Notice Inviting Bid

Name of Work:

Provisioning & Integration of Wi-Fi Hotspots, Interactive Information Kiosks, Surveillance Cameras, Environmental Sensors, Smart lighting solution and Remote Kiosks along with Facility Management Services

SINGLE STAGE TWO PART BID

JAIPUR DEVELOPMENT AUTHORITY

OFFICE OF EXECUTIVE ENGINEER (ELECT.-II)

ROOM No. 26, Main Building Ram Kishore Vyas Bhavan, Indira Circle, Jawahar Lal Nehru Marg, Jaipur – 302 004

TELEPHONE & FAX: +91-141-2569696 E.MAIL: ee.electric@jaipurjda.org

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JAIPUR DEVELOPMENT AUTHORITY

Office of Executive Engineer (Elect.-II)

Room No. 26, Main Building Ram Kishore Vyas Bhavan, Indira Circle, Jawahar Lal Nehru Marg, Jaipur – 302 004 Telephone: +91-141-2569696 e.mail : ee.electric@jaipurjda.org

No. JDA/Ex. Eng./Elect.-II/WiFi/2015-16/D-5-26

Dated : 22-1-14

NOTICE INVITING BID

NIB No.: JDA/Ex. Eng.(EE-II)/2015-16/25

Online Bids are invited up-to **3:00 PM of 04.03.2016** for "Provisioning & Integration of Wi-Fi Hotspots, Interactive Information Kiosks, Surveillance Cameras, Environmental Sensors, Smart lighting solution and Remote Kiosks along with Facility Management Services". Details may be seen in the Bidding Document at our office or the website of State Public Procurement Portal website www.sppp.rajasthan.gov.in, www.eproc.rajasthan.gov.in, www.eproc.rajasthan.gov.in, and <a href="https://www.

To participate in the bid, bidder must be:

 Registered on JDA website www.jaipurjda.org and Apply for the Bid and pay the Bidding Document Fee, RISL Processing Fee and Bid Security Deposit, online only.

Registered on e-Procurement Portal of Government of Rajasthar www.eproc.rajasthan.gov.in and submit online e-Bid.

(SANJEEV SACHDEV)
Executive Engineer (Elect.-II)

Procuring Entity

DETAILED NIB

NIB No.: JDA/Ex. Eng. Elect.-II/25/2015-16

	· JDA/ LX. Liig. Lie			
Name & Address of the		eer (ElectII), Jaipur Development Authority		
Procuring Entity	Address: Room No. 26, Main Building, Second Floor, Ram Kishore			
		rcle, Jawahar Lal Nehru Marg, Jaipur – 302 004		
Subject Matter of		tion of Wi-Fi Hotspots, Interactive Information		
Procurement		ameras, Environmental Sensors, Smart lighting		
		iosks along with Facility Management Services		
Bid Procedure		part open competitive e-Bid procedure at		
J.a. i i occurre	http://eproc.rajasthan.	·		
Bid Evaluation Criteria	Least Cost Based Selec			
(Selection Method)	Ecast cost based selection (Ecbs) E1			
Websites for downloading	Wobsites www.coop	p.rajasthan.gov.in, www.eproc.rajasthan.gov.in,		
		i.rajasulan.gov.iii, www.eproc.rajasulan.gov.iii,		
Bidding Document,	www.jaipurjda.org			
Corrigendum's,				
Addendums, etc.				
Website for online Bid	Website: www.jaipurjd	_		
application and payment *	For participating in the	e Bid, the Bidder has to apply for this Bid and		
	pay the Bidding Document Fee, RISL Processing Fee and Bid Security			
	Deposit, online only.	•		
		nt fee: Rs. 1000.00 Rupees (One Thousand		
	_	ne through JDA website		
		Fee: Rs. 1000.00 (Rupees One Thousand only)		
		ough JDA website		
		ecurity Deposit – online OR through Bank		
	· ·	• •		
	Guarantee (BG)* of any scheduled Bank having validity of six months from last date of Technical Bid Opening Date			
	* Original BG is to be submitted in Room No. MB-SF-226 of			
	_			
Fatimeted December		A on or before 01.03.2016 5.00 PM		
Estimated Procurement	INR 35,00,00,000.00	(Rupees Thirty Five Crore Only)		
Cost	. (7115)	5		
Bid Security Deposit		of Estimated Procurement Cost, 0.5% of S.S.I.		
		for Bidder registered as contractor in JDA, 1%		
		ther than S.S.I., whose cases are pending with		
		Financial Reconstruction.		
		curity, a bid securing declaration shall be taken		
	from Department	ts' of the State Government and Undertakings,		
	Corporations, A	Autonomous bodies, Registered Societies,		
	Cooperative Soc	cieties which are owned or controlled or		
	managed by the State Government and Government			
	Undertakings of the Central Government.			
Pre-Bid Meeting	✓ On 09.02.2016 at 4.00 PM in "Manthan" Hall 2 nd Floor, Main			
	Building, Ram Kishore Vyas Bhavan, Indira Circle, Jawahar Lal			
		- 302 004 (Rajasthan)		
		mitting clarifications requests by the bidder		
		00 PM addressed to the procurement entity at		
		·		
	Room No. 26, Main Building, Second Floor, Ram Kishore Vyas			
	Bhavan, Indira Circle, Jawahar Lal Nehru Marg, Jaipur – 302 004			
	(Rajasthan). Pre-bid Queries sent through email will not be			
	entertained.			
	Response to clarifications by procuring entity: 11.02.2016 by 5.00			
* 61 5 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 -	PM			
* Start Date for Applying	29.01.2016 at 5.00	Last Date for Applying 01.03.2016 by		
Bid and making Online	PM onwards	Bid and making Online 5:00 PM		
Payment on JDA portal		Payment / BG in		
		specified format on JDA		
		Portal		
Start Date of Bid	29.01.2016 at 5.00	Last Date for Bid 04.03.2016 by		

Submission on e-	PM onwards	Submission	on	e-	3:00 PM
Procurement Portal of GOR		Procurement	Portal	of	
		GOR			
Technical Bid Opening	On 04.03.2016 at 4:00 PM				
	In "Manthan" Hall 2 nd Floor, Main Building, Ram Kishore Vyas Bhavan,				
	Indira Circle, Jawahar Lal Nehru Marg, Jaipur – 302 004 (Rajasthan)				
Date/ Time/ Place of	Will be intimated later to the Technically qualified bidders				
Financial Bid Opening	, ,				
Bid Validity	90 days from the bid submission deadline				
•	,				

* The amount is to be deposited online by bidder. In case the amount exceeds the online payment limit the payment may be made through RTGS/NEFT in ICICI BANK LTD Bank Account Number 675401700586 IFSC Code ICIC0006754. After successful payment, update the UTR/Instrument number on JDA Tender portal against the tender you want to participate. The amount deposited will be confirmed by JDA and will be updated online.

Note:

- 1. Bidder (authorised signatory) shall submit their offer on-line in Electronic formats both for technical and financial proposal.
- 2. In case, any of the bidders fails to pay the Tender Fee, BSD, and RISL Processing Fee, online (subject to confirmation), its Bid shall not be accepted.
- 3. To participate in online bidding process, Bidders must procure a Digital Signature Certificate (Type III) as per Information Technology Act-2000 using which they can digitally sign their electronic bids. Bidders can procure the same from any CCA approved certifying agency, i.e. TCS, Safecrypt, Ncode etc. Bidders who already have a valid Digital Signature Certificate (DSC) need not procure a new DSC. Also, bidders must register on http://eproc.rajasthan.gov.in (bidders already registered on http://eproc.rajasthan.gov.in before 30-09-2011 must register again).
- 4. JDA will not be responsible for delay in online submission due to any reason. For this, bidders are requested to upload the complete bid well advance in time so as to avoid 11th hour issues like slow speed; choking of web site due to heavy load or any other unforeseen problems.
- 5. Bidders are also advised to refer "Bidders Manual Kit" available at eProc website for further details about the e-Tendering process.
- 6. Training for the bidders on the usage of e-Tendering System (eProcurement) is also being arranged by DoIT&C, GoR on a regular basis. Bidders interested for training may contact e-Procurement Cell, DoIT&C for booking the training slot.
 - Contact No: 0141-4022688 (Help desk 10 am to 6 pm on all working days) e-mail: eproc@rajasthan.gov.in
 - Address: e-Procurement Cell, JDA, Yojana Bhawan, Tilak Marg, C-Scheme, Jaipur
- 7. The procuring entity reserves the complete right to cancel the bid process and reject any or all of the Bids.
- 8. No contractual obligation whatsoever shall arise from the bidding document/ bidding process unless and until a formal contract is signed and executed between the procuring entity and the successful bidder.
- 9. Procurement entity disclaims any factual/ or other errors in the bidding document (the onus is purely on the individual bidders to verify such information) and the information provided therein are intended only to help the bidders to prepare a logical bid-proposal.
- 10. The provisions of RTPP Act 2012 and Rules thereto shall be applicable for this procurement. Furthermore, in case of any inconsistency in any of the provisions of this bidding document with the RTPP Act 2012 and Rules thereto, the later shall prevail.

Process for Participation & Depositing Payment Online

JAIPUR DEVELOPMENT AUTHORITY, has decided to receive Bidding document fee, RISL Processing Fee and Bid Security Deposit (BSD) through online mode only for which the bidder has to get registered himself on JDA portal www.jaipurjda.org.

To participate in the bid, bidder has to be:

- a) Registered on JDA website www.jaipurjda.org (by depositing Rs. 500.00 online, the validity of which remains 3 (three) years).

 For participating in the Bid, the Bidder has to apply for this Bid and pay the Bid
 - Document Fee, RISL Processing Fee and Bid Security Deposit, online only.
- b) Registered on e-Procurement Portal of Government of Rajasthan www.eproc.rajasthan.gov.in for online e-Bid submission.
- c) The Bid Document Fee, RISL Processing Fee and Bid Security Deposit are in addition to the JDA registration fee.

Methods for depositing on line amount

- > Online through Internet Banking, Debit Card or Credit Card.
- ➤ In case the amount exceeds the online payment limit, the payment may be made through RTGS / NEFT / Transfer in Bank Account Number 675401700586 IFSC Code ICIC0006754 of ICICI BANK Limited, JDA Campus Jaipur.

In case of RTGS / NEFT / Transfer the bidder is required to deposit the requisite amount in the dedicated bank account number as mentioned above and has to get the UTR / Reference number from the bank. This number requires to be updated whiling applying the bid on JDA portal.

While participation in the bid, a receipt will be generated through the system showing the submission details as per Bid Participation Receipt (Sample Enclosed). The bidder is required to fill the instrument numbers for various heads on e-Procurement portal www.eproc.rajasthan.gov.in as mentioned in the receipt.

Sample of Bid Participation Receipt:

Jaipur Development Authority

Bid Participation Receipt

Date & Time: 09/06/2015 05:13 PM

Bid Detail

Bid Title: Testing

Bid Value: 300000 Bid Opening Place: Manthan Hall, Jaipur

Development Authority

Bidder Detail

Registration Type: Individual Instrument Amount: 32500.00

Payment Mode: Online/UTR Payment Channel : Payment Gateway/ICICI Branch - JDA

Instrument No: 456123789 Instrument Date: 17-06-2015

Dates Detail

Sr. No.	Event Name	Event Date
1	Publishing Date	01/06/2015 01:00 PM
2	Bid Opening Date	01/07/2015 03:00 PM

Specific Instrument Detail for eProc Rajasthan

Instrument Type:	DD		
Instrument Number	Head Name	Amount	Date
10000	Tender Fee	400.00	05/06/2015
10001	RISL Processing Fee	1000.00	05/06/2015
10002	Bid Security Deposit	30,000.00	05/06/2015

More details about Registration Process, Terms and Conditions and FAQ along with contact detail is available on JDA website www.jaipurjda.org under e-Services>>JDA Tender.

Abbreviations & Definitions

JDA	Jaipur Development Authority
GOR Act	Government of Rajasthan The Rajasthan Transparency in Public Procurement Act, 2012 and Rules 2013, Government of Rajasthan, Rajasthan
Procurement/ Public Procurement	The acquisition by purchase, lease, license or otherwise of works, goods or services, including award of Public Private Partnership projects, by a procuring entity whether directly or through an agency with which a contract for procurement services is entered into, but does not include any acquisition without consideration, and "procure" or "procured" shall be construed accordingly
Procuring Entity /Purchaser/ Tendering Authority/ Buyer	Person or entity that is a recipient of a good or service provided by a Bidder / Supplier/Seller under a purchase order or contract of sale.
Bidder / Supplier/Seller	A company registered under Indian Companies Act, 1956 or a partnership firm registered under Partnership Act or a proprietorship firm.
Bidding Document	Documents issued by the procuring entity, including any amendments thereto, that set out the terms and conditions of the given procurement and includes the invitation to bid
Authorised Signatory	The bidder's representative/ officer vested (explicitly, implicitly, or through conduct) with the powers to commit the authorizing organization to a binding agreement. Also called signing officer/ authority having the Power of Attorney (PoA) from the competent authority of the respective Bidding firm.
Bid/ eBid	A formal offer made in pursuance of an invitation by a procuring entity and includes any tender, proposal or quotation in electronic format
Bid Security Deposit	A security provided to the procuring entity by a bidder for securing the fulfilment of any obligation in terms of the provisions of the bidding documents. Also called as BSD.
Contract/ Procurement Contract	A contract entered into between the procuring entity and a successful bidder concerning the subject matter of procurement
Contract/ Project Period	The Contract/ Project Period shall commence from the date mention in the Work Order
AoC	Award of Contrat
AoS BoS/ BoO	Award of Service Bill of Service/Bill of Quantity
BG	Bank Guarantee
Day	A calendar day as per GoR/ GoI.
INR	Indian Rupee
ITB	Instruction to Bidders
JDA	Jaipur Development Authority
LD	Liquidated Damages
MAF	Manufacturer's Authorization Certificate

NIB	Notice Inviting Bid
NOC	Network Operations Centre
PAN	Permanent Account Number
PBG	Performance Bank Guarantee
PC	Procurement/ Purchase Committee
PQ	Pre-Qualification
PSD/ SD	Performance Security Deposit/ Security Deposit
RISL	RajCOMP Information Services Ltd.
Services	Any subject matter of procurement other than goods or works and includes physical, maintenance, professional, intellectual, consultancy and advisory services or any service classified or declared as such by a procuring entity and does not include appointment of any person made by any procuring entity
SLA	Service Level Agreement is a negotiated agreement between two parties wherein one is the customer and the other is the service provider. It is a service contract where the level of service is formally defined. In practice, the term SLA is sometimes used to refer to the contracted delivery time (of the service) or performance.
VAT/ CenVAT	Value Added Tax/ Central VAT
WO/ PO	Work Order/ Purchase Order
QGR	Quarterly Gross Receipt
DoIT	Department of Information & Technology, Govt. of Rajasthan, Jaipur

Section 1: Project Profile & Background Information

- **1.0** The Jaipur Development Authority (JDA) was established in the year 1982. JDA was created by the State government of Rajasthan with a vision to combat and manoeuvre the growing requirements of a large city in wake of the increasing population and to help give Jaipur a planned look compatible and comparable to any metropolitan city of repute. For this motive JDA was given powers and a green signal to speed up the development and progressive growth of the entire city.
- **2.0** The initiative of the e-governance projects the major work area is being rendered through IT based solutions. Many activities are now performed through IT support solutions.
- **3.0** JDA is committed to working for the benefit of the citizens of Jaipur with planned implementation of development schemes and is consistently striving to take Jaipur to higher levels of progress. To meet its objective, JDA intends to provide, safety and security solutions, cost effective and easy access to information, through multiple devices to residents of Jaipur.
- **4.0** The initiative of the e-governance projects the major work area is being rendered through IT based solutions. Many activities are now performed through IT support solutions.
- 5.0 JDA under phase 1 is already in the process of developing Jaipur City in a Smart City with the use of IT/ICT based interventions. In this regard, a tender was floated for provisioning of Wi-Fi Hotspots, Interactive Information Kiosk, Surveillance Camera, Environmental Sensor, Parking Information system and Remote Kiosk along with Facility Management Services at selected locations of Jaipur City.
- 6.0 The Public Wi-Fi and associated wired network in each of the key locations identified in the City is being built for the purpose of having a network infrastructure asset using which the government can, not only provide internet access to Citizens, but also transform the engagement between the government and citizens for greater citizen services. The government plans to use this foundational network for improving various operations of civil and city administration. The vision here is also to engage the citizens in inclusive governance.
- **7.0** Technology has enabled a paradigm shift with "Smartness" shaping up all future developments. JDA has been working towards time bound development activities based on major scientific and hi-tech strategies to create a state-of-the-art city.
- **8.0** JDA has started rendering multiple services through IT based e-governance platforms to deal with issues of land, public grievances, notifications, information, tendering, records and a whole ambit of development issues.

Section 2: Eligibility Criteria

The following criteria must strictly be fulfilled by the Bidder. The Bidder must submit documentary evidences in support of their claim for fulfilling the criteria. The bids received without the documentary evidences shall be rejected summarily. The condition from 1 to 9 mentioned below are mandatory to qualify technical bid, noncompliance of any condition shall lead to disqualification in Technical Bid.

S.	Basic	Specific Requirements	Documents Required
No.	Requirement	Specific Requirements	Documents Required
1.	General Requirement	Bidder should be an established IT System Integrator and should have been engaged in Supply, Installation, Commissioning and Operations & Maintenance Services of ICT projects for a period of at least 3 financial years as on 31.03.2015	Work Orders / Client Certificates confirming year and area of activity should be enclosed.
2.	Bidder Entity	Consortium/Joint Venture is allowed, one of the parties in the consortium/JV partner will be the Prime Bidder/Lead Bidder. Prime Bidder/Lead Bidder shall be treated as "Bidder" Any of the parties of the consortium /JV partner or the Prime Bidder/Lead Bidder may meet the technical criteria. However, the Prime Bidder/Lead Bidder alone should meet the financial criteria. If the bidder does not have a Category B, ISP license or higher, then the bidder needs to tie up with at least one such ISP to provide Internet bandwidth. Both the Bidder and the ISP shall form a consortium/JV and should declare the Prime Bidder / Lead Bidder clearly at the time of bidding.	Copy of the consortium/JV agreement in case of consortium/JV, clearly specifying the role and area of specialization of the individual parties of consortium/JV, duly signed by Consortium/JV parties on Rs. 100 non-judicial stamp paper should be enclosed. The agreement should also clearly define the Prime Bidder/Lead Bidder and should be individually and jointly signed by each of the Consortium/JV parties.
3.	Legal Entity	Any legal entity duly registered in India is allowed. In case of consortium/JV, the Prime Bidder/ Lead Bidder should meet this criterion.	a) Certificates of incorporation and/ orb) Registration Certificates
4.	Turnover	The Prime Bidder/Lead Bidder must have annual turnover of at least Rs. 100 Crores solely from ICT Business and IT Services during each of the last 3 financial years as on 31.03.2015.	Audited and Certified Balance Sheet and Profit/Loss Account for the last FIVE Financial Years should be enclosed. CA Certificate be enclosed.
5.	Technical Capability	The Bidder or any of the parties of the consortium/ JV partner must have successfully completed, during last Five financial years as on 31.03.2015, at least the following numbers of Wi- Fi	Copies of work order or contract agreement and the client certificates/Project Sign-off Certificate from client for satisfactory

		systems & CCTV Surveillance System of value specified herein:	completion of project and showing order value and
		Two projects of similar nature for not less than 200 Access Points (AP) in a single work order	cost.
		OR	
		Three projects of similar nature for not less than 100 Access Points (AP) in a single work order	
		AND	
		One Project of similar nature for not less than 100 IP Cameras in a single work order	
6.	Net Worth	The Bidder or the Prime Bidder/Lead Bidder must have positive net worth & profit making in each of the last 3 financial years as on 31.03.2015	CA Certificate mentioning net profit should be enclosed.
		The bidder shall have bank Solvency certificate not less Rs. 80 Crores (issued date shall not be more than 06 months from the date of release of RFP).	Certificate from Bank
7.	Certification	 The Bidder or consortium/JV should possess below Certifications at the time of bidding: a) ISO 9001:2008 Certification for System Integration. b) ISO 20000:2011 for IT Service Management (Facility Management Services) c) ISO 27001:2005 for Information Security Management System 	The Bidder is required to furnish the copy of valid certification.
8.	Tax Registration	The Bidder or the Prime Bidder/Lead Bidder should have a registered number of a. VAT/Sales Tax where his business is located b. Service Tax c. Income Tax PAN	Copies of relevant(s) Certificates of Registration.
9.	Technical Specifications of BOQ items	The quoted product/item should fulfil all the technical specifications laid out in the tender document mentioned in the Annexure (Technical specifications of BOQ items). The Bidder is required to furnish Make, Model / Part number of	The Bidder should enclose relevant catalogues, brochures, etc. in support of all the items quoted in the Bid.

- Any bid failing to meet the above eligibility criteria shall be disqualified and will not be considered for Technical Evaluation.
- Change in Eligibility Criteria: If there is a change in the status of the bidder with reference to any of the eligibility criterion specified above, during the bid process till the award of the project, the bidder should immediately bring the same to the notice of JDA.

- For the purpose of the criterion, turnover of only the bidding entity will be considered. Turnover of any parent, subsidiary, associated or other related entity will not be considered.
- Moreover, the Bidder should provide the experience details of Projects undertaken by it or its
 consortium members or JV entity as the case may be, only. Project experience of the
 Individual Bidder's parent company or its subsidiary or Consortium Members' parent company
 or its subsidiary (who are not Members of the Consortium) will not be considered.
 Implementation or operation and maintenance experience of parent/subsidiary/associate
 company (ies) of the Bidder or its consortium members or JV entity as the case may be would
 not be considered for evaluation.

Section 3: Project Objective & Broad Scope of Work

- 1.0 The broad scope of work will include Provisioning of & Integration of Wi-Fi Hotspots, Interactive Information Kiosks, and Surveillance Cameras, Environmental Sensors, Smart lighting solution and Remote Kiosks along with Facility Management Services at the selected locations as well at NOC at JDA HQ as per bid Document. Details of solution wise locations selected are annexed at Annexure -1.
- **2.0** The architecture of set-up consists of number of locations which shall be operated / managed / controlled by Network Operations Centre (NOC) to be established at JDA HQ building at Jaipur. The detail of inventories for outdoor locations as well as NOC is annexed in the document.
- **3.0** The envisaged solution requirement for Phase 2 is listed below;
 - WiFi Hotspots
 - Kiosks
 - Smart Lighting
 - Remote Expert Govt Services
 - IP Surveillance

Existing System Integration

It is also envisaged that in phase 2 the same infrastructure will be used, upgrade and integrate with for the above services;

Existing System details

- Wi-Fi Hotspots
- Interactive Information Kiosks,
- Surveillance Cameras,
- Environmental Sensors
- Parking Information System
- Remote Kiosks
- Facility Management Services for Smart City Services

4.0 Existing infrastructure details

Currently in JDA NOC have 2 Internet Routers, 2 Wireless controllers, 2 Firewall with IPS capabilities, 2 Core switches, few power over Ethernet (PoE) access switches, 2 Rack servers, 2 Unified Communication servers, Interactive Kiosk Platform, Remote Expert Platform, Video management solution & Server based Storage for video management solution.

All the installed devices have the adequate amount of license to register already proposed devices that are installed & getting installed on the field.

The new deployment will have to integrate with existing JDA Network Operations Centre IT equipment's as well as to be reused wherever possible to minimize the Capex and ensure seamless operations.

To accommodate the new requirements, the bidder has to provide additional licenses. If required new hardware's may also be proposed, however the new proposed hardware's must be fully compatible with existing hardware.

City Infrastructure Management is being deployed in Phase 1 as a Smart City platform that integrates Smart Parking, Wi-Fi Business Data and Environmental monitoring.

The existing VMS system should be upgraded and expanded as per the requirements of this project.

- 5.0 The bidder is required to implement an end to end solution. He is required to maintain & operate the equipment so installed at various locations as well at NOC at JDA HQ for a period of 3 years. After completion of 3 years agreement, the service provider shall be obliged to transfer the entire system to JDA. The service provider shall comply with all the DoT and TRAI regulations with regard to provisioning of the Internet Services.
 - The bidder is advised to visit the sites of locations as well as Network Operations Centre (NOC) established at JDA HQ building at Jaipur to make an independent assessment of the quantum of the work involved. The Bidder is required to install requisite Server / storage / FireWall / Load Balancer / Switches / Router etc. to support the backend solution at NOC to Operate & Maintain the equipments so installed at various locations.
 - The JDA shall facilitate the bidder for any permissions/ issues to be required / resolved with the various departments of the State / Central Government. JDA shall arrange for basic facilities such as office space, fixtures & furniture, air conditioning, electricity, security, etc. required to operate & maintain the NOC to be established at JDA HQ building at Jaipur on non-chargeable basis. However, at locations other than NOC, the bidder shall arrange their own arrangement for these facilities in its name.
 - The successful bidder is also advised to get the complete equipments/system being installed at various locations as well as at Network Operations Centre(NOC) to be established at JDA HQ building at Jaipur to be insured to cover any thefts, mishaps, etc.
 - The new deployment will have to integrate with the existing JDA Network Operations Centre that includes Central Management Systems for Wi-Fi Hotspots, interactive Information Kiosks, Surveillance Cameras & environmental sensors. NOC has Wireless Controller which is operating in standalone mode and Bidder is required to provide hardware to upgrade existing Controller to High availability configuration with additional hardware.
 - Bidder is required to reuse the existing Wireless network resources, which were deployed as part of pilot project, to minimise the Capex and ensure seamless operations. The new deployment should provide Network monitoring system to monitor the wireless infrastructure including the existing deployed wireless network.

- JDA Control Centre has existing Surveillance Management System. The new deployment will have to integrate the existing Surveillance Management System including any up gradation if required.
- Any new Interactive Kiosk System should integrate with existing Interactive Kiosk Experience Platform deployed.

6.0 Project Deliverables, Milestones & Time Schedule:

The successful bidder is expected to carry out all ground work for Supply, Installation including documentation, coordination with JDA. Certain key deliverables are identified for each of the milestones, are mentioned in NIB Document. However, bidder should take approval of templates of all the reports from JDA before submission of deliverables to purchaser. The complete work has been planned for execution / completion in 2 phases as under -

- **Implementation period** All the end uses / solutions / individual sites shall be up & functional within three months of provisioning of links at concerned sites by DoIT. All the sites & use cases are to be made functional within 6 months of award of contract.
- **O&M Phase 3 years** from the successful execution / completion of the Implementation phase

7.0 Payments Terms

 Payment of 70% of the total contract value shall be made based on below milestone achieved by the Bidder;

S. No	Solution milestone	Payment
1.	WiFi Hotspots	25 %
2.	Kiosks and Remote Expert Govt	10 %
	Services (Remote Kiosks)	
3.	Smart Lighting	15 %
4.	Surveillance Solution	20 %
5.	Data Centre Solution	20 %
6.	Command Centre Solution 10 %	

- Payment of remaining **30%** of the total contract value to be paid @10% annually in 3 years for FMS services. The payment shall be made on quarterly basis @2.5% of the total contract value.
- The successful bidder will make the request for payment in writing, accompanied by invoices describing, as appropriate, the supply, and by the required documents submitted pursuant to the contract and upon fulfilment of all the obligations stipulated in the Contract.
- The currency or currencies in which payments shall be made to the successful bidder under this Contract shall be Indian Rupees (INR) only.
- All remittance charges will be borne by the successful bidder.
- In case of disputed items, the disputed amount shall be withheld and will be paid only after settlement of the dispute.
- Any penalties/liquidated damages, as applicable, for delay and non-performance, as mentioned in this bidding document, will be deducted from the payments for the respective running bill subject to bill amount.

8.0 Service Level Agreement

1. SERVICE AVAILABILITY

a. UPTIME (Hot Spot Availability & CCTV Cameras):

- a. SLA Requirement Average uptime should be ≥ 97% per site per quarter. Site means 75% of the equipment up.
- b. Report Requirement Average Uptime (Availability) Report

Calculation Criteria	Amount of penalty
Average Uptime 97% or above	No penalty
Average Uptime between 93% - 97%	1% of the QGR amount
Average Uptime between 90% - 93%	2% of the QGR amount
Average Uptime below 90%	5% of the QGR amount

b. UPTIME (Core System Availability):

- a. SLA Requirement Average uptime should be \geq 97% per quarter.
- b. Report Requirement Average Uptime (Availability) Report

Calculation Criteria	Amount of penalty
Average Uptime 97% or above	No penalty
Average Uptime between 93% - 97%	1% of the QGR amount
Average Uptime between 90% - 93%	2% of the QGR amount
Average Uptime below 90%	5% of the QGR amount

c. THROUGHPUT (Band Width):

- a. SLA Requirement Average throughput should be \geq 90% per quarter.
- b. Report Requirement Average Throughput Report

Calculation Criteria	Amount of penalty
Average Throughput 90% or above	No penalty
Average Throughput between 80% - 90%	1% of the QGR amount
Average Throughput between 70% - 80%	2% of the QGR amount
Average Throughput below 70%	5% of the QGR amount

2. **SLA Manpower Requirements:**

The Bidder shall provide following minimum manpower resources for on-site requirement (at outdoor locations as well as at NOC) with no other responsibility to meet out the SLA:

S.No	Professional	Minimum Resources	Minimum Qualifications	Key Job Duties
1.	Team Leader (8x7)	1	Experience on similar type of ICT based projects, of minimum 3 years	Overall project management and coordination
2.	System / Network Administrator (16X6)	2	Experience on Windows and Linux administration, Virtualization, Storage, Application handling,	System Administration and Backup Management; Network & Security

			Backups, etc., of minimum 3 years. Experience on configuration and deployment of Network Switches, Routers, WiFi Controllers & Access Points, Surveillance Cameras, Fire Wall Load Balancer, etc., of minimum 3 years	Management
3.	Technical Support for outdoor location and NOC (16X7)	4	Experience on	Configuration, Troubleshooting and Support.
4.	Security personnel for outdoor location (24x7)	As per sites	Matriculation or higher.	Physical protection.

9.0 Project Objective and Scope

Supply Installation testing commissioning of all systems as per below sections and services for 3 Years. Below listed objectives are envisaged from this project;

Wi-Fi Hotspots

City Wi-Fi serves as the foundation for creating a connected city. The City Wi-Fi allows for a confluence of data from static sensors as well as connected objects and people. This data can inform city processes and improve the delivery of urban services and the management of infrastructure. City Wi-Fi also helps cities provide citizens with Internet connectivity and access to a broad range of citywide services.

- Better city planning and development
- E-government services delivered to citizens, faster, and at a lower operating expense
- Local economic development
- Improved productivity and service
- Access to city services and Internet connectivity
- Improved quality of life
- Increased access to online services

• Interactive Information Kiosks

The objective of Smart Cities is to improve the quality of life of city-dwellers of Jaipur, Enhance the efficiency and competitiveness of the services provided by the administration and move towards the sustainability of cities by improving resource efficiency. JDA is looking for an intelligent and interactive kiosk system for quick access to public information, faster connectivity while providing a very rich citizen and tourist experience. It will be a comprehensive solution featuring a Kiosk and any touch screen that can act as a signage to display ads, Wi-Fi hotspot, interactive city

guide across Jaipur. The following are expected out of the Interactive Kiosk Solution:

- Quick and easy information access for citizens and tourists
- Show environmental data on the Kiosk screen
- Navigate through city maps
- Access various services like bus ticketing, train ticketing etc
- Integrate various services provided by the city administration as and when needed.

Smart Lighting

Electric streetlights are essential elements of a municipal environment. They affect residents' sense of safety and place while influencing a city's ability to create an inviting environment for business and tourism. Unfortunately, outdoor lights are also a major energy draw.

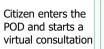
- Reduce energy consumption, cost, and maintenance
- Enhance situational awareness, real-time collaboration, and decision making across city
- Add intelligent IT innovations to transportation, utilities, public safety, and environmental monitoring without adding significantly more physical infrastructure
- Real-time data communications with low latency (or minimal delay), to improve safety and security

Note: Smart Lighting infrastructure and operations will be moved from Jaipur Development Authority (JDA) to Jaipur Nagar Nigam (JNN) after 6 months of deployment, Bidder should provision necessary hardware/software for same.

Remote Expert Govt Services (REGS)

Gives citizens convenient, cost-effective, face-to-face access to government representatives and services from remote locations with Central Remote Expert Smart Solution for Government Services. Remote Expert Manager software, a touch screen monitor, and a document scanner, all conveniently located in the point of delivery (POD), make sharing documents and collaborating together simple.

Placing a POD in a convenient location close to citizen residences and workplaces reduce both the cost of serving the public and carbon footprint.







Expert at the government center

Expected Capabilities:

- High-quality citizen services delivered remotely yet in a face-to-face interaction
- Virtual pool of experts in a centralized environment, maximizing the effectiveness and reach of their knowledge base
- Fast and easy access to expert government services thus increasing citizen engagement and satisfaction
- Cost reduction through real estate consolidation resulting from centralization of expert resources
- Carbon footprint reduction and better traffic flow management as citizens no longer need to travel long distances to government centres

• <u>City Surveillance</u>

City Safety and Security solution helps protect cities against crime, terrorism, and civil unrest. It helps law enforcement monitor public areas, analyze patterns, and track incidents and suspects, enabling quicker response.

- Help for more effective operations
- Quicker response to incidents
- Increased situational awareness
- Increased attractiveness to businesses and workers
- Improved planning and resource allocation
- Improved communications about incidents

Note- Dark fibre would be provided by DoIT at all sites for the purpose of this project and for use of JDA

10.0 Functional requirement of Project

Integrated Smart City Platform

Smart City Integrated Operations Platform (SCIOP), Role of the Smart City Integration Operations Platform (SCIOP)

It is envisaged that the city will implement multiple Smart City use cases over a period of time. The potential example Smart City use cases are-

- Smart Outdoor Lighting
- Smart Parking
- Smart Traffic Management
- Smart Energy Metering

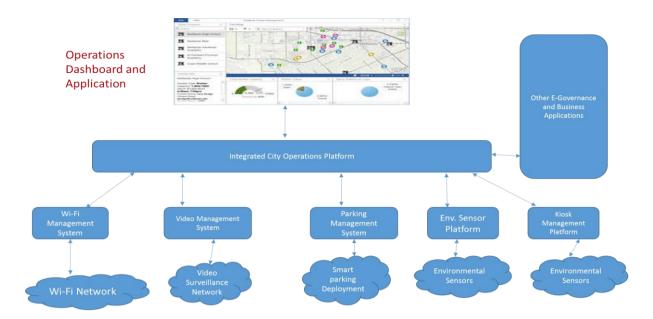
- Smart Water Metering
- Public Safety and Safe City Operations
- Connected Public Transport
- Public Wi-Fi and Urban Service Delivery over Public Wi-Fi
- Kiosks for Citizen Information
- Citizen Interactive Kiosks for Urban Service Delivery
- Environmental Monitoring
- Smart Waste Management

The City administration intends to use operations applications for monitoring and operating each of the above services. While each agency delivering each of these solutions will have their own operations applications individually, the true value of Smart City is delivered when there is a consolidated and integrated view of all of these operations for the administrators. Also, when one agency application is able to use the data and intelligence gathered from operations of other agency, not necessarily controlling other agencies operations, civic services are delivered lot of efficiently and in an informed fashion. An example is that when police come to know about the real time status of outdoor lighting, then they will be better informed on where to concentrate their patrolling on. Or when citizens come to know where there is good possibility of getting a parking in the city centre, they don't spend time looking for parking without any knowledge. This way traffic on the roads is reduced. The integrated operations platform is expected to enable such transformation of the city operations.

As part of an ongoing Smart City project, Jaipur City has deployed City Infrastructure Management as Smart City integrated platform and will have information about Smart Parking, Environmental Monitoring and Wi-Fi business data. The bidder is expected to leverage this platform to integrate new services like Smart Lighting into this platform. The capabilities of this platform are described below.

Capabilities of the Integrated City Operations Platform

The Figure below represents how the Integrated City Operations Platform plays a role of the key middleware platform for delivering Urban Services. The following sections describe the various capabilities of the proposed Integrated Operations Platform.



Integration of Various Urban Services Devices

This platform is expected to integrate various urban services devices at the street layer so that urban services applications can be developed on top of this platform independent of the technology that is used in the devices. Following are the integration capabilities from this platform

- Integrate devices using their APIs in to this platform. For example, if the City wants to deploy Smart Parking solution, this platform should have the ability and provision to write adaptors which interface with the parking sensors or management software of the parking sensors to collect parking events, data and alerts and notifications from the devices and their software managers.
- The platform should be able to integrate any type of parking sensor irrespective of the technology used. For example, some parking sensors might use RF technology like LoRa or ZigBee to communicate the data and events, some might use GPRS or some might use Wi-Fi. Some parking sensors might use infra-red based detection, some might use magnetic field based detection or combination of the both where as some might use a video camera to detect parking occupancy. Irrespective of the technology, the platform should be able to integrate with these devices and their software managers and provide the data from such devices in a normalized and standard based data models.
- The same logic and requirement applies to various other urban services devices like LED control nodes, water meters, energy meters, environmental sensors, waste bin sensors, device embedded in connected vehicles etc.
- It is expected that this platform
- ✓ Enables the City and its partners to define a standard data model for each of the urban services domains (i.e. Parking, lighting, kiosks etc....)
- ✓ Enables City and/or its partners to write software adaptors based on the API(s) provided by device vendors and have the ability to control, monitor and collect the data from these street devices

- ✓ Normalizes the data coming from different devices of same type (i.e. Different lighting devices etc...) and provide secure access to that data using data API(s) to application developers
- ✓ Provides urban services API(s) to develop operation applications for each of the Urban Services domains. For example, the lighting operator of the City should be able to develop a City Lighting management application based on the API(s) provided by the platform. This lighting application should also have the ability to access data from other domains like environment based on the access control configured in the system.
- The integrated operations platform should also have the following capabilities
- ✓ Create different users and roles for users.
- ✓ The platform should allow different roles to be created and assign those roles to different access control policies.
- ✓ Since this platform is being used for managing Cities, the platform should also allow association of users and locations. For example, the platform should allow creation of locations in the system which correspond to various physical locations in the city and allow the admin to associate different users to different locations with the intent that each user can control only services for a location for which has been given access.
- ✓ The platform should have capability to provide access to real time data and historical data from various connected devices for reporting and analytics.
- ✓ The access to data should be highly secure and efficient.
- ✓ Access to the platform API(s) should be secured using API keys.
- Currently City has developed dashboard and mobile applications on Cisco City Infrastructure management platform. It is expected that the as part of this project, the bidder will develop any new applications leveraging the Cisco City Infrastructure Management platform.

Functional requirement of City Wi-Fi Services

JDA is looking for City Wi-Fi design as per defined locations, which should lay down the foundational approach for infrastructure of the Internet of Everything (IoE) for cities. It should enable cities to provide its citizens the Internet connectivity and access to a broad range of citywide services. At the same time, it should also enable cities to solve their most critical problems (for example, parking, traffic management, lighting, water and waste management, etc. in future) on a shared and intelligent network infrastructure, thus making it a multiservice solution. City Wi-Fi solution should highlight the approach to integrate technologies like Wi-Fi Outdoor Wireless Access Points, Management and control solutions and Mobility Services Engine technologies like location tracking, and routing and switching products, as well as other data centre components, to provide an end-to-end architecture for citywide connectivity. City Wi-Fi should enable anytime, anywhere access for citizens, enables citizen participation, stimulates local commerce, and

forms an enabling foundational network for IoE innovations in city infrastructure management.

- City is looking for Wi-Fi access points, which has low-profile design that is aesthetically pleasing, yet they can withstand the most rugged outdoor conditions.
- Outdoor Access Points should be small enough and light enough to be unobtrusively mounted on street light poles or building facades.
- Option like solar shield/cover option should be preferred as if required same can be painted to match its surroundings to allow the access point to be even less noticeable
- Design should offer features which are extremely important for City wide Wi-Fi deployment like radio resource management, Band-Select to automatically take advantage of the 5-GHz band, and Video-Stream for high-quality video performance over Wi-Fi.
- Access Points should support technology that allows the same antenna ports to be used either for dual-band antennas to reduce the antenna footprint or for single-band antennas to optimize radio coverage.
- Design should allow flexibility to allow antenna changes to be made on the fly, and saves on sparing costs.
- Outdoor Access Point should support either dual-band or single-band antennas on the same platform and should be configurable via software.
- Access points should support various configurations in-order to provide flexibility for City wide deployment such as bridging, mesh network, serial backhaul and should be able to provide Wi-Fi connectivity concurrently to clients on both 2.4-GHz and 5-GHz radios.
- All access point should have central management and troubleshooting capabilities to help prevent costly maintenance service calls to outdoor locations.
- Central management solution should provide network administrators to have a single solution for RF prediction, policy provisioning, network optimization, troubleshooting, security monitoring, and wireless LAN system management.
- Network should be secure helping ensure that data remains private and secure and that the network is protected from unauthorized access.
- Wi-Fi design should optimize the performance of large wireless network with centralized control.
- Solution should support High Availability with sub-second access point and client stateful failover
- Solution should have Wireless intrusion prevention system (WIPS) capabilities
- Solution should offer WFA Pass point (Hotspot 2.0) for 3G/ 4G offloads, so that same can be allowed as and when deportment decides to provide this facility to service providers.
- Solution should provide both real-time and historical information about RF interference affecting network performance across controllers

- Solution should support versatile architecture with support for centralized, distributed, and mesh deployments to be used at different places in the network, offering maximum flexibility for city-wide networks offerings
- Solution should offer
 - Seamless client access in the event of a WAN link failure (local data switching)
 - Highly secure guest access
 - Centralized control, management, and client troubleshooting
 - Efficient access point upgrade that optimizes the WAN link utilization for downloading access point images

Min SLA and Operations for Wi-FI services

City Wi-Fi services should meet following SLA and Operations requirement:

- The hotspot should function 24 X 7 basis with uptime of 99.xx%
- Free data to be provided per user as per following criteria :
- Per day = Maximum of 100 MB
- Per Month= Maximum of 1 GB
- Minimum Speed = 1Mbps
- User should be able to access the data via multiple devices

Above mentioned free Wi-Fi quota defines the total limit per user and should be commonly measurable across all the hotspots.

- Wi-Fi solution should be able to provide differentiated services for City Staff Street Access, Citizens Free Internet Access and Sensor Network Access
- In addition bidder must ensure the minimum required bandwidth per sensor as per the design envisaged by bidder.

Functional requirement of City Surveillance

The City Surveillance System shall manage video feeds for all CCTV systems required under this project through Video Management System (VMS) application. Proposed VMS should support 10000 Cameras in design from day1.

This organization requires an integrated security solution that includes a command and control style operator console; a Linux-based video management software system, standard and high definition IP-based cameras, and system should meet the following requirements.

The Video Surveillance System should intend to effectively monitor all the critical operational areas of the locations. The broad objectives of the Video Management System are as follows:

- a) Access points monitoring with Motion Detection Alarms
- b) Coverage for detection of any intrusion of defined areas
- c) Enhancement of operational control by covering critical areas

d) Recording of camera outputs for analyzing critical events

The Video Surveillance System should require ensuring effective Security & surveillance of an area as well as creating a tamper proof record for post event analysis. The Surveillance System shall provide an on-line display of video images on monitors at local security control room & also at any other place as defined for large locations as per requirement.

Functional requirement of Smart Lighting

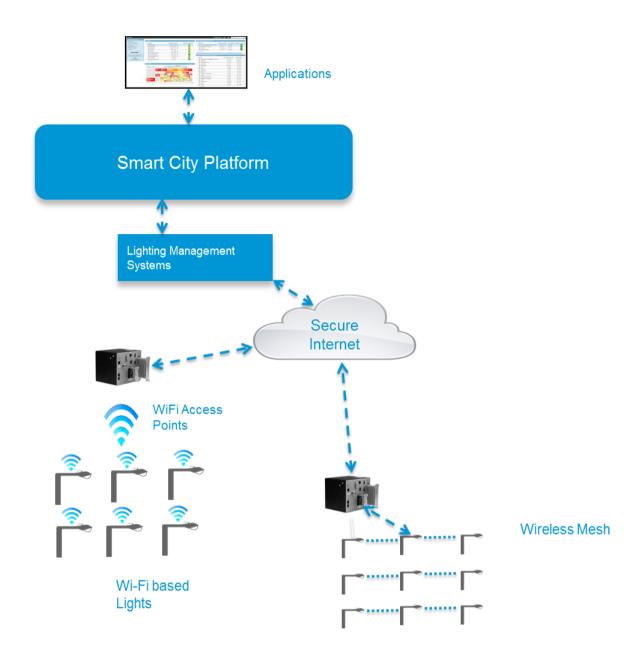
Electric streetlights are essential elements of a municipal environment. They affect residents' sense of safety and place while influencing a city's ability to create an inviting environment for business and tourism. Unfortunately, outdoor lights are also a major energy draw.

To reduce electrical demand, cities are moving a large percentage of outdoor lighting fixtures toward light-emitting diode (LED) technology. This global transition can be a gateway to adopting a common platform on which to launch a number of smart-city solutions.

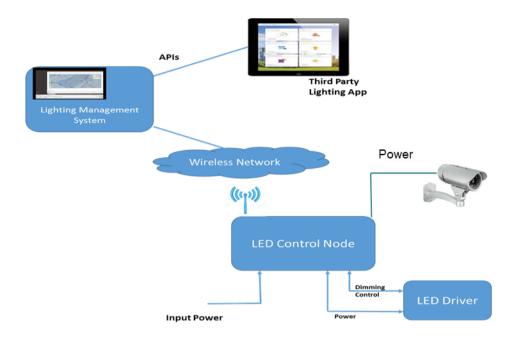
Smart lighting should meet below functional requirement;

- The sensors based street lighting system capable to provide the real time data
- Cloud or on-premise Lighting Operation and Management platform, Integrate with City Infrastructure Platform
- Ability to send commands to the smart street lighting system based on the data analytics to increase/decrease the luminosity as per the Day light and weather conditions.
- Individual switch on/off, increase/decrease luminosity as per the command received from the Lighting Operations Management software
- Policy based Operation via the Lighting Operations Management software Example: set up policies like light up alternate lights during low traffic density, increase the luminosity of the lights as per the dullness of the day lights
- Real time status of the Smart Lighting System on a city map view of the Lighting Operations Management software

The proposed architecture for Smart Lighting system will be as under -



The integration of Outdoor LED luminaries with a control node will look something like below



Functional requirement of Kiosks

Give citizens convenient, cost-effective, face-to-face access to government representatives and services from remote locations with Central Remote Expert Smart Solution for Government Services. Remote Expert Manager Software, a touch screen monitor, and a document scanner, all conveniently located in the point of delivery (POD), make sharing documents and collaborating together simple.

Section 4: Instructions to Bidder (ITB)

1. Sale of Bidding/ Tender Documents

- a) The sale of bidding documents shall be commenced from the date of publication of Notice Inviting Bids (NIB) and shall be stopped three days prior to the date of opening of Bid. The complete bidding document shall also be placed on the State Public Procurement Portal and e-Procurement portal as well as on JDA website.
- b) Bidding documents purchased by Principal of any concern may be used by its authorised sole selling agents/ marketing agents/ distributors/ sub-distributors and authorised dealers or vice versa.

2. Changes in the Bidding Document

- a) At any time, prior to the deadline for submission of Bids, the procuring entity may for any reason, whether on its own initiative or as a result of a request for clarification by a bidder, modify the bidding documents by issuing an addendum in accordance with the provisions below.
- b) In case, any modification is made to the bidding document or any clarification is issued which materially affects the terms contained in the bidding document, the procuring entity shall publish such modification or clarification in the same manner as the publication of the initial bidding document.
- c) In case, a clarification or modification is issued to the bidding document, the procuring entity may, prior to the last date for submission of Bids, extend such time limit in order to allow the bidders sufficient time to take into account the clarification or modification, as the case may be, while submitting their Bids.
- d) Any bidder, who has submitted his Bid in response to the original invitation, shall have the opportunity to modify or re-submit it, as the case may be, within the period of time originally allotted or such extended time as may be allowed for submission of Bids, when changes are made to the bidding document by the procuring entity: Provided that the Bid last submitted or the Bid as modified by the bidder shall be considered for evaluation.

3. Period of Validity of Bids

- a) Bids submitted by the bidders shall remain valid during the period specified in the NIB/ bidding document. A Bid valid for a shorter period shall be rejected by the procuring entity as non-responsive Bid.
- b) Prior to the expiry of the period of validity of Bids, the procuring entity, in exceptional circumstances, may request the bidders to extend the bid validity period for an additional specified period of time. A bidder may refuse the request and such refusal shall be treated as withdrawal of Bid and in such circumstances bid security shall not be forfeited.

c) Bidders that agree to an extension of the period of validity of their Bids shall extend or get extended the period of validity of bid securities submitted by them or submit new bid securities to cover the extended period of validity of their bids. A bidder whose bid security is not extended, or that has not submitted a new bid security, is considered to have refused the request to extend the period of validity of its Bid.

4. Format and Signing of Bids

- a) Bidders must submit their bids online at e-Procurement portal i.e. http://e-eproc.rajasthan.gov.in.
- b) All the documents uploaded should be digitally signed with the DSC of authorized signatory.
- c) A Single stage Two part/ cover system shall be followed for the Bid: -
 - (i) Technical Bid, including fee details, eligibility & technical documents
 - (ii) Financial Bid
- d) The technical bid shall consist of the following documents: -

S. No.	Documents Type	Document Format
1.	All the documents mentioned in the "Eligibility Criteria", in support of the eligibility	As Per Annexure-3: Technical Bid Evaluation Check List (As per the format mentioned against the respective eligibility criteria clause).

e) Financial bid shall include the following documents: -

S. No.	Documents Type	Document Format
1.	Financial Bid	As per BoQ(.XLS) format available on e- Procurement portal
2.	Annexure 14 A	As per available in the Bid document

f) The bidder should ensure that all the required documents, as mentioned in this bidding document, are submitted along with the Bid and in the prescribed format only. Non- submission of the required documents or submission of the documents in a different format/ contents may lead to the rejections of the Bid submitted by the bidder.

5. Cost & Language of Bidding

- a) The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the procuring entity shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
- b) The Bid, as well as all correspondence and documents relating to the Bid

exchanged by the Bidder and the procuring entity, shall be written only in English Language. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in English/ Hindi language, in which case, for purposes of interpretation of the Bid, such translation shall govern.

- **6. Bid Security (EMD):** Every bidder, if not exempted, participating in the procurement process will be required to furnish the bid security as specified in the NIB.
 - a) In lieu of bid security, a bid securing declaration shall be taken from Departments of the State Government, Undertakings, Corporations, Autonomous bodies, Registered Societies and Cooperative Societies which are owned or controlled or managed by the State Government and Government Undertakings of the Central Government.
 - b) Bid security instrument or cash receipt of bid security or a bid securing declaration shall necessarily accompany the technical bid.
 - c) Bid security of a bidder lying with the procuring entity in respect of other bids awaiting decision shall not be adjusted towards bid security for the fresh bids. The bid security originally deposited may, however, be taken into consideration in case bids are re- invited.
 - d) The bid security may be given in the form of bank guarantee, in specified format as given in the bidding document, of a scheduled bank. The bid security must remain valid thirty days beyond the original or extended validity period of the bid.
 - e) The issuer of the bid security and the confirmer, if any, of the bid security, as well as the form and terms of the bid security, must be acceptable to the procuring entity.
 - f) Prior to presenting a submission, a bidder may request the procuring entity to confirm the acceptability of proposed issuer of a bid security or of a proposed confirmer, if required. The procuring entity shall respond promptly to such a request.
 - g) The bank guarantee presented as bid security shall be got confirmed from the concerned issuing bank. However, the confirmation of the acceptability of a proposed issuer or of any proposed confirmer does not preclude the procuring entity from rejecting the bid security on the ground that the issuer or the confirmer, as the case may be, has become insolvent or has otherwise ceased to be creditworthy.
 - h) The bid security of unsuccessful bidders shall be refunded soon after final acceptance of successful bid and signing of Agreement and submitting performance security.

- i) The Bid security taken from a bidder shall be forfeited, including the interest, if any, in the following cases, namely: -
 - (i) when the bidder withdraws or modifies its bid after opening of bids;
 - (ii) when the bidder does not execute the agreement, if any, after placement of supply / work order within the specified period;
 - (iii) when the bidder fails to commence the supply of the goods or service or execute work as per supply / work order within the time specified;
 - (iv) when the bidder does not deposit the performance security within specified period after the supply / work order is placed; and
 - (v) if the bidder breaches any provision of code of integrity, prescribed for bidders, specified in the bidding document.
- j) Notice will be given to the bidder with reasonable time before bid security (EMD) deposited is forfeited.
- k) No interest shall be payable on the bid security (EMD).
- I) In case of the successful bidder, the amount of bid security may be adjusted in arriving at the amount of the Performance Security, or refunded if the successful bidder furnishes the full amount of performance security.
- m) The procuring entity shall promptly return the bid security after the earliest of the following events, namely:-
 - (i) the expiry of validity of bid security;
 - (ii) the execution of agreement for procurement and performance security is furnished by the successful bidder;
 - (iii) the cancellation of the procurement process; or
 - (iv) the withdrawal of bid prior to the deadline for presenting bids, unless the bidding documents stipulate that no such withdrawal is permitted.
- **7. Deadline for the submission of Bids** Bids shall be received online at e-Procurement portal and up to the time and date specified in the NIB.

8. Withdrawal, Substitution, and Modification of Bids

- a) If permitted on e-Procurement portal, a Bidder may withdraw its Bid or re-submit its Bid (technical and/ or financial cover) as per the instructions/ procedure mentioned at e-Procurement website under the section "Bidder's Manual Kit".
- b) Bids withdrawn shall not be opened and processes further.

9. Opening of Bids

a) The Bids shall be opened by the Bid Opening Committee on the date and time mentioned in the NIB in the presence of the bidders or their authorised

representatives who choose to be present.

- b) The committee may co-opt experienced persons in the committee to conduct the process of Bid opening.
- c) The committee shall prepare a list of the bidders or their representatives attending the opening of Bids and obtain their signatures on the same. The list shall also contain the representative's name and telephone number and corresponding bidder's names and addresses. The authority letters, if any, brought by the representatives shall be attached to the list. The list shall be signed by all the members of Bid opening committee with date and time of opening of the Bids.
- d) All the documents comprising of Technical Bid / Cover shall be opened & downloaded from the e-Procurement website (only for the bidders who have submitted the prescribed fee(s) to JDA).
- e) The committee shall conduct a preliminary scrutiny of the opened technical Bids to assess the prima-facie responsiveness and ensure that the: -
 - (i) bid is accompanied by bidding document fee, bid security or bid securing declaration, and processing fee (if applicable);
 - (ii) bid is valid for the period, specified in the bidding document;
 - (iii) bid is unconditional and the bidder has agreed to give the required performance security; and
 - (iv) other conditions, as specified in the bidding document are fulfilled.
 - (v) any other information which the committee may consider appropriate.
- f) No Bid shall be rejected at the time of Bid opening except the Bids not accompanied with the proof of payment or instrument of the required price of bidding document, processing fee and bid security.
- g) The Financial Bid cover shall be kept unopened and shall be opened later on the date and time intimated to the bidders who qualify in the evaluation of technical Bids.
- **10. Selection Method:** The selection method is Least Cost Based Selection (LCBS or L1).

11. Clarification of Bids

- a) To assist in the examination, evaluation, comparison and qualification of the Bids, the bid evaluation committee may, at its discretion, ask any bidder for a clarification regarding its Bid. The committee's request for clarification and the response of the bidder shall be in writing.
- b) Any clarification submitted by a bidder with regard to its Bid that is not in response to a request by the committee shall not be considered.

- c) No change in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the committee in the evaluation of the financial Bids.
- d) No substantive change to qualification information or to a submission, including changes aimed at making an unqualified bidder, qualified or an unresponsive submission, responsive shall be sought, offered or permitted.
- e) All communications generated under this rule shall be included in the record of the procurement proceedings.

12. Evaluation & Tabulation of Technical Bids

Determination of Responsiveness

- The bid evaluation committee shall determine the responsiveness of a Bid on the basis of bidding document and the provisions of eligibility criteria of the bidding document.
- A responsive Bid is one that meets the requirements of the bidding document without any material deviation, reservation, or omission where:
 - i. "deviation" is a departure from the requirements specified in the bidding document;
 - ii. "reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the bidding document; and
 - iii. "Omission" is the failure to submit part or all of the information or documentation required in the bidding document.
- A material deviation, reservation, or omission is one that,
 - i. if accepted, shall:-
 - 1. affect in any substantial way the scope, quality, or performance of the subject matter of procurement specified in the bidding documents; or
 - 2. limits in any substantial way, inconsistent with the bidding documents, the procuring entity's rights or the bidder's obligations under the proposed contract; or
 - ii. if rectified, shall unfairly affect the competitive position of other bidders presenting responsive Bids.
- The bid evaluation committee shall examine the technical aspects of the Bid in particular, to confirm that all requirements of bidding document have been met without any material deviation, reservation or omission.
- The procuring entity shall regard a Bid as responsive if it conforms to all requirements set out in the bidding document, or it contains minor deviations that do not materially alter or depart from the characteristics,

terms, conditions and other requirements set out in the bidding document, or if it contains errors or oversights that can be corrected without touching on the substance of the Bid.

Non-material Non-conformities in Bids

- The bid evaluation committee may waive any non-conformity in the Bid that
 do not constitute a material deviation, reservation or omission, the Bid shall
 be deemed to be substantially responsive.
- The bid evaluation committee may request the bidder to submit the necessary information or document like audited statement of accounts/ CA Certificate, Registration Certificate, VAT/ CST clearance certificate, ISO/ CMMi Certificates, etc. within a reasonable period of time. Failure of the bidder to comply with the request may result in the rejection of its Bid.
- The bid evaluation committee may rectify non-material nonconformities or omissions on the basis of the information or documentation received from the bidder under (b) above.
- **Technical Evaluation Criteria:** Bids shall be evaluation based on the documents submitted as a part of technical bid. Technical bid shall contain all the documents as asked in the clause "Format and Signing of Bids"

Tabulation of Technical Bids

- If Technical Bids have been invited, they shall be tabulated by the bid evaluation committee in the form of a comparative statement to evaluate the qualification of the bidders against the criteria for qualification set out in the bidding document.
- The members of bid evaluation committee shall give their recommendations below the table as to which of the bidders have been found to be qualified in evaluation of Technical Bids and sign it.
- The number of firms qualified in technical evaluation, if less than three and it is considered necessary by the procuring entity to continue with the procurement process, reasons shall be recorded in writing and included in the record of the procurement proceedings.
- The bidders who qualified in the technical evaluation shall be informed in writing about the date, time and place of opening of their financial Bids.
- **13. Evaluation & Tabulation of Financial Bids:** Subject to the provisions of "Acceptance of Successful Bid and Award of Contract" below, the procuring entity shall take following actions for evaluation of financial Bids:
 - a) The financial Bids of the bidders who qualified in technical evaluation shall be opened online at the notified time, date and place by the Bid Opening

Committee in the presence of the bidders or their representatives who choose to be present

- b) The process of opening of the financial Bids shall be similar to that of technical Bids.
- c) the names of the bidders, the rates given by them and conditions put, if any, shall be read out and recorded;
- d) Conditional Bids are liable to be rejected;
- e) The evaluation shall include all costs and all taxes and duties applicable to the bidder as per law of the Central/ State Government/ Local Authorities, and the evaluation criteria specified in the bidding documents shall only be applied;
- f) The offers shall be evaluated and marked L1, L2, L3 etc. L1 being the lowest offer and then others in ascending order in case price is the only criteria, or evaluated and marked H1, H2, H3 etc. in descending order.
- g) The bid evaluation committee shall prepare a comparative statement in tabular form in accordance with rules along with its report on evaluation of financial Bids and recommend the lowest offer for acceptance to the procuring entity
- h) The members of bids evaluation committee shall give their recommendations below the table regarding lowest Bid or most advantageous Bid and sign it.
- i) It shall be ensured that the offer recommended for sanction is justifiable looking to the prevailing market rates of the goods, works or service required to be procured.
- j) The cost asked in Annexure 14 A for Point to Point Ethernet Lease Line from said Location to JDA Head office with 100 Mbps Bandwidth is to be submitted as part of financial bid and to be uploaded on eprocurement portal BUT shall not be considered for financial evaluation. In case of the connectivity is not provided by DoIT, the cost of Point to Point Ethernet Lease Line connectivity from said Location to JDA Head office with 100 Mbps Bandwidth shall be considered as per Bidder's quote and will be payable extra.
- **14. Correction of Arithmetic Errors in Financial Bids:** The bid evaluation committee shall correct arithmetical errors in substantially responsive Bids, on the following basis, namely
 - a) multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the bid evaluation committee there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
 - b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and

- c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to clause (a) and (b) above.
- **15.** Comparison of rates of firms outside and those in Rajasthan: While tabulating the financial Bids of those firms which are not entitled to price preference, the element of Rajasthan Value Added Tax (RVAT) shall be excluded from the rates quoted by the firms of Rajasthan and the element of Central Sales Tax (CST) shall be included in the rates of firms from outside Rajasthan for financial bid evaluation purpose.
- **16. Price/ purchase preference in evaluation:** Price and/ or purchase preference notified by the State Government (GoR) and as mentioned in the bidding document shall be considered in the evaluation of Bids and award of contract.

17. Negotiations

- a) Except in case of procurement by method of single source procurement or procurement by competitive negotiations, to the extent possible, no negotiations shall be conducted.
- b) Negotiations may, however, be undertaken only with the lowest or most advantageous bidder when the rates are considered to be much higher than the prevailing market rates.
- c) The bid evaluation committee shall have full powers to undertake negotiations. Detailed reasons and results of negotiations shall be recorded in the proceedings.
- d) The lowest or most advantageous bidder shall be informed in writing either through messenger or by registered letter and e-mail (if available). A minimum time of seven days shall be given for calling negotiations. In case of urgency the bid evaluation committee, after recording reasons, may reduce the time, provided the lowest or most advantageous bidder has received the intimation and consented to regarding holding of negotiations.
- e) Negotiations shall not make the original offer made by the bidder inoperative. The bid evaluation committee shall have option to consider the original offer in case the bidder decides to increase rates originally quoted or imposes any new terms or conditions.
- f) In case of non-satisfactory achievement of rates from lowest or most advantageous bidder, the bid evaluation committee may choose to make a written counter offer to the lowest or most advantageous bidder and if this is not accepted by him, the committee may decide to reject and re-invite Bids or to make the same counter-offer first to the second lowest or most advantageous bidder, then to the third lowest or most advantageous bidder and so on in the order of their initial standing and work/ supply order be awarded to the

- bidder who accepts the counter-offer. This procedure would be used in exceptional cases only.
- g) In case the rates even after the negotiations are considered very high, fresh Bids shall be invited.

18. Exclusion of Bids/ Disqualification

- a) A procuring entity shall exclude/ disqualify a Bid, if: -
 - the information submitted, concerning the qualifications of the bidder, was false or constituted a misrepresentation; or
 - the information submitted, concerning the qualifications of the bidder, was materially Inaccurate or incomplete; and
 - the bidder is not qualified as per pre-qualification/ eligibility criteria mentioned in the bidding document;
 - the Bid materially departs from the requirements specified in the bidding document or it contains false information;
 - the bidder, submitting the Bid, his agent or any one acting on his behalf, gave or agreed to give, to any officer or employee of the procuring entity or other governmental authority a gratification in any form, or any other thing of value, so as to unduly influence the procurement process;
 - a bidder, in the opinion of the procuring entity, has a conflict of interest materially affecting fair competition.
- b) A Bid shall be excluded / disqualified as soon as the cause for its exclusion/disqualification is discovered.
- c) Every decision of a procuring entity to exclude a Bid shall be for reasons to be recorded in writing and shall be: -
 - communicated to the concerned bidder in writing;
 - published on the State Public Procurement Portal, if applicable.

19. Lack of competition

- a) A situation may arise where, if after evaluation of Bids, the bid evaluation committee may end-up with one responsive Bid only. In such situation, the bid evaluation committee would check as to whether while floating the NIB all necessary requirements to encourage competition like standard bid conditions, industry friendly specifications, wide publicity, sufficient time for formulation of Bids, etc., were fulfilled. If not, the NIB would be re-floated after rectifying deficiencies. The bid process shall be considered valid even if there is one responsive Bid, provided that: -
 - the Bid is technically qualified;
 - the price quoted by the bidder is assessed to be reasonable;

- the Bid is unconditional and complete in all respects;
- there are no obvious indicators of cartelization amongst bidders; and
- the bidder is qualified as per the provisions of pre-qualification / eligibility criteria in the bidding document
- b) The bid evaluation committee shall prepare a justification note for approval by the next higher authority of the procuring entity, with the concurrence of the accounts member.
- c) In case of dissent by any member of bid evaluation committee, the next higher authority in delegation of financial powers shall decide as to whether to sanction the single Bid or re-invite Bids after recording reasons.
- d) If a decision to re-invite the Bids is taken, market assessment shall be carried out for estimation of market depth, eliqibility criteria and cost estimate.

20. Acceptance of the successful Bid and award of contract

- a) The procuring entity after considering the recommendations of the bid evaluation committee and the conditions of Bid, if any, financial implications, trials, sample testing and test reports, etc., shall accept or reject the successful Bid. If any member of the bid evaluation committee has disagreed or given its note of dissent, the matter shall be referred to the next higher authority, as per delegation of financial powers, for decision.
- b) Decision on Bids shall be taken within original validity period of Bids and time period allowed to procuring entity for taking decision. If the decision is not taken within the original validity period or time limit allowed for taking decision, the matter shall be referred to the next higher authority in delegation of financial powers for decision.
- c) Before award of the contract, the procuring entity shall ensure that the price of successful Bid is reasonable and consistent with the required quality.
- d) A Bid shall be treated as successful only after the competent authority has approved the Procurement in terms of that Bid.
- e) The procuring entity shall award the contract to the bidder whose offer has been determined to be the lowest or most advantageous in accordance with the evaluation criteria set out in the bidding document and if the bidder has been determined to be qualified to perform the contract satisfactorily on the basis of qualification criteria fixed for the bidders in the bidding document for the subject matter of procurement.
- f) Prior to the expiration of the period of bid validity, the procuring entity shall inform the successful bidder, in writing, that its Bid has been accepted.
- g) As soon as a Bid is accepted by the competent authority, its written intimation shall be sent to the concerned bidder by registered post or email and asked to execute an agreement in the format given in the bidding documents on a non-judicial stamp of requisite value and deposit the amount of performance

- security or a performance security declaration, if applicable, within a period specified in the bidding documents or where the period is not specified in the bidding documents then within fifteen days from the date on which the letter of acceptance or letter of intent is dispatched to the bidder.
- h) If the issuance of formal letter of acceptance is likely to take time, in the meanwhile a Letter of Intent (LOI) may be sent to the bidder. The acceptance of an offer is complete as soon as the letter of acceptance or letter of intent is posted and/ or sent by email (if available) to the address of the bidder given in the bidding document. Until a formal contract is executed, the letter of acceptance or LOI shall constitute a binding contract.
- i) The bid security of the bidders who's Bids could not be accepted shall be refunded soon after the contract with the successful bidder is signed and its performance security is obtained.
- **21. Information and publication of award:** Information of award of contract shall be communicated to all participating bidders and published on the respective website(s) as specified in NIB.
- **22. Procuring entity's right to accept or reject any or all Bids:** The Procuring entity reserves the right to accept or reject any Bid, and to annul (cancel) the bidding process and reject all Bids at any time prior to award of contract, without thereby incurring any liability to the bidders.

23. Right to vary quantity

- a) At the time of award of contract, the quantity of goods, works or services originally specified in the bidding documents may be increased as per RTPP Act-2012 and Rules-2013. It shall be without any change in the unit prices or other terms and conditions of the Bid and the bidding documents.
- b) If the procuring entity does not procure any subject matter of procurement or procures less than the quantity specified in the bidding documents due to change in circumstances, the bidder shall not be entitled for any claim or compensation except otherwise provided in the bidding document.
- c) Repeat orders for extra items or additional quantities may be placed, if it is provided in the bidding document, on the rates and conditions given in the contract if the original order was given after inviting open competitive bids. Delivery or completion period may also be proportionally increased. The limits of the repeat order shall be as under:-
 - 1. 50% of the quantity of the individual items and 50% of the value of original contract in the case of works; and
 - 2. 50% of the value of goods or services of the original contract.

24. Performance Security:

a) Prior to execution of agreement, Performance security shall be solicited from all successful bidders except the departments of the State Government and undertakings, corporations, autonomous bodies, registered societies, co-operative

societies which are owned or controlled or managed by the State Government and undertakings of the Central Government. However, a performance security declaration shall be taken from them. The State Government may relax the provision of performance security in particular procurement or any class of procurement.

- b) The amount of performance security shall be 10% of the contract amount. In case of Small Scale Industries (SSI) of Rajasthan, it shall be 1% of the amount of quantity ordered for supply of goods and in case of sick industries, other than SSI, whose cases are pending before the Board of Industrial and Financial Reconstruction (BIFR), it shall be 2% of the amount of supply order.
- c) Performance security shall be furnished in any one of the following forms: -
 - Bank Draft or Banker's Cheque of a scheduled bank;
 - National Savings Certificates and any other script/ instrument under National Savings Schemes for promotion of small savings issued by a Post Office in Rajasthan, if the same can be pledged under the relevant rules. They shall be accepted at their surrender value at the time of bid and formally transferred in the name of procuring entity with the approval of Head Post Master;
 - Bank guarantee/s of a scheduled bank. It shall be got verified from the issuing bank. Other conditions regarding bank guarantee shall be same as mentioned in the bidding document for bid security (EMD);
 - Fixed Deposit Receipt (FDR) of a scheduled bank and discharged by the bidder in advance. The procuring entity shall ensure before accepting the FDR that the bidder furnishes an undertaking from the bank to make payment/premature payment of the FDR on demand to the procuring entity without requirement of consent of the bidder concerned. In the event of forfeiture of the performance security, the Fixed Deposit shall be forfeited along with interest earned on such Fixed Deposit.
- d) Initially the Performance security for 10% amount of the Contract value shall be furnished in the form specified as above, which shall be kept valid upto 90 days beyond the schedule date of completion of the project i.e. 6 months as specified in the NIB; which shall be released after successful implementation of the project and thereafter another Performance Security @10% of the 30% of the Contract Value shall be submitted valid upto 90 days beyond the schedule date of completion of 3 years O&M period after successful completion of the project.
- e) Forfeiture of Security Deposit: Security amount in full or part may be forfeited, including interest, if any, in the following cases:-
 - When any terms and condition of the contract is breached.
 - When the bidder fails to make complete supply satisfactorily.

- if the bidder breaches any provision of code of integrity, prescribed for bidders, specified in the bidding document.
- f) Notice will be given to the bidder with reasonable time before PSD deposited is forfeited.
- g) No interest shall be payable on the PSD.

25. Execution of agreement

- a) A procurement contract shall come into force from the date on which the letter of acceptance or letter of intent is despatched to the bidder.
- b) The successful bidder shall sign the procurement contract within 15 days from the date on which the letter of acceptance or letter of intent is despatched to the successful bidder.
- c) If the bidder, who's Bid has been accepted, fails to sign a written procurement contract or fails to furnish the required performance security within specified period, the procuring entity shall take action against the successful bidder as per the provisions of the bidding document and Act. The procuring entity may, in such case, cancel the procurement process or if it deems fit, offer for acceptance the rates of lowest or most advantageous bidder to the next lowest or most advantageous bidder, in accordance with the criteria and procedures set out in the bidding document.
- d) The bidder will be required to execute the agreement on a non-judicial stamp of specified value at its cost and to be purchase from anywhere in Rajasthan only.

26. Confidentiality

- a) Notwithstanding anything contained in this bidding document but subject to the provisions of any other law for the time being in force providing for disclosure of information, a procuring entity shall not disclose any information if such disclosure, in its opinion, is likely to: -
 - impede enforcement of any law;
 - affect the security or strategic interests of India;
 - affect the intellectual property rights or legitimate commercial interests of bidders;
 - affect the legitimate commercial interests of the procuring entity in situations that may include when the procurement relates to a project in which the procuring entity is to make a competitive bid, or the intellectual property rights of the procuring entity.
- b) The procuring entity shall treat all communications with bidders related to the procurement process in such manner as to avoid their disclosure to competing bidders or to any other person not authorised to have access to such

information.

- c) The procuring entity may impose on bidders and sub-contractors, if there are any for fulfilling the terms of the procurement contract, conditions aimed at protecting information, the disclosure of which violates (a) above.
- d) In addition to the restrictions specified above, the procuring entity, while procuring a subject matter of such nature which requires the procuring entity to maintain confidentiality, may impose condition for protecting confidentiality of such information.

27. Cancellation of procurement process

- a) If any procurement process has been cancelled, it shall not be reopened but it shall not prevent the procuring entity from initiating a new procurement process for the same subject matter of procurement, if required.
- b) A procuring entity may, for reasons to be recorded in writing, cancel the process of procurement initiated by it -
 - at any time prior to the acceptance of the successful Bid; or
 - after the successful Bid is accepted in accordance with (d) and (e) below.
- c) The procuring entity shall not open any bids or proposals after taking a decision to cancel the procurement and shall return such unopened bids or proposals.
- d) The decision of the procuring entity to cancel the procurement and reasons for such decision shall be immediately communicated to all bidders that participated in the procurement process.
- e) If the bidder whose Bid has been accepted as successful fails to sign any written procurement contract as required, or fails to provide any required security for the performance of the contract, the procuring entity may cancel the procurement process.
- f) If a bidder is convicted of any offence under the Act, the procuring entity may: -
 - cancel the relevant procurement process if the Bid of the convicted bidder has been declared as successful but no procurement contract has been entered into;
 - rescind (cancel) the relevant contract or forfeit the payment of all or a part of the contract value if the procurement contract has been entered into between the procuring entity and the convicted bidder.

28. Code of Integrity for Bidders

a) No person participating in a procurement process shall act in contravention of the code of integrity prescribed by the State Government.

b) The code of integrity include provisions for: -

Prohibiting

- i. any offer, solicitation or acceptance of any bribe, reward or gift or any material benefit, either directly or indirectly, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process;
- ii. any omission, including a misrepresentation that misleads or attempts to mislead so as to obtain a financial or other benefit or avoid an obligation;
- iii. any collusion, bid rigging or anti-competitive behaviour to impair the transparency, fairness and progress of the procurement process;
- iv. improper use of information shared between the procuring entity and the bidders with an intent to gain unfair advantage in the procurement process or for personal gain;
- v. any financial or business transactions between the bidder and any officer or employee of the procuring entity;
- vi. any coercion including impairing or harming or threatening to do the same, directly or indirectly, to any party or to its property to influence the procurement process;
- vii. any obstruction of any investigation or audit of a procurement process;
- disclosure of conflict of interest;
- disclosure by the bidder of any previous transgressions with any entity in India
 or any other country during the last three years or of any debarment by any
 other procuring entity.
- c) Without prejudice to the provisions below, in case of any breach of the code of integrity by a bidder or prospective bidder, as the case may be, the procuring entity may take appropriate measures including: -
 - exclusion of the bidder from the procurement process;
 - calling-off of pre-contract negotiations and forfeiture or encashment of bid security;
 - forfeiture or encashment of any other security or bond relating to the procurement;
 - recovery of payments made by the procuring entity along with interest thereon at bank rate;
 - cancellation of the relevant contract and recovery of compensation for loss incurred by the procuring entity;
 - debarment of the bidder from participation in future procurements of the procuring entity for a period not exceeding three years.

29. Interference with Procurement Process: A bidder, who: -

- a) withdraws from the procurement process after opening of financial bids;
- b) withdraws from the procurement process after being declared the successful bidder;
- c) fails to enter into procurement contract after being declared the successful bidder;
- d) fails to provide performance security or any other document or security required in terms of the bidding documents after being declared the successful bidder, without valid grounds, shall, in addition to the recourse available in the bidding document or the contract, be punished with fine which may extend to fifty lakh rupees or ten per cent of the assessed value of procurement, whichever is less.

30. Appeals

- a) Subject to "Appeal not to lie in certain cases" below, if any bidder or prospective bidder is aggrieved that any decision, action or omission of the procuring entity is in contravention to the provisions of the Act or the rules or guidelines issued thereunder, he may file an appeal to such officer of the procuring entity, as may be designated by it for the purpose, within a period of 10 days from the date of such decision or action, omission, as the case may be, clearly giving the specific ground or grounds on which he feels aggrieved:
 - Provided that after the declaration of a bidder as successful in terms of "Award of Contract", the appeal may be filed only by a bidder who has participated in procurement proceedings:
 - Provided further that in case a procuring entity evaluates the technical Bid before the opening of the financial Bid, an appeal related to the matter of financial Bid may be filed only by a bidder whose technical Bid is found to be acceptable.
- b) The officer to whom an appeal is filed under (a) above shall deal with the appeal as expeditiously as possible and shall endeavour to dispose it of within 30 days from the date of filing of the appeal.
- c) If the officer designated under (a) above fails to dispose of the appeal filed under that sub-section within the period specified in (c) above, or if the bidder or prospective bidder or the procuring entity is aggrieved by the order passed, the bidder or prospective bidder or the procuring entity, as the case may be, may file a second appeal to an officer or authority designated by the State Government in this behalf within 15 days from the expiry of the period specified in (c) above or of the date of receipt of the order passed under (b) above, as the case may be.
- d) The officer or authority to which an appeal is filed under (c) above shall deal with the appeal as expeditiously as possible and shall endeavour to dispose it of

within 30 days from the date of filing of the appeal:

e) The officer or authority to which an appeal may be filed under (a) or (d) above shall be: **First Appellate Authority:** Secretary / Additional Chief Secretary, Urban Development and Housing, Secretariat, Jaipur (Rajasthan).

Second Appellate Authority: Nominee from Finance Department Government of Rajasthan.

Filing an appeal

- f) Form of Appeal:
 - Every appeal under (a) and (c) above shall be as per Annexure available in NIB Document along with as many copies as there are respondents in the appeal.
 - Every appeal shall be accompanied by an order appealed against, if any, affidavit verifying the facts stated in the appeal and proof of payment of fee.
 - Every appeal may be presented to First Appellate Authority or Second Appellate Authority, as the case may be, in person or through registered post or authorised representative.
- g) Fee for Appeal: Fee for filing appeal:
 - Fee for first appeal shall be rupees two thousand five hundred and for second appeal shall be rupees ten thousand, which shall be non-refundable.
 - The fee shall be paid in the form of bank demand draft or banker's cheque of a Scheduled Bank payable in the name of Appellate Authority concerned.
- h) Procedure for disposal of appeal:
 - The First Appellate Authority or Second Appellate Authority, as the case may be, upon filing of appeal, shall issue notice accompanied by copy of appeal, affidavit and documents, if any, to the respondents and fix date of hearing.
 - On the date fixed for hearing, the First Appellate Authority or Second Appellate Authority, as the case may be, shall,
 - i. hear all the parties to appeal present before him; and
 - ii. peruse or inspect documents, relevant records or copies thereof relating to the matter.
 - After hearing the parties, perusal or inspection of documents and relevant records or copies thereof relating to the matter, the Appellate Authority concerned shall pass an order in writing and provide the copy of order to the parties to appeal free of cost.
 - The order passed under (c) shall also be placed on the State Public Procurement Portal.
- i) No information which would impair the protection of essential security interests of

India, or impede the enforcement of law or fair competition, or prejudice the legitimate commercial interests of the bidder or the procuring entity, shall be disclosed in a proceeding under an appeal.

- **31. Stay of procurement proceedings:** While hearing of an appeal, the officer or authority hearing the appeal may, on an application made in this behalf and after affording a reasonable opportunity of hearing to the parties concerned, stay the procurement proceedings pending disposal of the appeal, if he, or it, is satisfied that failure to do so is likely to lead to miscarriage of justice.
- **32. Vexatious Appeals & Complaints:** Whoever intentionally files any vexatious, frivolous or Malicious appeal or complaint under the "The Rajasthan Transparency Public Procurement Act 2012", with the intention of delaying or defeating any procurement or causing loss to any procuring entity or any other bidder, shall be punished with fine which may extend to twenty lakh rupees or five per cent of the value of procurement, whichever is less.

33. Offenses by Firms/ Companies

a) Where an offence under "The Rajasthan Transparency Public Procurement Act 2012" has been committed by a company, every person who at the time the offence was committed was in charge of and was responsible to the company for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of having committed the offence and shall be liable to be proceeded against and punished accordingly:

Provided that nothing contained in this sub-section shall render any such person liable for any punishment if he proves that the offence was committed without his knowledge or that he had exercised all due diligence to prevent the commission of such offence.

- b) Notwithstanding anything contained in (a) above, where an offence under this Act has been committed by a company and it is proved that the offence has been committed with the consent or connivance of or is attributable to any neglect on the part of any director, manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also be deemed to be guilty of having committed such offence and shall be liable to be proceeded against and punished accordingly.
- c) For the purpose of this section-
 - "Company" means a body corporate and includes a limited liability partnership, firm, registered society or co-operative society, trust or other association of individuals; and
 - "Director" in relation to a limited liability partnership or firm, means a partner in the firm.
- d) Abetment of certain offenses: Whoever abets an offence punishable under this

Act, whether or not that offence is committed in consequence of that abetment, shall be punished with the punishment provided for the offence.

34. Debarment from Bidding

- a) A bidder shall be debarred by the State Government if he has been convicted of an offence
 - under the Prevention of Corruption Act, 1988 (Central Act No. 49 of 1988); or
 - under the Indian Penal Code, 1860 (Central Act No. 45 of 1860) or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.
- b) A bidder debarred under (a) above shall not be eligible to participate in a procurement process of any procuring entity for a period not exceeding three years commencing from the date on which he was debarred.
- c) If a procuring entity finds that a bidder has breached the code of integrity prescribed in terms of "Code of Integrity for bidders" above, it may debar the bidder for a period not exceeding three years.
- d) Where the entire bid security or the entire performance security or any substitute thereof, as the case may be, of a bidder has been forfeited by a procuring entity in respect of any procurement process or procurement contract, the bidder may be debarred from participating in any procurement process undertaken by the procuring entity for a period not exceeding three years.
- e) The State Government or a procuring entity, as the case may be, shall not debar a bidder under this section unless such bidder has been given a reasonable opportunity of being heard.

35. Monitoring of Contract

- a) An officer or a committee of officers named Contract Monitoring Committee (CMC) may be nominated by procuring entity to monitor the progress of the contract during its delivery period.
- b) During the delivery period the CMC shall keep a watch on the progress of the contract and shall ensure that quantity of goods and service delivery is in proportion to the total delivery period given, if it is a severable contract, in which the delivery of the goods and service is to be obtained continuously or is batched. If the entire quantity of goods and service is to be delivered in the form of completed work or entire contract like fabrication work, the process of completion of work may be watched and inspections of the selected bidder's premises where the work is being completed may be inspected.
- c) If delay in delivery of goods and service is observed a performance notice would be given to the selected bidder to speed up the delivery.

- d) Any change in the constitution of the firm, etc. shall be notified forth with by the contractor in writing to the procuring entity and such change shall not relieve any former member of the firm, etc., from any liability under the contract.
- e) No new partner/ partners shall be accepted in the firm by the selected bidder in respect of the contract unless he/ they agree to abide by all its terms, conditions and deposits with the procuring entity through a written agreement to this effect. The bidder's receipt for acknowledgement or that of any partners subsequently accepted as above shall bind all of them and will be sufficient discharge for any of the purpose of the contract.
- f) The selected bidder shall not assign or sub-let his contract or any substantial part thereof to any other agency without the permission of procuring entity.

Section 5: General Terms & Condition of Bid & Contract

Bidders should read these conditions carefully and comply strictly while sending their bids.

- **1. Definitions:** For the purpose of clarity, the following words and expressions shall have the meanings hereby assigned to them:
 - a) "Contract" means the Agreement entered into between the Purchaser and the successful/ selected bidder, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.
 - b) "Contract Documents" means the documents listed in the Agreement, including any amendments thereto.
 - c) "Contract Price" means the price payable to the successful/ selected bidder as specified in the Agreement, subject to such additions and adjustments thereto or deductions there from, as may be made pursuant to the Contract.
 - d) "Day" means a calendar day.
 - e) "Delivery" means the transfer of the Goods from the successful/ selected bidder to the Purchaser in accordance with the terms and conditions set forth in the Contract.
 - f) "Completion" means the fulfilment of the related services by the successful/ selected bidder in accordance with the terms and conditions set forth in the Contract.
 - g) "Goods" means all of the commodities, raw material, machinery and equipment, and/or other materials that the successful/ selected bidder is required to supply to the Purchaser under the Contract.
 - h) "Purchaser" means the entity purchasing the Goods and related services, as specified in the bidding document.
 - i) "Related Services" means the services incidental to the supply of the goods, such as insurance, installation, training and initial maintenance and other similar obligations of the successful/ selected bidder under the Contract.
 - j) "Subcontractor" means any natural person, private or government entity, or a combination of the above, including its legal successors or permitted assigns, to whom any part of the Goods to be supplied or execution of any part of the related services is subcontracted by the successful/ selected bidder.
 - k) "Supplier/ Successful or Selected bidder" means the person, private or government entity, or a combination of the above, whose Bid to perform the Contract has been accepted by the Purchaser and is named as such in the Agreement, and includes the legal successors or permitted assigns of the successful/ selected bidder.

I) "The Site," where applicable, means the designated project place(s) named in the bidding document.

Note: The bidder shall be deemed to have carefully examined the conditions, specifications, size, make and drawings, etc., of the goods to be supplied and related services to be rendered. If the bidder has any doubts as to the meaning of any portion of these conditions or of the specification, drawing, etc., he shall, before submitting the Bid and signing the contract refer the same to the procuring entity and get clarifications.

2. Contract Documents: Subject to the order of precedence set forth in the Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory.

3. Interpretation

- a) If the context so requires it, singular means plural and vice versa.
- b) Entire Agreement: The Contract constitutes the entire agreement between the Purchaser and the Supplier/ Selected bidder and supersedes all communications, negotiations and agreements (whether written or oral) of parties with respect thereto made prior to the date of Contract.
- c) Amendment: No amendment or other variation of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto.
- d) Non-waiver: Subject to the condition (f) below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.
- e) Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, dated, and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.
- f) Severability: If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

4. Language

a) The Contract as well as all correspondence and documents relating to the Contract exchanged by the successful / selected bidder and the Purchaser, shall be written in English language only. Supporting documents and printed literature that are part of the Contract may be in another language provided they are

accompanied by an accurate translation of the relevant passages in the language specified in the special conditions of the contract, in which case, for purposes of interpretation of the Contract, this translation shall govern.

b) The successful / selected bidder shall bear all costs of translation to the governing language and all risks of the accuracy of such translation.

5. Eligible Goods and Related Services

- a) For purposes of this Clause, the term "goods" includes commodities, raw material, machinery, equipment, and industrial plants; and "related services" includes services such as insurance, transportation, supply, installation, integration, testing, commissioning, training, and initial maintenance.
- b) The OEM / Vendor of the quoted product must have its own registered spares depot in India having adequate inventory of the equipment being quoted for providing the necessary spares within next business day or maximum 30 hours.
- c) The OEM / Vendor of the quoted product should also have its direct representation in India in terms of registered office for at least past 3 years. The presence through any Distribution / System Integration partner agreement will not be accepted.
- d) Bidder must quote products in accordance with above clause "Eligible goods and related services".

6. Notices

- a) Any notice given by one party to the other pursuant to the Contract shall be in writing to the address specified in the contract. The term "in writing" means communicated in written form with proof of dispatch and receipt.
- b) A Notice shall be effective when delivered or on the Notice's effective date, whichever is later.
- **7. Governing Law:** The Contract shall be governed by and interpreted in accordance with the laws of the Rajasthan State / the Country (India), unless otherwise specified in the contract.

8. Scope of Supply

- a) Subject to the provisions in the bidding document and contract, the goods and related services to be supplied shall be as specified in the bidding document.
- b) Unless otherwise stipulated in the Contract, the scope of supply shall include all such items not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining delivery and completion of the goods and related services as if such items were expressly mentioned in the Contract.
- c) The bidder shall not quote and supply and hardware that is likely to be declared

as End of Sale in next 12 months and End of Service / Support for a period of 24 months from the last date of bid submission. OEMs are required to mention this in the MAF for all the quoted hardware. If any of the hardware is found to be declared as End of Sale/ Service/ Support, then the bidder shall replace all such hardware with the latest ones having equivalent or higher specifications without any financial obligation to the purchaser.

9. Delivery

- a) Subject to the conditions of the contract, the delivery of the goods and completion of the related services shall be in accordance with the delivery and completion schedule specified in the bidding document. The details of supply / shipping and other documents to be furnished by the successful/ selected bidder are specified in the bidding document and / or contract.
- b) The contract for the supply can be repudiated at any time by the purchase officer, if the supplies are not made to his satisfaction after giving an opportunity to the bidder of being heard and recording the reasons for repudiation.
- c) The Supplier/ Selected Bidder shall arrange to supply, install the ordered materials / system as per specifications within the specified delivery / completion period at offices / locations mentioned in the PO / WO.
- d) Shifting the place of delivery: The user will be free to shift the place of delivery within the same city / town / district/ division. The successful/ selected bidder shall provide all assistance, except transportation, in shifting of the equipment. However, if the city/town is changed, additional charges of assistance in shifting and providing maintenance services for remaining period would be decided mutually.
- **10. Supplier's/ Selected Bidder's Responsibilities:** The Supplier / Selected Bidder shall supply all the goods and related services included in the scope of supply in accordance with the provisions of bidding document and / or contract.

11. Purchaser's Responsibilities

- a) Whenever the supply of goods and related services requires that the Supplier/ Selected Bidder obtain permits, approvals, and import and other licenses from local public authorities, the Purchaser shall, if so required by the Supplier/ Selected Bidder, make its best effort to assist the Supplier / Selected Bidder in complying with such requirements in a timely and expeditious manner.
- b) The Purchaser shall pay all costs involved in the performance of its responsibilities, in accordance with the general and special conditions of the contract.

12. Contract Price

a) The Contract Price shall be paid as specified in the contract subject to any additions and adjustments thereto, or deductions there from, as may be

made pursuant to the Contract.

b) Prices charged by the Supplier/ Selected Bidder for the Goods delivered and the Related Services performed under the Contract shall not vary from the prices quoted by the Supplier/ Selected Bidder in its bid, with the exception of any price adjustments authorized in the special conditions of the contract.

13. Recoveries from Supplier/ Selected Bidder

- a) Recovery of liquidated damages, short supply, breakage, rejected articles shall be made ordinarily from bills.
- b) The Purchase Officer shall withhold amount to the extent of short supply, broken / damaged or for rejected articles unless these are replaced satisfactorily. In case of failure to withhold the amount, it shall be recovered from his dues and performance security deposit available with JDA.
- c) The balance, if any, shall be demanded from the Supplier / Selected Bidder and when recovery is not possible, the Purchase Officer shall take recourse to law in force.

14. Taxes & Duties

- a) The income tax, service tax, value added tax, etc., if applicable, shall be deducted at source from the payment to the Supplier / Selected Bidder as per the law in force at the time of execution of contract.
- b) The entry tax, if applicable shall be deducted at source and deposited in the government Treasury in proper revenue receipt head of account.
- c) For goods supplied from outside India, the successful / selected bidder shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the country.
- d) For goods supplied from within India, the successful / selected bidder shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Purchaser.
- e) Revision in VAT and Service Tax shall be on account of the tendering authority if it has been asked for separately in the financial bid and is not taken into account for the purpose of comparison of bids. If, however, they have not been asked for separately, any benefit or additional cost will be on account of the bidder. Revision of any other tax or duty shall be on account of the bidder.
- f) If any tax exemptions, reductions, allowances or privileges may be available to the successful/ selected bidder in India, the Purchaser shall use its best efforts to enable the successful/ selected bidder to benefit from any such tax savings to the maximum allowable extent.
- **15. Copyright:** The copyright in all drawings, design documents, source code and other materials containing data and information furnished to the Purchaser by the Supplier / Selected Bidder herein shall remain vested in the

Selected Bidder, or, if they are furnished to the Purchaser directly or through the Supplier / Selected Bidder by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.

16. Confidential Information

- a) The Purchaser and the Supplier / Selected Bidder shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any drawings, documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract.
- b) The Supplier/ Selected Bidder may furnish to its Subcontractor, if permitted, such documents, data, and other information it receives from the Purchaser to the extent required for the Subcontractor to perform its work under the Contract, in which event the Supplier/ Selected Bidder shall obtain from such Subcontractor an undertaking of confidentiality similar to that imposed on the Supplier/ Selected Bidder.
- c) The Purchaser shall not use such documents, data, and other information received from the Supplier/ Selected Bidder for any purposes unrelated to the Contract. Similarly, the Supplier / Selected Bidder shall not use such documents, data, and other information received from the Purchaser for any purpose other than the design, procurement, or other work and services required for the performance of the Contract.
- d) The obligation of a party under sub-clauses above, however, shall not apply to information that: -
 - the Purchaser or Supplier / Selected Bidder need to share with JDA or other institutions participating in the Contract;
 - now or hereafter enters the public domain through no fault of that party;
 - can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party; or
 - otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.
- e) The above provisions shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the supply or any part thereof.
- f) The provisions of this clause shall survive completion or termination, for whatever reason, of the Contract.

17. Sub-contracting

- a) Unless otherwise specified in the Contract, the bidder shall not assign or sublet his contract or any substantial part thereof to any other agency without the permission of Purchaser / Tendering Authority.
- b) If permitted, the selected bidder shall notify the Purchaser, in writing, of all subcontracts awarded under the Contract, if not already specified in the Bid. Subcontracting shall in no event relieve the Supplier/ Selected Bidder from any of its obligations, duties, responsibilities, or liability under the Contract.
- c) Subcontracts shall comply with the provisions of bidding document and/ or contract.

18. Specifications and Standards

- a) All articles supplied shall strictly conform to the specifications, trademark laid down in the tender form and wherever articles have been required according to ISI / ISO / other applicable specifications / certifications / standards, those articles should conform strictly to those specifications / certifications / standards. The supply shall be of best quality and description. The decision of the competent authority/ purchase committee whether the article supplied conforms to the specifications shall be final and binding on the supplier / selected bidder.
- b) Technical Specifications and Drawings
 - a. The Supplier/ Selected Bidder shall ensure that the goods and related services comply with the technical specifications and other provisions of the Contract.
 - b. The Supplier/ Selected Bidder shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Purchaser.
 - c. The goods and related services supplied under this Contract shall conform to the standards mentioned in bidding document and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the country of origin of the Goods.
- c) Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the bidding document. During Contract execution, any changes in any such codes and standards shall be applied only after approval by the Purchaser and shall be treated in accordance with the general conditions of the contract.
- d) The supplier/ selected bidder must certify that all the goods are new, unused, and of the agreed make and models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.

e) The supplier/ selected bidder should further warrant that the Goods shall be free from defects arising from any act or omission of the supplier/ selected bidder or arising from design, materials, and workmanship, under normal use in the conditions prevailing in the place of final destination.

19. Packing and Documents

- a) The Supplier / Selected Bidder shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. During transit, the packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the final destination of the Goods and the absence of heavy handling facilities at all points in transit.
- b) The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in the contract, and in any other instructions ordered by the Purchaser.

20. Insurance

- a) The Goods supplied under the Contract shall be fully insured against loss by theft, destruction or damage incidental to manufacture or acquisition, transportation, storage, fire, flood, under exposure to weather and delivery at the designated project locations, in accordance with the applicable terms. The insurance charges will be borne by the supplier and Purchaser will not be required to pay such charges if incurred.
- b) The goods will be delivered at the FOR destination in perfect condition.

21. Transportation

- a) The supplier / selected bidder shall be responsible for the proper packing so as to avoid damage under normal conditions of transport by sea, rail and road or air and delivery of the material in the good condition to the consignee at destination. In the event of any loss, damage, breakage or leakage or any shortage the bidder shall be liable to make good such loss and shortage found at the checking / inspection of the material by the Consignee. No extra cost on such account shall be admissible.
- b) All goods must be sent freight paid through Railways or goods transport. If goods are sent freight to pay, the freight together with departmental charge @5% of the freight will be recovered from the supplier's / selected bidder's bill.

22. Inspection

a) The Purchase Officer or his duly authorized representative shall at all reasonable time have access to the supplier's / selected bidder's premises and shall have the

power at all reasonable time to inspect and examine the materials and workmanship of the goods / equipment / machineries during manufacturing process or afterwards as may be decided.

23. Inspection / Testing charges: Inspection / Testing charges (for engaging third party if any) shall be borne by the supplier/ bidder/ selected bidder.

24. Rejection

- a) Articles / Goods not approved during inspection or testing shall be rejected and will have to be replaced by the selected bidder at his own cost within the time fixed by the Purchase Officer.
- b) If, however, due to exigencies of work, such replacement either in whole or in part, is not considered feasible, the Purchase Officer after giving an opportunity to the selected bidder of being heard shall for reasons to be recorded, deduct a suitable amount from the approved rates. The deduction so made shall be final.
- c) The rejected articles / goods shall be removed by the supplier/ bidder/ selected bidder within 15 days of intimation of rejection, after which Purchase Officer shall not be responsible for any loss, shortage or damage and shall have the right to dispose of such articles as he thinks fit, at the selected bidder's risk and on his account.

25. Extension in Delivery Period and Liquidated Damages (LD)

- a) Except as provided under clause "Force Majeure", if the supplier/ selected bidder fails to deliver any or all of the Goods or perform the Related Services within the period specified in the Contract, the Purchaser may without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in (d) below for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in the bidding document and / or contract. Once the maximum is reached, the Purchaser may terminate the Contract pursuant to clause "Termination".
- b) The time specified for delivery in the tender form shall be deemed to be the essence of the contract and the supplier/ selected bidder shall arrange goods supply and related services within the specified period.
- c) Delivery and installation / completion period may be extended with or without liquidated damages, if the delay in the supply of goods or service is on account of hindrances beyond the control of the supplier / selected bidder.
 - a. The supplier / selected bidder shall request in writing to the Purchaser giving reasons for extending the delivery period of service, if he finds himself unable to complete the supply of goods or service within the stipulated delivery period or is unable to maintain prorate progress in the supply of goods or service delivery. This request shall be submitted as soon as a hindrance in

delivery of goods and service occurs or within 15 days from such occurrence but before expiry of stipulated period of completion of delivery of goods and service after which such request shall not be entertained.

- b. The Purchaser shall examine the justification of causes of hindrance in the delivery of goods and service and the period of delay occurred due to that and recommend the competent authority on the period of extension which should be granted with or without liquidated damages.
- Normally, extension in delivery period of goods and service in following circumstances may be considered without liquidated damages:
 - i. When delay has occurred due to delay by JDA in performing any of the duties to be performed by them as mentioned in the Chapter titled "Scope of Work, Deliverables and Timelines".
 - ii. When delay has occurred in supply of materials etc. if these were required to be supplied to the supplier or service provider by JDA as per terms of the contract.
- d. If the competent authority agrees to extend the delivery period/ schedule, an amendment to the contract with suitable denial clauses and with or without liquidated damages, as the case may be, shall be issued. The amendment letter shall mention that no extra price or additional cost for any reason, what so ever beyond the contracted cost shall be paid for the delayed supply of goods and service.
- e. It shall be at the discretion of the concerned authority to accept or not to accept the supply of goods and / or services rendered by the contractor after the expiry of the stipulated delivery period, if no formal extension in delivery period has been applied and granted. The competent authority shall have right to cancel the contract with respect to undelivered goods and/ or service.
- f. If JDA is in need of the good and / or service rendered after expiry of the stipulated delivery period, it may accept the services and issue a letter of extension in delivery period with usual liquidated damages and denial clauses to regularize the transaction.
- d) Liquidated Damages: In case of extension in the delivery and/or installation/completion/commissioning period/FMS is granted with full liquidated damages, the recovery shall be made on the basis of following percentages of value of goods and/or service which the supplier / selected bidder has failed to supply or complete: -

No.	Condition	LD %*
а	Delay up to one fourth period of the prescribed delivery	2.5 %
	period & completion of work	

b	Delay exceeding one fourth but not exceeding half of the prescribed delivery period & completion of work	
С	Delay exceeding half but not exceeding three fourth of the prescribed delivery period & completion of work 7.5 %	
d	Delay exceeding three fourth of the prescribed delivery period, & completion of work	10.0 %

- a. Fraction of a day in reckoning period of delay in supplies, successful installation and completion of work shall be eliminated, if it is less than half a day.
- b. The maximum amount of liquidated damages shall be 10%.
- c. The percentage refers to the payment due for the associated milestone.
- d. The LD shall be levied if delay is attributable to the Bidder only.
- **26. Risk & Cost:** If successful bidder fails to complete the milestone(s) the same will be got executed by another participated firm and the expenses incurred in this account will be charged by the bidder.
- **27. Price Fall Clause:** The prices under a rate contract shall be subject to price fall clause of Act.
- **28.** Limitation of Liability: Except in cases of gross negligence or wilful misconduct:
 - a) neither party shall be liable to the other party for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier / selected bidder to pay liquidated damages to the Purchaser; and
 - b) the aggregate liability of the supplier/selected bidder to the Purchaser, whether under the Contract, in tort, or otherwise, shall not exceed the amount specified in the Contract, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the supplier / selected bidder to indemnify the Purchaser with respect to patent infringement.
- 29. Change in Laws & Regulations: Unless otherwise specified in the Contract, if after the date of the Invitation for Bids, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in Rajasthan/ India, where the Site is located (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and / or the Contract Price, then such Delivery Date and/ or Contract Price shall be correspondingly increased or decreased, to the extent that the Supplier has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited, if the same has already been accounted for in the price adjustment provisions where applicable.

30. Force Majeure

- a) The supplier / selected bidder shall not be liable for forfeiture of its PSD, LD, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- b) For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the supplier / selected bidder that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the supplier / selected bidder. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- c) If a Force Majeure situation arises, the supplier/ selected bidder shall promptly notify the JDA in writing of such conditions and cause thereof within 15 days of occurrence of such event. Unless otherwise directed by JDA, the supplier / selected bidder shall continue to perform its obligations under the contract as far as reasonably practical.
- d) If the performance in whole or part or any obligation under the contract is prevented or delayed by any reason of Force Majeure for a period exceeding 60 days, either party at its option may terminate the contract without any financial repercussion on either side.
- e) In case a Force Majeure situation occurs with the JDA, the JDA may take the case with the supplier / selected bidder on similar lines.

31. Change Orders and Contract Amendments

- a) The Purchaser may at any time order the supplier / selected bidder through Notice in accordance with clause "Notices" above, to make changes within the general scope of the Contract in any one or more of the following:
 - a. drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
 - b. the method of shipment or packing;
 - c. the place of delivery; and
 - d. the related services to be provided by the supplier/ selected bidder.
- b) If any such change causes an increase or decrease in the cost of, or the time required for, the supplier's/ selected bidder's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery and Completion Schedule, or both, and the Contract shall accordingly should be amended. Any claims by the supplier / selected bidder for adjustment under this clause must be asserted within thirty (30) days from the date of the supplier's / selected bidder's receipt of the Purchaser's change order.

c) Prices to be charged by the supplier / selected bidder for any related services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier / selected bidder for similar services.

32. Termination

a) Termination for Default

- The tender sanctioning authority of JDA may, without prejudice to any other remedy for breach of contract, by a written notice of default of at least 30 days sent to the supplier/ selected bidder, terminate the contract in whole or in part: -
 - If the supplier/ selected bidder fails to deliver any or all quantities of the service within the time period specified in the contract, or any extension thereof granted by JDA; or
 - ii. If the supplier/ selected bidder fails to perform any other obligation under the contract within the specified period of delivery of service or any extension granted thereof; or
- iii. If the supplier/ selected bidder, in the judgement of the Purchaser, is found to be engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the contract.
- iv. If the supplier/ selected bidder commits breach of any condition of the contract.
- If JDA terminates the contract in whole or in part, full amount of PSD shall stand forfeited.
- Before cancelling a contract and taking further action, advice of senior most finance person available in the office and of legal adviser or legal assistant posted in the office, if there is one, may be obtained.
- b) **Termination for Insolvency**: JDA may at any time terminate the Contract by giving a written notice of at least 30 days to the supplier / selected bidder, if the supplier / selected bidder becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the supplier / selected bidder, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to JDA.

c) **Termination for Convenience**

 JDA, by a written notice of at least 30 days sent to the supplier / selected bidder, may terminate the Contract, in whole or in part, at any time for its convenience. The Notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the supplier / selected bidder under the Contract is terminated, and the date upon which such termination becomes effective.

- Depending on merits of the case the supplier / selected bidder may be appropriately compensated on mutually agreed terms for the loss incurred by the contract if any due to such termination.
- The Goods that are complete and ready for shipment within twenty-eight (28) days after the supplier's/ selected bidder's receipt of the Notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:
 - To have any portion completed and delivered at the Contract terms and prices;

and/or

ii. To cancel the remainder and pay to the supplier / selected bidder an agreed amount for partially completed Goods and Related Services and for materials and parts previously procured by the supplier/ selected bidder.

33. Settlement of Disputes

- a) **General:** If any dispute arises between the supplier / selected bidder and JDA during the execution of a contract that should be amicably settled by mutual discussions. However, if the dispute is not settled by mutual discussions, a written representation will be obtained from the supplier/ selected bidder on the points of dispute. The representation so received shall be examined by the concerned Procurement Committee which sanctioned the tender. The Procurement Committee may take legal advice of a counsel and then examine the representation. The supplier / selected bidder will also be given an opportunity of being heard. The Committee will take a decision on the representation and convey it in writing to the supplier / selected bidder.
- b) **Standing Committee for Settlement of Disputes:** If a question, difference or objection arises in connection with or out of the contract / agreement or the meaning of operation of any part, thereof or the rights, duties or liabilities of either party have not been settled by mutual discussions or the decision of tender sanctioning Procurement Committee, it shall be referred to the empowered standing committee as decided by JDA for decision.
- c) **Procedure for reference to the Standing Committee:** The supplier / selected bidder shall present his representation to the Procuring Entity along with a fee equal to two percent of the amount of dispute, not exceeding Rupees One Lakh, within one month from the date of communication of decision of the tender sanctioning Procurement Committee. The officer-in-charge of the project who was responsible for taking delivery of the goods and/ or service from the supplier/ selected bidder shall prepare a reply of representation and shall represent the JDA's stand before the standing committee. From the side of the supplier / selected bidder, the claim case may be presented by himself or through a lawyer. After hearing both the parties, the standing committee shall

- announce its decision which shall be final and binding both on the supplier/selected bidder and JDA. The standing committee, if it so decides, may refer the matter to the empowered committee as decided by JDA.
- d) **Legal Jurisdiction:** All legal proceedings arising out of any dispute between both the parties regarding a contract shall be settled by a competent court having jurisdiction over the place, where agreement has been executed and by no other court, after decision of the standing committee for settlement of disputes.

Section 6: Special Terms & Conditions of Bid & Contract

- **1. Contracting:** Under this contract Sub-Contracting is not allowed by the successful bidder(s).
- 2. Project/Contract Period: The successful Bidder is expected to carry out all ground work before start the services in direction of Nodal Officer of this project. Initially the contract period shall be as per delivery schedule mentioned in the bid document. The contract period can be extended for another period on mutual consent on approved rates as per Act.
- **3. Delivery and Start of Services:** The successful Bidder will start the services as per the date mentioned in the Award of Contract (AoC)/Work Order which will also be treated as the start of project date.
- **4. Revenue Sharing:** Bidder shall not charge the subscribers for Internet Services at the Location without the prior approval of JDA. Notwithstanding anything to the contrary stated herein above, bidder shall not charge a user for Internet Service for initial 60 minutes of first instance of access, in a day. This duration may be increased, if both parties agree to do so for a specified duration. After such minutes allowed to be used for free of use, bidder shall be able to charge the user for use of WiFi services at rates as per the tariff approved by JDA. For this purpose bidder shall put required system (including electronic payment) in place to allow such users to pay the prescribed charges.

The Bidder is free to mobilize revenue from any sources including advertisement time/space through this project. However, 50% of such revenue earned, shall be shared with JDA on Half yearly basis. The Bidder shall maintain the proper record of such revenue earned, which shall be timely audited by the CA, for which the expenses shall be borne by the bidder.

The firm/Bidder has to finalize and sign the Revenue sharing Agreement with JDA within one month of the signing of the Contract for the project. If it fails to do so, it will treated as breach of Contract and shall be liable to the Liquidated Damages (LD) same as applicable for the deliverables.

5. Manpower

- a) The operational manpower will work under the guidance of Nodal Officer, JDA.
- b) The successful bidder will submit the list required professional manpower along with their CVs to the Nodal Officer, JDA.
- c) The professional shall be entitled for Government Holidays. However, on Government Holidays the services may be asked for as per the need without any extra cost.
- d) If there is a need to replace an existing professional manpower requested by the Nodal officer the bidder will replace the same within 3 days.

- e) If the bidder and /or his employees are found to be directly or indirectly involved in any unwanted activities, his services would be discounted / terminated. The bidder is responsible for the character of the all employees provided by him.
- f) The legal biding as per the industries dispute act. Payment of wages act., contract labour Act., and others pertaining to Civil/Criminal legislation, Medical claim if any, are the obligations of the bidder. The JDA would have no responsibility for the same.
- g) It is the responsibility of the bidder to provide payments, and other facilities as per the nominal wages in accordance with the law. All issues pertaining to the same would be dealt with by the bidder. The JDA would have no role in this.
- h) The State insurance, Provident Fund, Pension Gratuity, leaves, wages etc. as applicable, would have to be provided by the bidder and he would also be accountable for the employees. If for any reason, legal proceeding is undertaken against any employee, the bidder shall bear the responsibility. The JDA would not represent the same.
- i) JDA shall not have any liability/pay compensation towards any injury/ accident to the firm's employee while carrying out the maintenance/repair work under this contract.
- j) The bidder should also ascertain that as per contract the employees would not from any group/union etc. and would also not participate in such nor represent the same. If such incidence comes under the notice of the JDA, it would terminate the contract.
- k) If the professionals to be deputed for the project remain absent, a suitable substitute shall immediately be provided. Penalty on non-availability of manpower resources is are:-

Type of Professional	Penalty on non-availability of resource
Team Leader	Rs. 2500.00 per resource per absent days
System/Network Administrator	Rs. 1500.00 per resource per absent days
Technical Support for NOC / outdoor location	Rs. 750.00 per resource per absent days
Security personnel for outdoor location	Rs. 250.00 per resource per absent days

I) The deduction will be made against the absence of manpower and will be deducted from the QGR.

Annexure-1: Solutions wise Locations

S.N	Location / Solution Type		
	Park with Wi-Fi Hotspots		
1	Sylvan park - Agra Road		
2	Statue Circle - C Scheme		
	BRTS corridor with Wi-Fi Hotspots		
1	BRTS Corridor 2 - length 6.8 Km - 21 shelters (Chomu Pulia to VKIA 14 no. pulia)		
	Roadways Bus Stands with WiFi Hotspots		
1	Narayan Singh Circle - C Scheme		
2	Durgapura Bus stand - Tonk Road		
3	Transport Nagar Chouraha - Delhi - Agra Road		
4	Chomu Pulia - Sikar Road		
5	DCM Chauraha - Ajmer Road		
	Education Institutes with WiFi Hotspots and Interactive Information Kiosk with Environmental Sensors		
1	Rajasthan University - JLN Marg		
2	Maharaja College - Tonk Road		
3	Maharani College - Tonk Road		
	Tourist locations with Interactive Information Kiosk with Environmental Sensors		
1	Amer Fort		
2	Hawa mahal		
3	Albert Hall		
	Smart LED Lights (2 Km)		
1	60 feet Road for Smart LED Lighting		
	REGS for Multiple Locations		
2	Mansarovar		
3	Chitrakoot, Vaishali Nagar		
	Surveillance		
A	Entry Exit Points for Surveillance		
1.1	Sitapura Flyover - Tonk Road		
1.2	Bhankrota - Jaisinghpura Junction - Ajmer Road		
1.3	Kho Nagorian Tiraha - Agra Road		
1.4	Near Harmada Chouki - Sikar Road		
1.5	Kalwar Road (for entry / exit to Nagaur) - C Zone byepass		
1.6	VKIA 14 no. pulia - Sikar Road		
1.7	Hirapura tiraha - C zone byepass - Ajmer Road		
1.8	Transport Nagar Chouraha - Delhi - Agra Road		
1.9	Malpura gate (for entry / exit from Phagi road) - Phagi road		
1.10	Sivad Mode, Sirsi road - Sirsi road		
1.11	Kunda Tiraha, Delhi Road		
B	Public Places with Surveillance		
2.1	Narayan Singh Circle - C Scheme		
2.2	GT area - Malviya Nagar		
2.3	Gandhi Nagar Rly Station - Front - Gandhi Nagar		
2.4	Gandhi Nagar Rly Station - Tonk Road side - Tonk Road		

Annexure-2: Bill of Material (BoM)

S.No	Items	Unit	Quantity of	Warranty
	(Specifications are as per Annexure)		Items (Tentative)	
Wi-Fi	Hot Spot		(Tentative)	
1	Wireless Controller with HA	No.	2	3 Year NBD OEM Warranty with AP Licensing
2	Outdoor Access Point	No.	150	3 Year NBD OEM Warranty
3	Indore Access Point	No.	50	3 Year NBD OEM Warranty
4	Access Switch (Indoor Use)	No.	25	3 Year NBD OEM Warranty
5	Access Switch (Outdoor Use)	No.	75	3 Year NBD OEM Warranty
6	Internet Bandwidth			Minimum Internet Bandwidth of 10 Mbps Per AP ensuring minimum 1 Mbps per user
	illance Solution	ı	1	
1	Camera Type 1- Outdoor 2 MP PTZ Camera with IP66 Outdoor enclosure	No.	46	3 Year NBD OEM Warranty
2	Camera Type 2 - Surveillance Cameras - Outdoor, HD Fixed Camera with IR	No.	82	3 Year NBD OEM Warranty
3	Camera Type 3 -Fixed Box Cameras	No.	134	3 Year NBD OEM Warranty
4	Camera Type 4 - HD Cameras	No.	58	3 Year NBD OEM Warranty
5	Camera Type 5 -Ruggedized HD with PoE power Injector if required	No.	8	3 Year NBD OEM Warranty
6	Surveillance Video Management System with N+1 redundancy	Unit	1	OEM Subscription, Support & Licensing for 3 Years for Item 1 to 5
7	Indoor/Outdoor Switch as needed	Lot	As needed	3 Year NBD OEM Warranty
8	Cables, Poles, any other Accessories as needed	Lot	As needed	
Kiosk		ı	1	
1	Interactive Kiosk with Protective Shell, Touch Screen and Environmental Sensor	Unit	6	3 Year NBD OEM Warranty
2	Remote Kiosk with Protective Shell with Point of Delivery	Unit	2	3 Year NBD OEM Warranty
3	Environmental Sensors	Unit	3	3 Year NBD OEM Warranty
Smart	t Lighting			
1	Smart Lighting node with Individual Light Control with Required Wi-Fi Access points for outdoor as per the solution (Outdoor Access Point and Outdoor switch should consider as solution requirement)	No.	320	3 Year NBD OEM Warranty
2	Smart LED Light Luminaries (Min 120 watts) and Pole with mounting accessories	No.	320	3 Year NBD OEM Warranty

3	Light Pole Integrated Video Analytics Node for Traffic Analytics	No.	4	3 Year NBD OEM Warranty
4	Spare provisioning @ minimum 10% for smart lighting infrastrcutrue.	Lot	10% of total	3 Year NBD OEM Warranty
5	Pole Installation as per site requirement	No.	240	Standard Warranty
Comr	nand Centre Solution		•	,
1	Control Room Video-wall Solution 70 inch x6 Cubes with Controller and required Software	No.	6	3 Year NBD OEM Warranty
2	Video Surveillance Monitoring Workstation	No.	10	3 Year NBD OEM Warranty
Data	Centre Solution			
1	Wi-Fi Hotspots Management Application and Centre infrastructure update	Unit	as required	OEM Subscription, Support & Licensing for 3 Years
2	Kiosks Management Application and Centre infrastructure update	Unit	as required	OEM Subscription, Support & Licensing for 3 Years
3	Smart Light Software application to monitor individual or group of lights	Unit	as required	OEM Subscription, Support & Licensing for 3 Years
4	Remote Kiosk for Govt Services - Centre infrastructure Update	Unit	as required	OEM Subscription, Support & Licensing for 3 Years
5	Video Management System- Software for Recording Update	No.	1	OEM Subscription, Support & Licensing for 3 Years
6	Video Analytics Package Software for Left Object Detection	No.	67	OEM Subscription, Support & Licensing for 3 Years
7	Advanced Video Analytics Package Software for Crowd Monitoring	No.	29	OEM Subscription, Support & Licensing for 3 Years
8	Integration of New Services with City Infrastructure Software	Unit	as required	OEM Subscription, Support & Licensing for 3 Years
9	Recording and other application Servers; > Application Servers > Management Server > Storage for 30 Days > Database Management Server etc.	Unit	2	OEM Subscription, Support & Licensing for 3 Years
10	Firewall with URL Filtering	Unit	2	OEM Subscription, Support & Licensing for 3 Years

Note:-

- The architecture of set-up consists of number of locations which shall be operated / managed / controlled by Network Operations Centre (NOC) to be established at JDA HQ building at Jaipur.
- 2. Connectivity between locations and NOC should preferably on fibre.
- 3. Internet Bandwidth to be connected at NOC through fibre only
- 4. The equipment to be provided for surveillance and access points etc. at the outside locations are to be installed on the available poles, walls at site. In case of no physical termination support is available, then the Bidder has to provide poles which shall be in the scope of the Bidder.

- 5. Any other requirement for NOC to be operational and not mentioned in the estimated BOQ, the Bidder has to deploy the resources, which shall be in the scope of the Bidder.
- 6. The connectivity to the City Police Control Room from JDA NOC covered in Phase 2 (surveillance solution) is to be provided and shall be in the scope of the Bidder.
- 7. All accessories including Network Cable/OFC/Power Cable, Connectors/Couplers etc., connected/terminated to active equipments & will be covered under this contract.
- 8. The Bidder may note that no logistics support or warehouse facility shall be provided by JDA. All such facility at JDA or at outside locations will be responsibility of the Bidder.
- 9. NMS at NOC is required as per requirement.
- 10. Atleast 1 environment sensor is needed along with each Interactive kiosk.
- 11. Minimum Bandwidth of 2.1 Mbps per surveillance camera should be ensured.
- 12. The connectivity between JDA NOC to Police Control Room should be on single core dark fiber.

Annexure-2: Technical Specifications

Item: Wireless Controller	
BRAND NAME:	
MODEL No.:	PART No. (IF ANY):

Description:

- Must be compliant with IEEE CAPWAP or equivalent secure connectivity controller-based WLANs
- WLAN Controller should support minimum 500 Access points and 5000 clients in a single 1 RU.
- WLAN controller must have atleast 2 x 1Gbps of uplink interfaces.
- WLC should have licenses floating on two controllers.
- Multiple link aggregation (LAG)/ VRRP support to protect against link failures while maintaining the optimal network connectivity
- Must support both 1+1 and N+1 redundancy models.
- Must support stateful switchover between active and standby controller in a sub second time frame.
- Must have feature for stateful recovery without re-authentication of the client in the event of LAN and WLAN infrastructure disruption to deliver a non-stop client session
- Must support redundant power supplies.
- Must support an ability to dynamically adjust channel and power settings based on the RF environment.
- Radio coverage algorithm must allow adjacent APs to operate on different channels, in order to maximize available bandwidth and avoid interference
- Must have Automatic 802.11 interference detection, identification, classification, and mitigation. Classification should support a dynamically updatable signature library
- Must support coverage hole detection and correction that can be adjusted on a per WLAN basis.
- Must support RF Management with 40 MHz and 80 Mhz channels with 802.11n & 802.11ac
- WLC should support L2 and L3 roaming of IPv6 clients
- WLC should support IPv6 access control lists
- WLC should support Guest-access functionality for IPv6 clients
- Controller performance must remain the same if encryption is on or off for wireless SSIDs.
- Should support ability to adjust Delivery Traffic Indicator Message (DTIM) on a per WLAN basis to improve performance for latency sensitive applications.
- Should support Management frame protection for the authentication of 802.11 management frames by the wireless network infrastructure.
- Should adhere to the strictest level of security standards, including 802.11i Wi-Fi Protected Access 2 (WPA2), WPA, Wired Equivalent Privacy (WEP), 802.1X with multiple Extensible Authentication Protocol (EAP) types, including Protected EAP (PEAP), EAP with Transport Layer Security (EAP-TLS), EAP with Tunneled TLS (EAP-TTLS), RFC 4347
- Controller should have rogue AP detection, classification and automatic containment feature
- Controller should be able to detect attacks like Broadcast de-authentication, NULL probe, Wellenreiter from day one for all access points
- Controller should have profiling of devices based on protocols like HTTP, DHCP and more to identify the end devices on the network
- Must support internal and external web authentication.
- Must be able to set a maximum per-user bandwidth limit on a per-SSID basis.
- Must support user load balancing across Access Points.
- Controller must provide Mesh capability for Mesh supported AP.
- Must be able to restrict the no. of logins per user

- Must be able to dedicate some APs to monitor-only for Intrusion Prevention Services.
- Must support client roaming across controllers separated by a layer 3 routed boundary.
- Solution proposed must support clients roaming across at least 500 APShould support the ability to schedule AP power on/off for energy savings
- Controller Should support L2 Client Isolation so User cannot access each other's devices. Isolation should have option to apply on AP or SSID's.
- Should support encrypted mechanism to securely upload/download software images to and from wireless controllers
- Must support 802.11e WMM
- Should have Voice and Video Call Admission and Stream prioritization for preferential QOS
- Controller should have Deep Packet Inspection for Layer 4-7 traffic for user for all traffic across the network to analyses information about applications usage and prioritization
- WLC should support web and console based management including SNMP v1,v2,v2c or higher.
- Should support port-based and SSID-based IEEE 802.1X authentication.
- Should support MAC authentication to provide simple authentication based on a user's MAC address.
- WLC Should support Roque AP detection, classification and standard WIPS signatures.
- WLC should be able to exclude clients based on excessive/multiple authentication failure.
- Shall support AES or TKIP encryption to secure the data integrity of wireless traffic
- Shall able to provide an air quality index for ensuring the better performance
- Shall able to provide real time chart showing interference per access point on per radio and per-channel basis.
- Should support AP location-based user access to control the locations where a wireless user can access the network
- Must be able to set a maximum per-user bandwidth limit on a per-SSID basis.

Item : Indoor Access Point				
BRAND	Brand Name:			
MODEL No.: PART No. (IF ANY):				
Sr. No	Feature	Description		
1	Components	• Access Points proposed must include radios for both 2.4 GHz and 5 GHz.		
		• Must include integrated internal dual band antennas to support both the 2.4GHz and 5GHz operations simultaneously from single antenna.		
		 Access point must have two 10/100/1000BASE-T Ethernet autosensing interface 		
		Mounting kit should be standard from OEM directly.		
		 Must support 3X3 multiple-input multiple-output (MIMO) with TWO spatial streams 		
		• Must support simultaneous 802.11ac on 5 GHz radios and 802.11n on 2.4Ghz Radio.		
		 Must support data rates up to 867 Mbps throughput on 5 GHz radio. 		
		Must support 40 and 80 MHz wide channels in 5 GHz.		
		• Must support AP enforced load-balance between 2.4Ghz and 5Ghz band.		
		Must support Standards based Beam forming		
		 Must incorporate radio resource management for power, channel, coverage hole detection and performance optimization 		
		 Must support Proactive Key Caching and/or other methods for Fast Secure Roaming. 		
		Access Points must support a distributed encryption/decryption model.		

 AP model proposed must be able to be both a client-serving AP and a monitor-only AP for Intrusion Prevention services.
 Should support mesh capabilities for temporary connectivity in areas with no Ethernet cabling.
 Mesh support should support QoS for voice over wireless.
Must be plenum-rated (UL2043).
 Must support Controller-based and standalone(autonomous) deployments
 Should support up to 16 SSID profiles per radio and each profile shall be independently configurable for authentication, encryption, VLANs, and QoS levels.
 Must support telnet and/or SSH login to APs directly for troubleshooting flexibility.
• Must support Power over Ethernet, local power, and power injectors.
• 802.11e and WMM
Access point must be Wi-Fi alliance certified.

Itom :	Access Switch	(Indoor Use)
Item : Access Switch (Indoor Use) Brand Name :		
MODEL	No.:	PART No. (IF ANY):
Sr. No	Feature	Escription
1	Access Switch (PoE/PoE+)	The switch should have 12 Gigabit PoE/PoE+ ports
	(POL/POL+)	• Should have 2 Gigabit combo uplink ports i.e. 2 x SFP and 2 x 10/100/1000Base T ports.
		The switch should support Layer-2 and Layer-3 features
		• The switch should have total power budget of 240W or more to support PoE/PoE+ capable devices.
		• The switch should support PoE in all ports in a fashion that the connected devices should be able to get power even when the switch is booting to ensure minimal disruption during a power cycle.
		• The switch should support power management capabilities like Energy Efficient ports and hibernation mode when not in use.
		The switch should have 12 Gigabit PoE/PoE+ ports
		 Should have 2 Gigabit combo uplink ports i.e. 2 x SFP and 2 x 10/100/1000Base T ports.
		The switch should support Layer-2 and Layer-3 features
		• The switch should have total power budget of 240W or more to support PoE/PoE+ capable devices.
		The switch should support PoE in all ports in a fashion that the connected devices should be able to get power even when the switch is booting to ensure minimal disruption during a power cycle.
		• The switch should support power management capabilities like Energy Efficient ports and hibernaton mode when not in use.
		The switch should have 12 Gigabit PoE/PoE+ ports
		 Should have 2 Gigabit combo uplink ports i.e. 2 x SFP and 2 x 10/100/1000Base T ports.
		The switch should support Layer-2 and Layer-3 features
		 The switch should have total power budget of 240W or more to support PoE/PoE+ capable devices.
		The switch should support PoE in all ports in a fashion that the

connected devices should be able to get power even when the switch is booting to ensure minimal disruption during a power cycle.
• The switch should support power management capabilities like Energy Efficient ports and hibernation mode when not in use.

Item:	Access Switch	(Outdoor Use)	
	Brand Name:		
MODEL	No. :	PART No. (IF ANY):	
Sr. No	Feature	Escription	
1	Access Switch	The switch should have 16 10/100 ethernet ports	
		At least 4 port should be PoE	
		Should have 2 Gigabit combo uplink ports	
		 Should support zero-touch discovery using Dynamic Host Control Protocol (DHCP), express setup, and fast bootup time to help in migrating to an Ethernet environment without resistance. 	
		Forwarding rate: 6.5 Mpps with 64-byte packet	
		Unicast MAC addresses: 8000	
		Internet Group Management Protocol (IGMP) multicast groups: 255	
		IPv4 MAC security ACEs: 384	
		• IPv4 routing: 3500 routes, IPv6 routing: 1750 routes	
		• Should suport 802.1x, port security, and DHCP to achieve dynamic port-based authentication.	
		 Should support Secure Shell (SSHv2); SNMPv3 for encrypted administrator traffic during Telnet and SNMP sessions. 	
		Should support TACACS+ and RADIUS authentication to facilitate centralized control and restrict unauthorized users.	
 Should conform to Common Industrial Protocol (CIP) and I 			
		The switch should support power management capabilities like Energy Efficient ports and hibernation mode when not in use.	
		Line-rate, no blocking uplink, downlink ports	

Item:	Item: Interactive Kiosk with Protective Shell, Touch Screen		
BRANI	Brand Name:		
Mode	L No. :	PART No. (IF ANY):	
S. No.	Specification		Compliance (Yes/no)
1	Hardware based Interactive Clier and collaboration devices), a m applications, and a network in	ce Platform should comprise of its (a set of interactive computing anagement platform, collaboration frastructure to deliver web-based ent through interactive displays and	
2	configurable and manage web cli multimedia services for public ven	Platform should be enterprise-grade ents designed to deliver interactive ues, including high-definition digital ed kiosk platform should be both	

3	The Interactive Kiosk Experience Platform should feature a COBRA web browser, which is a comprehensive web-centric kiosk application development platform with integrated JavaScript API access to multimedia, peripheral, and system resources. In addition to support for plug-ins such as Adobe Flash Player, the browser should provide several proprietary widgets, which can be configured and controlled from JavaScript, to simplify the development effort. The browser should support touch screens and features kinetic scrolling, a virtual navigational panel, and a virtual keyboard. External keyboards and mice should be supported for accessibility compliance and administration. Content to be integrated with the current service selection to provide highly effective targeted advertising. Applications to be displayed in templates that also contain zones for Really Simple Syndication (RSS) feeds, web-based services, and advertising content. Built-in support for voice and video communications will allow the rapid development and delivery of many collaboration applications. The Session Initiation Protocol (SIP) client (one such collaboration application) should let users make video calls from the kiosks to a virtual concierge or customer service agent who can then provide assistance to the kiosk user. The Interactive Kiosk Experience Platform should support a comprehensive set of peripherals, including cameras for video collaboration, touch screens, printers, speakers, microphones, magnetic card readers, barcode scanners, and headsets for the hearing impaired. The devices should be configurable and managed remotely by an advanced, web-based management portal with a menu-based GUI.	
4	The solution shall include Touch Panel as well as Shelter for housing all the equipment's with all necessary protections along with Interactive Kiosk Hardware Client Platform.	
5	The Touch screen should be of 42'inch size and be HD compliant. It should be possible to use the touch screen in horizontal as well as vertical mount positions.	
6	High-definition interactive citizen service deliver content from centralized Kosk application management platform	
7	Easy to deploy, secured and compliant for open-to-public facilities	

Environmental Sensors:

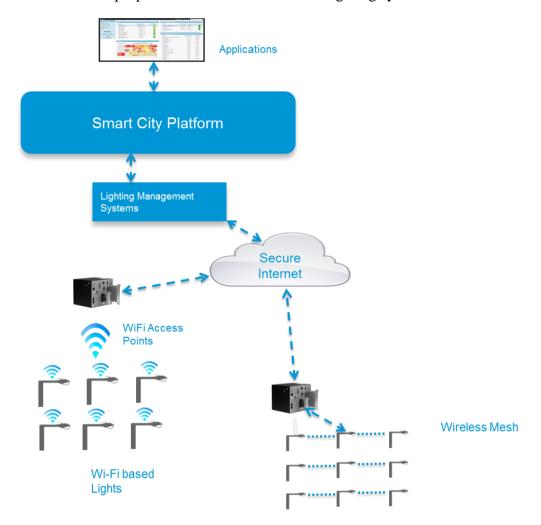
Item	Minim	um Required Specification	Complied (Yes/No)
Functional	The environment s		
Requirement	capabilities	_	
Functional		ggedized enough to be deployed in	
Requirement	open air areas on s	•	_
	They should be able following parameter	le to read and report at least the ers	
	o Temperature		
Functional	o Humidity		
Requirement	o Ambient Light		
	o Sound		
	о СО		
	o NO2		
Functional		be able to communicate its data using	
Requirement	wireless technology		
Functional	J .	e collected in a software platform that	
Requirement		software applications to read that	
Requirement	data.	ortware applications to read that	
Functional	0.0.00.	ement platform should allow the	
Requirement		e sensor to the network and also	
	location details etc		
Air Quality Parameters	NO2	upto 10ppm	
Air Quality Parameters	CO	upto 1000 ppm	
Air Quality Parameters	SO2	upto 20 ppm	
Air Quality Parameters	03	upto 1000 ppb	
Air Quality Parameters	PM 2.5	0 to 230 micro gms / cu.m	
Air Quality Parameters	PM 10	0 to 450 micro gms / cu.m	
Weather Parameters	Temperature	0 to 100 Deg. C	
Weather Parameters	Relative Humidity	upto 100%	
Weather Parameters	Light	upto 10,000 Lux	
Weather Parameters	UV	upto 15 mW/ cm2	
Weather Parameters	CO2	upto 5000 ppm	
Noise Parameters	Noise	upto 120 dB (A)	
Interface & Power	GPS	Should have GPS capability	
Interface & Power	GSM	3G compatiable	
Interface & Power	Wi-fi	802.11b/g/n	
		12 V , 2 A DC supply for ESD	
Interface & Power	Power	12 V , 3 A DC or 230 V, 1 A for	
		housing fan	
		To be located in a housing, on a pole	
Other parameters		500 mm x 250 mm x 250 mm *	
		(*indicative - final size based on	
	Mounting	configuration)	
Otherway	Enclosure	Engineering Polymer or Metal	
Other parameters		construct	

	te Kiosk with Protective Shell with Point of Delivery	
BRAND NAME		
MODEL No.:	PART No. (IF ANY):	T
l no	Specification	Compliance (Yes/No)
	High-definition interactive Video based citizen service deliver solution from centralized Citizen Support solution.	
	Easy to deploy, secured and compliant for open-to-public facilities	
	The point of delivery cabin allows confidential interview with citizen (reduction of noise, sliding door to be closed)	
	The design of the inside is clear, easy to deal for all citizens. Integration of ICT components in the design is crucial.	
1	Provide best and easy citizen experience with remote agents, tanks to high quality videoconferencing system and a set of collaboration tools enabling direct communication and support by the remote agents	
	Accessibility compliant for several kind of handicaps	
	Point of delivery cabin requirements	
	resistant panel walls	
	security lock	
	built-in ventilation	
	LED daylight lighting	
	Presence sensor	
	sliding door for confidentiality Collaboration consider	
	Collaboration services	
	In view of answering to address any kind of citizen, the solution should require no IT expertise or know-how from citizen. Nevertheless, intend to provide a best-in-class citizen experience thanks to a large set of collaboration tools available within the cabin and remotely managed by the agent.	
	Collaboration services	
2	Easy and user-friendly interface for citizen: the solution will require neither physical keyboards/mouse nor ICT expertise.	
	Videoconferencing screen with high-quality audio and high definition video experience. The quality of video interaction is considered as crucial for citizen experience. Thus definition and quality of service (QoS) will prevail.	
	Additional interactive screen to:	
	i) Show streaming video (when starting an interview, putting a person on hold or simply when a video says more than words).	

	ii) Display a document that the agent would like to share with the remote citizen and agent-side should have the capability to capture the document and save for further requirements.	
	iii) On-screen fulfilment of an administrative form (for example, complete a request for renewal of Identity document)	
	iv) Allow on-screen collaborative fulfilment with the agent support	
	v) Allow Co-Browsing for the citizen with agent.	
	Ability for the agent to direct printing to the citizen in the cabin	
	Ability to remotely read document shown by citizen to the remote agents, using a document camera agent should enable to capture the document shown in jpeg format for further processing	
	Optional ability to scan and upload the document that a citizen might share it with the expert for additional proof as an example	
	Cabin remote management	
	The remote management of collaborative tool in the cabin should be simply and integrated with the current Remote Agent interface.	
	Tools should include:	
	- Remote management of a camera for document reading (zoom in, zoom out, PIP)	
	- Remote management of screen panel	
	o display a document (text, PDF, web browser, video)	
	o display a video (wait, informative, end of session)	
	o sharing, allow collaborative mode	
3	- Remote management of a scanner	
	- Remote printing	
	- Optional Remote management of magnetic Card reader	
	- Remote management of HD video call	
	o Launch HD video call	
	o Put a communication on hold	
	- Shared repository of documents for citizen interaction or agent support. This repository should be online and support a wide range of document kinds (including text, formula, video)	
	File format to be supported: XLS, PDF, Video (precise – format compliant with touch screen)	

Smart Lighting Specifications

The City wants to deploy to transition the current halogen and sodium vapor lighting systems to smart adaptable LED lights across the City. With this in mind, City is asking for the following specifications. The proposed architecture for Smart Lighting system will be



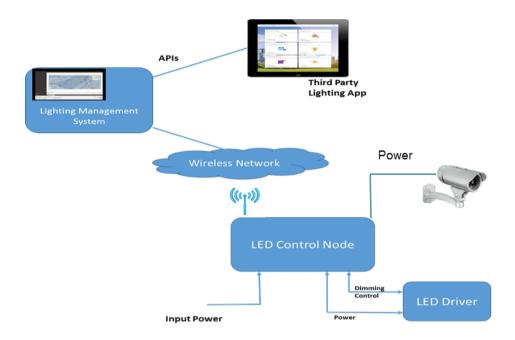
Functional specifications

- 1. The City is looking a LED lighting vendor who can provide LEDs that can be integrated with lighting control nodes.
- 2. The smart street lighting system should be able to operate at any weather conditions
- 3. The smart street lighting system should be communicating using wireless technology as mentioned above in the topology
- 4. The smart street lighting system should be able to communicate to the Lighting Operations Management software hosted on the cloud (Preferably)
- 5. The smart street lighting system should have the capability to receive the instruction from the Lighting Operations Management software and act accordingly
- 6. The Lighting Operations Management software should be able to send commands to the smart street lighting system based on the data analytics to increase/decrease the luminosity as per the Day light and weather conditions.

- 7. The smart street lighting system should be able to operate the lights switch on/off, increase/decrease luminosity as per the command received from the Lighting Operations Management software
- 8. The Lighting Operations Management software should have the capability to apply policies to the smart lighting system. Example: set up policies like light up alternate lights during low traffic density, increase the luminosity of the lights as per the dullness of the day lights
- 9. The city administration should be able to see the real time status of the Smart Lighting System on a city map view of the Lighting Operations Management software
- 10. The city administration should be able to operate the Smart Lighting System manually too.
- 11. The smart lighting system should be able to communicate the system issue or failure to the Lighting Operations Management software.
- 12. The smart lighting system are a combination of LED lights and sensors.
- 13. The system should be able to provide dynamic lighting based on ambient light sensors, motion sensors and predefined lighting schedule.
- 14. The individual lights are to be monitored by electronic controller using a wireless communication technology
- 15. The controller should be able to operate autonomously as per the defined schedules and light level sensors
- 16. Should enable Over the Air (OTA) firmware update
- 17. The control nodes should have a provision to integrate other sensors to it and collect the sensor data and transmit to application in the cloud.
- 18. The control node should also have the ability to supply power to other devices which might be mounted on the same pole. Example a video camera or a Wireless access point etc.
- 19. The Lighting Management Software should have well documented APIs for developing applications for
- 20. Policy based Management of Outdoor Lights
- 21. To subscribe for alarms and events
- 22. To collect and analyze all the measured parameters and integrated sensors data.
- 23. The Lighting Management System should integrate with Cisco City Infrastructure Management for monitoring multiple smart city use cases simultaneously as shown in the above figure

Technical Specifications

The integration of an Outdoor LED luminaire with a control node will look something like below



- 1. The control node should use industry standard wireless communication technologies like 802.15.4, ZigBee, Lora, Wi-Fi to communicate with the management system. Wi-Fi is highly preferred
- 2. The control node should be able to interface with LED Drivers using standard interfaces like 0-10V or DALI
- 3. The control node should use industry standard security mechanisms for device authentication, device identification, data encryption on the device.
- 4. The control node should have onboard GPS to enable simplified deployment and asset tracking.
- 5. The control node should have the following characteristics
- 6. The control node which interfaces with LED Driver and Lamp should also be able to provide power to other external devices that might be mounted on the pole. For example, a camera to be mounted on the pole will be getting powered on by the LED control node which is controlling the LED lamp as shown in the above picture.
- 7. The control node should also be able to integrate with other external sensors like temperature, motion and other environmental sensors.

Control Node Specifications:

or mode specifications.	
Maximum Lamp Power	500W
Dimming Capability	Yes
Dimming Range	At least 30-100%. Preferably 10-100%
Control Interface	0-10V
Network Interface	Any one of Wi-Fi, LoRa,
	802.15.4/ZigBee. WiFi is preferred
Frequency Support	Low Power RF: 433Mhz or 868Mhz
	or 915Mhz,
	Wi-Fi: 2.4Ghz, 5Ghz

Power Supply	85 - 260VAC / 50Hz-60Hz
Local Memory	Yes
Power Consumption	Max 0.5W
Operating Temperature	-25C to +55C
Parameters to be Measured (most if not all of	Lamp Power, line voltage, current,
the parameters to be present)	active power, reactive power, apparent
	power, power factor, energy
	consumption, lamp/controller –
	running hours counter, lamp on/off
	cycles counter
Operation Mode	ON/OFF/dimming
Optional Sensors	Light, accelerometer
Optional External Sensors to be integrated	Temperature, Humidity and Noise,
	Motion

Video Based Control nodes for Traffic Analytics

City intends to analyse the traffic patterns and parking at some key locations for planning and operations purposes. City is looking to implement video analytics based data collection for the following use cases.

- 1. Vehicle Counting
- 2. Vehicle Classification (4-wheeler vs. two wheeler)
- 3. Pedestrian Counts and Movement analytics
- 4. Detection of on street parking in unmarked spots
- 5. Detection of parking in demarcated spots
- 6. Detection of illegal parking on roads

Following are the technical specifications of the required video analytics solution for traffic analytics.

- 1. The video node should connect directly to the light control node to provide a simple, integrated solution with power from the light.
- 2. Each video node should have two cameras with adjustable field of view.
- 3. The video hardware should support on-board analytics of traffic patterns.
- 4. The video node should communicate the meta data of the analytics output to a central application for further analysis of the data.
- 5. Since the node is going to be deployed on traffic junctions where availability of network cable and fiber can be challenging, this video node needs to be a wireless device and should use the same wireless system as the lighting control nodes.
- 6. The video specification for the device should be
 - a. Minimum 1.2MP
 - b. Minimum Resolution 1280X720
 - c. Up to 30 frames per second
 - d. Dedicated Video Analytic Processor
 - e. Onboard Video storage of at least 256GB
 - f. Should have a Power over Ethernet port to connect other devices on the pole like environmental sensors
- 7. The onboard analytics feature of the video unit should have the following features at minimum

- a. Vehicle Classification
- b. Vehicle Counting
- c. Pedestrian Analytics
- d. Per Lane Statistics of Vehicular movement
- e. Detection of Stopped Vehicles
- f. Detection of Legally and illegally parked vehicles
- 8. The video node need not stream the video 24x7 to a central server, but should be able to send analytics meta data 24x7 to a central server.
- 9. Video should be stored locally on the node to avoid unnecessary overburdening of the network.
- 10. The video feed or clips should be available on-demand via API.
- 11. All the data it produces should be available through API(s) for application development

Luminaire Specifications

The LED Luminaire will meet the following specifications:

- 1. LED street light luminaire shall be made of pressure die cast aluminum housing with appropriate heat sink fins with corrosion resistant powder coat.
- 2. Manufacturer shall submit INSITU Thermal report indicating maximum temperature point on LED array. This value shall not exceed junction temperature (Specified in LM 80 report at which life > 50000 hrs)
- 3. The luminaire shall have UL approved FR grade polycarbonate cover with high transmission index and the luminaire shall have impact resistance of IK 07
- 4. Total System Power Consumption should be within the tolerance of $\pm 5\%$ with typical system Light output of >100LPW
 - Test Certificate from Govt. Approved Lab/NABL accredited Lab/UL to substantiate lumen output as per LM 79 must be furnished for evaluation.
- 5. The fixture shall have Ingress Protection of IP 66 Rated (Both for Optical & Electrical Compartment). Test Report for the same need to be furnished from any Govt. Approved/NABL accredited Laboratory.
- 6. Luminaire shall be provided with IP 66 rated Oleo-phobic and hydrophobic Micro Vent offering sustained ingress protection over its life
- 7. Luminaire should consist of Universal Voltage driver to operate wide voltage range from 150V to 270V 50/60Hz application with in built short circuit, over voltage, overload and mis-wiring protection.
- 8. The fixture shall be designed so as to have lumen maintenance of at least 70% at the end of 50,000 hours with life of 50000 hrs.
- 9. IES LM-80 report for the LED chip package employed in the proposed luminary product must be submitted.
- 10. Luminaire shall have side pole mounting option with outer Diameter 40 to 60mm.

- 11. The luminaire efficiency shall be greater than >100 LPW.
- 12. The color temp of LED shall be 5600K + -500K
- 13. The CRI of LED shall be >70
- 14. The LED shall be provided with structured LED array for optimized roadway photometric distribution with photometric lenses designed to optimize application efficiency and minimal glare
- 15. Driver should have Surge Protection as per IEC 6100-4-5 level-4 of min 6KV and shall have external surge protection device of 10KV built into fixture.
- 16. The driver shall be dimmable driver (analog 0-10V) suitable for dimming the luminaires to various power levels.
- 17. The driver efficiency shall be >88% & power factor of the electronic driver shall be >0.95 and THD shall be <10%.
- 18. The driver shall be provided with inbuilt over voltage protection system with cut off with voltage >300V and shall auto restart when the voltage drops to <290V.
- 19. The solder point temperature of the LEDs should be less than 85°C under actual user condition at an ambient of 35°C.
- 20. The luminaire manufacturer shall have full-fledged testing lab with all optical test equipment like Integrated Sphere and Type-C Rotating Mirror Photo Goniometer to test the LED luminaries and the lab shall be NABL accredited.

S.NO.	Specification		Compliance (Yes/No)
	Mechanical Parameters		
1	Housing Material	Pressure Die Cast Aluminium with powder coating	
2	Heat sink	INSITU Thermal report to be submitted to cover this parameter. Manufacturer shall submit design/ drawing indicating maximum temperature point on LED array. This value shall not exceed junction temperature (Specified in LM 80 report at which life > 50000 hrs)	
3	Cover/Glass Material	Injection Molded Flat Polycarbonate Cover	
4	Gasket Material	Silicon Gasket	
5	IK Rating	IK 07 (TEST REPORT as per IS:10322 part 5 Sec-3 /IEC:60598-2-3) as per NABL report	
6	Vibration	Conforms to ANSI 2G Standard	
7	Humidity	RH - 10-90%	
8	Mounting type	Side mounting only	
9	Pole Dia	40-60mm	
	Electrical Parameter		

10	Input Voltage Range	150-270V	
11	Input Frequency	50-60Hz	
12	Nominal Power	System Power shall be within the range of +/-	
12	Consumption	5% of rated power	
13	Nominal Power	>0.95 (LM79 report to be submitted)	
	Factor	(2) If I report to be submittedly	
14	Surge Protection	6 KV inbuilt with driver and 10 KV external SPD	
	- As per	to be provided in the luminaire	
	IEC61000-4-5		
16	LED Driver	>=350 mA <900 mA	
	Current		
17	Total Harmonic	<10%	
	Distortion) THD		
	as per IEC		
	61000-3-2,		
10	e.d.3.2,2009	Over Veltage Chart Circuit Over Lead Mississing	
18	Safety features	Over Voltage, Short Circuit, Over Load, Miswiring	
19	High – Voltage	The system shall shutdown at 300V and restart when the voltage level comes down to <290V	
	Cut off LED and	when the voltage level comes down to <290v	
	Optical		
	Assembly		
21	LED Type	High Power LED - Approved make -	
		CREE/Lumileds/NICHIA - LED technical datasheet	
		including packaging details to be submitted. LED	
		Chip manufacturer to provide an authorization	
		letter in favor of bidder stating their supply	
		support for execution of project LM-80/IS 16105	
		Test reports of specific LED used in the proposed	
		Luminaire.	
22	Wattage per	The LEDs shall be driven at a current <70% of	
	LED (>1w	its rated current	
	<3w)		
23	Photobiological	To be submitted	
24	Safety report	100 DW	
24	System Efficacy - LPW	>100 LPW	
25	Nominal CCT	5650K±500K (LM 79 to be submitted)	
26	Nominal CRI	>70 (LM80 need to be submitted)	
27	Secondary	Secondary LED shall be provided for appropriate	
	Optics/Optical	lighting distribution.	
	Lens Available		
28	Secondary	PMMA conforming to ASTM Specification	
	Optics/Optical	5 22 1 2 1 1 2 p 3 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2 m 1 2	
	Lens Material		
29	PCB Material	MCPCB	
30	LED Viewing	115 degree	
	Angle		
	Environmental		
2.4	Specifications	200 . 45 0	
31	Ambient	-20C - +45 C	
	Temperature		

32	Storage	-20C - +50 C	
	Temperature		
33	IP Rating	IP66 (NABL Lab accredited report to be	
	Optical	submitted)	
	assembly		
34	IP Rating	IP66 (NABL Lab accredited report to be	
	Electrical	submitted)	
	enclosure		
35	Micro Vent	Oelophobic and Hydophobic vent IP66 rated)	
	rating		
36	Maximum Wind	150 Km/hr - External 3rd party report to be	
	speed at which	submitted	
	Fixture should		
	operate		
	Basic		
	Specifications		
37	Designed life	L70@50000 Hrs (LM80 to be submitted)	
38	Lumen	L70@50000 Hrs (LM80 to be submitted)	
	Maintenance		
	Rating L70		
39	Initial System	To mention	
	Lumen Output (
	> 100 Lumens		
	/Watt)		
	Standard		
	Compliance		
40	Luminaire	IS10322 (Part 5/Sec 3) & IEC 60598-1,IEC 60529	
	Performance		
	Complies to		

- 21. Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. No sticker will be accepted.
- 22. PCB shall be MC PCB type of high grade aluminum (AL5052) and should have a thermal conductivity of >1W/mK.
- 23. The luminaire light shall be constant. The voltage variation / fluctuations in the specified voltage range shall not impinge upon the lumen it produces. Maximum +/- 2% is allowed throughout in the input operating voltage range. Necessary supporting document from Govt. Approved/NABL accredited Laboratory shall be furnished with lumen output for 150V, 180V, 200V, 220V & 240V voltage.
- 24. The connecting wires used inside the luminaire, shall be low smoke halogen free, fire retardant and MCB protection shall be provided in input side.
- 25. Type Test Certificate of luminaire from Govt. accredited Test Lab/ERTL/ NABL shall be submitted.
- 26. The luminaire shall be compatible for 5 or 7 pin NEMA socket (ANSI C136.41) to take the required NEMA compatible control nodes.

IP Surveillance Systems

Video Management System

The existing VMS system should be upgraded and expanded as per the requirements of this project. The required software and licenses need to be provided by the bidder as part of this project. New cameras need to integrate with the existing VMS system.

Type 1- PTZ - High Definition

BRAND NAME:		
MODEL No. :		PART No. (IF ANY):
S.NO.	Camera Characteristics	Description
1.	Requirement Overview	IP Camera Should allows up to 20x optical zoom while viewing and recording at 1080p resolutions.
2.	Sensor Type	1/2.8" CMOS Sensor
3.	Max Resolution	1920x1080 @ 30fps
4.	Dynamic Range	86db
5.	Lens/Iris	4.7-94mm
6.	Field of View	Horizontal Angle of View: 55.4° (W) – 2.9° (T)
7.	Audio I/O	Audio in x 1
8.	Digital I/O	(3.5-mm miniature jack)
9.		Audio out x 1
10.		(3.5-mm miniature jack)
11.		DI x 4
12.		DO x 2
13.	Max Illumination	Color: 0.05 lux
14.		B/W: 0.05 lux
15.	Day/Night	The camera should provides true day/night functionality and includes an IR filter that automatically switches to night mode in low-light scenes. This function can be set to manual, automatic, or scheduled control.
16.	Local Storage	MicroSD
17.	PTZ Speed	Pan speed: 0.05° to 450°/sec Tilt speed: 0.05° to 450°/sec
18.	Video Compression & Video Streaming	 Single-stream H.264 or MJPEG up to 1080p (1920 x 1080) @ 30 fps Dual-stream H.264 and MJPEG Primary stream programmable up to 1280 x 720 @ 30 fps Secondary stream programmable up to 960 x 544 @15 fps
19.	ONVIF	Should support for ONVIF 2.0 allows for standards based interoperability
20.	Motion Detection	Should be Integrated
	•	•

21.	External Power	24V AC
22.	Power Consumption (in watts)	Max 20 Watt at PoE+
23.	Environmental Certification	IP66
24.	Operating Temperature	-40 to 55°C at High POE
25.	Certifications Safety and Certifications EMC-Requirements	CE, Class A FCC, Class A UL/cUL Listed C-Tick
26.	Auto Detection & Configuration	The camera should be automatically discovered and configured when connected to VMS or Network Switch, to set the right network parameters for the video stream on the network .
27.	OEM Criteria	All proposed Cameras should be from single OEM and OEM should have Registration in India min from 10 Years

Type 2- Fixed IR Camera

BRAND N	Brand Name:		
MODEL N	0.:	PART No. (IF ANY):	
S.NO.	Camera Characteristics	Description	
1.	Requirement Overview	High-definition Bullet outdoor IP Camera, integrated infrared illuminator	
2.	Sensor Type	1/2.7" Progressive Scan CMOS	
3.	Max Resolution	1920x1080 @ 30fps	
4.	Dynamic Range	69db	
5.	IR	Yes, Infrared illuminator with illumination capabilities up to 30 Mtrs	
6.	Lens/Iris	3.6 to 9 mm or better with Motorized Zoom Lens	
7.	Field of View	37.5°-95.98° Horizontal	
8.		21.6°-53.8° Vertical	
9.		42.6°-109.46° Diagonal	
10.	Audio I/O	The camera supports full-duplex audio and options for half-duplex operation, Camera should allows the connection of an optional Y cable or mini cable with BNC connector. Camera should allow to connect a video monitor to the mini cable with BNC connector. Camera should have option to connect an external microphone. Camera should have Focus assist button, which will use in conjunction with an analog display to fine-tune the IP camera focus at local site. Audio in x 1	
11.	Digital I/O	(3.5-mm miniature jack)	
12.		Audio out x 1	

13.		(3.5-mm miniature jack)
14.		DI x 1
15.		DO x 1
16.	Max Illumination	Color: 0.5 lux
17.		B/W: 0 lux w/Illuminator Active
18.	Day/Night	Automatic, manual, scheduled
19.	Local Storage	Should support MicroSD -min 32 GB
20.	Video Streaming	 Single-stream H.264 or MJPEG up to 1080p (1920 x 1080) at 30 fps Dual-stream H.264 and MJPEG Primary stream programmable up to 1280 x 720 at 30 fps Secondary stream programmable up to 960 x 544 at 15 fps
21.	ONVIF	Should support for ONVIF 2.0 allows for standards based interoperability
22.	POE and External Power	12V DC, 24V Ac and PoE- 802.3af compliant (Class 3)
23.	Power Consumption (in watts)	Max 10 Watt at DC
24.	Supported Protocol	Dynamic Host Control Protocol (DHCP), Hypertext Transfer Protocol (HTTP), Secure HTTP (HTTPS), Network Time Protocol (NTP), Real-Time Transport Protocol (RTP), Real-Time Streaming Protocol (RTSP), Simple Mail Transfer Protocol (SMTP), Secure Sockets Layer/Transport Layer Security (SSL/TLS), TCP/IP, Secure Real-Time Transport Protocol (SRTP), Bonjour, Simple Network Management Protocol (SNMP),and Secure Shell (SSH) Protocol. Differentiated-services-code-point (DSCP) marking and class-of-service (CoS) marking
25.	Environmental Certification	IIP67- and IK10-rated housing, Camera should have sun shield, wall mount bracket and waterproof Ethernet Cable form same OEM
26.	Operating Temperature	40° to 122°F (-40° to 50°C)
27.	Certifications Safety	UL60950-1 2nd edition CSA22.2-No.60950-1 IEC/EN60950-1 2nd edition IEC/EN60825
28.	Certifications EMC- Requirements	CISPR22 Class B ICES-003 EN55022 EN55024 EN61000-3-2/-3-3 Class A VCCI Class B KN22 Class B KN24
29.	Light sensor	Senses the level of ambient light to determine when to switch day/night mode.
30.	Auto Detection & Configuration	The camera should be automatically discovered and configured when connected to VMS or Network Switch, to set the right network parameters for the video stream on the network.

31.	OEM Criteria	All proposed Cameras should be from single OEM and OEM
		should have Registration in India min from 10 Years

Type 3- Fixed Box Camera

BRAND NAME:			
Model No. :		PART No. (IF ANY):	
S.NO.	Camera Characteristics	Description	
1.	Requirement Overview	High-definition IP Box Camera for outdoor	
2.	Sensor Type	1/2.7" Progressive Scan CMOS with additional digital signal processor (DSP) to support complex applications such as real-time video analytics	
3.	Max Resolution	1920x1080 @ 30fps	
4.	Dynamic Range	69db	
5.	Lens/Iris	3.1 - 8 mm - P-Iris	
6.	Audio I/O	The camera supports full-duplex audio and options for half-duplex operation. Suould support Audio compression G.711 A, Law, G.711 U, Law, G.726, Audio in x 1	
7.	Digital I/O	(3.5-mm miniature jack)	
8.		Audio out x 1	
9.		(3.5-mm miniature jack)	
10.		DI x 1	
11.		DO x 1	
12.	Max Illumination	Color: 0.3 lux	
13.		B/W: 0.05 lux	
14.	Day/Night	Automatic, manual, scheduled	
15.	Local Storage	Should support MicroSD -min 32 GB	
16.	Video Streaming	 Single stream H.264 or MJPEG up to 1080p (1920 x 1080) @ 30 fps Dual stream H.264 and MJPEG Primary stream programmable up to 1280 x 720 @ 30 fps Secondary stream programmable up to 960 x 544 @15 fps 	
17.	ONVIF	Should support for ONVIF 2.0 allows for standards based interoperability	
18.	POE and External Power	12V DC, 24V Ac and PoE- 802.3af compliant (Class 3)	
19.	Power Consumption (in watts)	Max 10 Watt at DC	
20.	Supported Protocol	Dynamic Host Control Protocol (DHCP), Hypertext Transfer Protocol (HTTP), Secure HTTP (HTTPS), Network Time Protocol (NTP), Real-Time Transport Protocol (RTP), Real-Time Streaming Protocol (RTSP), Simple Mail Transfer Protocol (SMTP), Secure Sockets Layer/Transport Layer Security (SSL/TLS), TCP/IP, Secure Real-Time Transport Protocol (SRTP), Bonjour, Simple Network Management Protocol (SNMP), and Secure Shell (SSH) Protocol. Differentiated-services-code-point (DSCP) marking and class-of-service (CoS) marking	

21.	Operating Temperature	14° to 122°F (-10° to 50°C)
22.	Certifications Safety	UL60950-1 2nd edition CSA22.2-No.60950-1 IEC/EN60950-1 2nd edition IEC/EN60825
23.	Certifications EMC- Requirements	CISPR22 Class B ICES-003 EN55022 EN55024 EN61000-3-2/-3-3 Class A VCCI Class B
		KN22 Class B KN24
24.	Auto Detection & Configuration	The camera should be automatically discovered and configured when connected to VMS or Network Switch, to set the right network parameters for the video stream on the network .
25.	OEM Criteria	All proposed Cameras should be from single OEM and OEM should have Registration in India min from 10 Years

Type 4- Camera- High Definition

BRAND NA	BRAND NAME:		
MODEL NO). :	PART No. (IF ANY):	
S.NO.	Camera Characteristics	Description	
1.	Requirement Overview	High-definition Outdoor IP Camera	
2.	Sensor Type	1/2.5" Progressive Scan CMOS with additional digital signal processor (DSP) to support complex applications such as real-time video analytics	
3.	Max Resolution	2560 x 1920	
4.	Dynamic Range	80db	
5.	IR	Yes, Infrared illuminator with illumination capabilities up to 20 Mtrs	
6.	Lens/Iris	3 to 10 mm P-Iris or better with Motorized Zoom Lens and Vandal-Resistant Dome	
7.	Field of View	35.45° to 88.90° (horizontal)	
8.		26.69° to 67.01° (vertical)	
9.		43.99° to 111.00° (diagonal)	
10.	Audio I/O	The camera supports full-duplex audio and options for half-duplex operation. Should support Audio compression G.711 A, Law, G.711 U, Law	
11.	Digital I/O	(3.5-mm miniature jack)	
12.		Audio out x 1	
13.		(3.5-mm miniature jack)	
14.		DI x 1	
15.		D0 x 1	
16.	Max Illumination	Color: 0.1 lux	
17.		B/W: 0 lux w/Illuminators Active	
18.	Day/Night	Automatic, manual, scheduled	
19.	Local Storage	Should support MicroSD -min 32 GB	

20.	Video Compression & Video Streaming	 Single-stream H.264 up to 2560 x 1920 @ 5 frames per second (fps) Single-stream MJPEG up to 1920 x 1080 @ 30 fps Dual-stream H.264 and MJPEG: Primary stream programmable up to 1280 x 720 @ 30 fps Secondary stream programmable up to 960 x 540 @ 15 fps
21.	ONVIF	Should support for ONVIF 2.0 allows for standards based interoperability
22.	POE and External Power	24V Ac and PoE- 802.3af compliant (Class 3)
23.	Power Consumption (in watts)	Max 15 Watt at PoE or 30watt at AC
24.	Supported Protocol	Dynamic Host Control Protocol (DHCP), Hypertext Transfer Protocol (HTTP), Secure HTTP (HTTPS), Network Time Protocol (NTP), Real-Time Transport Protocol (RTP), Real-Time Streaming Protocol (RTSP), Simple Mail Transfer Protocol (SMTP), Secure Sockets Layer/Transport Layer Security (SSL/TLS), TCP/IP, Secure Real-Time Transport Protocol (SRTP), Bonjour, Simple Network Management Protocol (SNMP), and Secure Shell (SSH) Protocol. Differentiated-services-code-point (DSCP) marking and class-of-service (CoS) marking
25.	Environmental Certification	IIP67- and IK10-rated housing, Camera should have sun shield, wall mount bracket and waterproof Ethernet Cable form same OEM
26.	Operating Temperature	-25 to 50°C (-13 to 122°F) using PoE -40 to 50°C (-40 to 122°F) using AC
27.	Certifications Safety	UL60950-1 2nd edition CSA22.2-No.60950-1 IEC/EN60950-1 2nd edition IEC/EN60825
28.	Certifications EMC- Requirements	CISPR22 Class B ICES-003 EN55022 EN55024 EN61000-3-2/-3-3 Class A VCCI Class B KN22 Class B KN24
29.	Light sensor	Senses the level of ambient light to determine when to switch day/night mode.
30.	Auto Detection & Configuration	when connected to VMS or Network Switch, to set the right network parameters for the video stream on the network .
31.	OEM Criteria	All proposed Cameras should be from single OEM and OEM should have Registration in India min from 10 Years

Type 5- Camera Type 5 -Ruggedized HD

BRAND NAM	Brand Name:			
MODEL No. :		PART No. (IF ANY):		
S.NO.	Camera Characteristics	Description		
1.	Requirement Overview	IP Camera should be a high-definition, ruggedized, Vibration resistant and Outdoor ready		
2.	Max Resolution	1080p (1920 x 1080) at 30 fps		
3.	Dynamic Range	69db		
4.	Lens/Iris	2.8mm - Fixed Iris		

5.	Minimum illumination	Color mode: 0.5 lux ■ Black and white mode: 0.05 lux
6.	Field of View	37.5° to 103.7° (horizontal)
7.		21.6° to 71.2° (vertical)
8.		42.6° to 111.21° (diagonal)
9.	Camera Adjustment	Tilt range: 90° (0°~90°)
10.	Privacy regions	The camera supports up to four user-defined privacy regions. Any video within a privacy region is masked in the video stream.
11.	Number of streams	The camera can stream H.264 and MJPEG video simultaneously. Each video stream can be configured with individual resolution, quality, and frame-rate settings
12.	Local Storage	MicroSD
13.	Video Compression and Video streaming	 H.264 & Motion JPEG: Single-stream H.264 or MJPEG up to 1080p (1920 x 1080) @ 30 fps Dual-stream H.264 and MJPEG Primary stream programmable up to 1280 x 720 @ 30 fps Secondary stream programmable up to 960 x 544 @15 fps
14.	ONVIF	Profile 2.0
15.	Powering Camera	The camera should support Power over Ethernet (PoE) 802.3af
16.	Power Consumption	Max 8 Watts
17.	Environmental	Camera should be Ruggedized, IK10 and IP67-rated housing
18.	Operating Temperature	-13 to 122°F (-25 to 50°C)
19.	Protocols	Dynamic Host Control Protocol (DHCP), Hypertext Transfer Protocol (HTTP), Secure HTTP (HTTPS), Network Time Protocol (NTP), Real-Time Transport Protocol (RTP), Real-Time Streaming Protocol (RTSP), Simple Mail Transfer Protocol (SMTP), Secure Sockets Layer/Transport Layer Security (SSL/TLS), Transmission Control Protocol/Internet Protocol (TCP/IP), Secure Real-Time Transport Protocol (SRTP), Discovery Protocol, Bonjour, Simple Network Management Protocol (SNMP), and Secure Shell (SSH)
20.	Quality of service (QoS)	Differentiated services code point (DSCP) marking and class of service (CoS) marking
21.	Certifications Safety	UL60950-1 2nd edition CSA22.2-No.60950-1 IEC/EN60950-1 2nd edition IEC/EN60825
22.	Certifications EMC- Requirements	CISPR22 Class B ICES-003 EN55022 EN55024 EN61000-3-2/-3-3 Class A EN50121-4 VCCI Class B KN22 Class B KN24
	Auto Detection & Configuration	The camera should be automatically discovered and configured when connected to VMS or Network Switch, to set the right network parameters for the video stream on the network .
	Activity detection	Camera should support User-definable alerts with configurable sensitivities and thresholds, email alert, and HTTP notifications. Camera should also support for IEEE 802.1X authentication

Dimensions and Housing	Max 6x5x2 inch with Aluminium Housing
OEM Criteria	All proposed Cameras should be from single OEM and OEM should have Registration in India min from 10 Years

Video & Audio Analytics

The System should support Video Analytics at camera edge or at server level; these video analytics should enable an IP camera to perform various analytic and counting functions. Analytic functions trigger events when a camera detects activities or behaviours that match predefined rules. Counting functions count people.

Leave behind event -Camera should have provision to enable the following video analytics, system should provide software as per RFP requirement: The Video Analytics should include the following:

The implemented video analytics software should integrate with Smart City Infrastructure Management platform providing it the analytics events to be visualized on a City Map.

Type 3 Cameras - Fixed Box Camera should be enabled for this analytics. Bidder has to quote as per RFP bill of material.

Feature	Analytics
Object classification	Yes
Tripwire event	Yes
Exits Event	Yes
Appears event (full view)	Yes
Appears event (area of interest)	Yes
Disappears event (full view)	Yes
Disappears event (area of interest)	Yes
Loitering event	Yes
Leave behind event (full view)	Yes
Leave behind event (area of interest)	Yes
Configurable leave behind time	Yes
Object size filters	Yes
Object size change filters	Yes

Crowd Monitoring—Camera should provide below features for estimating the size and the relative density of a crowd of people.

Type 4 Cameras – High Definition should be enabled for this analytics. Bidder has to quote as per RFP bill of material.

Feature	Analytics
Object Size Filters	Yes
Object Density Level	Yes
Flow Violation	Yes

Indoor PoE Network Switch

S. No	Minimum Required Specifications
1	Switch with min 8 Nos. 10/100/1000BaseT PoE ports and additional 2 no's of free combo ports so that Fiber based SFP or Gigabit Ethernet transceiver can be used for uplink purpose.
2	Should have minimum switching capacity of 10 Gbps. All ports on the switch should work on line rate.
3	The switch should have IPV4 & IPv6 support from day one
4	It shall support IEEE 802.1s Multiple Spanning Tree Protocol and provide legacy support for IEEE 802.1d STP and IEEE 802.1w RSTP or equivalent technology and static routes.
5	Switch should support queuing as per IEEE 802.1P standard on all ports with mechanism for traffic shaping and rate limiting.
6	Switch should support automated image installation, configuration & automatic configuration of per port QoS to reduce switch provisioning time & effort.
7	The switch should support IPv6 RA-Guard, IPv6 DHCP-Guard/ DHCP Snooping, Source-Guard features.
8	The Router should be NDPP or EAL3 & Ipv6 ready logo certified at the time of Bidding
9	All necessary SFP's, interfaces, connectors, patch cords (if any) & licenses must be delivered along with the switch from day one.
10	The Switch should be 19" Rack mountable & the switch should be supplied with Indian standard AC (5Amp) power cord.

Field Network Switches

Field Non PoE Switch for Access Points and other solutions

S.NO.	Item	Specifications
1		The switch should be Industrial Grade ruggedized in nature that provides minimum 4 x $10/100BASETX$ access ports 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 with wire rate switching fabric of minimum 8 Gbps or more with forwarding rate of minimum 6 Mpps. Switch should have minimum 128 MB RAM/DRAM
3	Layer 2 Features	802. 1Q VLAN on all ports with minimum 2k MAC address
4		Spanning Tree Protocol as per IEEE 802.1d
5	-	Should support Jumbo frames up to 9000 bytes & Link Aggregation Control Protocol (LACP) as per IEEE 802.3ad.
6	-	Switch should support IGMP v1/v2/v3 & upto 1000 IGMP groups as well as IGMP snooping.
7		Static, Inter-VLAN routing must be enabled from day one
8		Switch should support Dynamic Routing – RIPv1/v2, OSPF for both IPv4 & IPv6, BGP, PBR etc protocol by enabling/upgrading the license.
9	Quality of Service (QoS) Features	Switch should support classification and scheduling as per IEEE 802.1P on all ports with minimum four egress queues per port
10		Switch should provide traffic shaping and rate limiting features for specified Host, network, Applications etc.

S.NO.	Item	Specifications
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		Switch should be SNMP manageable with support for SNMP Version 1, 2 and 3.
15		Support for Automatic Quality of Service or equivalent for easy configuration of QoS features for critical applications.
16		Switch should support NTP (Network Time Protocol)], FTP/TFTP
17		• -40 °F to 140°F (-40 to +58°C) continuous operating temperature range
18	-	• -40 °F to 185°F (-40 to +80°C) test under exception conditions short time
19		Operating relative humidity: 5% to 95% no condensing
20	Mechanical Conditions:	Protection Class -minimum IP 20
21	_	19" rack-mount design and 1 RU form factor for rack installation and wall mount options.
22		• Compliance to NEMA TS2 for extended temperature, vibration, shock, surge, and noise environments, UL 60950 or IEC 60950 • Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards
23		EMC interface immunity:
24		• IEC61000-4-2 [Criteria A], • IEC61000-4-3/ENV50204 [Criteria A], • IEC61000-4-4 [Criteria A]
25		Electromagnetic emissions certifications:
26		• EN 61000-6-2, •EN 61000-6-4, • EN 61131-2, • EN 61326-1, • CISPR11

Note- Bidder needs to consider POE switch/Module as per solution requirement.

Field PoE Switch for Cameras

S.NO.	Item	Specifications
1		The switch should be Industrial Grade ruggedized in nature that provides minimum 8 x 10/100BASETX PoE access ports & 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 with wire rate switching fabric of minimum 8 Gbps or more with forwarding rate of minimum 6 Mpps
3		Switch have Dual Field Replaceable & upgradable Power Supplies

S.NO.	Item	Specifications
4	Layer 2 Features	802. 1Q VLAN on all ports with support for minimum 1000 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		Should support Jumbo frames up to 9000 bytes & Link Aggregation Control Protocol (LACP) as per IEEE 802.3ad.
7		Switch should support IGMP v1/v2/v3 as well as IGMP snooping.
8		Static, Inter-VLAN routing must be enabled from day one
9		Switch should support Dynamic Routing – RIPv1/v2, OSPF for both IPv4 & IPv6, BGP, PBR etc protocol by enabling/upgrading the license.
10	Quality of Service (QoS) Features	Switch should support classification and scheduling as per IEEE 802.1P on all ports with minimum four egress queues per port
11		Switch should provide traffic shaping and rate limiting features (for egress as well as ingress traffic) for specified Host, network, Applications etc.
12		Strict priority queuing guarantees that the highest-priority packets are serviced ahead of all other traffic.
13		Switch should support ACLs, Extended IP ACLs, support RADIUS and TACACS+ for access restriction and authentication.
14		Should support a mechanism to shut down Spanning Tree Protocol Fast-enabled interfaces when BPDUs are received to avoid accidental topology loops.
15		Switch should support static ARP, Proxy ARP, UDP forwarding and IP source guard, DHCP Snooping, DHCP Option 82, Dynamic ARP Inspection (DAI)
16		Switch should be SNMP manageable with support for SNMP Version 1, 2 and 3.
17		Support for Automatic Quality of Service or equivalent for easy configuration of QoS features for critical applications.
18		Switch should support NTP (Network Time Protocol)], FTP/TFTP
19		• -40 °F to 140°F (-40 to +58°C) continuous operating temperature range
20		• -40 °F to 185°F (-40 to +80°C) test under exception conditions short time
21		Operating relative humidity: 5% to 95% no condensing
22	Mechanical Conditions:	Protection Class -minimum IP 20
23		19" rack-mount design and 1 RU form factor for rack installation and wall mount options.
24		• Compliance to NEMA TS2 for extended temperature, vibration, shock, surge, and noise environments, UL 60950 or IEC 60950 • Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards
25		EMC interface immunity:
26		• IEC61000-4-2 [Criteria A], • IEC61000-4-3/ENV50204 [Criteria A], • IEC61000-4-4 [Criteria A]
27		Electromagnetic emissions certifications:
28		• EN 61000-6-2, •EN 61000-6-4, • EN 61131-2, • EN 61326-1, • CISPR11

Firewall

Item	Minimum Required Specifications
1	Industry Certifications and Evaluations
	The Firewall solution offered must be rated as 'leaders' or 'Challengers' in the latest Magic Quadrant for Firewall published by Gartner.
	The Firewall appliance should have certifications like NDPP/ ICSA / EAL4 or more
	The proposed vendor must have a track record of continuous improvement in threat detection and must have successfully completed NSS Labs' NGFW Methodology v5.4 testing with a minimum exploit blocking rate of 95%
2	Hardware Architecture
	The appliance based security platform should be capable of providing firewall, IPS, Botnet, URL Filtering, and VPN (both IPSec and SSL) functionality in a single appliance
	The appliance should support atleast 4 * 10/100/1000 Gigabit and 4 * 10 G ports from Day one
	The appliance hardware should be a multicore CPU architecture with a hardened 64 bit operating system to support higher memory
	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.
3	Performance & Scalability
	Firewall should support production/multiprotocol throughput of 20Gbps
	Firewall should support atleast 4,000,000 concurrent sessions
	Firewall should support atleast 150,000 connections per second
	NGFW should support 3Des/AES IPSec VPN throughput of atleast 4000 Mbps
	Firewall should support atleast 10000 concurrent VPN peers IPSec / SSL
	Firewall should support atleast 1000 vlans
	Firewall should support 2 virtual firewalls from day one & support licensed based scalability upto 200 virtual firewalls as & when required with licenses without upgrading any hardware parts like memory etc, all necessary hardware modules to support upto 200 virtual firewalls should be provisioned from day one.
4	Firewall Features
	Firewall should provide application inspection for DNS, FTP, HTTP, SMTP,ESMTP, LDAP, MGCP, RTSP, SIP, SCCP, SQLNET, TFTP, H.323, SNMP
	Should be able to group multiple (minimum 4) firewalls together as a single logical device and should scale performance in term of cobined throughput, connections and connections per second
	Firewall should support creating access-rules with IPv4 & IPv6 objects simultaneously
	Firewall should support operating in routed & transparent mode. Should be able to set mode independntly for each context in multi-context mode
	In transparent mode firewall should support arp-inspection to prevent spoofing at Layer-2
	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.
	Should support Static, RIP, OSPF v2 & v3, BGP Protocol
	Should support Non Stop Forwarding in HA during failover and Graceful Restart
	Firewall should support setting connection limits based on max embryonic-connections, per-client embyonic connections, per-client max connections, setting embronic connection timeouts & idletimeouts. These settings should be applicable on web servers & clients.

functionality NGFW should be able to Block the download/upload of specific file type/MIME type Should support Remotely Triggered Black Hole for Border Gateway protocol security Firewall should support stateful failover of sessions in Active/Standby or Active/Active mode Firewall should support etherchannel functionality for the failover control & date interfaces for provide additional level of redundancy Firewall should support redundant interfaces to provide interface level redundancy before device failover Firewall should support 802.3ad functionality to increase the bandwidth for a segment across different modules Firewall should support failover of IPv4 & IPv6 sessions Firewall should replicate Nat translations, TCP,UDP connection states, ARP table, ISAKMP & IPSec SA's, SIP signalling sessions Firewall should have integrated redundant power supply VPN Features Firewall should support client based and clientless SSL vpn peers from day one. 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. 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. 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.				
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Firewall should support client based and clientless SSL vpn peers from day one. 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. 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. 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.		Firewall should have integrated redundant power supply		
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. 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. 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.	6	VPN Features		
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. 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. 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.		Firewall should support client based and clientless SSL vpn peers from day one.		
integrity algorithms in hardware to ensure there is no performance bottleneck & higher security. 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.		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.		
the Mobile Application Store/Market/OEM webesite other than the Firewall/Device.		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.		
Chould support any shared keys 9 Digital Contificator for VDN poor puthontication		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.		
Should support pre-shared keys & Digital Certificates for VPN peer authentication		Should support pre-shared keys & Digital Certificates for VPN peer authentication		

Item	Minimum Required Specifications
	Should support perfect forward secrecy & dead peer detection functionality
	Should support Nat-T for IPSec VPN
7	Routing Features
	Firewall should support IPv4 & IPv6 static routing, RIP, OSPF v2 & v3 and BGP
	Firewall should support PIM multicast routing
	Firewall should support SLA monitoring for static routes
8	Next Generation IPS
	Combined Firewall & IPS throughput should minimum be 6 Gbps
	The detection engine must be capable of detecting and preventing a wide variety of threats (e.g.,network probes/reconnaissance, CnC, VoIP attacks, buffer overflows, P2P attacks, etc.).
	The detection engine must incorporate multiple approaches for detecting threats, including at a minimum exploit-based signatures, vulnerability-based rules, protocol anomaly detection, and behavioral anomaly detection techniques. The solution must be capable of detecting and blocking IPv6 attacks.
	The solution should support the capability of passively gathering information about virtual machine traffic, network hosts and their activities, such as operating system, services, open ports, client applications, and vulnerabilities, to assist with multiple activities, such as intrusion event data correlation, elimination of false positives, and policy compliance
	The solution must provide IP reputation feed that comprised of several regularly updated collections of IP addresses and feeds from third party and custom lists of IP addresses including a global blacklist.
	The solution must be capable of passively gathering user identity information, mapping IP addresses to username, and making this information available for event management purposes.
	Solution should be able to block the attack on the basis of Geo location
	The solution must be capable of dynamically tuning IDS/IPS sensors (e.g., selecting rules, configuring policies, updating policies, etc.) with minimal human intervention.
	The solution must be capable of automatically providing the appropriate inspections and protections for traffic sent over non-standard communications ports.
9	Management Capabilities
	Firewall should support management of firewall policies via Cli, SSH & inbuilt GUI management interface.
	Firewall should support SNMP v1,2c & 3 simultaneously
	Firewall should support packet capturing functionality to send the packet capture to ethereal/wireshark for detailed packet analysis
	Firewall should support the functionality of Auto-Update to check for latest software versions & download the same
10	URL Filtering Capabilities
	The device must support wide range of applications with minimum 1000 application types being supported & URL categories up to 70.
	More than 15 MN URL must be categorized.
	To store the logs, the system must have more than 20GB of memory

Control Room Video-wall Solution

Video-wall Screen

S.NO.	Specification Item	Detailed Specification Description	
1	Configuration	CUBES OF 70" DIAGONAL IN A 4 (C) X 2 (R) CONFIGURATION COMPLETE WITH COVERED BASE STAND	
2	Cube & Controller	Cube & controller should be from the same manufacturer	
3	Reputed Company	The OEM should be an established multinational in the field of video walls and should have installations around the world	
4	Chip Type	1-chip 0.95" Digital micro mirror device	
5	Resolution	1920x 1080 native DMD chip resolution	
6	Light Source Type	LED light source with separate LED array for each colour (RGB)	
7	Brightness	Minimum 700 lumens	
8	Brightness Uniformity	≥ 90 %	
9	Dynamic Contrast	1400000:1 or more	
10	Control	IP based control to be provided	
11	Remote	IR remote control should also be provided for quick access	
12	Screen to Screen Gap	≤ 1.0 mm	
13	Screen Support	Screen should have an anti reflective glass backing to prevent bulging	
14	Control BD Input terminals	Input: 2 x Digital DVI	
15		Input: 1 x HDMI	
16		Input: 1 x HD-BaseT	
17		Input: 1 x Display Port	
18		Output: 1 x Digital DVI	
19	Auto color adjust function	Should provide auto color adjustment function	
20		Should be sensor based	
21	Maintenance Access	Front	
22	Cube Size	Each cube should have a screen size of 1550 mm wide and 872 mm high (+-2%)	
23	Cube control & Monitoring	Videowall should be equipped with a cube control & monitoring system	
24		Provide videowall status including Source , light source ,temperature, fan and power information	
25		Should provide a virtual remote on the screen to control the videowall	
26		Input sources can be scheduled in " daily", "periodically" or "sequentially" mode per user convenience	
27		System should have a quick monitor area to access critical functions of the videowall	

S.NO.	Specification Item	Detailed Specification Description
28		User should be able to add or delete critical functions from quick monitor area
29		Automatically launch alerts, warnings, error popup windows in case there is an error in the system
30		User should be able to define the error messages as informational, serious or warning messages
31		Automatically notify the error to the administrator or user through a pop up window and email
32		Status log file should be downloadable in CSV format as per user convenience

Video-wall Controller & Software

Video Wall Controller

S. No	Parameter	Indicative Specifications	
1	Controller	Controller to control Video wall in a matrix as per	
		requirement along with software's	
2	Chassis	19" Rack mount	
3	Processor options	Single Quad Core Intel® Core™ i7 Quad Core 3.4 GHz processor) or better	
4	OS	Supports 64-bit Operating System Windows 7	
5	RAM Capacity	16 GB or more	
6	HDD	500 GB or more	
7	Networking	Dual-port Gigabit Ethernet	
8	RAID	RAID 1, 5, 10 supports	
9	Power Supply	(1+1) Redundant hot swappable	
10	Cooling	Any Advanced Proven cooling mechanism	
11	Input / Output support	DVI/HDMI/USB/ LAN/ VGA/SATA port	
12	Accessories	DVD +RW, Keyboard and mouse	
13	Voltage	100-240V @ 50/60 Hz	
14	Redundancy support	Power Supply, HDD, LAN port & Controller	
15	Scalability	Display multiple source windows in any size, anywhere on the wall	
16	Control functions	Brightness / contrast / saturation/ Hue/ Filtering/ Crop / rotate	
17	Universal Inputs	Minimum 2	
18	Formats	DVI /RGB/Component	
19	Input Format	NTSC/ PAL/SECAM	
20	Operating Temperature	10°C to 35°C , 80 % humidity	
21	Cable & Connections	Vendor should provide all the necessary cables and connectors	

Video Wall Management Software

SI. No	Parameter	Minimum Specifications		
1	Display & Scaling	Display multiple sources anywhere on display up to any size		
2	Input Management	All input sources can be displayed on the video wall in freely resizable and movable windows		
3	Scenarios management	Save and Load desktop layouts from Local or remote machines		

4	Layout Management	Support all Layout from Video, RGB, DVI, Internet Explorer, Desktop and Remote Desktop Application	
5	Multi View Option	Multiple view of portions or regions of Desktop, Multiple Application Can view from single desktop	
6	Other features SMTP support		
7		Remote Control over LAN	
8		Alarm management	
9		Remote management	
10		Multiple concurrent client	
11		KVM support	
12	Cube Management	Cube Health Monitoring	
13		Pop-Up Alert Service	
14		Graphical User Interface	
15	Cube ,Controller & Wall Mangment Software	Cube , Controller and Wall mangment Software should be from the same manufacturer	
16	Manufacturing	Manufacturing OEM should have a manufacturing setup in India for Video Walls running successfully for the last 3 years or more	
17	Manufacturer Authorisation	The Bidder must be authorised by OEM to bid	
18	Reputed Company	The OEM should be an established multinational in the field of video walls and should have installations in India	

Storage Server for Video Management and Storage

Note- All Cameras video should be recorded at 2MP and 15 FPS for 30 Days.

S.NO.	Item	Feature description	Remarks
1.	Processors	Each server shall have a minimum of two (2) Intel E5-2600 v2 series CPUs	Offers the standard x86 technology
2.	Memory	Supports up to 256 GB of memory	Offers the standard x86 technology
3.	Upgradability	Server CPU and memory configuration should be upgradeable to future CPU and memory released without having to change the entire chassis	Investment protection
4.	Storage	The server should have up to 60 * 4 TB hot- swappable, SAS drives	Offers large server side storage capacity
5.		In case of failure , individual drives can be replaced without impacting any other drives	Improves redundancy and lowers downtime
6.		The 12 G Server RAID controller should support the following drive configurations - JBOD, RAID 0, 1, 5, 6, 10, 50 and 60	Greater performance and also more options disk configuration
7.		Support onboard Flash Backed Write Cache of up to 4 GB	Offers higher storage performance
8.	Network*	Up to 4 x 10-Gbps connectivity with dual NICs controllers	Offers network connectivity without using any of the PCIe expansion
9.		Utilizes embedded LAN on Motherboard slot	slots, flexibility in terms of number of PCIe vNICs that needs to be

S.NO.	Item	Feature description	Remarks
10.		Supports up to partitioning of 16 vNICs for each NIC from the BIOS	presented to the OS and network fault tolerance
11.	Management	Dedicated 1 Gb Ethernet management port	Simplified and easier management
12.		The integrated management controller should support web user interface for server management; remote keyboard, video, and mouse (KVM); virtual media; and administration with Virtual media support for remote KVM and CD and DVD drives as if local	Follows industry standard and offers a choice for the administrators
13.	Physical	Standard depth of 32 inches and fits into a standard 42 U rack	Eliminates the need for specialized racks with larger depth
14.		Server chassis of up to 4 U in height	Better utilization of rack space
15.	Environmental	Operating Temperature support from 41 to 95°F (5 to 35°C) and Nonoperating Temperature from -40 to 149°F (-40 to 65°C)	Wide range of operating environments
16.		Operating Humidity from 10 to 90% noncondensing	Wide range of operating environments
17.		Operating Altitude from 0 to 10,000 ft (0 to 3048m) and Nonoperating Altitude from 0 to 40,000 ft (0 to 12,192m)	Wide range of operating environments

Item:	Item: Video Surveillance Monitoring Workstation				
BRAND	NAME:				
MODEL	No. :	PART No. (IF ANY):			
Sr. No.	Feature	Description			
1	Technical requirements	 ✓ CPU: Intel Xeon E5-2620 v2/v3, 2.1GHz, 15 MB L3 cache or higher ✓ Chip set and Motherboard: Intel C-602 chipset or better. ✓ Memory: 32 GB DDR3 1600 Mhz expandable to 96 GB or better. ✓ Hard Disk Drive: 1000 GB SATA HDD at 7200 rpm upgradeable to 2 HDD or better. ✓ Storage Controller: SATA Controller RAID 0, 1. ✓ Monitor: 24 inch TFT (Large Format Display) ✓ Graphic card: NVIDIA Quadro K6000 (12 GB) or higher ✓ Keyboard: Standard Keyboard ✓ Mouse: Optical Scroll Mouse ✓ PCI Slots: 4 PCI/PCI Express including 1 PCI Express X 16 ✓ Bays: Total 4 Bays (2 internal, 2 external) ✓ Ports: 5 USB 2.0, 2 USB 3.0, RJ-45, audio in, audio out, mic in. ✓ Cabinet: Mini tower ✓ Optical Drive: 8 X DVD writer. ✓ Networking features: Integrated 10/100/1000 ✓ Operating System: Microsoft Windows 8.1 Professional 64 Bit or Higher 			

Annexure-3: Technical Bid Evaluation Checklist

Part – A: Authorization / Undertaking / Declarations

S. No.	Specific Requirements	Documents Required	Page No. (to be filled by bidder)
1.	The Bidder should deposit Tender Fee, RISL Processing Fee, Bid Security (EMD) along with the Technical bid.	Online receipt generated through Bid Participation portal	
2.	Tender Form	As given in Annexure5 on Bidders letterhead	
3.	Bidder's Authorization Certificate	As given in Annexure 6 on Bidders Letterhead	
4.	Self-Declaration – No Blacklisting	As given in Annexure 7 on Bidders Letterhead	
5.	Declaration by the Bidder regarding Qualification Under Section 7 of the ACT	As given in Annexure 8 on Bidders Letterhead	
6.	Certificate of Conformity / No deviations	As given in Annexure 9 on Bidders Letterhead	
7.	Undertaking On Authenticity of Items	As given in Annexure 10 On Non-Judicial Stamp Paper of Rs. 100/-	
8.	Undertaking for functional requirement of Equipments	As given in Annexure 11 on Bidder's Letter head	
9.	Technical Bid Submission Sheet	As given in Annexure 12 on Bidders Letterhead	
10.	Financial Bid Submission Sheet	As given in Annexure 13 on Bidders Letterhead	

Part - R. Fligibility Criteria

rait	art – B: Eligibility Criteria				
S. No.	Basic Requirement	Specific Requirements	Documents Required	Page No. (to be filled by bidder)	
1.	General Requirement	Bidder should be an established IT System Integrator and should have been engaged in Supply, Installation, Commissioning and Operations & Maintenance Services of ICT projects for a period of at least Five financial years as on 31.03.2015	Work Orders / Client Certificates confirming year and area of activity should be enclosed.		
2.	Bidder Entity	Consortium/Joint Venture is allowed, one of the parties in the consortium/JV partner will be the Prime Bidder/Lead Bidder. Prime Bidder/Lead Bidder shall be treated as "Bidder" Any of the parties of the consortium /JV partner or the Prime Bidder/Lead Bidder may meet the technical criteria. However, the Prime Bidder/Lead Bidder alone should meet the financial criteria. If the bidder does not have a	in case of consortium/JV, clearly specifying the role and area of specialization of the individual parties of consortium/JV, duly signed by Consortium/JV parties on Rs. 100 non-		

		Catalana B. ICD. "		
3.	Legal Entity	Category B, ISP license or higher, then the bidder needs to tie up with at least one such ISP to provide Internet bandwidth. Both the Bidder and the ISP shall form a consortium/JV and should declare the Prime Bidder / Lead Bidder clearly at the time of bidding. Any legal entity duly registered in India is allowed. In case of consortium/JV, the Prime Bidder/Lead Bidder should meet this	c) Certificates of incorporation and/ or d) Registration Certificates	
		criterion.		
4.	Turnover	The Prime Bidder/Lead Bidder must have annual turnover of at least Rs. 100 Crores solely from ICT Business and IT Services during each of the last Five financial years as on 31.03.2015.	Audited and Certified Balance Sheet and Profit/Loss Account for the last FIVE Financial Years should be enclosed. CA Certificate be enclosed.	
5.	Technical Capability	The Bidder or any of the parties of the consortium/ JV partner must have successfully completed, during last Five financial years as on 31.03.2015, at least the following numbers of Wi-Fi systems & CCTV Surveillance System of value specified herein: Two projects of similar nature for not less than 200 Access Points (AP) in a single work order OR Three projects of similar nature for not less than 100 Access Points (AP) in a single work order AND One Project of similar nature for not less than 100 IP Cameras in a single work order	Copies of work order or contract agreement and the client certificates/Project Signoff Certificate from client for satisfactory completion of project and showing order value and cost.	
6.	Net Worth	The Bidder or the Prime Bidder/Lead Bidder must have positive net worth & profit making in each of the last five financial years as on 31.03.2015	CA Certificate mentioning net profit should be enclosed.	
		The bidder shall have bank Solvency certificate not less Rs. 80 Crores (issued date shall not be more than 06 months from the date of release of RFP).	Certificate from Bank	
7.	Certification	The Bidder or consortium/JV should possess below Certifications at the time of bidding: d) ISO 9001:2008 Certification for System Integration.	The Bidder is required to furnish the copy of valid certification.	

Bid Document for Provisioning of & Integration of Wi-Fi Hotspots, Interactive Information Kiosks, Surveillance Cameras, Environmental Sensors, Smart lighting solution and Remote Kiosks along with Facility Page **108** of **133** Management Services under Phase 2

		e) ISO 20000:2011 for IT Service Management (Facility Management Services) f) ISO 27001:2005 for Information Security Management System		
8.	Tax Registration	The Bidder or the Prime Bidder/Lead Bidder should have a registered number of d. VAT/Sales Tax where his business is located e. Service Tax f. Income Tax PAN	Copies of relevant(s) Certificates of Registration.	
9.	Technical Specifications of BOQ items	The quoted product/item should fulfil all the technical specifications laid out in the tender document mentioned in the Annexure (Technical specifications of BOQ items). The Bidder is required to furnish Make, Model / Part number of the quoted item.	The Bidder should enclose relevant catalogues, brochures, etc. in support of all the items quoted in the Bid.	

Annex		Queries Format r's letter head)
y/Firm:		
epresenting the Comp	oany/ Firm:	
Designation	Email-ID(s)	Tel. Nos. & Fax
cts:		
Address for Correspondence	Email-ID(s)	Tel. Nos. & Fax Nos.
	y/Firm:epresenting the Comp Designation octs: Address for	y/Firm:

Query / Clarification Sought:

S.No.	RFP Page No.	RFP Rule	Rule Details	Query/Suggestion/ Clarification

Note: - Queries must be strictly submitted only in the prescribed format (.XLS/.XLSX/.PDF). Queries not submitted in the prescribed format will not be considered/responded at all by the tendering authority. Also, kindly attach the coloured scanned copy of the receipt towards the submission of the bidding/tender document fee.

Bid Document for Provisioning of & Integration of Wi-Fi Hotspots, Interactive Information Kiosks,	
Surveillance Cameras, Environmental Sensors, Smart lighting solution and Remote Kiosks along with Facility	Page 110 of 13 3
Management Services under Phase 2	

Annexure-5:	Tender Form
(On bidder's	letter head)

1	۸۵۵	مممما		+~.
1.	Auc	lresse	ď	w:

Name	of	the	Procuring	Executive	Engineer	(ElectII),	Jaipur	Development
Address	5			Jaipur Deve Room No. 2 Opp. Birla N Rajasthan 3	26, Ground Mandir, Jair	Floor, Main	Building	, J.L.N Marg,
Telepho	one			0141- 2569	9696 Extn:	7026		_

2. Firm Details:					
Name of Firm					
Name of Contact Person with Designation					
Registered Office Address					
Address of the Firm					
Year of Establishment					
Type of Firm Put Tick mark	Public Limited	Private Limited	Par	tnership	Proprietary
Telephone Number(s)					•
Email Address/ Web Site	Email:			Web-Site:	
Fax No.					
Mobile Number	Mobile:				
Certification/Accreditation /Affiliation, if Any					

The requisite deposit against	: Tender Fee, Prod	cessing Fee and EMD	amounting to Rs
	has been deposit	ed vide Online receipt	generated through
Bid Participation portal of JDA	vide challan No.	dated	

We agree to abide by all the terms and conditions mentioned in this form issued by the Tendering Authority and also the further conditions of the said notice given in the attached sheets (all the pages of which have been signed by us in token of acceptance of the terms mentioned therein along with stamp of the firm).

Bid Document for Provisioning of & Integration of Wi-Fi Hotspots, Interactive Information Kiosks, Surveillance Cameras, Environmental Sensors, Smart lighting solution and Remote Kiosks along with Facility Page **111** of **133** Management Services under Phase 2

Name :	
Address:	
In the capacity of:	
Signed:	
Date:	
Place :	
Seal of the	
Organization:	

Bid Document for Provisioning of & Integration of Wi-Fi Hotspots, Interactive Information Kiosks, Surveillance Cameras, Environmental Sensors, Smart lighting solution and Remote Kiosks along with Facility Page **112** of **133** Management Services under Phase 2

	Annexure-6: Bidder's Authorization Certificate (On bidder's letter head)
To:	(
Executive Engineer (Elect Room No. 26, Main Buildi Jaipur Development Auth	ng,
hereby authorized to sign	ntion} hereby declare/ certify that {Name/ Designation} is relevant documents on behalf of the company/ firm in dealing
information/ clarifications	rized to attend meetings & submit technical & commercial as may be required by you in the course of processing the Bid. tion, his/ her verified signatures are as under.
Thanking you,	
Name of Bidder	
Address:	
Authorised Signatory:	
Signed:	
Date :	
Pace :	
Seal of the	Signature Verified
Organization:	

Bid Document for Provisioning of & Integration of Wi-Fi Hotspots, Interactive Information Kiosks, Surveillance Cameras, Environmental Sensors, Smart lighting solution and Remote Kiosks along with Facility Page **113** of **133** Management Services under Phase 2

Annexure-7: Self-Declaration – No Blacklisting (On bidder's letter head)
То:
Executive Engineer (ElectII) [Procuring Entity] Room No. 26, Main Building, Jaipur Development Authority, Jaipur
In response to the NIB Ref. Nodated for {Project Title}, as an Owner/Partner/Director of, I/ We hereby declare that presently our
Company/ firm or any of our group or associate companies, at the time of bidding, is having unblemished record and is not declared ineligible or has been issued letter for blacklisting for corrupt & fraudulent practices either indefinitely or for a particular period of time by any State/ Central government/ PSU/ UT or the Procuring Entity.
If this declaration is found to be incorrect then without prejudice to any other action that may be taken, my/ our security may be forfeited in full and our bid, to the extent accepted, may be cancelled.
Thanking you,
Name :
Address:
In the capacity of :
Signed:
Date:
Place :
Seal of the

Organization:

Annexure: 8- Declaration by the Bidder regarding Qualification Under Section 7 of the ACT (On bidder's letter head)

Declaration

In relation to my/our Bid procurement ofBids NoRajasthan Transparency i	Dated	in response to th _ I/we hereby declare u	for heir Notice Inviting nder Section 7 of
and competence requiI/we have fulfilled my, the State GovernmentI/we are not insolvent affairs administered by	ired by the Bidding I /our obligation to pa or any local authori t, in receivership, ba y a court or a judicia	technical, financial and ma Document issued by the Pro ay such of the taxes payabl ity as specified in the Biddin ankrupt or being wound up al officer, not have my/our oceedings for any of the fo	ocuring Entity; le to the Union and ng Document; o, not have my/our business activities
4. I/we do not have, as criminal offence rela statements or misre procurement contract	nd our directors and ted to my/our prospersentations as within a period of tocess, or not have	nd officers not have, been ofessional conduct or the to my/our qualifications three years preceding the been otherwise disqua	n convicted of any e making of false to enter into a commencement of
5. I/we do not have a contract Document, which mate		s specified in the Act, Rule Impetition.	es and the Bidding
Name :			
Address:			
In the capacity of :			
Signed:			
Date :			
Place :	İ		

Seal of the Organization:

Annexure-9: Certificate of Conformity/No Deviation/ End of Service Support (On bidder's letter head)

To:

Executive Engineer (Elect.-II) [Procuring Entity] Room No. 26, Main Building, Jaipur Development Authority, Jaipur

This is to certify that, the specifications of Hardware/Software/FMS which I/ We have mentioned in the Technical bid, and which I/ We shall supply if I/ We am/ are awarded with the work, are in conformity with the minimum specifications of the Tender/ bidding document and that there are no deviations of any kind from the requirement specifications.

Also, I/ we have thoroughly read the tender/ bidding document and by signing this certificate, we hereby submit our token of acceptance to all the tender terms & conditions without any deviations.

I/ We also certify that the price I/ we have quoted is inclusive of all the cost factors involved in the end-to-end implementation and execution of the project, to meet the desired standards set out in the Tender/ bidding Document. The end of service support date will not precede the expiry of warranty for any the items supplied / commissioned by us.

Thanking you,

Name:	
Address:	
In the capacity of:	
Signed:	
Date :	
Place :	
Seal of the	
Organization:	

Bid Document for Provisioning of & Integration of Wi-Fi Hotspots, Interactive Information Kiosks, Surveillance Cameras, Environmental Sensors, Smart lighting solution and Remote Kiosks along with Facility Page **116** of **133** Management Services under Phase 2

Annexure-10: Undertaking On Authenticity of Items (On Non-Judicial Stamp Paper of Rs. 100/-)

	\ -		<u> </u>		
То:					
Executive Engineer (Elect Room No. 26, Main Buildi Jaipur Development Autho	ng,	ty]			
Reference: NIB No. :		Dated:	_		
	This has reference to the items being supplied/ quoted to you vide our bid ref. no dated				
equipment shall be genu from respective OEMs of components/ parts/ asser licensed software, we u	ine, original and ne the products and the mbly/ software are undertake that the	nts/ parts/ assembly/ software used in ew components /parts/ assembly/ soft hat no refurbished/ duplicate/ second being used or shall be used. In respe same shall be supplied along with hall be sourced from the authorized so	ware hand ect of the		
installation, for the equip supplied at our cost and r	ment already billed, eturn any amount p eit our BSD/ SD/ PS	ect, we at the time of delivery or delivery black list of the delivery or delivery black list of the delivery or deli	eady t you		
Name :					
Address:					
In the capacity of :					
Signed:					
Date :					
Place :					
Seal of the					
Organization:					

Annexure- 11 : Undertaking for functional requirement of Equipments (Letter Head)

			(Letter Head)
To:			
Executive Engineer (Elect. Room No. 26, Main Buildin Jaipur Development Autho	ng,	y]	
Reference: NIB No. :		Dated:	
This has reference to the dated_			le our bid ref. no.
We hereby undertake th Controller, Access Points Surveillance components possible, be from Single C	s, Radius Server, I (like CCTV Camer	Network Monitoring Too	ol and Switches) &
We hereby further undert & surveillance component furnish Undertaking from thus confirming 100% complete functional requiperformance guarantee for solution) comprising of a and responsibility of the multiple OEMs.	es (as specified above all OEM's whose e compliance to required irements as stated or the complete solutionally all proposed networ	re) from more than one (equipments are part of the line-by-line technical in the bid document, in the bid document, in the line to the line line to the line line line line line line line lin	OEM, then we shall the overall solution specifications and nteroperability and the overall network omplete ownership
If this undertaking is for installation, for the equipment of the equipmen	ment already billed, eturn any amount p eit our BSD/ SD/ PSI	agree to take back the aid to us by you in this r	equipment already egard and that you
Name :			
Address:			
In the capacity of:			
Signed:			
Date :			
Place :			
Seal of the			
Organization:			

Bid Document for Provisioning of & Integration of Wi-Fi Hotspots, Interactive Information Kiosks, Surveillance Cameras, Environmental Sensors, Smart lighting solution and Remote Kiosks along with Facility Page **118** of **133** Management Services under Phase 2

Annexure-12: Technical Bid Submission Sheet(On bidder's letter head)

To:

Executive Engineer (Elect.-II) [Procuring Entity] Room No. 26, Main Building, Jaipur Development Authority, Jaipur

WE	e, the	e unae	ersignea, ae	eclare	e tnat:							
1.	We	have	examined	and	have	no	reservations	to	the	Bidding	Document,	including

- Addenda No. ______.

 2. We offer Hardware/ Software/FMS for in conformity and in accordance to the Bid Document.
- 3. Our Bid shall be valid for a period of 90 days from the date fixed for the bid submission deadline in accordance with the Bidding Document, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- 4. If our Bid is accepted, we commit to obtain a Performance Security in the amount of **5%** of the Contract Price for the due performance of the Contract;
- 5. Our firm, including any subcontractors or suppliers for any part of the Contract, have nationalities from the eligible countries;
- 6. We are not participating, as Bidders, in more than one Bid in this bidding process, other than alternative offers, if permitted, in the Bidding Document;
- 7. Our firm, its affiliates or subsidiaries, including any subcontractors or suppliers has not been debarred by any State/ Central government/ PSU/ UT or the Procuring Entity;
- 8. We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared and executed;
- 9. We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive;
- 10. We agree to permit the Procuring Entity or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors appointed by the Procuring Entity;
- 11. We declare that we have complied with and shall continue to comply with the provisions of the Code of Integrity for Bidders as specified in the Rajasthan Transparency in Public Procurement Act, 2012, the Rajasthan Transparency in Public Procurement Rules, 2012 and this Bidding Document in this procurement process and in execution of the Contract.

Name:	
Address:	
In the capacity of:	
Signed:	
Date :	
Place:	
Seal of the	
Organization:	

Annexure-13: Financial Bid Submission Sheet (On bidder's letter head)

To:

Executive Engineer (Elect.-II) [Procuring Entity] Room No. 26, Main Building, Jaipur Development Authority, Jaipur We, the undersigned, declare that:

- 1. We, the undersigned bidder, Having read & examined in detail, the Bidding Document, the receipt of which is hereby duly acknowledged, I/ we, the undersigned, offer to supply/ work as mentioned in the Scope of the work, Bill of Material, Technical specifications, Service Level Standards & in conformity with the said bidding document for the same.
- 2. I / We hereby confirm that I / We have bid for **all items** mentioned in the Bill of Material (BOM) / Bill of Quantity (BOQ).
- 3. I / We undertake that the prices are in conformity with the specifications prescribed. The quote/ price are inclusive of all cost likely to be incurred for executing this work. The prices are inclusive of all type of govt. taxes/duties.
- 4. I / We undertake, if our bid is accepted, to deliver the Services in accordance with the delivery schedule specified in the schedule of Requirements.
- 5. I/ We hereby declare that in case the contract is awarded to us, we shall submit the contract performance guarantee as prescribed in the bidding document.
- 6. I / We agree to abide by this bid for a period of days after the last date fixed for bid submission and it shall remain binding upon us and may be accepted at any time before the expiry of that period.
- 7. Until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and your notification of award shall constitute a binding Contract between us.
- 8. I/ We hereby declare that our bid is made in good faith, without collusion or fraud and the information contained in the bid is true and correct to the best of our knowledge and belief.
- 9. I/ We agree to permit the Procuring Entity or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors appointed by the Procuring Entity.
- 10. We understand that you are not bound to accept the lowest or any bid you may receive.
- 11. We agree to all the terms & conditions as mentioned in the bidding document and submit that we have not submitted any deviations in this regard.

Name :	
Name : Address:	
In the capacity of :	
Signed:	
Signed : Date : Place :	
Place :	
Seal of the Organization:	

Annexure-14: Price Schedule (Online submission on e-Procurement Portal)

(The rates shall be filled up separately in given format on e-procurement portal with financial bid).

<u> </u>	Name of the Procuring Entity:					
Nan	Name of Work:					
Bido	der Name:					
			PRICE SC	HEDULE		
SI. N o	Item Description	Units	Rate (In Rs.) FOR destination including of all cost and all taxes except Rajasthan VAT but including CST (if Applicable)	VAT Amount on Units Price (If Applicable) (In Rs.)	Service Tax Amount on Units Price (If Applicable) (In Rs.)	Amount inclusive of all (In Rs.)
(1	(2)	(3)	(4)	(5)	(6)	(7) = (4+5+6)
1. Delivery, Installation, Commissioning, Integration, Development and handover in all respect, including Operation and Maintenance for 3 Years Lum Sump e-procurement portal with financial bid (Item wise). e-procurement portal with financial bid (Item wise).						
		*	Total in Figures			Auto Fill (Do Not Fill)
	*Total in Words Auto Fill (Do Not Fill)					

^{*}Instructions for filling Financial Bid in e-tendering portal are given in tender document.

Annexure-14 A : Price Schedule (Online submission on e-Procurement Portal)

Cost of Point to Point Ethernet Lease Line from said Location to JDA Head office with 100 Mbps Bandwidth

JDA H	lead office with 100 Mbps Bandwidth	
S.N	Location /Solution Type	Cost Inclusive of all and Taxes for 3 Years
	Park with Wi-Fi Hotspots	
1	Sylvan park - Agra Road	
2	Statue Circle - C Scheme	
	BRTS corridor with Wi-Fi Hotspots	
1	BRTS Corridor 2 - length 6.8 Km - 21 shelters (Chomu Pulia to VKIA 14 no. pulia)	
	Roadways Bus Stands with WiFi Hotspots	
1	Narayan Singh Circle - C Scheme	
2	Durgapura Bus stand - Tonk Road	
3	Transport Nagar Chouraha - Delhi - Agra Road	
4	Chomu Pulia - Sikar Road	
5	DCM Chauraha - Ajmer Road	
	Education Institutes with WiFi Hotspots and Interactive Information Kiosk with Environmental Sensors	
1	Rajasthan University - JLN Marg	
2	Maharaja College - Tonk Road	
3	Maharani College - Tonk Road	
	Tourist locations with Interactive Information Kiosk with Environmental Sensors	
1	Amer Fort	
2	Hawa mahal	
3	Albert Hall	
	Smart LED Lights (2 Km)	
1	60 feet Road for Smart LED Lighting	
	REGS for Multiple Locations	
2	Mansarovar	
3	Chitrakoot, Vaishali Nagar	
	Surveillance	
Α	Entry Exit Points for Surveillance	
1.1	Sitapura Flyover - Tonk Road	
1.2	Bhankrota - Jaisinghpura Junction - Ajmer Road	
1.3	Kho Nagorian Tiraha - Agra Road	
1.4	Near Harmada Chouki - Sikar Road	
1.5	Kalwar Road (for entry / exit to Nagaur) - C Zone byepass	
1.6	VKIA 14 no. pulia - Sikar Road	
1.7	Hirapura tiraha - C zone byepass - Ajmer Road	
1.8	Transport Nagar Chouraha - Delhi - Agra Road	

Bid Document for Provisioning of & Integration of Wi-Fi Hotspots, Interactive Information Kiosks, Surveillance Cameras, Environmental Sensors, Smart lighting solution and Remote Kiosks along with Facility Page **122** of **133** Management Services under Phase 2

1.9	Malpura gate (for entry / exit from Phagi road) - Phagi road
1.1	Sivad Mode, Sirsi road - Sirsi road
1.11	Kunda Tiraha, Delhi Road
В	Public Places with Surveillance
2.1	Narayan Singh Circle - C Scheme
2.2	GT area - Malviya Nagar
2.3	Gandhi Nagar Rly Station - Front - Gandhi Nagar
2.4	Gandhi Nagar Rly Station - Tonk Road side - Tonk Road

Annexure-15 A: Bank Guarantee Format — Performance Security (equivalent to 70% of contract price for implementation phase) (On non-Judicial Stamp Paper)

(To be stamped in accordance with Stamp Act and on a Stamp Paper purchased from Rajasthan State only and to be issued by a Nationalised/ Scheduled bank having its branch at Jaipur and payable at par at Jaipur, Rajasthan)

To:

Executive Engineer (Elect.-II) [Procuring Entity]

unequivocal and unconditional.

Room No. 26, Main Building, Jaipur Development Authority, Jaipur Subject: Reference: Work Order No......dated 1. In consideration of the Executive Engineer (Elect.-II) [Procuring Entity] , JDA (hereinafter called "JDA") having agreed to exempt M/s (hereinafter called "the said Contractor(s)" from the demand, under the terms and conditions of an Work Order No. dated for the work "....." (hereinafter called "the Agreement") of Performance Security Deposit (PSD) for the due fulfilment by the said Contractor (s) of the terms and conditions contained in the said Agreement, on production of a Bank Guarantee for Rs. (Rupees only), as "the Bank") at the request of M/s, do hereby undertake to pay to the JDA an amount not exceeding Rs. (Rupees only) on demand. pay Rs. (Rupees only), the amounts due and payable under this guarantee without any demur or delay, merely on a demand from the JDA. Any such demand made on the bank by the JDA shall be conclusive as regards the amount due and payable by the Bank under this guarantee. The Bank Guarantee shall Bank with Addresss], bound ourselves with all directions given by JDA regarding this Bank Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. (Rupees only).

JDA any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any Court or Tribunal or Arbitrator etc. relating thereto, our liability under these presents being absolute,

and accordingly discharges this guarantee.

the said Agreement have been fully and properly carried out by the said Contractor(s)

JDA that the JDA shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the JDA against the said Contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act or omission on the part of the JDA or any indulgence by the JDA to the said Contractor(s) or by any such matter or thing whatsoever which would but for this provision, have effect of so relieving us. 6. The liability of us[Name of Bank with Addresss], under this guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s). revoke this guarantee except with the previous consent of the JDA in writing. 8. This performance Guarantee shall remain valid and in full effect, until it is decided to be discharged by the JDA. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. (Rupees only). 9. It shall not be necessary for the JDA to proceed against the contractor before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank notwithstanding any security which the JDA may have obtained or obtain from the contractor. branch at Jaipur. 11. We undertake that this Bank Guarantee shall be payable at any of its branch at Jaipur. If the last day of expiry of Bank Guarantee happens to be a holiday of the Bank, the Bank Guarantee shall expire on the close of the next working day. 12. We hereby confirm that we have the power(s) to issue this guarantee in your favour under the memorandum and articles of Association/constitution of our bank and the undersigned is/are the recipient of authority by express delegation of power(s) and has/have full power(s) to execute this guarantee for the power of attorney issued by the bank. "Notwithstanding anything contained herein: Our Liability under this Bank Guarantee shall not exceed Rs./-(Rupees (i) Only). (ii) This Bank Guarantee shall be valid upto We are liable to pay the guaranteed amount or any part thereof under this Bank (iii) Guarantee only and only if you serve upon us a written claim or demand on or before The Bank Guarantee shall be kept valid for 90 days beyond (grace period) the (iv) completion/commissioning schedule as per NIB. However, the validity of the BG may be extended on the written request from the client for the specified period.

Bid Document for Provisioning of & Integration of Wi-Fi Hotspots, Interactive Information Kiosks, Surveillance Cameras, Environmental Sensors, Smart lighting solution and Remote Kiosks along with Facility Page **125** of **133** Management Services under Phase 2

(Printed Name) (Bank's common seal)	. (Designation)
In presence of: WTTNESS (with full name, designation, (1)	address & official seal, if any)
Bank Details : Name & address of Bank : Name of contact person of Bank: Contact	et telephone number:

GUIDELINES FOR SUBMISSION OF BANK GUARANTEE "The Bank Guarantee shall fulfil the following conditions in the absence of which they cannot be considered valid: -

- 1. Bank Guarantee shall be executed on non- judicial stamp paper of applicable value purchased in the name of the bank.
- 2. Two persons should sign as witnesses mentioning their full name, designation, address and office seal (if any).
- 3. The Executor (Bank Authorities) may mention the power of attorney No. and date of execution in his/her favour authorizing him/ her to sign the document. The Power of Attorney to be witnessed by two persons mentioning their full name and address.
- 4. The Bank Guarantee should be executed by a Nationalised Bank/ Scheduled Commercial Bank only.
- 5. Non Judicial stamp paper shall be used within 6 months from the date of Purchase of the same.
- 6. Bank Guarantee executed on the non-judicial stamp paper after 6 (six) months of the purchase of such stamp paper shall be treated as non-valid.
- 7. The contents of Bank Guarantee shall be strictly as per format prescribed by JDA.
- 8. Each page of Bank Guarantee shall bear signature and seal of the Bank and B.G. number.
- 9. All corrections, deletions etc. in the Bank Guarantee should be authenticated by signature of Bank Officials signing the Bank Guarantee.
- 10. Bank should separately send through registered post/courier a certified copy of Bank Guarantee, mentioning Bid reference, Bid title and bidder name, directly to the Purchaser at the following address:

To:

Executive Engineer (Elect.-II) [Procuring Entity] Room No. 26, Main Building, Jaipur Development Authority, Jaipur

Annexure-15 B: Bank Guarantee Format — Performance Security (equivalent to 30% of contract price for O&M phase) (On non-Judicial Stamp Paper)

(To be stamped in accordance with Stamp Act and on a Stamp Paper purchased from Rajasthan State only and to be issued by a Nationalised/ Scheduled bank having its branch at Jaipur and payable at par at Jaipur, Rajasthan)

Executive Engineer (Elect.-II) [Procuring Entity]

To:

and accordingly discharges this guarantee.

the said Agreement have been fully and properly carried out by the said Contractor(s)

in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the JDA against the said Contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act or omission on the part of the JDA or any indulgence by the JDA to the said Contractor(s) or by any such matter or thing whatsoever which would but for this provision, have effect of so relieving us. 6. The liability of us[Name of Bank with Addresss], under this guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s). revoke this guarantee except with the previous consent of the JDA in writing. 8. This performance Guarantee shall remain valid and in full effect, until it is decided to be discharged by the JDA. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. (Rupees only). 9. It shall not be necessary for the JDA to proceed against the contractor before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank notwithstanding any security which the JDA may have obtained or obtain from the contractor. branch at Jaipur. 11. We undertake that this Bank Guarantee shall be payable at any of its branch at Jaipur. If the last day of expiry of Bank Guarantee happens to be a holiday of the Bank, the Bank Guarantee shall expire on the close of the next working day. 12. We hereby confirm that we have the power(s) to issue this guarantee in your favour under the memorandum and articles of Association/constitution of our bank and the undersigned is/are the recipient of authority by express delegation of power(s) and has/have full power(s) to execute this guarantee for the power of attorney issued by the bank. "Notwithstanding anything contained herein: Our Liability under this Bank Guarantee shall not exceed Rs./-(Rupees (i) Only). (ii) This Bank Guarantee shall be valid upto We are liable to pay the guaranteed amount or any part thereof under this Bank (iii) Guarantee only and only if you serve upon us a written claim or demand on or before The Bank Guarantee shall be kept valid for 90 days beyond (grace period) the O&M (iv) phase as per NIB. However, the validity of the BG may be extended on the written request from the client for the specified period.

Bid Document for Provisioning of & Integration of Wi-Fi Hotspots, Interactive Information Kiosks, Surveillance Cameras, Environmental Sensors, Smart lighting solution and Remote Kiosks along with Facility Page **128** of **133** Management Services under Phase 2

(Printed Name) (Desi (Bank's common seal)	gnation)
In presence of: WTTNESS (with full name, designation, addres (1)	s & official seal, if any)
Bank Details : Name & address of Bank : Name of contact person of Bank: Contact telep	phone number:

GUIDELINES FOR SUBMISSION OF BANK GUARANTEE "The Bank Guarantee shall fulfil the following conditions in the absence of which they cannot be considered valid: -

- 1. Bank Guarantee shall be executed on non- judicial stamp paper of applicable value purchased in the name of the bank.
- 2. Two persons should sign as witnesses mentioning their full name, designation, address and office seal (if any).
- 3. The Executor (Bank Authorities) may mention the power of attorney No. and date of execution in his/her favour authorizing him/ her to sign the document. The Power of Attorney to be witnessed by two persons mentioning their full name and address.
- 4. The Bank Guarantee should be executed by a Nationalised Bank/ Scheduled Commercial Bank only.
- 5. Non Judicial stamp paper shall be used within 6 months from the date of Purchase of the same.
- 6. Bank Guarantee executed on the non-judicial stamp paper after 6 (six) months of the purchase of such stamp paper shall be treated as non-valid.
- 7. The contents of Bank Guarantee shall be strictly as per format prescribed by JDA.
- 8. Each page of Bank Guarantee shall bear signature and seal of the Bank and B.G. number.
- 9. All corrections, deletions etc. in the Bank Guarantee should be authenticated by signature of Bank Officials signing the Bank Guarantee.
- 10. Bank should separately send through registered post/courier a certified copy of Bank Guarantee, mentioning Bid reference, Bid title and bidder name, directly to the Purchaser at the following address:

To:

Executive Engineer (Elect.-II) [Procuring Entity] Room No. 26, Main Building, Jaipur Development Authority, Jaipur

Annexure-16: Bank Guarantee Format — BID Security Format (On non-Judicial Stamp Paper)

IRREVOCABLE & UNCONDITIONAL BANK GUARANTEE

(To be stamped in accordance with Stamp Act and on a Stamp Paper purchased from Rajasthan State only and to be issued by a Nationalised/ Scheduled bank having its branch at Jaipur and payable at par at Jaipur, Rajasthan)

To:

Executive Engineer (Elect.-II) [Procuring Entity] Room No. 26, Main Building, Jaipur Development Authority, Jaipur

Sir,

- 2. It is a condition in the bidding documents that the Bidder has to deposit Bid Security (EMD) amounting to <Rs. (Rupees <in words>)> in respect to the NIB Reference No........Datedissued by Executive Engineer (Elect.-PRN), [Procuring Entity], Jaipur Development Authority, Jaipur (hereinafter referred to as "JDA") by a Bank Guarantee from a Nationalized Bank/ Scheduled Commercial Bank having its branch at Jaipur irrevocable and operative till the bid validity date (i.e. 120 days from the date of opening of bid). It may be extended if required in concurrence with the bid validity.
- 3. And whereas the Bidder desires to furnish a Bank Guarantee for a sum of <Rs. (Rupees <in words>)> to JDA as Bid Security.
- 5. We, the aforesaid bank, further agree that the JDA shall be the sole judge of and as to whether the Bidder has committed any breach or breaches of any of the terms costs, charges and expenses caused to or suffered by or that may be caused to or suffered by the JDA on account thereof to the extent of the Bid Security required to be deposited by the Bidder in respect of the said bidding document and the decision of the JDA that the Bidder has committed such breach or breaches and as to the amount or amounts of loss, damage, costs, charges and expenses caused to or suffered by or that may be caused to or suffered by the JDA shall be final and binding on us.

- 6. We, the said Bank further agree that the Guarantee herein contained shall remain in full force and effect until it is released by the JDA and it is further declared that it shall not be necessary for the JDA to proceed against the Bidder before proceeding against the Bank and the Guarantee herein contained shall be invoked against the Bank, notwithstanding any security which the JDA may have obtained or shall be obtained from the Bidder at any time when proceedings are taken against the Bank for whatever amount that may be outstanding or unrealized under the Guarantee.
- 7. Any notice by way of demand or otherwise hereunder may be sent by special courier, telex, fax, registered post or other electronic media to our address, as aforesaid and if sent by post, it shall be deemed to have been given to us after the expiry of 48 hours when the same has been posted. The BG shall be payable at Jaipur Branch.
- 8. If it is necessary to extend this guarantee on account of any reason whatsoever, we undertake to extend the period of this guarantee on the request of our constituent under intimation to you.
- 9. The right of the JDA to recover the said amount of <Rs. (Rupees <in words>) from us in manner aforesaid will not be precluded/ affected, even if, disputes have been raised by the said M/s.(Bidder) and/ or dispute or disputes are pending before any court, authority, officer, tribunal, arbitrator(s) etc..
- 10. Notwithstanding anything stated above, our liability under this guarantee shall be restricted to <Rs. (Rupees <in words>)> and our guarantee shall remain in force till bid validity period i.e. 120 days from the last date of bid submission and unless a demand or claim under the guarantee is made on us in writing within three months after the Bid validity date, all your rights under the guarantee shall be forfeited and we shall be relieved and discharged from all liability there under.
- 11. This guarantee shall be governed by and construed in accordance with the Indian Laws and we hereby submit to the exclusive jurisdiction of courts of Justice in India for the purpose of any suit or action or other proceedings arising out of this guarantee or the subject matter hereof brought by you may not be enforced in or by such count.
- 12. We hereby confirm that we have the power/s to issue this Guarantee in your favour under the Memorandum and Articles of Association/ Constitution of our bank and the undersigned is/are the recipient of authority by express delegation of power/s and has/have full power/s to execute this guarantee under the Power of Attorney issued by the bank in your favour.

Date	(Signature)	Place
		(Designation)
(Bank's common se	eal)	
In presence of:	•	
WTTNESS (with fu	Il name, designation	n, address & official seal, if any)
(1)		
(2)		
Bank Details:		

Name & address of Bank:

Name of contact person of Bank: Contact telephone number:

GUIDELINES FOR SUBMISSION OF BANK GUARANTEE "The Bank Guarantee shall fulfill the following conditions in the absence of which they cannot be considered valid: -

- 1. Bank Guarantee shall be executed on non- judicial stamp paper of applicable value purchased in the name of the bank.
- 2. Two persons should sign as witnesses mentioning their full name, designation, address and office seal (if any).
- 3. The Executor (Bank Authorities) may mention the power of attorney No. and date of execution in his/her favour authorizing him/ her to sign the document. The Power of Attorney to be witnessed by two persons mentioning their full name and address.
- 4. The Bank Guarantee should be executed by a Nationalized Bank/ Scheduled Commercial Bank only.
- 5. Non Judicial stamp paper shall be used within 6 months from the date of Purchase of the same.
- 6. Bank Guarantee executed on the non-judicial stamp paper after 6 (six) months of the purchase of such stamp paper shall be treated as non-valid.
- 7. The contents of Bank Guarantee shall be strictly as per format prescribed by JDA.
- 8. Each page of Bank Guarantee shall bear signature and seal of the Bank and B.G. number.
- 9. All corrections, deletions etc. in the Bank Guarantee should be authenticated by signature of Bank Officials signing the Bank Guarantee.
- 10. The validity of the Bank Guarantee shall be kept at least for 120 days from the date of opening of Part I Bid.
- 11. Bank should separately send through registered post/courier a certified copy of Bank Guarantee, mentioning Bid reference, Bid title and bidder name, directly to the Purchaser at the following address:

To:

Executive Engineer (Elect.-II) [Procuring Entity] Room No. 26, Main Building, Jaipur Development Authority, Jaipur **Bid Document for** Provisioning of & Integration of Wi-Fi Hotspots, Interactive Information Kiosks, Surveillance Cameras, Environmental Sensors, Smart lighting solution and Remote Kiosks along with Facility Page **132** of **133** Management Services under Phase 2

Annexure—17: Agreement (On Non-Judicial Stamp Paper of Rs. 1,000/-) Agreement

THIS AGREEMENT made on this day of l	between of
Of (here in after "the Supplier"), of the other part:	
Whereas the procuring Entity invited Bids for Supply of Network Switches and h	as accepted
a Bid by the Supplier for the sum of (herein after "the Contract Price	e").
NOW THIS AGREEMENT WITNESS AS FOLLOWS:	•

- 1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract referred to.
- 2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - a) The Procuring Entity's Notification to the Supplier of Award of Contract And Award of Services;
 - b) Pre-Oualification / Eligibility Criteria;
 - c) Scope of Work;
 - d) Instruction to Bidder (ITB);
 - e) General Terms & Condition of Bid & Contract;
 - f) Special Terms & Conditions of Bid & Contract;
 - g) The Notice Inviting Bids; and
 - h) All Annexure's.

This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, the documents shall prevail in the order listed above.

- 3. In consideration of the payments to be made by the Procuring Entity to the Supplier as indicated in this Agreement, the Supplier hereby covenants with the Procuring Entity for Supply of Network Switches and to remedy defects therein in conformity in all respects with the provisions of the Contract.
- 4. The Procuring Entity hereby covenants to pay the Supplier in consideration of the Supply of Network Switches and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of India and Rajasthan on the day, month and year indicated above.

For the Supplier

Name: Designation: Address: Signed by: Witness 1:

Witness 2:

For the Procuring Entity (On behalf of JDA/ the Procuring Entity)

Name Designation Address:

Annexure-18: Memorandum of Appeal under the Rajasthan Transparency in Public Procurement Act, 2012

FORM No. 1 [See rule 83] Memorandum of Appeal under the Rajasthan Transparency in Public Procurement Act, 2012

Ap	peal No of of
Be	fore the (First / Second Appellate
Au	thority)
1.	Particulars of appellant: (i) Name of the appellant: (ii) Official address, if any: (iii) Residential address:
2.	Name and address of the respondent(s): (i) (ii) (iii)
3.	Number and date of the order appealed against and name and designation of the officer / authority who passed the order (enclose copy), or a statement of a decision, action or omission of the Procuring Entity in contravention to the provisions of the Act by which the appellant is aggrieved:
4.	If the Appellant proposes to be represented by a representative, the name and postal address of the representative:
5.	Number of affidavits and documents enclosed with the appeal:
6.	Grounds of appeal:
	(Supported
	by an affidavit)
7.	Prayer:
	Place : Date : Appellant's Signature