenance for 5 years	37	L/S		
B4	Tower at POP - Installation and Operations & Maintenance for 5 years	6	L/S		
B5	Tower at Remote - Installation and Operations & Maintenance for 5 years	39	L/S		

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Annexure I– Proposal Covering Letter

(A copy to be enclosed with **each parts of proposal**)

Date:……..

To,

The CEO,

Chhattisgarh Infotech& Biotech Promotional Society

State Data Center Building, Near Police Control Room,

Civil Lines,

Raipur Chhattisgarh–492001

Dear Sir,

We …….. (Name of the bidder) hereby submit 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 proposal, and
4. We are quoting for all the items (including 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. We have an office in the state and relevant documents for the same are attached. We undertake that if the local presence is not there in the state, that we shall establish an office in the state capital at Raipur, within one month of the award of contract.
7. Chhattisgarh Infotech& Biotech Promotional Society, 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

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

8. We are submitting our Pre-Qualification proposal bid documents and technical bid documents
   a. In soft format in form of a CD/DVD clearly hyperlinking all the relevant scanned documents and highlighting relevant portions of the document for ease of evaluation. This is in addition to the paper documents in hard copy format to be submitted by the bidders and needs to be handed over along with bids.
   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.)

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Annexure II: Format for Power of Attorney

(To be provided in original as part of **Technical Proposal (Envelope – 2)**on stamp paper of value required under law duly signed by 'lead bidder' for the tender)

Dated: _____

POWER OF ATTORNEY

To Whomsoever 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 Contract **"Design, Supply, installation, commissioning, and maintenance of Wi-fi Local Area Networks (WLAN) and IP Camera in State of Chhattisgarh"** involving the deliverables including Provisioning for Software, Networking and IT infrastructure, Implementation Services, Maintenance and support for at least 5 years as per location provided in Purchase Order by CHiPS , vide Invitation for Tender (Tender Document) Document dated _____ , issued by The CEO, Chhattisgarh Infotech& Biotech Promotional Society Raipur, including signing and submission of all documents and providing information and responses to clarifications / enquiries etc. as may be required by Chhattisgarh Infotech& Biotech Promotional Society Raipur or any governmental authority, representing us in all matters before Chhattisgarh Infotech& Biotech Promotional Society Raipur, and generally dealing with CHiPS in all matters 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._____)

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

(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 applicable 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).

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Annexure III-Authorisation Letter from Original Equipment Manufacturer (OEM)

(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 'lead bidder' for the tender)

Date .....

To,

CEO, CHiPS

SDC Building, Near Police Control Room,

Opp. to New Circuit House, Civil Lines

Raipur, Chhattisgarh– 492001

Dear Sir,

Ref. : Tender No.

I/We ..... [manufacturer] hereby certify that M/s ..... [tenderer] is an authorized ..... [relationship] of ..... [manufacturer] and they are authorized to represent ..... [manufacturer] in submitting their bid for ..... [product& services] and conclude the contract with you.

We ..... [manufacturer] are confident of M/s [tenderer's] ability to represent us and provide full support in making your project successful.

We ..... [manufacturer] have authorized ..... to quote for this tender .

Signature .....

Name .....

Designation .....

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Annexure IV-Commitment Letter for support from original equipment manufacturer (OEM)

(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 'lead bidder' for the tender)

Date .....

To,

CEO, CHiPS

SDC Building, Near Police Control Room,

Opp. to New Circuit House, Civil Lines

Raipur, Chhattisgarh– 492001

Dear Sir,

Ref. : Tender No.

I / We ..... hereby commit & confirm the following:

a) The duration of the service support will be for a period of five years from the date of supply of equipment.

b) The service support will be provided onsite and will not be charged extra.

c) The service support will be comprehensive hence no extra charge is to be paid for any Hardware failure.

Signature .....

Name .....

Designation .....

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Annexure-V- Bank Guarantee format for Earnest Money Deposit

(To be provided in original as part of Q**ualification Bid (Envelope – B)**on stamp paper of value required under law duly signed by authorized representative of Bank)

This Deed of Guarantee executed at _____ by _____ / _____ (Name of the Nationalised/ Scheduled Bank) having its Head / Registered office at _____, and having one of its branches at _____ Raipur (hereinafter referred to as "the Guarantor") which expression shall unless it be repugnant to the subject or context thereof include its heirs, executors, administrators, successors and assigns;

In favor of Chief Executive Officer, Chhattisgarh infotech and biotech Promotion Society (CH*i*PS) Under Department of Information Technology and biotechnology, Government of Chhattisgarh, having its office at SDC Building, Near Police Control Room, Civil Lines, Raipur, Chhattisgarh (hereinafter referred to as "CH*i*PS") which expression shall unless it be repugnant to the subject or context thereof include its heirs, executors, administrators, successors and assigns;

Whereas Name of the bidder _____ Ltd., a Company / partnership firm / proprietorship concern registered under the _____(name of the relevant act/law under which incorporated) having its registered office at _____ (hereinafter called "Bidder" which expression shall unless it be repugnant to the subject or context thereof include its executors, administrators, successors and assigns) has submitted its Proposal for award of Contract for **"Design, Supply, installation, commissioning, and maintenance of Wi-fi Local Area Networks (WLAN) and IP Camera in State of Chhattisgarh"**vide Invitation for Tender Document No _____ dated _____ issued by CH*i*PS Government of Chhattisgarh (hereinafter referred to as "the Project").

Whereas in terms of the Invitation for Tender Document No _____dated _____ (hereinafter referred to as Tender Document) issued by CH*i*PS, the Bidder is required to furnish to CH*i*PS an unconditional and irrevocable Bank Guarantee for an amount of INR 30, 00, 000 (INR Thirty lakhs only) as Earnest Money Deposit and the Guarantor has at the request of the Bidder agreed to provide such Guarantee being these presents:

Now this Deed witnessed that in consideration of the premises, we, _____ Bank hereby agree, declare, undertake and guarantee as follows:

1. We as primary obligor hereby irrevocably, unconditionally and without reservation guarantee the due and faithful fulfilment and compliance of the terms and conditions of the tender by the

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

said Bidder and unconditionally and irrevocably undertake to pay forthwith to CH*i*PS an amount not exceeding INR 30,00,000.00 (INR Thirty lakhs only) without any demur, reservation, recourse, contest or protest and without reference to the Bidder, if the Bidder has failed to comply with and fulfil all or any of the terms and conditions contained in the tender. A letter from CH*i*PS stating that the Bidder is in default in the due and faithful fulfilment and compliance with the terms and conditions contained in the tender shall be final, conclusive and binding on the Bank, in respect of the forfeiture of the Earnest Money Deposit and the amount due and payable under this Guarantee.

2. This Guarantee shall remain in full force and effect for a period of 180 (One hundred and Eighty) days from the _____ (Proposal Due Date).

3. Subject to clause 1 above, any claim for payment under this Guarantee shall be in the form of a written declaration by CH*i*PS.

4. We……..Bank further agree that CH*i*PS shall be the sole judge as regards the determination as to whether the Bidder is in default of due and faithful fulfilment and compliance of the terms and conditions contained in the Tender and the decision of CH*i*PS in this regard shall be final and binding on us, notwithstanding any differences between CH*i*PS and the said Bidder and/or any dispute between CH*i*PS and the Bidder pending before any Court, Tribunal, Arbitrator or any other authority.

5. CH*i*PS 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 CH*i*PS and the bank shall not be released from its liability under these presents by any exercise by CH*i*PS 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 CH*i*PS or any indulgence by CH*i*PS 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.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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 CH*i*PS 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 CH*i*PS 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 CH*i*PS 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.

Date _____ day of _____ 2015

Signature of the Issuing / Authority with seal

CORPORATE SEAL
For _____ Bank

Note: A covering letter of confirmation is also to be given by the bank along with this bank guarantee.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Annexure-VI- Declaration for Not Black listed

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

Date.....

To,

CEO, CHiPS

SDC Building, Near Police Control Room

Opp. to New Circuit House, Civil Lines

Raipur, Chhattisgarh– 492001

Dear Sir,

Ref.: Tender No.

I / We ..... hereby 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

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Annexure VII– Software Manufacturer Authorization & Support form

(To be provided in original as part of **Pre-qualification Proposal(Envelope – B)**on letter head signed by the authorized representative of OEM in favor of 'lead bidder' for the tender)

To,

THE CEO CHIPS

SDC BUILDING, NEAR POLICE CONTROL ROOM

Civil Lines
RAIPUR, CG.

Ref.: Tender No.

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 / Component

a)

b)

2. Product / Component

a)

b)

We _____ would be responsible for support of providing updates, patches, security updates, and bug fixes for the entire period of contract for all the locations for the above products as required in the Tender. Confirm that the products meet the technical & functional requirements & Products quoted are latest version / specification and not the end of life. We also assure you that we _____ indemnifies 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.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Date:	SIGNATURE OF AUTHORISED PERSON
Place:	FULL NAME OF SIGNATORY
	DESIGNATION AND SEAL OF SIGNATORY
Date:	COUNTERSIGNATURE OF BIDDER
Place:	NAME
DESIGNATION AND SEAL	

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Annexure VIII – Equipments Manufacturer Authorization & support form

(To be provided in original as part of **Pre-qualification Proposal(Envelope – B)**on letter head signed by the authorized representative of OEM in favor of 'lead bidder' for the tender)

To,
THE CEO, CHIPS
SDC BUILDING, NEAR POLICE CONTROL ROOM,
CIVIL LINES
RAIPUR, CG.

We have gone through the tender document for the said NIT and we authorise M/s. - _____ (name of the bidder to said NIT) with office at _____to submit tender in response to the said NIT with equipment _____ produced by us on the understanding and with the undertaking from our side that the product offered in not at the end of its life cycle and we shall provide expeditiously all spares and full maintenance support to the equipment's supplied by the bidder for this tender throughout a period of five year of warranty as required by the tender document. Confirm that the products meet the technical & functional requirements & Products quoted are latest version / specification and not the end of life

This is also to certify that all products are ISO 9001, International Certified, and Restriction of hazardous substances (RoHS) compliant.

Date:	SIGNATURE OF AUTHORISED PERSON
Place:	FULL NAME OF SIGNATORY
	DESIGNATION AND SEAL OF SIGNATORY
Date:	COUNTERSIGNATURE OF BIDDER
Place:	NAME
DESIGNATION AND SEAL	

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Annexure IX–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 repugnant to the subject or context thereof include its heirs, executors, administrators, successors and assigns;

In favour of The CEO of Chhattisgarh Infotech& Biotech Promotional Society, Raipur, having its office at SDC Building, Near Police Control Room, Civil Lines Raipur (CG) (hereinafter called "CEO, CHiPS Raipur" which expression shall unless it be repugnant to the subject or context thereof include its heirs, executors, administrators, successors and assigns);

Whereas M/s _____. a company formed under _____ (specify the applicable law) and having its registered office at _____ has been, consequent to conduct and completion of a competitive bidding process in accordance with the letter of requirements document No._____ dated __/__/2015 issued by CEO, CHiPS Raipur, and selected M/s _____ (hereinafter referred to as the Bidder) for the Contract by CEO, CHiPS Raipur as more specifically defined in the aforementioned Document including statement of work and the Agreement executed between the CEO, CHiPS Raipur and Bidder. The Agreement requires the Bidder to furnish an unconditional and irrevocable Bank Guarantee for an amount of Rs._____ /- (Rupees _____only) by way of security for guaranteeing the due and faithful compliance of its obligations under the 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 premises, we, ———— Bank hereby guarantee as follows:

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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 CEO, CHiPS Raipur an amount not exceeding Rs. _____ (Rupees _____ only) within 7 (seven) days of receipt of a written demand therefore from CEO, CHiPS 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 CEO, CHiPS 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 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 Chhattisgarh Infotech& Biotech Promotional Society, Raipur, Government of Chhattisgarh under this Guarantee, which is one month after the expiry of performance guarantee, whichever is earlier. Any demand received by the Guarantor from CEO, CHiPS 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 CEO, CHiPS Raipur.

5. In order to give effect to this Guarantee, CEO, CHiPS 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 CEO, CHiPS Raipur or by the extension of time of performance granted to the Bidder or any postponement for any time of the power exercisable by CEO, CHiPS 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, forbearance or omission on the part of CEO, CHiPS Raipur or any indulgence by CEO, CHiPS Raipur to the Bidder to

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

give such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

6. This Guarantee shall be irrevocable and shall remain in full force and effect until all our obligations under this guarantee are duly discharged.

7. 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 hands hereunto on the day, month and year first here-in-above written.

Signed and Delivered by _____ Bank by the hand of Shri_____ ____ its _____and authorised office.

Authorised Signatory _____Bank

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Annexure X: Format of Sending Pre-bid queries

Ref: RFP Notification no <xxx> dated <dd/mm/yy>

Name of the Bidder

<<……..……>>

Contact Number and Address of the Bidder -

<<……

……>>

Sr. No.	Section No.	Page No.	RFP Clause	Query	Remarks
1					
2					
.					
N					

Note: Bidder will send its query only in prescribed format above by email and Excel file only.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Annexure XI: Technical Specification Compliance

Minimum Criteria and condition for OEM/Bidder for Technical Specifications

1.The OEM for all the above mentioned equipment's should be able to support the Warranty and Replacement services efficiently.

2.Any kind of propriety term may be ignored and highlighted at the time of bid submission. Equivalent and higher Specification for the component is acceptable.

3.Please fill up compliance statement as per below format with Technical Bid for all items as per Technical specification mentioned in this RFP.

Example for Compliance Statement Format:

Core L3 Switch (Make/Model)			
S. No.	**Description as Per RFP**	**Compliance provided by bidder**	**Compliance in Yes/No**
1	Modular switch in data centre design withIPv6 ready from day 1.		
2	Should have minimum 24x 10G SFP+ interfaces populated with 10G-Base-SRtransceivers.		

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Annexure XII: Financial Proposal Format

To be returned in original along with the Proposals (**ENVELOP - C**)

Tender No.

To Date:-

The Chief Executive Officer

SDC Building, Near Police Control Room

Civil Lines, Raipur- 492001

Sir,

I/We hereby submit our Proposal for the **"Design, Supply, installation, commissioning, and maintenance of Wi-fi Local Area Networks (WLAN) and IP Camerain State of Chhattisgarh"** mentioned in the Tender document within the time specified and in accordance with the special Terms and Conditions as well as Scope of work. The rates are quoted in the prescribed format given below:

S. No.	Description	Qty (Q)	Unit	Average Unit Rate (R)	Tax (T)	Total unit Rate Inclusive of Taxes U=((R*T)/100)	Total Amount incl. of Taxes A=Q*U)
NOC/ Central Location components - Wi-Fi + IP Camera (X)							
1	**Wi-Fi Components**						
1A	**Active Networking**						
A1	Link Load Balancer	1	Nos.				
A2	Internet Security Firewall	2	Nos.				
A3	Core L3 Switch	2	Nos.				
A4	Access L2 Switch (24 Port)	4	Nos.				
A5	Wireless Controller with 100 client license	2	Nos.				
A6	Wireless Controller - license for 50 clients add on	1	Nos.				
A7	Wireless NMS Software with 100 client license	1	Nos.				
A8	Wireless NMS Software - license for 50 clients add on	1	Nos.				

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

S. No.	Description	Qty (Q)	Unit	Average Unit Rate (R)	Tax (T)	Total unit Rate Inclusive of Taxes U=((R*T)/100)	Total Amount incl. of Taxes A=Q*U)
A9	Switched Rack PDU EMS Software	1	Nos.				
1B	**Server for NMS, IPS and SMS Gateway**						
B2	Server with Operating System	2	Nos.				
1C	**Portal Software**						
C1	Web based user access Portal Software and Services	1	L/S				
1D	**Helpdesk support**						
D1	Helpdesk support Software	1	L/s				
1E	**Services**						
E1	Installation and commissioning of all components under 1A , 1B, 1C and 1D including Testing and Documentation.	1	L/S				
E2	Operations & Maintenance and warranty support for components under 1A , 1B, 1C & 1D up to 5 years	5	Year				
E3	Onsite Network Administrator cum Manager at NOC (Manpower services, per-year)	1	Nos.				
E4	Network support Engineer (Manpower services, per-year)	2	Nos.				
E5	Helpdesk Executive (Manpower services, per-year)	2	Nos.				
	Total of 1 (Sum of Components under heading 1)						
2	**IP Camera Components**						
2A	**VMS Solution**						
A1	VMS Server Software with 10 user and 1 admin license	1	Nos.				
A2	VMS Server Software user license for 5 user - add on	1	Nos.				
A2	LED Professional Display (40")	1	Nos.				
2B	**Server & Storage for VMS**						

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

S. No.	Description	Qty (Q)	Unit	Average Unit Rate (R)	Tax (T)	Total unit Rate Inclusive of Taxes U=((R*T)/100)	Total Amount incl. of Taxes A=Q*U)
B1	Server with Operating System	2	Nos.				
B2	External Storage of 25 TB capacity in RAID 6 configuration	1	Nos.				
B3	Internal Storage of 4 TB capacity in RAID 6 configuration for server expansion slot	1	Nos.				
2C	**Services**						
C1	Installation and commissioning of all components under 2A & 2B, including Testing and Documentation.	1	L/S				
C2	Operations & Maintenance and warranty support for components under 2A & 2B up to 5 years	5	Year				
	Total of 2 (Sum of Components under heading 2)						
Total Cost for Centralized Location Components - Amount in Figure (X= Total of 1+Total of 2) Incl. of all Taxes						**INR**	
Total Cost for Centralized Location Components - Amount in Words (X) Inclusive of all Taxes							
Indoor Location Components - Wi-Fi Network (Y)							
A	**Active Networking**						
A1	Indoor Wireless AP	70	Nos.				
A2	Access L2 PoE Switch (24 port)	4	Nos.				
A3	Access L2 PoE Switch (8 port)	4	Nos.				
A4	Online UPS 1 KVA (1 Hr. back up)	8	Nos.				
	Total of A (Sum of Components under heading A)						
B	**Services**						
B1	Installation and commissioning of all components under A, including Testing and Documentation and Operations & Maintenance (for 5 years) per site upto 70 access points and thereafter proportionate basis	1	L/S				
	Total of B (Sum of Components under heading B)						
Total Cost of Components for One Indoor Location - Amount in Figure (Y=Total of A + Total of B) Incl. of all Taxes						**INR**	

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

S. No.	Description	Qty (Q)	Unit	Average Unit Rate (R)	Tax (T)	Total unit Rate Inclusive of Taxes U=((R*T)/100)	Total Amount incl. of Taxes A=Q*U)
Total Cost of Components for One Indoor Location - Amount in Words (B) Inclusive of all Taxes							
Outdoor Location Components - Wi-Fi + IP Camera (Z)							
A	**Active Networking**						
A1	Outdoor Wireless AP	4	Nos.				
A2	Access L2 PoE Switch (8 port)	1	Nos.				
A3	Switched Rack PDU	1	Nos.				
A4	Online UPS 1 KVA (1 Hr. back up)	1	Nos.				
A5	Outdoor MIMO Antenna	4	Nos				
	Total of A (Sum of Components under heading A)						
B	**IP Camera**						
B1	IP Outdoor IR Camera (with neccesary outdoor enclosure)	4	Nos.				
	Total of B (Sum of Components under heading B)						
C	**Passive Networking**						
C1	Outdoor Enclosure	1	Nos.				
C2	Antenna Pole	4	Nos.				
C4	Antenna Lightning Arrester	4	Nos				
	Total of C (Sum of Components under heading C)						
D	**Services**						
D1	Active components Installation, configuration, testing, documentation and Operations & Maintenance per site for 5 years	1	L/S				
D2	IP Camera Installation, configuration, testing, documentation and Operations & Maintenance per site for 5 years	1	L/s				
D3	Commissioning of Outdoor Enclosure	1	L/S				
D4	Erection of Antenna Pole	4	L/S				
D5	Installation and Commissioning of Outdoor Antenna	4	L/S				

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

S. No.	Description	Qty (Q)	Unit	Average Unit Rate (R)	Tax (T)	Total unit Rate Inclusive of Taxes U=((R*T)/100)	Total Amount incl. of Taxes A=Q*U)
D6	Installation and Commissioning of Antenna Lightning Arrester	1	L/S				
	Total of D (Sum of Components under heading D)						
Total Cost of components for One Outdoor Location - Amount in Figure (Z= Total of A + Total of B + Total of C + Total of D) Incl. of all Taxes						**INR**	
Total Cost of components for One Outdoor Location - Amount in Words (Z) Inclusive of all Taxes							
Passive supply and Labour Components (Wi-Fi + IP Camera) (P)							
A	**Passive Supply**						
A1	Outdoor armed 6 core Single mode Fiber cable- ISI Mark	3200	Mtr.				
A2	12 port single mode with SC.LIU with fully loaded	5	Nos.				
A3	5 Mtrs SC-LC patch cards	12	Nos.				
A4	1" HDPE pipe	300	Mtr.				
A5	Cat 6 cable 305 meters boxes	14	Boxes				
A6	Cat 6 cable Outdoor	10	Boxes				
A6	24 port Cat6 Jack panel unloaded	25	Nos.				
A7	I/O Ports	70	Nos.				
A8	Cable managers	21	Nos.				
A9	Cat 6 Dual face plate	50	Nos.				
A10	UTP Patch Panel	8	Nos.				
A11	SM box	120	Nos.				
A12	3 mtrs. cat 6 patch cords	140	Nos.				
A13	Weather proof metal enclosures with	10	No				

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

S. No.	Description	Qty (Q)	Unit	Average Unit Rate (R)	Tax (T)	Total unit Rate Inclusive of Taxes U=((R*T)/100)	Total Amount incl. of Taxes A=Q*U)
	clamping		s.				
A14	Conduits/Cap & casing	4200	Mtr.				
A15	Network rack 12U	8	Nos.				
A16	Network rack 24U	1	Nos.				
A20	PLB HDPE Duct	300	Mtr				
A21	STP Cable (305m Box)	1	Nos				
A22	STP Patch Panel	1	Nos				
A23	STP IO	8	Nos				
A24	STP Patch Cord	20	Nos				
	Total of A (Sum of Components under heading A)						
B	**Passive Labour**						
B1	Laying of Outdoor armed 6 core Single mode Fiber cable- ISI Mark	3200	Mtr.				
B2	Fixing of 12 port single mode with SC.LIU with fully loaded	5	Nos.				
B3	Fixing of 5 Mtrs SC-LC patch cards	12	Nos.				
B4	Laying of 1" HDPE pipe	3200	Mtr.				
B5	Laying of Cat 6 cable 305 meters boxes	14	Boxes				
B6	Fixing of 24 port Cat6 Jack panel unloaded	25	Nos.				
B7	Fixing of I/O Ports	70	Nos.				
B8	Fixing of Cable managers	21	Nos.				
B9	Fixing of Cat 6 Dual face plate	50	Nos.				
B10	Fixing of SM box	120	Nos.				

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

S. No.	Description	Qty (Q)	Unit	Average Unit Rate (R)	Tax (T)		Total unit Rate Inclusive of Taxes U=((R*T)/100)	Total Amount incl. of Taxes A=Q*U)
B11	Fixing of 3 mtrs. cat 6 patch cards	140		Nos.				
B12	Fixing of Weatherproof metal enclosures with clamping	10		Nos.				
B13	Laying of PVC Conduits/Cap & casing	4200		Mtr.				
B14	Fixing of 12U rack	8		Nos.				
B15	Fixing of 24U rack	1		Nos.				
B16	Laying of UTP Cable	500		Mtr.				
B17	Crimping on pp & I/O end	70		Nos.				
B18	Fixing of I/O box	70		Nos.				
B19	Fixing of Patch Panels	8		Nos.				
	Total of B (Sum of Components under heading B)							
Total Cost for Passive/Labour Components - Amount in Figure (P= Total of A + Total of B) Incl. of all Taxes							**INR**	
Total Cost for Passive/Labour Components - Amount in words (P) Inclusive of all Taxes								
Electrical Supply and Labour Components (Wi-Fi + IP Camera) (Q)								
A	**Electrical Supply**							
A1	Supply of Plastic/Steel board (10x8 inch)with fixing 6 Amp. Switch 3 nos. Socket 3 Nos, 15 Amp. Switch 1 nos. Socket 1 Nos and 1 No of indicator (Make Anchor / Havells / L&T)	120		Nos.				
A2	Supply of 1x 1.5 Sq mm single core copper cable (Make Anchor / Havells / L&T)	800		Nos.				
A3	Supply of 40 Amp MCB DP ((Make Anchor / Havells / L&T) with fixing on wooden board	50		Nos.				

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

S. No.	Description	Qty (Q)	Unit	Average Unit Rate (R)	Tax (T)	Total unit Rate Inclusive of Taxes U=((R*T)/100)	Total Amount incl. of Taxes A=Q*U)
A4	Supply of 6 - 10 Amp MCB single pole ((Make Anchor / Havells / L&T) with fixing on wooden board	10	Nos.				
A5	Supply of 4 Sq mm copper cable (Make Anchor / Havells / L&T) Main switch to MCB.	120	Nos.				
A6	PVC Casing and Capping 1inch	250	Nos.				
	Total of A (Sum of Components under heading A)						
B	**Electrical Labour**						
B1	Fixing of Steel/Plastic board on wall (Electrical supply sl. 1)	120	Nos.				
B2	Laying of cable with casing capping (Electrical supply sl. 2)	800	Mtr.				
B3	Fixing of MCB on(Electrical supply sl. 3)	50	Nos.				
B4	Fixing of MCB on(Electrical supply sl. 4)	10	Nos.				
B5	Laying of cable with casing capping (Electrical supply sl. 5)	120	Nos.				
B6	Earth Pit labour with material of 40 mm G I pipe-3 Mtr , 2'x 2' x 3 mm copper plate, 50 kg salt,50 kg charcoal, 10 feet deep earthing cutting & back filling,10 mm sq. copper cable from Pit to MCB, casing, capping consumable item, chamber, 2' x 2' with cover	5	Nos.				
	Total of B (Sum of Components under heading B)						
Total Cost for Electrical/Labour Components - Amount in Figure (Q= Total of A + Total of B) Incl. of all Taxes						**INR**	
Total Cost for Electrical/Labour Components - Amount in words (Q) Inclusive of all Taxes							
RF Connectivity (Wi-Fi + IP Camera) (R)							
A	**RF Components**						
A1	RF Connectivity Antenna (Point to Multipoint Device) with required Accessories	3	Nos.				
A2	CPE Radio device with required Accessories	35	Nos.				

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

S. No.	Description	Qty (Q)	Unit	Average Unit Rate (R)	Tax (T)	Total unit Rate Inclusive of Taxes U=((R*T)/100)	Total Amount incl. of Taxes A=Q*U)
A3	RF Connectivity Antenna (Point to Point Device) with required Accessories	5	Nos.				
A4	Tower at POP	6	Nos.				
A5	Tower at Remote	39	Nos.				
	Total of A (Sum of Components under heading A)						
B	**Services**						
B1	RF Connectivity Antenna (Point to Multipoint Device)- Installation, configuration, testing, documentation and Operations & Maintenance for 5 years	3	L/S				
B2	RF Connectivity Antenna (Point to Point Device)- Installation, configuration, testing, documentation and Operations & Maintenance for 5 years	5	L/S				
B3	CPE Radio device - Installation, configuration, testing, documentation and Operations & Maintenance for 5 years	37	L/S				
B4	Tower at POP - Installation and Operations & Maintenance for 5 years	6	L/S				
B5	Tower at Remote - Installation and Operations & Maintenance for 5 years	39	L/S				
	Total of B (Sum of Components under heading B)						

Total Cost for RF Connectivity - Amount in Figure (R= Total of A + Total of B) Inclusive of all Taxes	**INR**
Total Cost for RF Connectivity - Amount in words (R) Inclusive of all Taxes	

Total Cost of project (X+Y*4+Z*40+P+Q+R) - Amount in Figure (Inclusive of all Taxes)	**INR**
Total Cost of project (X+Y*4+Z*40+P+Q+R) - Amount in Words (Inclusive of all Taxes)	

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Please note the following:

1. All quoted prices should be **inclusive of all taxes and duties** prevailing on the date of proposal submission.
2. Since the price proposal is in INR, CHiPS shall not consider any upward variation/ fluctuation on account of any foreign exchange at any time during the currency of the contract.
3. Prices are valid for a period of 180 Days from 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 successful and will be considered for commercial evaluation.
5. The Prices of All equipment and services are valid for a period of One Year from date of Agreement. The CHiPS may issue the Purchase Order/ Work Order during the one year period for any additional Sites in the State of Chhattisgarh. The CHiPS may on its own discretion extend the price validity for one more year after satisfactory performance in first year.
6. **Warranty on Hardware products** will be 5 (Five) years from the date of FAT. The warranty will become effective from the date of FAT.
7. CHiPS reserves the right to increase or decrease the no. of resources / other item quantity at the time of the Agreement or during the project.

Signature of the bidder with seal

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Annexure-XIII–Deed of Consortium

(To be provided in original as part of **Techno-Commercial Proposal(Envelope – B)**on stamp paper of value required under law duly signed by each member of a consortium of bidders in favour of 'lead bidder' for the tender)

TO WHOEVER IT MAY CONCERN

Whereas we, M/s. _____, and M/s. _____ (names of members of the consortium of bidders as registered by the relevant registering authority under the deed relating to their respective incorporation) have formed a consortium named _____ to compete as a single consortium for the award of the work for which Notice Inviting Tenders (NIT) has been issued by the , Government of Chhattisgarh vide its NIT No._____ dated __/__/____, M/s. _____ as a member of the said consortium and having its registered address as _____ is hereby duly authorized to fully represent and act on behalf of, and as 'lead bidder' of the said consortium to sign the tender proposal, conduct negotiation(s), sign agreement(s) / contract(s), incur liabilities and receive communication(s) for, and on behalf of, the consortium, and, further, to transact all other necessary affairs in connection with all matters related to, or arising from, with the said NIT. We hereby confirm that we are jointly and severally liable, together with the other member(s) of the said consortium, to the Government of Chhattisgarh in the Department of Information Technology for all obligations of the consortium in respect of all matters related to, or arising from, the said NIT.

In witness whereof, we have hereunto set under our respective hands and seals this _____ day of _____, 2015.

Signing for and on behalf of, and under authority from, M/s. _____ (name of member of consortium)	Signing for and on behalf of, and under authority from, M/s. _____ (name of member of consortium)
_____ (Signature)	_____ (Signature)
Name of signatory _____	Name of signatory _____

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Designation of signatory _____	Designation of signatory _____
(Seal of member of consortium for and under whose authorization signing)	(Seal of member of consortium for and under whose authorization signing)
Name of witness _____	Name of witness _____
Signature of witness _____	Signature of witness _____

Note: Original copy of the deed constituting the consortium referred herein to be attached hereto.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Annexure XIV: Format for Power of Attorney – for consortium

(To be provided in original as part of **Techno-Commercial Proposal(Envelope – B)**on stamp paper of value required under law duly signed by each member of a consortium of bidders for the tender)

Whereas Chhattisgarh Infotech and biotech Promotion Society (hereinafter referred to as "CHiPS") has invited Proposals from interested parties for award of contract for the project **"Tender Document for Design, Supply, installation, commissioning, and maintenanceof Wi-Fi Local Area Networks (WLAN) and IP Camerain State of Chhattisgarh""** involving the deliverables including Provisioning for Design, Supply, Installation, commissioning and warranty support for at least 5 years in the state of Chhattisgarh (hereinafter referred to as "the Project"), vide Invitation for Tender (hereinafter referred to as Tender Document) document dated ____ , issued by Government of Chhattisgarh, and,

Whereas, we, (Name of Address of the Lead Member) and (Name of Address of the other Member of Consortium), (hereinafter collectively referred to as "the Consortium"), propose to submit our Proposal in accordance with Tender Document and on being awarded the contract, to implement the Project in accordance with the terms and condition of the Tender Document and other connected documents in respect of the Project,

And whereas it is necessary under the Tender Document for the members of the Consortium to designate one of them as the Lead Member with all necessary power and authority to do for and on behalf of the Consortium all acts, deeds and things, as may be necessary, in connection with the aforesaid Project.

NOW THIS POWER OF ATTORYNEY WITNESSETH THAT:

We ___and ___ (respective names of the members of the Consortium) hereby nominate _____ (Name of the lead member of the Consortium), being one of the members of the Consortium, as the Lead Member of the Consortium, and authorize ---- (Name of the Lead Member) as our constituted attorney in our name and on our behalf, to do or execute all or any of the acts, deeds or things necessary or incidental to the Consortium's Proposal for the Project, including, inter-alia, submission of Proposal, participating in conferences, responding to clarifications/ queries, submission of information/documents and generally to

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

represent the Consortium in all its dealings with CHiPS or any other Governmental Authority , in connection with the Project until culmination of the process of bidding and thereafter until the Agreement is entered into with CHiPS.

And we hereby agree that all acts, deeds and things lawfully done by our said attorney, pursuant to this Power of Attorney, shall be construed as acts, deeds and things done by us and we undertake to ratify and confirm all and whatsoever that the said attorney shall lawfully do or cause to be done for us by virtue of the power hereby given.

In Witness hereof we have signed this deed on this the _____ _____ day of _____.

1. For and on behalf of _____
2. For and on behalf of _____

Notes:

- To be executed by all the members in the Consortium.
- The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants (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 resolution/ power of attorney in favor of the person executing this power of attorney for the designation of power hereunder on behalf of the Consortium member.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Annexure XV: 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 (hereinafter called the Integrity Pact) is made on .....day of the month .....20..... between, the Government of Chhattisgarh acting through Shri. ..... (Designation of the officer, Department) Government of Chhattisgarh (hereinafter called the "TENDERING AUTHORITY", which expression shall mean and include, unless the context otherwise requires, his successors in the office and assigns) and the First Party, proposes to procure (name of the Stores/Equipment/Work/Service) and M/s .....represented by Shri ..... (hereinafter called the "BIDDER/SeIIer", which expression shall mean and include, unless the context otherwise requires, his successors an permitted assigns) and the Second Party, 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 pre-contract 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/Service at a competitive price in conformity with the defined

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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 prevent corruption, in ay 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, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.

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 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

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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 an 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 advantage, commission, fees, brokerage or inducement to any official of the TENDERING AUTHORITY, connected directly or indirectly with the biding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.

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 advantage, commission, fees, brokerage, or inducement to any official of the TENDERING AUTHORITY or otherwise in procuring the Contract of forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the Government for showing or forbearing to show favour or dis-favour 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 exportentity 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

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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.

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

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

4.7. The BIDDER shall not use improperly, for 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 proposal and business details, including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.

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

4.9. The BIDDER shall not instigate or cause to instigate any third person to commit any ofthe acts mentioned above.

5. PREVIOUS TRANSGRESSION

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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 commercial bid, shall deposit an amount as specified in 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.....
(ii) A confirmed guarantee by an Indian Nationalised Bank, promising payment of the guaranteed sum to the .... (TENDERING AUTHORITY) ..... on demand within three working days without any demur whatsoever and without seeking any reasons whatsoever. The demand for payment by the TENDERING AUTHORITY shall be treated as conclusive proof of payment.

(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

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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 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 any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitlethe 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 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 utilized to recover the aforesaid sum and interest.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

(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 step son or step daughter and wholly dependent upon Government servant, but does not include a child or step child who is no longer

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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 similar product/systems or sub systems was supplied by the BIDDER 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.

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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 the parties accept that the Monitors have the right to access all the documentsrelating to the project/procurement, including minutes of meetings. The Monitor shall be under contractual obligation to treat the information and documents of the BIDDER/SubSelected 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

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

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 the 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 case, the parties will strive to come to an agreement to their original intentions.

14. The parties hereby sign this Integrity Pact

at.....on.....

TENDERING AUTHORITY **BIDDER**

Name of the Officer

Designation

Witness **Witness**

1)..... 1).....

2)..... 2).....

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.

Annexure XVI: Core Project Team

(To be provided in original as part of **Techno-Commercial Proposal (Envelope – B)**duly signed by 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 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 project.

***** End of Document *****

This document is confidential and intended solely for the use of the individuals or entities addressed. Any use, dissemination, forwarding, printing or copying of this document without prior permission of 'The CEO' Chhattisgarh InfoTech & Biotech Promotional Society (CHiPS), Raipur, Raipur is strictly prohibited.