

# Short Term Notice Inviting Bid

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## **Name of Work:**

*Implementation and O&M for various smart solutions for developing JDA's 30 Kms Dravyavati Riverfront stretch as Smart Corridor with 5 years FMS 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,  
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## JAIPUR DEVELOPMENT AUTHORITY

MB-GF-26, Room No. 26, Ground Floor, Main Building, Ram Kishore Vyas Bhawan, Indira Circle, Jawahar Lal Nehru Marg, Jaipur – 302 004 (Rajasthan)

No. JDA/EE (Elect.-II) / Smart City / 2017-18/D- 241 dated : 28.03.2018

### NOTICE INVITING BID

NIB No.: JDA/Ex. Eng. Elect.-II/14/2017-18

Online Bids are invited up-to 5:00 PM of 16/04/2018 for “RFP for Implementation and O&M for various smart solutions for developing JDA's 30 Kms Dravyavati Riverfront stretch as Smart Corridor with 5 years FMS Services” with estimated cost of Rs. 45.0 Crs. The last date for Applying Bid and making online payment on JDA portal is up-to 5:00 PM of 16/04/2018. Details may be seen in the Bidding Document at our office or the State Public Procurement Portal website [www.sppp.rajasthan.gov.in](http://www.sppp.rajasthan.gov.in), [www.eproc.rajasthan.gov.in](http://www.eproc.rajasthan.gov.in) and [www.jda.urban.rajasthan.gov.in](http://www.jda.urban.rajasthan.gov.in).

To participate in the bid, bidder has to be:

1. Registered on JDA website [www.jda.urban.rajasthan.gov.in](http://www.jda.urban.rajasthan.gov.in)  
For participating in the Bid, the Bidder has to apply for the Bid and pay the Bidding Document Fee, RISL Processing Fee and Bid Security Deposit, online only.
2. Registered on e-Procurement Portal of Government of Rajasthan [www.eproc.rajasthan.gov.in](http://www.eproc.rajasthan.gov.in) for online e-Bid submission.

**-Sd-**

**Executive Engineer (Elect.-II)**  
Procuring Entity

<b>Detailed NIB (Short Term)</b>	
<b>Name &amp; Address of the Procuring Entity</b>	<ul style="list-style-type: none"> <li>➤ Name: Executive Engineer (Elect.-II), Jaipur Development Authority</li> <li>➤ Address: Room No. 26, Main Building, Second Floor, Ram Kishore Vyas Bhavan, Indira Circle, Jawahar Lal Nehru Marg, Jaipur – 302 004 (Rajasthan)</li> </ul>
<b>Subject Matter of Procurement</b>	➤ “Implementation and O&M for various smart solutions for developing JDA's 30 Kms Dravyavati Riverfront stretch as Smart Corridor with 5 years FMS Services”
<b>Bid Procedure</b>	➤ Single-stage Two part open competitive eBid procedure at <a href="http://eproc.rajasthan.gov.in">http://eproc.rajasthan.gov.in</a>
<b>Bid Evaluation Criteria (Selection Method)</b>	➤ Least Cost Based Selection (LCBS)-L1
<b>Websites for downloading Bidding Document, Corrigendum's, Addendums, etc.</b>	➤ Websites: <a href="http://www.sppp.rajasthan.gov.in">www.sppp.rajasthan.gov.in</a> , <a href="http://www.eproc.rajasthan.gov.in">www.eproc.rajasthan.gov.in</a> , <a href="http://www.jda.urban.rajasthan.gov.in">www.jda.urban.rajasthan.gov.in</a>
<b>Website for online Bid application and payment *</b>	<ul style="list-style-type: none"> <li>➤ Website: <a href="http://www.jda.urban.rajasthan.gov.in">www.jda.urban.rajasthan.gov.in</a></li> <li>➤ For participating in the Bid, the Bidder has to apply for this Bid and pay the Bidding Document Fee, RISL Processing Fee and Bid Security Deposit, online only. <ul style="list-style-type: none"> <li>○ Bidding document fee: Rs. 5000.00 Rupees (Rupees Five Thousand only)</li> <li>○ RISL Processing Fee: Rs. 1000.00 (Rupees One Thousand only)</li> <li>○ Requisite Bid Security Deposit</li> </ul> </li> </ul>
<b>Estimated Procurement Cost</b>	➤ INR 45,00,00,000.00 (Rupees Forty Five Crore Only)
<b>Bid Security Deposit</b>	<ul style="list-style-type: none"> <li>➤ Amount (INR) : 2% of Estimated Procurement Cost, 0.5% of S.S.I. of Rajasthan, 0.5% for Bidder registered as contractor in JDA, 1% for Sick Industries, other than S.S.I., whose cases are pending with Board of Industrial &amp; Financial Reconstruction</li> <li>➤ In case of Departments' of the State Government and Undertakings, Corporations, Autonomous bodies, Registered Societies, Cooperative Societies which are owned or controlled or managed by the State Government and Government Undertakings of the Central Government shall submit a bid securing declaration in lieu of bid security.</li> </ul>
<b>Applying Bid and making Online Payment on JDA portal</b>	<ul style="list-style-type: none"> <li>➤ Start Date: 28/03/2018 at 06:00 PM onwards</li> <li>➤ End Date: 16/04/2018 at 05:00 PM</li> <li>➤ In case EMD in form BG Original Bank Guarantee is to be submitted in Room No. MB-SF-226 of Main Building, Jaipur Development Authority by 19/04/2018 by 3:00 PM.</li> </ul>
<b>Bid Submission on e-Procurement Portal of GOR</b>	<ul style="list-style-type: none"> <li>➤ Start Date: 28/03/2018 at 06:00 PM onwards</li> <li>➤ End Date: 16/04/2018 at 05:00 PM</li> </ul>
<b>Date/ Time/ Place of Technical Bid Opening</b>	<ul style="list-style-type: none"> <li>➤ 19/04/2018 at 04:00 PM</li> <li>➤ PB-SF-201, Room No. 201, Second Floor, Parking Building, Ram Kishore Vyas Bhawan, Indira Circle, Jawahar Lal Nehru Marg, Jaipur – 302 004 (Rajasthan)</li> </ul>
<b>Date/ Time/ Place of Financial Bid Opening</b>	➤ Will be intimated later to the Technically qualified bidders
<b>Bid Validity</b>	➤ 90 days from the bid submission deadline
<p>* Jaipur Development Authority has decided to receive Earnest Money Deposit (EMD) (Bid Security), Tender Fee and RISL processing fee online through JDA Portal. The bid security options available in tender for participants are as mentioned below:</p> <p><b>A. Payment Options:</b></p> <p><b>Option-1: Bank Guarantee (BG) against EMD / Bid Security</b></p> <p>Bidder may opt Bank Guarantee (BG) against EMD (Bid Security), for which bidder requires to prepare BG before applying in the tender. The details of BG requires to be fed on JDA portal before paying balance amount (Tender Fee + RISL Processing Fee). This amount will be paid through <b>Payment Gateway only</b>, option to make balance payment through EFT (RTGS/NEFT) will not be available.</p> <p>If bidder does not opt for BG against EMD, options of making complete payment through Payment Gateway</p>	

or through EFT (NEFT / RTGS) will be available.

**Option-2: Electronic Fund Transfer (EFT: NEFT/RTGS)**

If the bidder selects payment mode as EFT (NEFT/RTGS), "Paying Slip for EFT (NEFT/RTGS)" will be generated by the system for the complete amount. The payment can be made from **any Bank any Branch** using this Paying Slip through NEFT/RTGS (Claim against payment made through EFT in any other JDA bank account will not be acceptable and bidder stands disqualified from participation in the bid applied for). After successful transaction through NEFT/RTGS, as per the standard procedures it may take 4 to 24 hours in process of confirmation of EFT through Auto-Process depending on the time of EFT done. Therefore, option to make payment through EFT (NEFT/RTGS) will be available till 48 hours prior to closing date of bid participation.

**Option-3: Payment Gateway (Aggregator)**

The facility to make payment through Debit Card, Credit Card, Net banking etc., will be available. User can use this facility from **anywhere any time** till the closing date & time of bid participation.

**B. Bid Participation Receipt**

After confirming payment, the bidder will get Bid Participation Receipt on the basis of which user will get the payment details along with other details for bidding on e-Procurement portal of GOR.

- In case of BG as the remaining payment will be done through Payment Gateway, on successful transaction the "Bid Participation Receipt" will be generated on real time basis.
- In case complete payment is done through Payment Gateway, on successful transaction the "Bid Participation Receipt" will be generated on real time basis.
- In case complete payment is done through EFT (NEFT/RTGS), on confirmation of payment from ICICI Bank (Auto Process) "Bid Participation Receipt" will be available on Login of Bidder on JDA portal.

**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](mailto: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 RTPPA 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 RTPPA Act 2012 and Rules thereto, the later shall prevail.

-Sd-

**Executive Engineer (Elect.-II)**  
Procuring Entity

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### **Process for Participation & Depositing Payment Online**

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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.jda.urban.rajasthan.gov.in](http://www.jda.urban.rajasthan.gov.in).

**To participate in the bid, bidder has to be:**

1. Registered on JDA website [www.jda.urban.rajasthan.gov.in](http://www.jda.urban.rajasthan.gov.in) (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.
2. Registered on e-Procurement Portal of Government of Rajasthan [www.eproc.rajasthan.gov.in](http://www.eproc.rajasthan.gov.in) for online e-Bid submission.

**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 while 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](http://www.eproc.rajasthan.gov.in) as mentioned in the receipt.

**Jaipur Development Authority**  
**Bid Participation Receipt**      Date & Time : 09/06/2015 05:13 PM

**Bid Detail**

<b>Bid Id :</b> 6215152001	<b>Procurement Entity :</b> XXXXXXXXXXXXX
<b>Bid Title :</b> Testing	
<b>Bid Value :</b> 300000	<b>Bid Opening Place :</b> Manthan Hall, Jaipur Development Authority

**Bidder Detail**

Name of Entity :	XXXXXXXXXXXX	Mobile:	9829012345
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**

<b>Instrument Type:</b> 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
<b>Issuer Detail :</b> Jaipur Development Authority		<b>ChallanNumber:</b> 641515600014	

More details about Registration Process, Terms and Conditions and FAQ along with contact detail is available on JDA website [www.jda.urban.rajasthan.gov.in](http://www.jda.urban.rajasthan.gov.in) under [e-Services](#)>>JDA Tender.

## Abbreviations & Definitions

JDA	Jaipur Development Authority
GOR	Government of Rajasthan
Act	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	Award of Service
BoS/ BoQ	Bill of Service/Bill of Quantity
BG	Bank Guarantee
Day	A calendar day as per GoR/ Gol.
INR	Indian Rupee
ITB	Instruction to Bidders
JDA	Jaipur Development Authority
LD	Liquidated Damages
MAF	Manufacturer’s Authorization Certificate
NIB	Notice Inviting Bid
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.
GST	Goods and Service Tax
WO/ PO / LOI	Work Order/ Purchase Order / Letter of Intent

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## Section 1: Project Profile & Background Information

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- 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. 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.
- 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.
- 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.
- 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.
- 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.
- Jaipur Development Authority is developing a riverfront along Dravyavati River. The riverfront will extend from Vidyadharnagar to Ramchandrapura (47.5 Kms). Dravyavati Riverfront will have 5 entrances at each bank, with 10 Citizen Social Space. The 5 STP locations will be as follows:
  - a. Bassi
  - b. Devari
  - c. RIICO
  - d. Bambala
  - e. Goner
- As the vision around the Dravyavati River project is around urban sustainability and leveraging this development for citizen services and recreation, following civic services are being planned to be developed.
- Many entrances to the water body and associated facilities will act not only as gates, but also social spaces for citizens to congregate, enjoy free time and engage in recreational activities.
- The pathways along the river will provide facilities for citizens for walking, jogging and separate bicycle track will be available for bicyclists.

## Section 2: Pre-Qualification / 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 will be rejected out rightly. 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. No.	Basic Requirement	Specific Requirements	Documents Required
1.	General Requirement	The Bidder or any of the parties of the consortium/ JV partner should be an established IT System Integrator and should have been engaged in Supply, Installation, Commissioning and Operations & Maintenance Services of ICT/large infrastructure projects for a period of at least 3 financial years as on date of submission	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". The maximum nos. of consortium/JV partner should be 3.  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.	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/ or b) Registration Certificates
4.	Turnover	The Prime Bidder/Lead Bidder must have annual turnover of at least Rs. 50.00 Crores solely from Infrastructure / ICT Business and IT Services during each of the last 3 financial years.	Audited and Certified Balance Sheet and Profit/Loss Account for the last 3 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 3 financial years, at least the following numbers of Wi-Fi systems & Smart Elements of value specified herein: One project of similar nature for not less than 100 Access Points (AP)/ Switches in a single work order	Copies of work order or contract agreement and the client certificates/Project Sign-off Certificate from client for satisfactory completion of project and showing order value and cost.

		OR Two projects of similar nature for not less than 50 Access Points (AP)/ Switches in a single work order AND One Project which includes Smart elements (any 6 Mentioned Below) in a single project with CCC like Environmental Sensors, AVLS, PIS Display, Kiosk, Parking Management with sensors, Surveillance, ANPR, Wi-Fi.	
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.	CA Certificate mentioning net profit should be enclosed.
	Solvency	The bidder shall have bank Solvency certificate not less Rs. 50.00 Crores (issued date shall not be more than 06 months from the date of release of NIB).	Certificate from Bank
7.	Certification	The Bidder or consortium/JV should possess any two of the 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 d) CMMi-3 for IT Services	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. GST Number b. Income Tax PAN	Copies of relevant(s) Certificates of Registration.
9.	Technical Specifications of BOQ items	The quoted product/item should fulfill 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.

- 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.

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### Section 3: Scope of Work

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- 1.0 The broad scope of work will include Provisioning, Expansion & Integration of Wi-Fi Hotspots, Interactive Kiosks, Environmental Sensors, E-Bicycle Solution, Smart Waste bins, IP Public Addressing System and Emergency Call Box and Network and compute Core components.
- 2.0 The Existing JDA Smart City Setup for Wifi Hotspots e.g. Controller, User Authorisation and Accounting, Data Centre existing setup (Network Infra) and logical and physical connectivity will be extended to STP NOC. The existing Command Centre Software application for Smart City Solution will be leveraged. The maintenance of management of existing infra will be not in scope of this project.
- 3.0 There will be Entry and Exit points at STP locations where Smart City Solutions will be deployed.
- 4.0 These Smart Solutions will be connected to respective STP Locations on fibre connectivity. All Smart components deployed at the edge will be connecting to Field ruggedized switch aggregating to aggregation switch on 1G fibre backhaul.
- 5.0 The Aggregation switch will be aggregating the entire field network and consolidating to Core Switch, where Core switch and Core Router will be deployed on STP NOC.
- 6.0 This STP NOC will be connecting to JDA existing NOC on new Fibre connectivity and terminating on router on 10G fibre connectivity.
- 7.0 The entire setup of Command Centre software will be leveraged and expanding to provide connectivity of these Smart City Solutions.
- 8.0 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 new STP NOC.
- 9.0 The envisaged solution requirement at Dravyavati Riverfront is listed below:
  - a) Wi-Fi Hotspots
  - b) Interactive kiosk
  - c) Environmental Sensors
  - d) Variable Digital Signage
  - e) Smart Waste Management
  - f) E-Bicycle Solution
  - g) Surveillance Storage
  - h) Enterprise Management Solution
  - i) Smart panel integration.
  - j) IP PA and ECB Solution
  - k) Network Core Components
  - l) Integration of Smart Solutions into existing Command Centre Platform

- 10.0 The new deployment will have to integrate with existing JDA Command Centre Software and Network Operations Centre IT equipment's as well as to be reused wherever possible to minimize the Capex and ensure seamless operations.
- 11.0 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.
- 12.0 The bidder is required to implement an end to end solution and assess any additional requirement of item / service which is not part of the BOQ of this RFP and is required for successful implementation of the project. The bidder is required to maintain & operate the equipment so installed at various locations as well at STP NOC for a period of 5 years. After completion of 5 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.
- 13.0 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 / Switches / Router etc. to support the backend solution at NOC to Operate & Maintain the equipment's so installed at various locations.
- 14.0 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 on non-chargeable basis. However, at locations other than NOC, the bidder shall arrange their own arrangement for these facilities in its name.
- 15.0 The successful bidder is also advised to get the complete equipment's/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.
- 16.0 The basic infrastructure such as power connectivity, P2P connectivity with the field racks at the supporting pole and fiber connectivity at the STPs at the riverfront stretch, UPS for the field equipments, smart panels to take care of raw power fluctuations, earthing, etc at the riverfront stretch are not in the scope of the bidder and will be arranged through the existing Tata - SUCG Consortium who is developing the riverfront.

Below listed objectives are envisaged from this project;

### **1. Wi-Fi Hotspots**

Jaipur Development Authority (JDA) has already deployed smart Wi-Fi hot spot across multiple locations throughout the city of Jaipur using Indoor & Outdoor Wireless Access Points (WAP). The Public Wi-Fi hotspots and associated wired network at each Citizen Social Space across Dravyavati river front needs to be deployed as part of Phase-4 extension so that a world class wireless experience can be extended to the upcoming river front.

All the new WAP being deployed across river front should be registered to the existing Wireless Controller (WLC 5520) placed at JDA NOC.

There will be approximately **20 hotspot locations** across Dravyavati river front as part of Smart Corridor project, where these WAP needs to be implemented. Bidder has to provide adequate internet bandwidth at each WAP at each of the predefined locations.

The Wi-Fi deployment shall also be used for monetization purpose. In this view, it is proposed to leverage JDA existing setup, where the bidder will be responsible for getting Digital Advertisements, run them and work on a revenue share model with JDA.

Below are the expected functional feature out of the billing & monetization platform:

**Functional features:**

Jaipur Development Authority (JDA) has already deployed smart Wi-Fi hot spot across multiple locations throughout the city of Jaipur using Indoor & Outdoor Wireless Access Points (WAP). The Public Wi-Fi and associated wired network in each of the key locations needs to be deployed as part of Phase-3 extension so that a world class wireless experience can be extended to further locations of Jaipur.

**Monetization Features:**

- Branded Splash Page Customization of Logo, background, colours, etc.
- Ad push Images and Videos.
- Pre-Authentication Ads.
- Social Media action – page like etc.
- Third party page diverts on successful login.
- Local Language customisation
- In session ad push
- Push notifications
- App push
- Paid Access
- User analytics – Repeat user/Loyal user

**2. Interactive Kiosks (i-Kiosks)**

Interactive information platform transforms customer experiences with interactive digital media. With this solution, business and public agencies can deliver interactive content and information in real time, improving loyalty and revenues, while increasing efficiencies in business processes.

A key component of the interactive information experience platform is the Interactive Experience Clients, Interactive Computing and Collaboration Devices that deliver interactive web applications and rich media content on a scalable platform. These Interactive Information platforms provides power engaging customer experiences on interactive displays and kiosks to end users near river bank.

The same platform can be even used for monetization purpose.



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.

### **3. Environmental Sensors**

Smart environment sensors will gather data about pollution, ambient conditions (temperature and humidity), levels of gases in the city (pollution) and any other events on an hourly and subsequently daily basis. It is for information of citizens and administration to further take appropriate actions during the daily course/cause of any event.

There will be approximately 10 locations which will be identified at all Citizen Social Space across Dravyavati river front as part of Smart Corridor project

a. The environment sensors should have the following capabilities:

- They should be ruggedized enough to be deployed in open air areas, on streets and parks
- They should be able to read and report at least the following parameters: Temperature, Humidity, Ambient Light, Sound, Pressure, CO, NO<sub>2</sub>, O<sub>3</sub>, SO<sub>2</sub> and compulsorily PM 2.5 and PM 10.

b. Smart environment sensors will inform and enable citizens and administrators to keep a check on their endeavours which impact the environment and enable the city to take remedial action if required.

c. These environmental sensors can also be connected via 3G or 4G wireless network or Wi-Fi networks. It is not mandatory to connect all sensors via MPLS fibre network.

d. The data should be collected in a software platform that allows third party software applications to read that data. Various environment sensors shall sense the prevailing environment conditions and send the data to the integrated control system where real time data resides and the same shall be made available to various other departments and applications for decision making. It is preferred if the platform also includes intelligent analytical engines that make information meaningful to all stakeholders and helps ease decision making.

e. Successful bidder can also make use of the Nearby Variable Messaging Displays wherever possible (need to be finalized post detailed survey of locations).

f. The sensor management platform should allow the configuration of the sensor to the network and also location details etc.

g. The sensors should be able to be managed remotely. This includes sensors being updated with calibration parameters, software upgrades. Sensors must also provide updates and detect faults with self-diagnosis functionality.

- h. Apart from information provision, the sensors must ensure data is transmitted securely and have security measures from sensors to the software platform. It must also ensure tamper alerts are provided in cases of vandalism, security breaches, etc.

#### **4. Variable Message Signage**

Variable Message Signage is increasingly appreciated as a socially beneficial infrastructure service. Beyond the networks being installed by cities and transport networks. Public hotspots provided on retail, public sector and Tourist attraction premises across the city keep people connected and informed through their day.

Variable Message Signage at tourism places provides city tourist, i.e., local as well as foreign tourist provides transports services, Emergency services and other city related information on their fingertips. VMS would act as Public Information System, where JDA can push relevant information, schemes etc. to the citizens and tourist. It can also help gain revenue by pushing relevant advertisements.

It will be used for displaying various messages like traffic conditions, environmental parameters, emergency contact numbers, advertisement and any custom messages which JDA wants to display. There will be approximately 10 VMS would be deployed at Citizen Social Spaces across Dravyavati river front.

This VMS is based on SMD LEDs with pixel pitch of 10 mm. The VMS can be used to display language like English/ Devanagari/ Regional Language (Optional). The message on the proposed VMS will be injected through Ethernet connectivity using IOT platform.

Following benefits will be delivered to customer with the solution:

- i. Good visibility from 100 meters
- ii. Displaying weather information
- iii. Traffic conditions
- iv. Advertisements
- v. Any customize messaging

#### **5. Smart Waste-bin Management**

Waste disposal and sewage treatment plants are missing in most Indian cities Around 60 million tons of municipal solid waste (MSW) is generated in urban India annually. With rapid urbanization and changing lifestyle and food habits, the amount of municipal solid waste will increase significantly E-Waste (obsolete, discarded, broken and surplus electrical and electronic devices) is of immediate and long term concern as the industry is unregulated and recycling can lead to major environmental degradation posing a major threat to human health.

The vision of the Dravyavati Riverfront is to leverage urban sustainability to citizens and tourists. Many tourist spots in India find it very difficult to manage waste bins and fleet at tourist spot as authorities do not have the relevant information for sustainable waste management. The solution will leverage predictive analytics to help the authority to develop a streamlined logistics for waste collection. The use case would enable JDA to manage their waste collection bins and fleet in order

to maintain the cleanliness of the riverfront, this improving the quality of recreational area and ecotourism experience.

The smart bins will allow the authority to design a custom logistic route for garbage collection along the riverfront. In addition, the data can be displayed to citizens on their personal devices and would allow a community partnership in keeping the riverfront clean and green.

There will be total 100 numbers of Smart waste bins at Citizen Social Space (10 per such space) across river front.

## **6. Connected e-bicycle sharing system**

As IoT (Internet of Things) applications pervade every facet of our lives, it becomes necessary to take stock of the possibilities that include what has already been achieved and what could readily be achieved. Pedestrians and cyclists comprise the largest number of road traffic crash victims in Indian cities. Many cities are therefore wary about developing cycling facilities due to fears they will only put more people in danger. Smart Bicycle Solution involves a fully automated system of fleet of bicycles and docking stations across Jaipur, backed by a state-of-the-art IT system. As part of this completely automated system, users can pick up a cycle from any of the stations and deposit it at another without worrying about returning it to its original location.

The vision of the Dravyavati Riverfront is to leverage sustainable urban/ recreational services with eco-tourism to citizens and tourists. The e-Bicycle Solution would enable tourists/ citizens at riverfront to enjoy the cycle track being developed. This would enable JDA to monetize the solution as well as manage and monitor the bicycle fleet for asset management and physical safety.

The e-Bicycle would allow citizens to monitor availability & book cycles for their personal use using their personal devices. This solution would also lead to regular customer flow and income to JDA. There will be total 100 numbers of e-bicycle at Citizen Social Space (10 e-bicycle and 1 stand per such space) across river front.

## **7. Integration of the smart solution with the existing Digital Platform**

As JDA has already deployed City Integrated Command and Control Operation Centre for monitoring various smart solution implemented in Phase-1, 2 & 3. The same platform will be used for integration the above smart solutions as well as the following solution being deployed by Tata Project Ltd:

- i. Sewage Treatment Plant (STP) Monitoring
- ii. Smart Lights IOT Integration.

The vendor of the above two solutions has to provide APIs and sandbox for the integration of these services into existing JDA Smart City Platform.

## **8. Public Address and Emergency Call Box (PA&ECB Solution)**

PA system or smart cities is communication link between the peoples in city and Security force. To manage harmony in city operation, it is very essential to have effective management of traffic through PA system.

IP based PA communication system works on the city wide distributed IP backbone and

- a. Speakers - are used to convert audio signal in speech and will be fitted on roads/lighting poles to address required manned areas. Speaker power and quantity is designed to meet the required audio levels requirement at streets and international audio standards. Placement of speakers will be required to planned in such a way that audio announcements will clear, unambiguous and loud enough to address peoples across citizen social spaces and across Dravyavati river front.

Solution to be proposed shall have the followings:

- i. 10 W horn speakers with maximum sound pressure level of 119 decibels
- ii. Outdoor mounting speakers with weather proof rating of IP66
- iii. Speaker audio level will be directional; as well audio power reduces by 3 decibels for every 1 meter from speaker location.

so to address all direction of squares and roads, placement of multiple speakers will be planned. Number of speakers at any place will be planned as per area requirement.

- b. IP Amplifier - Broadcasting audio signal will be received by this device and amplified to provide it to speakers with required power. These are IP based devices so it can be easily deployed over wide city areas without complicated cabling network. High level Audio line output used to drive multiple speakers. IP Amplifiers power will be planned as per number of speakers need to be used.
- c. Control Desk Station - Security control desk station is IP based call station. It is used for PA announcements on city wide PA system. There is provision for manual and recorded PA announcements. Manual announcement will be made by security personals through control desk call station. With pre-programmed key press, desired area will be selected for PA announcements and operator can make live announcement or play pre-recorded message. Audio will be broadcasted on selected area PA speakers via IP Amplifiers. System can have multiple control desk call stations. Control desk stations will be connected to system via CAT 6 cables.

## Section 4: Project Deliverables, Milestones, Time Schedule & Payment Terms

1.0 The milestones, deliverables and time schedule for the implementation of Smart Corridor project shall be as follows:

- The time specified for delivery and other activities as mentioned in the table below shall be deemed to be the essence of the contract and the successful bidder shall arrange supplies and provide the required services within the specified period.
- It should be noted that any delay in the project timelines shall attract Liquidated Damages to the selected bidder.
- 'T' is the event marking JDA signing the agreement or date of issue of work order or date of issue of LOI, whichever is earlier, with the successful bidder.

Sl. No.	Milestone	Project Deliverables	Time Schedule	Payment Terms
1	Project Kick-Off	<u>Event:</u> Signing of Agreement <u>Deliverable:</u> Submission of BG and Agreement	T+15	NIL
2	Delivery	1) Details of supplied bill of material equipments along with serial number, product ID, licenses, part code etc. 2) Original S/w/CDs/DVDs and licenses, wherever applicable 3) OEM Warranty documents for five years. 4) User Manuals, Administrator Manual and datasheets, wherever applicable. 5) Inspection report/Delivery Challan	T + 8 weeks	50% of CAPEX Amount
3	Go-Live	1) Supply, Installation & Commissioning certificates of all equipment's/software supplied including all Solution. 2) UAT report	T + 16 weeks	30% of CAPEX Amount
4	Operations& Maintenance	1) MIS reports 2) SLA reports	After end of each quarter (After GO-LIVE)	20% of the Balance CAPEX amount in equal quarterly installment plus due OPEX for the quarter.

5	Project Handover	<u>Event:</u> Project Handover	Within 90 days After successful completion of O&M phase of the project	NIL
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**Note:-**

- a) The supplier's/selected bidder's request for payment shall be made to the purchaser in writing, accompanied by invoices describing, as appropriate, the goods delivered and related services performed, and by the required documents submitted pursuant to general conditions of the contract and upon fulfilment of all the obligations stipulated in the Contract.
- b) Due payments shall be made promptly by the purchaser, generally within sixty (60) days after submission of an invoice or request for payment by the supplier/selected bidder, and the purchaser has accepted it.
- c) The currency or currencies in which payment shall be made to the supplier/ selected bidder under this Contract shall be Indian Rupees (INR) only.
- d) All remittance charges will be borne by the supplier/ selected bidder.
- e) In case of disputed items, the disputed amount shall be withheld and will be paid only after settlement of the dispute.
- f) 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 milestones.
- g) Taxes (GST, income tax, etc.), as applicable, will be deducted at source, from due payments, as per the prevalent rules and regulations.

**Manpower Requirements:**

- A. The bidder should assess and deploy the manpower required to meet the SLA for successful completion and O&M (Operation and Maintenance) along with FMS (Facility Management Services) during contract period.
- B. In addition to, the Bidder shall provide following manpower resources for JDA to assess, mitigate and coordinate between various stack-holders for successful implementation and operation of project. These man-power resources will be directly under the control of JDA IT cell:

S. No	Professional	Minimum Resources	Minimum Qualifications	Key Job Duties
1.	Team Leader	1	Experience on similar type of ICT based projects, of minimum 3 years	Overall project management, coordination
2.	System / Network Administrator	2	Experience on Windows and Linux administration,	System Administration and

Short Term NIB for Implementation and O&M for various smart solutions for developing JDA's 30 Kms Dravyavati Riverfront stretch as Smart Corridor with 5 years FMS Services

			Virtualization, Storage, Application handling, Backups, etc., of minimum 3 years. Experience on configuration and deployment of Network Switches, Routers, Wi-Fi Controllers & Access Points, Surveillance Cameras, Fire Wall Load Balancer, etc., of minimum 3 years	Backup Management; Network & Security Management
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**Section 5: Service Level Agreement**

Sl.No.	Service Description	Reporting Requirement	Reporting Period	Calculation Criteria	Penalty							
1.	Repair/replace time of Core Components (Core Router, Core Switches, Aggregation switch, Distribution Switch, Field Switch, Servers, Storage, Backup Server and other tools)	Average uptime (Availability report)	Monthly	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							
2	Wi-Fi Hotspots	Average uptime (Availability report	Monthly	<table><tr><td>Average Uptime 95% or above</td><td>No penalty</td></tr><tr><td>Average Uptime between 93% - 95%</td><td>1% of the QGR amount</td></tr><tr><td>Average Uptime between 90% - 93%</td><td>2% of the QGR amount</td></tr><tr><td>Average Uptime below 90%</td><td>5% of the QGR amount</td></tr></table>	Average Uptime 95% or above	No penalty	Average Uptime between 93% - 95%	1% of the QGR amount	Average Uptime between 90% - 93%	2% of the QGR amount	Average Uptime below 90%	5% of the QGR amount
Average Uptime 95% or above	No penalty											
Average Uptime between 93% - 95%	1% of the QGR amount											
Average Uptime between 90% - 93%	2% of the QGR amount											
Average Uptime below 90%	5% of the QGR amount											
3	E-Bicycle	Average uptime (Availability report	Monthly									
4	Variable Messaging System	Average uptime (Availability report	Monthly									
5	Smart Wastebins	Average uptime (Availability report	Monthly									
6	PA and ECB System	Average uptime (Availability report	Monthly									
7	Environment Sensor	Average uptime (Availability report	Monthly									
8	Interactive Experience Kiosks	Average uptime (Availability report	Monthly									
9	Smart Rack and UPS	Average uptime (Availability report	Monthly	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							



10	Internet bandwidth	Average uptime (Availability report)	Monthly	Average Uptime 99% or above	No penalty 1% of the QGR amount 2% of the QGR amount 5% of the QGR amount
				Average Uptime between 95% - 99%	
				Average Uptime between 93% - 95%	
				Average Uptime below 93%	
11	Dark Fiber Network (Point to Point)	Average uptime (Availability report)	Monthly	Average Uptime 99% or above	No penalty 1% of the QGR amount 2% of the QGR amount 5% of the QGR amount
				Average Uptime between 95% - 99%	
				Average Uptime between 93% - 95%	
				Average Uptime below 93%	
12	Technical team Leader	Mandays	Monthly		Rs. 2500.00 per resource per absent days
13	System / Network Administrator	Mandays	Monthly		Rs. 1500.00 per resource per absent days

**Note:-**

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 as under :-

Type of Professional	Penalty on non-availability of resource
Technical team Leader	Rs. 2500.00 per resource per absent days
System / Network Administrator	Rs. 1500.00 per resource per absent days

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## **Section 6: Instruction to Bidder (ITB)**

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### **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 one day 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.
- 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. Pre-bid Meeting/ Clarifications**

- a) Any prospective bidder may, in writing, seek clarifications from the procuring entity in respect of the bidding documents.
- b) A pre-bid conference is also scheduled by the procuring entity as per the details mentioned in the NIB and to clarify doubts of potential bidders in respect of the procurement and the records of such conference shall be intimated to all bidders and where applicable, shall be published on the respective websites.
- c) The period within which the bidders may seek clarifications under (a) above and the period within which the procuring entity shall respond to such requests for clarifications shall be as under: -
  - 1. Last date of submitting clarifications requests by the bidder: As specified in the NIB
  - 2. Response to clarifications by procuring entity: As specified in the NIB
- d) The minutes and response, if any, shall be provided promptly to all bidders to which the procuring entity provided the bidding documents, so as to enable those bidders to take minutes into account in preparing their bids, and shall be published on the respective websites.

### **3. 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.

#### 4. 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.

#### 5. Format and Signing of Bids

- a) Bidders must submit their bids online at e-Procurement portal i.e. <http://e-procurement.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: -
  1. Technical Bid, including fee details, eligibility & technical documents
  2. Financial Bid
- d) The technical bid shall consist of the following documents: -

S. No.	Documents Type	Document Format	e-Procurement Folder
Fee Details			
1.	Bidding document Fee (Tender Fee)	Receipt of online submission on JDA Portal	Fee/PreQual/Technical (in .pdf format)
2.	RISL Processing Fee (e-Procurement)		
3.	Bid Security Deposit (BSD)		
Authorizations / Undertakings / Declarations			
4.	All the documents mentioned in the “Authorizations / Undertakings / Declarations”.	As Per Annexure: Technical Bid Evaluation Checklist (as per the format mentioned against the respective “Authorizations / Undertakings / Declarations” clause).	Fee/PreQual/Technical (in .pdf format)
Technical Eligibility Documents			

5.	All the documents mentioned in the "Eligibility Criteria", in support of the eligibility	As Per Annexure: Technical Bid Evaluation Checklist (as per the format mentioned against the respective 'Eligibility Criteria' clause).	Fee/PreQual/Technical (in .pdf format)
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e) Financial bid shall include the following documents:-

S. No.	Documents Type	Document Format	e-Procurement Folder
1.	Financial Bid	As per BOQ (.XLS) format available on e-Procurement portal	Finance (in .XLS format)

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.

## 6. Cost & Language of Bidding

- 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.
- 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.

## 7. Bid Security Deposit (BSD): Every bidder, if not exempted, participating in the procurement process will be required to furnish the bid security as specified in the NIB.

- 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.
- Bid security instrument or cash receipt of bid security or a bid securing declaration shall necessarily accompany the technical bid.
- 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.
- 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.
- 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: -
  - 1. when the bidder withdraws or modifies its bid after opening of bids;
  - 2. when the bidder does not execute the agreement, if any, after placement of supply / work order within the specified period;
  - 3. 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;
  - 4. when the bidder does not deposit the performance security within specified period after the supply / work order is placed; and
  - 5. 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 BSD is forfeited.
- k) No interest shall be payable on the BSD.
- l) 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:-
  - 1. the expiry of validity of bid security;
  - 2. the execution of agreement for procurement and performance security is furnished by the successful bidder;
  - 3. the cancellation of the procurement process; or
  - 4. the withdrawal of bid prior to the deadline for presenting bids, unless the bidding documents stipulate that no such withdrawal is permitted.

#### **8. Deadline for the submission of Bids**

- a) Bids shall be received online at e-Procurement portal and up to the time and date specified in the NIB.

#### **9. 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.

#### **10. 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: -
  - 1. bid is accompanied by bidding document fee, bid security or bid securing declaration, and processing fee (if applicable);
  - 2. bid is valid for the period, specified in the bidding document;
  - 3. bid is unconditional and the bidder has agreed to give the required performance security; and
  - 4. other conditions, as specified in the bidding document are fulfilled.
  - 5. 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.

**11. Selection Method:** The selection method is Least Cost Based Selection (LCBS or L1) based on NPV as defined in this RFP.

## **12. 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.

## **13. Evaluation & Tabulation of Technical Bids**

### **a) Determination of Responsiveness**

- 1. The bid evaluation committee shall determine the responsiveness of a Bid on the basis of bidding document and the provisions of pre-qualification / eligibility criteria

of the bidding document.

2. 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.
3. 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.
4. 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.
5. 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.

**b) Non-material Non-conformities in Bids**

1. The bid evaluation committee may waive any non-conformities in the Bid that do not constitute a material deviation, reservation or omission, the Bid shall be deemed to be substantially responsive.
2. The bid evaluation committee may request the bidder to submit the necessary information or document like audited statement of accounts/ CA Certificate, Registration 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.
3. 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.

**c) 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"

**d) Tabulation of Technical Bids**

1. 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.
2. 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.

- e) 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.
- f) 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.

**14. 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:-

- The financial bids/ cover of bidders who qualify in technical evaluation shall be opened at the notified time, date and place by the members of the designated Procurement Committee in the presence of the bidders or their representatives who choose to be present. Alternatively, the bidders may also view the financial bid opening status/ process online at e-Procurement website.
- The process of opening of financial bids/ covers shall be similar to that of technical bids.
- The names of the bidders, the rates given by them and conditions put, if any, shall be read out and recorded.
- Conditional Bids are liable to be rejected;
- In order to decide the L1 bidder, NPV (Net Present Value) of the payable QGR amount shall be taken into account as given below:

Price quoted for CAPEX= A

Price quoted for OPEX = B

Total quarters for which QGR to be paid = 20

Per quarter price for QGR, i.e.  $[(\text{Balance amount, ie 20\%, of A}) + B]/20 = C$  The PV factor would be 3% per quarter.

$$NPV = A + [C/1.03] + [C/(1.03)^2] + [C/(1.03)^3] + [C/(1.03)^4] + [C/(1.03)^5] + \dots + C/(1.03)^{20}$$

- To evaluate a bid, the tendering authority shall consider the following: -
  - the bid price as quoted in accordance with bidding document.
  - price adjustment for correction of arithmetic errors in accordance with bidding document.
- 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.
- The offers shall be evaluated and marked L1, L2, L3 etc. based on NPV calculated as above. L1 being the lowest offer and then others in ascending order.



- 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.
- The members of bids evaluation committee shall give their recommendations below the table regarding lowest Bid and sign it.
- 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.

**15. 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.

If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be disqualified and its Bid Security shall be forfeited or its Bid Securing Declaration shall be executed.

**16. 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.

**17. 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.

**18. Exclusion of Bids/ Disqualification**

- a) A procuring entity shall exclude/ disqualify a Bid, if: -
  1. the information submitted, concerning the qualifications of the bidder, was false or constituted a misrepresentation; or
  2. the information submitted, concerning the qualifications of the bidder, was materially Inaccurate or incomplete; and
  3. the bidder is not qualified as per pre-qualification/ eligibility criteria mentioned in the bidding document;
  4. the Bid materially departs from the requirements specified in the bidding document or it contains false information;
  5. 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;
  6. 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: -
  - 1. communicated to the concerned bidder in writing;
  - 2. published on the State Public Procurement Portal, if applicable.

**19. Price fall Clause**

- a) The prices under a rate contract shall be subject to price fall clause. A clause regarding price fall shall be incorporated in the terms and conditions of rate contract. Price fall clause is a price safety mechanism in rate contracts and it provides that if the rate contract holder quotes / reduces its price to render similar goods, works or services at a price lower than the rate contract price to anyone in the state any time during the currency of the rate contract, the rate contract price shall be automatically reduced with effect from the date of reducing or quoting lower price, for all delivery of the subject matter of procurement under that rate contract and the rate contract shall be amended accordingly. The firms holding parallel rate contracts shall also be given opportunity to reduce their price by notifying them the reduced price and giving them fifteen days time to intimate their acceptance to the revised price. Similarly, if a parallel rate contract holding firm reduces their price during currency of the rate contract, their reduced price shall be conveyed to other parallel rate contract holding firms and the original rate contract holding firm for corresponding reduction in their prices. If any rate contract holding firm does not agree to the reduced price, further transaction with it, shall not be conducted.

**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 Conditions of Contract.
- c) In case of procurement of Goods or services, additional quantity may be procured by placing a repeat order on the rates and conditions of the original order. The repeat order shall be as under :-
  - 1. 50% of the quantity of the individual items and 50% of the value of original order contract in 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 5% of the amount of supply order in case of procurement of goods and services. 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: -

1. Bank Draft or Banker's Cheque of a scheduled bank;
  2. 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;
  3. 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 BSD;
  4. 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 SITC of the project i.e. 6 months plus 3 months as specified in the NIB; which shall be released after successful implementation of the project and thereafter another Performance Security @10% of the 20% of the Contract Value shall be submitted valid upto 90 days beyond the schedule date of completion of 5 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:-
1. When any terms and condition of the contract is breached.
  2. When the bidder fails to make complete supply satisfactorily.
  3. 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: -
  - 1. impede enforcement of any law;
  - 2. affect the security or strategic interests of India;
  - 3. affect the intellectual property rights or legitimate commercial interests of bidders;
  - 4. 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 -
  - 1. at any time prior to the acceptance of the successful Bid; or
  - 2. 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: -
  - 1. 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;
  - 2. 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 and no Conflict of Interest**

- a) Any person participating in the procurement process shall -
  - i. not offer any bribe, reward or gift or any material benefit either directly or indirectly in exchange for an unfair advantage in procurement process or to otherwise influence the procurement process;
  - ii. not misrepresent or omit that misleads or attempts to mislead so as to obtain a

financial or other benefit or avoid an obligation;

- iii. not indulge in any collusion, Bid rigging or anti-competitive behavior to impair the transparency, fairness and progress of the procurement process;
  - iv. not misuse any information shared between the procuring Entity and the Bidders with an intent to gain unfair advantage in the procurement process;
  - v. not indulge in 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;
  - vi. not obstruct any investigation or audit of a procurement process;
  - vii. disclose conflict of interest, if any; and
  - viii. Disclose any previous transgressions with any Entity in India or any other country during the last three years or any debarment by any other procuring entity.
- b) **Conflict of Interest:**-A conflict of interest is considered to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations.
- i. A Bidder may be considered to be in conflict of interest with one or more parties in this bidding process if, including but not limited to:
    - 1. have controlling partners/shareholders in common; or
    - 2. receive or have received any direct or indirect subsidy from any of them; or
    - 3. have the same legal representative for purposes of this Bid; or
    - 4. have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Procuring Entity regarding this bidding process; or
    - 5. the Bidder participates in more than one Bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the Bidder is involved. However, this does not limit the inclusion of the same subcontractor, not otherwise participating as a Bidder, in more than one Bid; or
    - 6. The Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the Goods and Services that are the subject of the Bid; or
    - 7. Bidder or any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity as engineer-in-charge/ consultant for the contract.
  - ii. The Bidder shall have to give a declaration regarding compliance of the Code of Integrity prescribed in the Act, the Rules and stated above in this Clause along with its Bid, in the format specified in Section IV, Bidding Forms.
  - iii. Breach of Code of Integrity by the Bidder: Without prejudice to the provisions of Chapter IV of the Rajasthan Transparency in Public Procurement Act, 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 action in accordance with the provisions of sub-section (3) of section 11 and section 46 of the Act.

**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. Grievance Redressal during Procurement Process and Appeals**

The designation and address of the **First Appellate** Authority is Commissioner, Jaipur Development Authority, JLN Marg, Jaipur (Rajasthan)

The designation and address of the **Second Appellate** Authority is Principal Secretary / Additional Chief Secretary, Urban Development and Housing, Secretariat, Jaipur (Rajasthan)

#### **Filing an appeal**

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 the Guidelines issued thereunder, he may file an appeal to First Appellate Authority, as specified in the Bidding Document within a period of ten 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 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 Bids before the opening of the Financial Bids, an appeal related to the matter of Financial Bids may be filed only by a Bidder whose Technical Bid is found to be acceptable.

1. The officer to whom an appeal is filed under para (1) shall deal with the appeal as expeditiously as possible and shall endeavour to dispose it of within thirty days from the date of the appeal.
2. If the officer designated under para (1) fails to dispose of the appeal filed within the period specified in para (2), or if the Bidder or prospective bidder or the Procuring Entity is aggrieved by the order passed by the First Appellate Authority, the Bidder or prospective bidder or the Procuring Entity, as the case may be, may file a second appeal to Second Appellate Authority specified in the Bidding Document in this behalf within fifteen days from the expiry of the period specified in para (2) or of the date of receipt of the order passed by the First Appellate Authority, as the case may be.
3. Appeal not to lie in certain cases  
No appeal shall lie against any decision of the Procuring Entity relating to the following matters, namely:-
  - (a) determination of need of procurement;
  - (b) provisions limiting participation of Bidders in the Bid process;
  - (c) the decision of whether or not to enter into negotiations;
  - (d) cancellation of a procurement process;
  - (e) applicability of the provisions of confidentiality.
4. Form of Appeal
  - (a) An appeal under para (1) or (3) above shall be in the annexed Form along with as many copies as there are respondents in the appeal.
  - (b) 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.
  - (c) 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.

5. Fee for filing appeal

- (a) 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.
- (b) The fee shall be paid in the form of bank demand draft or banker's cheque of a Scheduled Bank in India payable in the name of Appellate Authority concerned.

6. Procedure for disposal of appeal

- (a) 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.
- (b) 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.
- (c) 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.
- (d) The order passed under sub-clause (c) above shall also be placed on the State Public Procurement Portal.

**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-

- 1. "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



2. "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

1. under the Prevention of Corruption Act, 1988 (Central Act No. 49 of 1988); or
2. 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.

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## Section 7: General Terms & Condition of Bid & Contract

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**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 therefrom, as may be made pursuant to the Contract.
  - d) "Day" means a working 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.
  - l) "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 / Bidder 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 / Bidder of the quoted product should also have its direct representation in India in terms of registered office. 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 any hardware that is declared or is likely to be declared End of Sale within next 12 months and End of Service / Support within next 24 months, from the bid closing date. 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, GST, 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 GST 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: -
  - 1. the Purchaser or Supplier / Selected Bidder need to share with JDA or other institutions participating in the Contract;
  - 2. now or hereafter enters the public domain through no fault of that party;
  - 3. 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 sub-let 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**

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.
  1. 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 prorata 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.
  2. 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.
  3. 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.
  4. 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.

5. 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.
6. 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/Penalty for delay** : In case of extension in the delivery and/or installation/completion/commissioning period is granted with penalty / liquidated damages, the recovery for the un-finished work on pro-rata basis for each milestone, 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 for the individual milestone as in the RFP :-

No.	Condition	LD %*
a.	Delay up to one fourth period of the prescribed delivery period, successful installation and completion of work.	2.5 %
b.	Delay exceeding one fourth but not exceeding half of the prescribed delivery period, successful installation and completion of work.	5.0 %
c.	Delay exceeding half but not exceeding three fourth of the prescribed delivery period, successful installation and completion of work.	7.5 %
d.	Delay exceeding three fourth of the prescribed delivery period, successful installation and completion of work.	10.0 %

1. 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.
2. The maximum amount of liquidated damages shall be 10%.
3. The percentage refers to the payment due for the associated item as per the capex and opex Bill of Material.
4. The maximum total under the Contract penalty / LD shall be 10% of the total contract amount.

**26. Risk & Cost:** If successful bidder fails to complete the milestone(s) the same will be got executed by another firm JDA and the expenses incurred in this account will be charged by the bidder.

**27. 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.

**28. 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.

**29. 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.

**30. 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.

### **31. Termination**

#### **a) Termination for Default**

- a. 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: -
  - i. 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.
- b. If JDA terminates the contract in whole or in part, amount of PSD may be forfeited.
- c. 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**

- a. 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.
- b. 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.
- c. 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:

- i. 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.

### 32. 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, if the amount of the claim is more than Rs. 50,000/-.
- 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.

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## Section 8: Special Terms & Conditions of Bid & Contract

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The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of 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 Letter of Intent (LOI) / Award of Contract (AoC) / Work Order as the case may be, which will also be treated as the start of project date.
4. **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 bidding 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.

## Annexure-1: Bill of Material (BoM) / Bill of Quantity & Warranty

### A. CAPEX – SITC of equipment and services

#	Item	Qty	Unit	Tech Specs Ref.	MAF Required (Y/N)	End of Sale / End of Service requirement in MAF	Period of Onsite Comprehensive OEM Warranty/ Subscription/ Support (in yrs.).	Period of back to back support, updates and patches (in yrs.).
1	Core Router	4	Nos.	1	Y	Y	5	5
2	Core Switch (Fiber)	2	Nos.	2	Y	Y	5	5
3	Aggregation Switch (Fiber)	16	Nos.	3	Y	Y	5	5
4	Distribution Switch (POE+)	16	Nos.	4	Y	Y	5	5
5	Ruggedized Field Switch (POE)	500	Nos.	5	Y	Y	5	5
6	Hyper Converged Infrastructure	1	No.	6	Y	Y	5	5
7	Surveillance Storage	1	No.	7	Y	Y	5	5
8	Video Conference Unit	1	No.	8	Y	Y	5	5
9	Outdoor Access Point	65	Nos.	9	Y	Y	5	5
10	Indoor Access Point	30	Nos.	10	Y	Y	5	5
11	Enterprise Management System	1	No.	11	Y	Y	5	5
12	Unified Management System (for Server)	1	No.	12	Y	Y	5	5
13	AAA Appliance Based Solution for Network Devices	2	No.	13	Y	Y	5	5
14	Backup/ Replication Software	1	No.	14	Y	Y	5	5
15	Interactive Kiosk	10	Nos.	15	Y	Y	5	5
16	Smart Waste-bins	100	Nos.	16	Y	Y	5	5
17	Smart Environment Sensor	10	Nos.	17	Y	Y	5	5
18	Variable Message Signage	10	Nos.	18	Y	Y	5	5
19	Smart Bicycle	100	Nos.	19	Y	Y	5	5
20	Public Address System and Emergency Response System	60	Nos.	20	Y	Y	5	5
21	Integrated Smart Rack System	1	Nos.	21	Y	Y	5	5
22	Modular UPS with Modular Battery	1	Nos.	22	Y	Y	5	5
23	Ruggedized Laptops	3	Nos.	24	-	-	5	5

24	Wireless Management System	1	Nos.	26	Y	Y	5	5
25	Internet Bandwidth 300Mbps	1	Nos.	24	-	-	5	5
26	Dark Fibre Network (Point to Point)	1	Nos.	25	-	-	5	5
27	Existing Wireless Controller (WLC-5520) - Additional Licenses for APs	100	Nos.	-	-	-	-	-
28	Existing Command Centre Application - Additional Licenses for Wi-Fi Hotspots	95	Nos.	-	-	-	-	-
29	Existing Command Centre Application - Additional Licenses for Environmental Sensors	10	Nos.	-	-	-	-	-
30	Existing Collaboration Application - Additional Licenses for Interactive Kiosk	10	Nos.	-	-	-	-	-
31	Existing Command Centre Application - Additional Licenses for Waste-Bins	100	Nos.	-	-	-	-	-
32	Existing Command Centre Application - Additional Licenses for Smart Bi-cycle	100	nos.	-	-	-	-	-
33	Existing Command Centre Application - Additional Licenses for Variable Message Signage	10	nos.	-	-	-	-	-
34	Existing Command Centre Application - Additional Licenses for SCADA	5	Nos.	-	-	-	-	-
35	Existing Command Centre Application - Additional Licenses for Smart Lighting	750	Nos.	-	-	-	-	-
36	One-time OEM Implementation & Integration Service Cost for integrating new smart solutions with existing IOT Platform	1	No.	-	-	-	-	-
37	One-time OEM Implementation & Integration Service Cost for Hyper Converged Solution, Storage Solution for Surveillance & Core Network Design	1	No.	-	-	-	-	-



**B. OPEX – O&M and FMS services**

#	Item	Qty	Unit	Period in months
1	Repair/replace time of Core Components (Core Router, Core Switches, Aggregation switch, Distribution Switch, Field Switch, Servers, Storage, Backup Server and other tools)	1	Lot	60
2	Wi-Fi Hotspots solution	1	Lot	60
3	Smart Bicycle sharing system	1	Lot	60
4	Variable Messaging System	1	Lot	60
5	Smart Waste bins Solution	1	Lot	60
6	PA and ECB System	1	Lot	60
7	Environment Sensor solution	1	Lot	60
8	Interactive Experience Kiosks solution	1	Lot	60
9	Internet Bandwidth	1	Lot	60
10	Dark Fibre Network (Point to Point)	1	Lot	60
11	Integrated Smart Rack System & Modular UPS with Modular Battery	1	Lot	60
12	Technical team Leader	1	No.	72
13	System / Network Administrator	2	No.	60

## Annexure-2: Technical Specifications of Items (On bidder's letter head)

Note: All the specifications below are minimum specifications and higher specifications shall be used wherever necessary/ required. Deviation on higher side only shall be considered and no extra weightage shall be awarded for such deviations. If any one of the items quoted do not confirm fully to the specifications, then the technical bid will be rejected.

Item 1: Core Router			Quantity: 4
BRAND NAME:			
MODEL NO.:		PART NO. (IF ANY):	
Sr. No.	Parameters	Description	Compliance (Y/N)
1	Architecture	Router should support redundant controller cards and should support stateful switch over, non-stop forwarding, Non-stop routing and Graceful restart.	
2		Router should be CE2.0 & MEF14.0 certified.	
3		Router shall support MEF for Ethernet based services like PW, VPLS or ATOM.	
4		Router shall support sync any configurations from previous modules to new modules with hot-swap event occurred	
5		The router should support redundant control & data plane.	
6		The router shall support following type of interfaces – 10GE, 1GE interfaces; 10GE WAN PHY and 10G, Ch.STM1, E1	
7		All the Ports and card on Router should be hot swappable and field replacement of port or card should not require to bring down the chassis.	
8		Router shall support non-blocking capacity of 120 Gbps full duplex	
9	High Availability	Router shall support 180 Mpps forwarding performance for IPv4 & IPv6 performance	
10		The router should support Minimum 20 Gbps per slot throughput.	
11		Router shall support in total minimum 24000 routes for IPv4 and IPv6.	
12		router shall support 3000 queues and 128 MPLS VPN's	

13		Router shall support aggregation of links. Minimum 8 link should be supported as part of single aggregation	
14		Router shall support IPSLA or equivalent and Y.1731 for performance monitoring	
15		Router should support Redundant Power Supply and should also support On line insertion and removal of same.	
16		Fan tray should be hot-swappable, and should be a Field Replaceable Unit (FRU). The node can run indefinitely with a single fan failure. Shall Support hot-swappable for all modules. And secure normal operations when hot- swap event occurred	
17	Protocol Support	Router shall support MPLS-TE with FRR for sub 50 msec protection.	
18		Router must support Traffic Engineering for node and link protection.	
19		Router shall support IPV4 and IPV6,IGMP V2/V3,MLD,IGMP and PIM,6PE and 6VPE mode for IPV6 transport over IPV4, ECMP,LDP,BGP Prefix independent control (EDGE and Core) for IPV4 and IPV6,BGP,IS- IS,OSPFv2and V3,RSVP,VRRP,Loop free alternate FRR (IPFRR) and Traffic Engineering.	
20		Router should support high availability for all BFD, BGP, OSPF and IS-IS and no packet loss during controller switch over.	
21	QoS Features	Router should support RFC 3107 of Carrying Label Information in BGP-4	
23		Router shall support layer3 and layer2 MPLS VPN.	
24		Router shall support HQOS on all kind of interface in both ingress/egress direction. Similar QOS shall be supported for all type of interface including Bundled interfaces.	
25		Shall support Ingress classification, marking and policing on physical interfaces and logical interfaces using source/destination IP subnet, protocol types (IP/TCP/UDP), source/destination ports, IP Precedence, MPLS EXP, DSCP,802.1p	
26	Security & Management	Shall support Strict Priority Queuing or Low Latency Queuing to support real time application like Voice and Video with minimum delay and jitter.	
27		Congestion Management: WRED, Priority queuing,	

		Class based weighted fair queuing	
28		Support Access Control List to filter traffic based on Source & Destination IP Subnet, Source & Destination Port, Protocol Type (IP, UDP, TCP, ICMP etc) and Port Range etc. Should Support per-user Authentication, Authorization and Accounting through RADIUS or TACACS and SNMPv1/v2/V3	
29	Interface	The proposed router should support the following day1:, 2x10G SFP+ ports, 8x1G Base T Ports and 8x1G sfp ports.	
30	Certifications	The proposed router should be EAL2/ NDPP/NDcPP certified. The OEM should be listed in Gartner Magic Leaders/Challengers Quadrant for wired or wireless segment 2017 OR Gartner Magic Leaders/Challengers Quadrant for Data-Centre Networking 2017.	
<b>Additional Items(s)</b>			
1		1. 8x 1G SFP Interfaces of Single Mode Transceivers 2. 2x10G SFP+ of single mode Long Range (LR)	

<b>Item 2: Core Switch (Fibre)</b>			<b>Quantity: 2</b>
<b>BRAND NAME:</b>			
<b>MODEL No.:</b>		<b>PART No. (IF ANY):</b>	
<b>Sr. No</b>	<b>Parameter</b>	<b>Compliance Yes/No</b>	
1	Switch should be 1RU with minimum 48 no. of SFP/SFP+ port.		
2	Should have 12GB RAM and 12GB Flash		
3	Switching system shall have minimum 960 Gbps of switching fabric and minimum 720 Mpps of forwarding rate.		
4	Switch should have hot swappable 1:1 redundant internal power supply.		
5	Switching system shall have minimum 32K MAC Addresses and 4K VLANs.		
6	Switch should support minimum 18K ACLs, 16K Multicast and 32K IPv4, 16K IPv6 Routes.		
7	Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.1ae, 802.3x, 802.1p, 802.1Q.		
8	Should have static routing, OSPF, OSPFv3, BGP, VRRP, VRF (Virtual routing and forwarding), IGMP v1/v2/v3, PIM and multicast routing.		
9	Shall have 802.1p class of service, marking, classification, policing and shaping. Should support strict priority queuing.		
10	Switch should support management features like SSHv2, SNMPv2c, SNMPv3, IGMP, Netconf/ YANG or equivalent		

11	Switch should support port security, DHCP snooping, Spanning tree root guard, First Hop Security.	
12	IPv6 support in hardware, providing wire rate forwarding for IPv6 network	
13	Should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment.	
14	Eight egress queues per port for different types.	
15	Switch shall support application visibility and traffic monitoring with sflow/ jflow/ netFlow entries.	
16	Switch shall conform to UL 60950, IEC 60950, CSA 60950, EN 60950 Standards	
17	The OEM should be listed in Gartner Magic Leaders/Challengers Quadrant for wired or wireless segment 2017 OR Gartner Magic Leaders/Challengers Quadrant for Data Centre Networking 2017.	
<b>Additional Items(s)</b>		
1	<ol style="list-style-type: none"> <li>1. 4x1G Copper Base-T SFP</li> <li>2. 4x1G Multimode SX SFP</li> <li>3. 8x1G Singlemode LH/LX SFP</li> <li>4. 30X10G LR SFP</li> <li>5. 4X10G SR SFP</li> <li>6. 4x10G ER SFP</li> </ol>	

<b>Item 3: Aggregation Switch (Fibre)</b>		<b>Quantity: 16</b>
<b>BRAND NAME:</b>		
<b>MODEL NO.:</b>		<b>PART NO. (IF ANY):</b>
<b>Sr. No</b>	<b>Parameter</b>	<b>Compliance Yes/No</b>
1	Switch should be 1RU with minimum 48 no. of SFP/SFP+ port.	
2	Should have 12GB RAM and 12GB Flash	
3	Switching system shall have minimum 960 Gbps of switching fabric and minimum 720 Mpps of forwarding rate.	
4	Switch should have hot swappable 1:1 redundant internal power supply.	
5	Switching system shall have minimum 32K MAC Addresses and 4K VLANs.	
6	Switch should support minimum 18K ACLs, 16K Multicast and 32K IPv4, 16K IPv6 Routes.	
7	Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.1ae, 802.3x, 802.1p, 802.1Q.	
8	Should have static routing, OSPF, OSPFv3, BGP, VRRP, VRF (Virtual routing and forwarding), IGMP v1/v2/v3, PIM and multicast routing.	
9	Shall have 802.1p class of service, marking, classification, policing and shaping. Should support strict priority queuing.	
10	Switch should support management features like SSHv2, SNMPv2c, SNMPv3, IGMP, Netconf/ YANG or equivalent	

11	Switch should support port security, DHCP snooping, Spanning tree root guard, First Hop Security.	
12	IPv6 support in hardware, providing wire rate forwarding for IPv6 network	
13	Should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment.	
14	Eight egress queues per port for different types.	
15	Switch shall support application visibility and traffic monitoring with sflow/ jflow/ netFlow entries.	
16	Switch shall conform to UL 60950, IEC 60950, CSA 60950, EN 60950 Standards	
17	The OEM should be listed in Gartner Magic Leaders/Challengers Quadrant for wired or wireless segment 2017 OR Gartner Magic Leaders/Challengers Quadrant for Data Centre Networking 2017.	
<b>Additional Item(s)</b>		
1	1. 36x1G single mode LH/LX SFP 2. 4x1G copper Base-T SFP 3. 4x1G Multimode(MMD) SFP 4. 4x10G SR SFP 5. 4x10G LR SFP	

<b>Item 4: Distribution Switch (POE+)</b>		<b>Quantity: 16</b>
<b>BRAND NAME:</b>		
<b>MODEL No.:</b>		<b>PART No. (IF ANY):</b>
<b>Sr. No</b>	<b>Parameter</b>	<b>Compliance Yes/No</b>
1	Switch should be 1RU with minimum 24 no. of 10/100/1000 Base-T POE+ ports and 8 Port SFP/SFP+ Port	
2	Switch should have minimum 150 Gbps of stacking bandwidth with dedicated stacking ports and cables with minimum 4 switches in a single stack from Day 1.	
3	Should have 2GB RAM and 2GB Flash	
4	Switching system shall have minimum 200 Gbps of switching fabric and minimum 154 Mpps of forwarding rate.	
5	Switch should have hot swappable 1:1 redundant internal power supply.	
6	Switching system shall have minimum 32K MAC Addresses and 4K Vlan.	
7	Switch should support minimum 5K ACLs, 8K Multicast and 32K IPv4, 16K IPv6 Routes.	
8	Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.1ae, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z.	
9	Should have static routing, OSPF, OSPFv3, BGP, VRRP, IGMP v1/v2/v3, PIM and multicast routing.	
10	Shall have 802.1p class of service, marking, classification, policing and shaping. Should support strict priority queuing.	

11	Switch should support management features like SSHv2, SNMPv2c, SNMPv3, IGMP, Netconf/YANG or equivalent	
12	Switch should support port security, DHCP snooping, Spanning tree root guard, First Hop Security.	
13	IPv6 support in hardware, providing wire rate forwarding for IPv6 network	
14	Should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment.	
15	Eight egress queues per port for different types.	
16	Switch shall support application visibility and traffic monitoring with sflow/jflow/netFlow entries.	
17	Switch shall conform to UL 60950, IEC 60950, CSA 60950, EN 60950 Standards and ROHS5	
18	The OEM should be listed in Gartner Magic Leaders/Challengers Quadrant for wired or wireless segment 2017 OR Gartner Magic Leaders/Challengers Quadrant for Data Centre Networking 2017	
<b>Additional Item(s)</b>		
1	1. 4x1G single mode LH/LX SFP 2. 4x10G multi mode SR SFP	

<b>Item 5: Ruggedized Field Switch (POE)</b>			<b>Quantity: 500</b>
<b>BRAND NAME:</b>			
<b>MODEL NO.:</b>		<b>PART NO. (IF ANY):</b>	
<b>Sr. No</b>	<b>Parameter</b>	<b>Minimum Required Specification</b>	<b>Compliance Yes/No</b>
1	<b>General Features</b>	The switch should be Industrial Grade ruggedized in nature that provides minimum 10 x 10/100/1000 Base-T access ports including PoE/PoE+ Ports & 2 x 1GE combo Uplink ports with Min. 120 Watts Power Supply for POE/POE+.	
2		The switch should have non-blocking wire-speed architecture with support for both IPv4 & IPv6 from day one with wire-rate switching fabric of minimum 16 Gbps or more	
3		The switch should support backup storage drives, which will store the last known configuration of the switch, in the case of hardware failure and replacement.	
4	<b>Layer 2 Features</b>	802. 1Q VLAN on all ports with minimum 10k MAC address	
5		Spanning Tree Protocol as per IEEE 802.1d, ring protection protocol.	
6		Should support Jumbo frames up to 9000 bytes & Link Aggregation Control Protocol (LACP) as per IEEE 802.3ad.	
7		The switch should support IGMP v1/v2/v3 & up to 1000 IGMP groups as well as IGMP snooping & IGMP	

		filtering. Should also support MLD v1/v2.	
8	<b>Layer Features</b>	Static, Inter-VLAN routing must be enabled from day one	
9		The switch should support Dynamic Routing – RIPv1/v2, OSPF for both IPv4 & IPv6, PBR, network address translation etc. protocol by enabling/upgrading the license as & when required.	
10	<b>Quality of Service (QoS) Features</b>	Switch should support classification and scheduling as per IEEE 802.1P on all ports with minimum four egress queues per port	
11		The switch should provide traffic shaping and rate limiting features for specified Host, network, Applications etc.	
12	<b>Security Features</b>	The switch should support ACLs, Extended IP ACLs, support RADIUS and TACACS+ for access restriction and authentication.	
13		Should support a mechanism to shut down Spanning Tree Protocol Fast-enabled interfaces when BPDUs are received to avoid accidental topology loops.	
14		Switch should support static ARP, Proxy ARP, UDP forwarding and IP source guard, DHCP Snooping, DHCP Option 82, Dynamic ARP Inspection (DAI), IP Source Guard, Network Address Translation, BPDU Guard, Port-Security, DHCP Snooping, 802.1x, 802.1AE, MAC Authentication Bypass, 802.1x Multi-Domain Authentication, Storm Control	
15	<b>Management Features</b>	The switch should be SNMP manageable with support for SNMP Version 1, 2 and 3.	
16		Support for Automatic Quality of Service or equivalent for easy configuration of QoS features for critical applications.	
17		Switch should support PTP, FTP/TFTP	
18	<b>Mechanical Conditions:</b>	• -5 to +70°C continuous operating temperature range	
19		• Operating relative humidity: 5% to 95% no condensing	
20		Protection Class -minimum IP 30, NEMA TS-2	
21	<b>Certifications</b>	Switch should be EN 55022A Class A, VCCI Class A, KN22/CISPR 32 certified	
22		The switch should support CIP Ethernet/IP, IEEE 1588 PTP	
23		EMC interface immunity:	
24		Switch should be EN55024, EN 61000-4-2 Electro Static Discharge, EN 61000-4-5 Surge, EN 61000- 4-8 Power Frequency Magnetic Field, EN 61000- 4-11 AC Power Voltage	



Additional Item(s)			
1		1. 2 x 1G ruggedized single mode LH/LX SFP 2. AC Power Supply	

Item 6: Hyper Converged Infrastructure			Quantity: 1
BRAND NAME:			
MODEL NO.:		PART No. (If ANY):	
Sr. No	Parameter	Compliance Yes/No	
1	The solution should provide hyper-converged software that allows delivery of enterprise-class storage services using latest x86 server infrastructures without dependence on a separate Storage Area Network & associated components such as SAN Switches & HBAs.		
2	The proposed HCI solution should be true Software defined with required Software, there should not be any dependence on Hardware engine for Raid, Compression and De-duplication.		
3	The proposed HCI solution should be a factory shipped engineered & integrated system. All the components of HCI such should be factory installed and shipped ready for fast deployment.		
4	The HCI solution should support scaling hyper-converged node (compute+ storage), compute-only or storage-only(HDDs) independent of each other under a single cluster.		
5	The HCI solution should be proposed with N+1 design. The HX nodes should be proposed on shared nothing architecture (no common power supplies, network ports). Each node should be configured with latest generation Intel Xeon scalable processors with minimum 2*10C and 128GB Memory with 9 TB RAW storage. The node should also include minimum 800 GB (10x Endurance) SSD cache layer or higher.		
6	The proposed HCI solution should support scalability up to 32 nodes in a single cluster. Each server node should have dedicated redundant hot swap power supplies & cooling fans, HCI solution should have 8 nodes from day-1.		
8	The solution should support various data replication methods (RF=2 & RF=3) for data protection. Any software license required to enable RF=2 & RF=3 for data protection must be included on day 1		
9	The HCI should be proposed with SAS/SSD drives for capacity tier per server node. The HDDs should be presented via pass through mode without any hardware RAID on every server node.		
10	Min. 2 * 40Gbps/4*10 GBps network ports per server node.		
11	The solution should support Single button non-disruptive rolling upgrades of HCI software and system firm-wares.		
12	The HCI storage should be a scale-out distributed storage with no dependence on data locality		
13	The HCI should support connecting to external 3rd party SAN (iSCSI) and NAS (CIFS, NFS) storage into the HCI cluster for capacity expansion and ease of migration from existing environment to HCI		

14	The HCI solution should provide Inline Deduplication and compression across all storage tiers.	
15	The HCI solution should have encryption for data at rest at the hard drive layer.	
16	HCI Solution should include Leading Virtualisation SW that sits directly on bare metal hypervisor with functionality of High Availability, Fault Tolerance, hot Add (CPU, Memory, Storage & Network), dynamic resource scheduler, distributed switch, dynamic power management, storage and network IO control, VM level encryption	
17	Integration of 3rd party endpoint security to secure the virtual machines with offloaded antivirus, antimalware, firewall and hips solutions without the need for agents inside the virtual machines.	
18	Hypervisor should have inbuilt Distributed Switch to centralize network provisioning, administration and monitoring using data centre-wide network aggregation, should provide Network QoS to define priority access to network resources.	
19	The HCI solution for all features and any license applicable in Hypervisor, HCI on day 1.	
20	The solution should be provided with 2 Fabric switches 24 Port for inter node connectivity and provide end-to-end network QoS to streamline HCI network traffic to improve traffic filtering, segmentation and performance.	
<b>Additional Item(s)</b>		
1	a. 8x 4 x10G SFP+ with 3Mtr cable b. 8 x 10G SFP+ SR	
2	c. VMware vCenter Standard with 5 Years Production support and subscription from VMware – 1 No. d. VMware vSphere Enterprise Plus with 5 Years Production support and subscription from VMware – 16 No. e. VMware Site Recovery Manager Standard with 5 Years Production support and subscription from VMware – 2 Packs.	

<b>Item 7: Storage for Surveillance</b>			<b>Quantity: 1</b>
<b>BRAND NAME:</b>			
<b>MODEL No.:</b>		<b>PART No. (If ANY):</b>	
<b>Sr. No</b>	<b>Parameter</b>	<b>Description</b>	<b>Compliance Yes/No</b>
1	Converge/ Unified Storage	Unified Storage/Truly converge Solution with NSPoF (No single point of failure) Architecture. The Storage solution should support NAS & SAN as an integrated offering with high availability at each level. The architecture should allow upgrades of hardware and software for investment protection.	

2	Protocols	Solution should be configured with required protocols for the solution CIFS/SMB 3/ NFS 4/iSCSI/FCoE/FC. All required protocols required for the solution to be enabled.	
3	Controllers	System to have minimum Two controllers. System Data mover/controller should support 2x Intel Xeon E5-2600 8- core CPU or higher. Storage should support non-disruptive online firmware upgrade for both Controllers and disk drives.	
4	Operating System	The storage array should support Operating System Platforms & Clustering including: Linux/Windows	
5	Cache Memory	Cache Memory: Each controller/node should be provided with minimum 128 GB RAM scalable to 512 GB RAM with usable protected data Cache for Disk IO Operations. If NAS controllers with separate controllers additional RAM cache to be provided. The storage array must have complete cache protection mechanism either by de-staging data to disk/flash or protecting with NVRAM.	
6	Host	The storage system shall be capable of providing host connectivity as per solution offered (Unified/SAN/NAS/Scale out NAS).	
7	Connectivity	Minimum 2 ports per controller to be provided for host connectivity	
8	RAW Capacity	Min 2 PB	
9	RAID Support	RAID levels Supported: 0, 1, 5, 6, 10 (Dual parity or higher)	
10	Redundancy	Fans and power supplies: Dual redundant, hot-swappable	
11	Disk Drive Support	Storage subsystem shall support 4TB/6TB/8TB or higher NLSAS/SATA/equivalent 7.2K drives in the same device array.	
12	Global Hot Spare	System should have the capability to designate global hot spares that can automatically be used to replace a failed drive anywhere in the system. Storage system should be configured with required Global Hot-spares for the different type and no. of disks configured, as per the system architecture best practices.	
13	Multipath	Multi-path & Load balancing, MPXIO, IPMP, LACP protocol should be supported.	
14	Capacity	The storage system to be configured with SSD capacity for application storage (not certified in HCI appliance) & NL-SAS drives for video surveillance storage to be factored for 90days of online retentions.	

15	Thin Provisioning	Proposed array must be supplied with Thin provisioning for the configured capacity.	
16	De-duplication	Should provide de-duplication functionalities for the configured capacity.	
17	Tiering	Storage should support inbuilt automated tiering feature that migrates the most frequently accessed data to the SSD/RAM. Necessary licenses for configured capacity to be provided from day 1	
18	Snapshots	Should be able to take "snapshots" of the stored data. Offered Storage shall have support to make the snapshot in scheduled or auto snaps. Snapshot should support both block and file.	
19	Replication	The storage array must have the capability to do remote replication using IP technology.	
20	Software Licenses	All the necessary software and licenses to configure and manage the storage space, RAID configuration, logical drives allocation, snapshots, compression, de-dup, replication, auto-tiering for the configured capacity to be provided from day 1	
21	Monitoring	Should support the functionality of monitoring of Disk drive and Storage system for all possible hard or soft failure.	
22	Software Defined Storage	VMware vSAN Standard with 5 Years Production support and subscription from VMware - CPU license as required.	

<b>Item 8: Video Conference Unit</b>			<b>Quantity: 1 set</b>
<b>BRAND NAME:</b>			
<b>MODEL NO.:</b>		<b>PART NO. (IF ANY):</b>	
<b>Sr. No</b>	<b>Parameter</b>	<b>Description</b>	<b>Compliance Yes/No</b>
<b>A. Video Conferencing Display Unit</b>			
1	<b>Form Factor</b>	The solution should be an OEM integrated system with a dual 70" TFT-LCD display or above, full HD 1080p codec and dual automatic voice tracking cameras.  All the components including dual 70" or more LCD display with Floor-Stand kit, codec, dual automatic voice tracking cameras, microphones, and minimum 10" or above touch panel should be from the same OEM from day-1	
2	<b>Video Standards</b>	H.263, H.264, H.265	
3		H.264 should be possible when sending or receiving two live video sources e.g. Presenter and Presentation.	
4	<b>Protocol</b>	H.323, SIP and TIP	

5	<b>Video Frame Rate</b>	Should support 60 fps with 1080p resolution from day one	
6	<b>Video Features</b>	Ability to send and receive two live simultaneous video sources in a single call, so that the image from the main camera and PC can be seen simultaneously.	
7	<b>Content Sharing</b>	Should support H.239 and BFCP protocols with full High definition resolution for presentations.	
8		The VC endpoint should be able to do wireless and wired content sharing during the call	
9	<b>Video Output</b>	The system should be an OEM integrated solution with a single 70" or more TFTLCD Monitor with floor mounting kit	
10	<b>Video Input</b>	Should have DVI (Digital Video Interface)/HDMI input to connect PC / Laptop directly to the Video conferencing system and display resolutions HD1080p along with PC Audio.	
11	<b>Audio standards supported</b>	G.711, G.722, G.722.1 standards must be supported.	
12	<b>Other Desirable features</b>	Noise Reduction, Automatic Gain control, Acoustic Echo Canceller	
13	<b>Audio Interfaces</b>	The system should be supplied with minimum 8-table top microphones day one, which should be connected to the codec directly.	
14		The microphones must be standard based microphones.	
15		The pickup of the microphones should be at least 10 feet from the microphone.	
16		Echo Cancellation for every input must be available.	
17		The system should have inbuilt hi fidelity bass speakers as part of the integrated unit with minimum 150W amplifier output.	
18	<b>Network Interfaces</b>	1 LAN / Ethernet - 10/100/1000 Mbps full duplex	
19	<b>Bandwidth</b>	IP bandwidth up to 6Mbps	
20	<b>Network Capabilities</b>	Packet Loss Based Down-speeding	
21	<b>H.323/ IP Features</b>	Quality of Services, IPV4 and IPV6	
22		Auto Gatekeeper discovery	
23		Network Address Translation(NAT) support	
24		Standards based- Packet Loss Recovery feature on H.323 call	
25		Should support URL Dialling	
26	<b>SIP Features</b>	The endpoints must support SIP in addition to H323 protocol	
27	<b>Menu Control</b>	Password protected system menu	
28	<b>Encryption of</b>	ITU-T standards-based Encryption of the video call	

29	<b>video call</b>	Call should be encrypted end-to-end on IP	
30		Should support Standards-based: H.235 and AES Encryption via Automatic key generation and exchange.	
31		Ability to manually turn encryption On or OFF should be there.	
32		Automatic key generation and exchange	
33	<b>Advanced Collaboration Feature/Smart Pair</b>	The system must have the ability to pair mobile devices such as Tablets and Smartphones based on iOS or Android platforms so that these devices can be used for viewing the presentation that is being shown in the VC call.	
34	<b>Camera</b>	Dual Full HD 1080p automatic voice tracking cameras CMOS or equivalent	
35		PTZ Capabilities: +/-10° tilt, +50/-50° pan,	
36		Camera Zoom: Minimum of 10x optical or more zoom	
37		1920 x 1080 pixels progressive @ 60fps	
38		Should have at least 65 degrees field of view	
39	<b>Device Operations</b>	The device should be operated for call connection, disconnection, presentation sharing using a start of the art touch panel	
40	<b>Inbuilt Multisite 1+3</b>	Must have built-in Multi-conference capability to connect at least 1+3 sites at 1080p in a continuous presence mode	
41	<b>Directory services</b>	Should support Local and Global directories.	

**B. Web Conferencing Subscription License**

**Quantity: 10 Host**

**BRAND NAME:**

**MODEL No.:**

**PART No. (IF ANY):**

Sr. No	Parameter	Compliance Yes/No
	Make Offered	
	Model Offered	
1	The solution should be a web-based tool allowing users to connect with other users over Internet/ Secure Intranet.	
2	The tool should enhance individual and team productivity and collaboration with high-quality audio, video, and web conferencing	
3	The tool should enable mobile users to be more productive and be engaged with the ability to participate in meetings using a variety of mobile devices such as smartphones, tablets, iPhone.	
4	The tool should have the capability for document, application, and desktop sharing	
5	The tool should have the capability for annotation and collaboration tools	
6	The tool should have Personal Conferencing Number capabilities provide persistent host and attendee access codes for planned and ad-hoc audio-centric conferencing.	

7	The tool should support Dial Out capabilities that rapidly dials to multiple participants automatically at a meeting's start.	
8	The tool should provide High-quality video; full-screen video; up to six simultaneous webcam video feeds and voice-activated switching	
9	The tool should support meetings and recording capabilities including downloadable recordings and playback	
10	The tool should have consistent cross-platform experience on Windows, Mac, smart phones, and tablets	
11	The tool should have the capability for the hosts can schedule meetings directly from their Microsoft Outlook for Windows calendars / Web based interface	
12	The tool should have Start, join, schedule, and attend online meetings from mobile devices	
13	The tool should have mobile functions such as chat, audio, call back over IP network or PSTN network, calendar, and ability to pass host privileges to others on call	
14	The tool should be a simple virtualized application running in the network	
15	The tool should work on HTTP port 80.	
16	The solution should allow for H.323 and SIP based hardware-based Video conference endpoints deployed in conference rooms with a PTZ Camera and codec to seamlessly join as a participant into the meeting with other users connected on the web conference using a web camera, Internet and audio speakers and microphone.	
17	The solution should allow for the users connected on the web-based tool to share video, audio and content with the hardware-based Video conferencing device and vice versa.	
18	The solution should support the following features when a SIP/H.323 room-based Video conference endpoint connects to the meeting:	
19	Video Resolution: main video up to 720p at 30 fps and content sharing	
20	Video Aspect Ratios: 4:3 standard and 16:9 widescreen aspect ratios	
21	Single, dual, and multi-screen standards-based video conferencing systems	
22	Advanced Encryption Standard (AES) 128-bit encryption	
23	<b>Signalling protocol support:</b> H.323/SIP, TLS	
24	<b>Media protocol support:</b> RTP, sRTP, and RTCP	
25	<b>Content share (dual video) protocol support:</b> Binary Floor Control Protocol (BFCP)/H.239 / TIP	
26	<b>Video codec support:</b> H.263 and H.264 AVC	
27	<b>Audio codec support:</b> G.711, G.722, G.722.1 or equivalent	
28	The users connected in to the web meeting from desktop should be able to connect on audio using any of the following methods:	
29	Computer audio	
30	call back on Telephone Service Provider (PSTN) audio	
31	The users connected in to the web meeting from desktop/laptop/iPad should be able to dial into the meeting or the server should call the user back on audio.	
32	<b>The solution should support the following advanced security features such as :</b>	
33	Personal Identification Number (PIN)-protected access into meetings from	

	video endpoint	
34	Meeting lock/unlock for added privacy to prevent unintended participants from joining	
35	Authenticated access into meetings on desktop and mobile apps	
36	<b>During the meeting , the user should be able to have the following controls</b>	
37	See all meeting participants in a unified participant list	
38	Drop participants	
39	Record sessions with video, audio, and content for future reference, training, or demonstrations	
40	Mute, un-mute audio of participants	
41	The web conferencing users and users joining from SIP/H.323 video conferencing endpoint should be able to have multiparty meeting.	
42	The single meeting should have around 100 web-based users joining from desktop/laptop etc.	
43	The meeting should have the future scalability to have up to 25 SIP / H.323 endpoints to join a single meeting with 100 users from PC/laptop/iPad etc over Web.	
44	The entire collaborative solution should be from same OEM.	

<b>Item 9: Outdoor Access Point</b>		<b>Quantity: 65</b>
<b>BRAND NAME:</b>		
<b>MODEL NO.:</b>		<b>PART NO. (IF ANY):</b>
<b>Sr. No</b>	<b>Parameter</b>	<b>Compliance Yes/No</b>
1	Access Points proposed must include radios for both 2.4 GHz and 5 GHz.	
2	AP should support dual-band antenna ports.	
3	Must have -91/99 dB or better Receiver Sensitivity	
4	Must support 2X2 multiple-input multiple-output (MIMO) with two spatial streams	
5	Must support 802.11ac, Wave 2 and backward compatible with 802.11n standards	
6	Must support data rates upto 866 Mbps on the 5GHz radio	
7	Must support 80 MHz wide channels in 5 GHz.	
8	Must support WAP enforced load-balance between 2.4Ghz and 5Ghz band.	
9	Should support configuring the access point as network connected sensor to access any network location covered by the access point to get real-time Spectrum analysis data	
10	Must support upto 28dbm or higher transmitting power for both the radios	
11	Access point should 802.11ac, 802.11n and 802.11a/b/g Beam forming	
12	The Wireless Backhaul/Mesh shall operate in 5Ghz	



13	Support Encrypted and authenticated connectivity between all backhaul components	
14	Access point should have multiple wired uplink interfaces including 10/100/1000BASE-T Ethernet autosensing (RJ-45) and a built-in SFP port for direct fibre connection.	
16	Wireless AP Should able to detect and classify non-Wi-Fi wireless transmissions.	
17	Must incorporate radio resource management for power, channel, coverage hole detection and performance optimization	
18	Access point shall support powering from AC/ DC/ UPOE/ PoE/ PoE+	
19	Access point shall support pole/ wall/ Cable strand mounting options.	
20	The equipment shall support up to 100 MPH sustained winds & 165 MPH wind gusts.	
21	The Access point shall be IP67 and NEMA rated	
22	The Access point shall support operating temperature of - 20 to 55°C	
23	Wi-Fi Alliance Certification for WMM and compliance to WMM power save	
24	Must support Reliable Multicast to Unicast conversion to maintain video quality at AP level	
25	Must support QoS and Video Call Admission Control capabilities.	
26	Must support Spectrum analysis including @ 80 MHz	
27	The Same model AP that serves clients must be able to be dedicated to monitoring the RF environment.	
28	Should support mesh capabilities for temporary connectivity in areas with no Ethernet cabling.	
30	Must support 16 WLANs per AP for BSSID deployment flexibility.	
31	Must support telnet and SSH login to APs directly for troubleshooting flexibility.	
32	Access Points must use existing authentication and monetised solution for wireless users	
33	Wifi access points must provide 20Mbps Bandwidth speed per Access Point.	
34	The OEM should be listed in Gartner Magic Leaders/Challengers Quadrant for wired or wireless segment 2017.	
35	Access Point should have these from day-1 1. Antenna set 2. Pole Mounting Kit 3. Access Point License for existing Wireless Controller (WLC-5520)	

Item 10: Indoor Access Point		Quantity: 30
BRAND NAME:		
MODEL NO.:		PART NO. (IF ANY):
Sr. No	Parameter	Compliance Yes/No
1	Access Points proposed must include radios for 2.4 GHz and 5 GHz with 802.11ac Wave 2	
2	Must have an industrial design for durability, with steel cases, industrial grade antenna connectors, without visible vents.	
3	Access Point must provide Kensington lock option for theft protection.	
4	Must support external antenna options that provides flexibility to support single and dual band antenna	
5	Mounting kit should be standard from OEM directly.	
	Access Point shall support dual 5GHz radios allowing a total physical layer data rate upto 5 Gbps	
6	The Access Point should have a capability to handle high density environment with more number of concurrent users by having dedicated memory and CPU to each radio apart from the shared Memory and CPU.	
7	Access Point shall be able to support 20, 40, 80 and 160 MHz channel bandwidth	
8	Must have atleast 1024 MB DRAM and 256 MB flash	
9	Access point must provide dual Gigabit ethernet uplink	
10	Access point should have serial/console port	
11	Must have atleast 4 dBi and 6dBi Antenna gain on 2.4 Ghz and 5Ghz respectively	
12	Must support 4x4 MU-MIMO multi-user multiple input multiple-output (MIMO) with three spatial streams	
13	Must support upto 5 Gbps on 802.11ac wave 2 respectively.	
14	Must support minimum of 22dbm of transmit power on both 2.4 Ghz& 5GHz Radio.	
15	The AP must be capable of optimizing the SNR exactly at the position where 802.11a/g/n/ac client is placed (beamforming) without requiring any support from clients, hence it should work with all 802.11a/g/n/ac clients.	
16	Should have detecting and classifying non-Wi-Fi wireless transmissions while simultaneously serving network traffic	
17	Should support configuring the access point as network connected sensor to access any network location covered by the access point to get real-time Spectrum analysis data.	
18	Must support AP enforced load-balance between 2.4Ghz and 5Ghz band.	
19	Must incorporate radio resource management for power, channel, coverage hole detection and performance	

	optimization	
20	Should be able to detect atleast 20 sources of non 802.11 interference within 30 seconds	
21	Must have -100 dB or better Receiver Sensitivity.	
22	Must support Proactive Key Caching and/or other methods for Fast Secure Roaming.	
23	Must support Management Frame Protection.	
24	Should support locally-significant certificates on the APs using a Public Key Infrastructure (PKI).	
25	Must operate as a sensor for wireless IPS	
26	Should support non-Wi-Fi detection for off-channel rogues and Containment for both radio	
27	Access point should able to do the spectrum scanning for WiFi and non-WiFi interference at all 20Mhz ,40Mhz and 80Mhz channels	
28	Access Points must support a distributed encryption/decryption model.	
29	Access Points must support Hardware-based encrypted user data and management traffic between controller and Access point for better security.	
30	Same model AP that serves clients must be able to be dedicated to monitoring the RF environment.	
31	AP model proposed must be able to be both a client-serving AP and a monitor-only AP for Intrusion Prevention services.	
32	Should support mesh capabilities for temporary connectivity in areas with no Ethernet cabling.	
33	Mesh support should support QoS for voice over wireless.	
34	Must be plenum-rated (UL2043).	
35	Must support 16 WLANs per AP for SSID deployment flexibility.	
36	Must continue serving clients when WAN link to controller is back up again, should not reboot before joining	
37	The APs must support centralized wireless mode with the use of a controller, but the APs must also support operation in autonomous mode without the presence of any controller, when needed.	
38	When operated in remote AP mode, the AP must not disconnect any clients when the connection to the controller fails or in the case the failed connection has been restored again.	
39	When operated in remote AP mode, the AP must be able to authenticate new users with local radius server directly at the AP itself in case of link failure to controller.	
40	Access point should able to do the spectrum scanning for WiFi and non-WiFi interference at all 20Mhz ,40Mhz, 80Mhz and 160MHz channels	
41	Must support telnet and/or SSH login to APs directly for troubleshooting flexibility.	

42	Must support Power over Ethernet, local power(DC Power), and power injectors.	
43	Must operate at 3x3 or higher with 802.3af PoE is the source of power	
44	802.11e and WMM	
45	Must support Reliable Multicast to Unicast conversion to maintain video quality at AP level	
46	Must support QoS and Video Call Admission Control capabilities.	
47	Access Point should 802.11 DFS certified	
48	Access Point should have these from day-1 4. Antenna set 5. Pole Mounting Kit 6. Access Point License for existing Wireless Controller (WLC-5520)	

Item 11: Enterprise Management System		Quantity: 1
BRAND NAME:		
MODEL NO.:		PART NO. (IF ANY):
Sr. No	Parameter	Compliance Yes/No
A	<b>Enterprise Management System</b> (for monitoring of IP/SNMP devices as per specifications, comprising of the modules A1 to A4 below. The central aggregation device should also be capable of consolidating NON-IT equipment in the future.). (1 set)	
A1	Integrated Hardware & Software ( <b>in High Availability mode</b> ) along with database, licensed to manage min 10,000 network I/O's across Different networking devices. (1+1 No.)	
A2	Fault Management Module (1 No.)	
A3	Performance Management Module (1 No.)	
A4	Configuration management module to save the configurations of all networked devices. (1 No.)	
<b>B</b>	<b>Operations Management system (1 set), comprising :</b>	
B1	Reporting & Analysis	
B2	Help Desk Module	
B3	SLA Management and Penalty Estimation	
B4	CMDB	
B5	IT Asset and inventory Management	
<b>C</b>	<b>Implementation</b>	
C1	Implementation and one-time Training. (Lot)	
<b>D</b>	<b>Post Implementation Support</b>	
C1	The system should be managed by a dedicated technical resource deputed at CCR who will work under the guidance of JDA's IT staff, for the duration of contract period.	

Item 12: Unified Management (for Servers)		Quantity: 1
BRAND NAME:		
MODEL NO.:		PART NO. (If ANY):
Sr. No	Parameter	Compliance Yes/No
1	The solution shall provide a single pane of glass for automated provisioning with model-based orchestration of existing Data Centre compute, network, storage, applications and custom services through a unified multi-tenant IT service catalogue. The solution should provide 50Nodes management licenses.	
2	The solution shall allow authorized administrators, developers or business users to request new IT services and manage specific cloud and IT resources, while ensuring compliance with business policies	
3	The solution shall support management of the machine life cycle from a user request and administrative approval through decommissioning and resource reclamation with dynamic capacity management	
4	The solution shall support provisioning across multi-vendor, multi-hypervisor (eg: VMware ESX, ESXi, Microsoft Hyper-V, and Red Hat hypervisors) physical x86, virtual and public cloud environments. Currently supported target environments with version details should be submitted as part of compliance	
5	The solution shall support extensible automation and integration with northbound APIs.	
7	The solution shall support creation of services such as 'Single VM' (including software-based constructs such as load balancers)' as part of a standard template.	
9	The solution shall support multiple levels of approval and email notifications with ability to automate manual provisioning and de-provisioning of the tasks and policies embedded in each layer of their application	
11	The solution shall extend operations capabilities to the requestor of the service eg. ability to start/stop/suspend virtual machines through the self-service portal based on entitlement	
12	The solution shall support granular role-based access control and entitlements of infrastructure services to consumers with continuous monitoring for infrastructure consumption to improve capacity planning and management	
11	The solution should be able to manage blade servers across multiple sites from a single console	
12	The solution shall allow administrators to manage and reserve (allocate a share of the memory, CPU and storage) resources for a group of virtual machines to use.	

13	The solution shall integrate with Active Directory (AD) to allow importing existing users and groups in addition to creation of local users in the cloud portal.	
14	The solution should include an Application and Infrastructure performance management tool quoted as part of the solution to improve operations and provide deep infrastructure performance insight.	
15	The solution should have capability to capture each and every flow using the light weight sensors deployed on VM, Bare Metal host and Network switches and analyse them to provide rich telemetry information about network i.e. Buffer utilization, packet drops, network latency etc. and application i.e. process ID, process owner, application latency etc.	
16	The solution should be able to perform Application dependency mapping for the stipulated time and then it continuously monitors an application for compliance and also perform application behaviour analysis for anomaly detection. the solution must have capability of simulating and applying policy for validation on live as well as historical traffic.	
17	Bidder must quote appropriate license to enable and meet mentioned features in the Infrastructure Automation Architecture	

Item 13: AAA Appliance Based Solution for Network Devices		Quantity: 2
BRAND NAME:		
MODEL NO.:		PART NO. (IF ANY):
Sr. No	Parameter	Compliance (Yes/No)
1	The Solution should provide a highly powerful and flexible attribute-based access control solution that combines authentication, authorization, and accounting (AAA) services on a single platform.	
2	Solution should include all required licenses to perform device authentication for 1000 devices from day one	
3	Solution should support capability to allow enterprises to authenticate and authorize users and endpoints via wired, wireless, and VPN with consistent policy throughout the enterprise as when required in future by purchasing required license	
4	Solution should support capability to provides complete guest lifecycle management by empowering sponsors to on-board guests as and when required in future by purchasing license	
5	Proposed solution should include two appliances to be configured in Active/Standby	
6	Solution should support capability to enforces security policies by blocking, isolating, and repairing non-compliant machines in a quarantine area without requiring administrator attention	
7	Offers a built-in monitoring, reporting, and troubleshooting console to assist helpdesk operators and administrators streamline	

	operations	
8	Solution should utilizes standard RADIUS protocol for authentication, authorization, and accounting (AAA).	
9	Supports a wide range of authentication protocols, including PAP, MS-CHAP, Extensible Authentication Protocol (EAP)-MD5, Protected EAP (PEAP), EAP-Flexible Authentication via Secure Tunnelling (FAST), and EAP-Transport Layer Security (TLS).	
10	Provides a wide range of access control mechanisms, including downloadable access control lists (dACLs), VLAN assignments, URL redirect	
11	Should support predefined device templates for a wide range of endpoints, such as IP phones, printers, IP cameras, smartphones, and tablets.	
12	Should support Identity source sequences which defines the order in which the solution will look for user credentials in the different databases. Solution should support the following databases: •Internal Users, Internal Endpoints, Active Directory, LDAP, RSA, RADIUS Token Servers, Certificate Authentication Profiles	
13	Proposed solution should support TACACS+ to simplify device administration and enhance security through flexible, granular control of access to network devices	
14	TACACS+ device administration should support: 1.Role-based access control 2.Flow-based user experience 3. Per Command level authorization with detailed logs for auditing	
15	Proposed solution should support capability to customize TACACS+ Services by specifying customer TACACS+ port number	
16	Proposed solution should be able to create TACACS+ profile like Monitor, Privilege level, default, etc to control the initial login session of device administrator.	
17	Proposed solution should be able to create TACACS+ authorization policy for device administrator containing specific lists of commands a device admin can execute. Command sets should support; exact match, case sensitive, (any character), * (matches any), etc and support stacking as well	
18	Proposed solution must support TACACS+ in IPv6 network	
19	Should support troubleshooting & Monitoring Tools	

<b>Item14: Backup/ Replication Software for On-Premise and Cloud</b>			<b>Quantity: 1</b>
<b>BRAND NAME:</b>			
<b>MODEL NO.:</b>		<b>PART NO. (IF ANY):</b>	
<b>Sr. No.</b>	<b>Feature</b>	<b>Description</b>	<b>Compliance (Y/N)</b>
01	Backup/ Replication Software for	Backup software must be present as Leaders in latest Gartner's Magic Quadrant Report for at least last 3 years.	
		Backup software must support GUI with centralized	

	On-Premise and Cloud	management / Single interface for management of all backup activities.	
		The offered software must support Advanced sharing of different media across the environment (disk, tape and optical)	
		The offered software must support multiple level of backups including full, incremental, differential and synthetic full.	
		The offered software must include following application and database backup with Native Integration (Without Third Party Agents Integration) For 64-Bit Active Directory, SQL, Exchange, Share-Point, Oracle, MySQL, PostgreSQL.	
		Backup software should support online backup of applications and Database Servers covering unlimited numbers of PostgreSQL, MySQL, MS SQL, Oracle instances.	
		The proposed solution must have inbuilt Ransom ware detection capability for clients.	
		Proposed backup solution must have inbuilt capability to protect the backed up disk volume from Ransomware.	
		The software must be able to perform inline block-level de-duplication of data across different electronic data repository like physical server, Virtual machine from different hypervisors, user machines etc.	
		The software must be able to Compress and Encrypt data at the Client- side and this feature should be available even during de-duplication.	
		The offered software must have more than three Encryption algorithms (like 128 bit AES, 256 BIT AES etc.) and it should not demand for additional license, any such license if needed should be quoted for the total backup capacity license.	
		The offered software must support complete integration of Server Backup, Desktop backup, Laptop Backup, Virtual Machine Backup, Archival and Replication Solution with a Single Console to manage all the solutions	
		The offered software must integrate with different hypervisors to backup different platforms including RHEV, VMware, Hyper-V, Oracle Virtual machine, Citrix Xen.	
		Backup solution must support multi tenancy feature for creation of distinct data zones.	
		The offered software must be able to auto discover guest VMs and dynamically configure them for data backup.	
		Proposed software should support image backup for VMware, Hyper-V and RHEV backup without installing	



		agent inside the VMs.	
		Backup software should support Bare Metal recovery for physical to physical, physical to virtual, virtual to physical.	
		Backup solution should support granular restore options like complete VM, Databases, files, folders etc.	
		Should support all leading Standalone tape drives as well as tape libraries.	
		Backup software should support bandwidth throttling.	
		The software solution must provide full support for Global Filter lists.	
		The offered software solution must support IPV4 and IPV6 addressing system.	
		The offered software solution must have capability to do trend analysis for capacity planning of backup environment.	
		The offered front-end backup capacity license software must be proposed to cater to 5 TB of Database & Application and 25 TB flat file.	
	Cloud Server	Windows 2016/ 16 Core CPU/64 GB memory/400 GB OS disk/1.5 TB SAS disk for Metadata	
	Cloud Storage	30TB object storage	
	Implementation	Implementation planning, design and documentation of the backup solution to be done by the product OEM	
	OEM Support & Subscription	Five(5) year subscription license with 24x7x365 support must be included with license from OEM	

Item 15: Interactive Kiosk		Quantity: 10 nos	
BRAND NAME:			
MODEL NO.:		PART NO. (IF ANY):	
Sr. No	Parameter		Compliance Yes/No
	Make Offered		
	Model Offered		
1.	The Interactive Kiosk should comprise of Hardware based Interactive Clients (a set of interactive computing and collaboration devices), a management platform, collaboration applications, and a network infrastructure to deliver web-based applications and multimedia content through interactive displays and kiosks to Citizens.		
2.	The Interactive Kiosk should be enterprise-grade configurable and manage web clients designed to deliver interactive multimedia services for public venues, including high-definition digital displays and kiosks. This managed kiosk platform should be both developer and IT friendly.		

3.	The Interactive Kiosk must display the content in frame format using any web browser. The content must be developed in agreement of JDA's IT cell to show without any address bar for all public websites on Kiosks platform. The Kiosks should be ready to show any content related video, virtual tour, flash content, multimedia content and must support dynamic change in content. 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 must be integrated with the current service selection to provide highly effective targeted advertising.	
4	Kiosks should be compatible with existing collaboration applications and should provide voice and video calls over SIP. 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.	
5.	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, shelter should be good in look feel and should be designed to show only touch screen, all the peripherals should be inside the shelter, locked and should not be visible openly. The shelter should be designed to fix in a wall or should be placed independent to place in a hall.	
6.	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.	
7.	High-definition interactive citizen service deliver content from centralized Kiosk application management platform. The content developed must be JDA's property and hosted on JDA's resources.	
8.	Easy to deploy, secured and compliant for open-to-public facilities	
9.	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.	
10.	Easy and user-friendly interface for citizen: the solution will require neither physical keyboards/mouse nor ICT expertise.	
11.	On-screen fulfilment of an administrative form (for example, complete a request for renewal of Identity document)	
<b>Additional Items</b>		
1.	The content should be managed by a dedicated content developer deputed at JDA IT Cell who will work under the guidance of JDA's IT staff.	

<b>Item 16: Smart Waste bins</b>		<b>Quantity: 100</b>
<b>BRAND NAME:</b>		
<b>MODEL NO.:</b>		<b>PART NO. (If ANY):</b>
<b>Sr. No</b>	<b>Parameter</b>	<b>Compliance Yes/No</b>
	<b>Make Offered</b>	
	<b>Model Offered</b>	
1	Ultrasonic fill-level sensor	
2	Should provide current location data through APIs	
3	Should also be able to report temperature in the bin	
4	Completely wireless with 3+ years battery life	
5	Should be light weight & be easily mounted to any container	
6	Should communicate via LoRa, Wi-Fi or cellular networks	
7	Zero maintenance with a non-corrosive protective shell	
8	The software associated with the sensor should expose all the data reported by sensor using well defined REST APIs to third party applications	
9	The software should report any sensor faults, communication issues etc. as alerts through APIs to third party applications.	
<b>Waste Bins Specifications</b>		
10	Plastic Waste-bin capacity - 240 Litre	
11	Dead weight of Waste-bin - approx. 14 Kg	
12	Useful Load - 110 Kg	
13	Waste-bin Hanging Stand customised a. Two Iron in square pillar thickness 2"inch b. Iron round thickness 0.5mm	
14	Foot operate system for 240 Litre Waste-bin	
15	Iron Foot Operate thickness - 1" (inch)	
<b>Additional Item</b>		
1.	SIM Charges along with Data Plan as required + subscription charges of APIs + subscription charges for any other related requirement for contract period	

<b>Item 17: Environment Sensor</b>		<b>Quantity: 10</b>
<b>BRAND NAME:</b>		
<b>MODEL NO.:</b>		<b>PART NO. (If ANY):</b>
<b>Sr. No</b>	<b>Parameter</b>	<b>Compliance Yes/No</b>

<b>Make Offered</b>				
<b>Model Offered</b>				
1	Measurement elements	Temperature, Humidity, Light, Noise, CO, NO2, O3, SO2, pm2.5, pm10, CO2, UVa, UVb		
2	Measurement components & Measurement range	NO2	0 to 10 ppm	
		CO	0 to 100 ppm	
		SO2	0 to 2000 ppm	
		O3	0 to 1000 ppm	
		PM2.5	0 to 230 micro gms/cu m	
		PM10	0 to 450 micro gms/cu m	
		Temperature	0 to 100 Deg. C	
		Relative Humidity	up to 100%	
		Light	up to 10,000 Lux	
		Noise	40 to 120 db(A)	
		CO2	up to 5000ppm	
		UVa	up to 15mW / cm2	
		UVb	up to 15mW / cm2	
		Pressure	540-1100 Millibars	
3	Connectivity	GSM(3G/4G)		
		Wi-Fi		
		Wireless backhauls to Cloud.		
		Third party access for		
		· Raw data at defined frequencies		
		· Curated /Computed data		
4	Software and Data backup	Data Buffer Capacity up to 3 years		
5	Data Capture Frequency	Every 30 seconds		
6	Battery	Li-Ion Battery Backup of 4 hours		
7	Enclosure	Aero Dynamic Design for minimal air resistance		
8	Stabilization Time	Stabilization Time on power outages < 10 minutes		
9	Visual Indication	LEDs on the enclosure for easy visual indications		
10	Products origin and certification	· Communications modules are FCC, PTCRB compliant		
		· All major components of Environmental sensors like individual sensors etc are CE certified		
10	Housing Design	Universal Housing which can be mounted on buses/Public Transport and designed to ensure minimum air resistance		
11	Software Solution	a) Solution to enable APIs for mobile & Web services		

		b) APIs to provide	
		· Status of Devices	
		· AQI Colour Schema	
		c) Lead pollutant contributing to AQI	
		d) Architecture to support computation of new parameters such as	
		· Now Cast AQI	
		· Zonal Limits	
12	Support system	a. Element Management System (EMS)	
		b. Alerts for outages	
		c. Alerts for Device working on Battery/Mains	
		d. Alerts for any pollutant crossing the breakpoint level for PM 2.5, PM 10, SO2, NO2 O3 and CO	
		e. Alerts for Noise level reaching breakpoint level for Hospitals	
		f. Alerts for AQI crossing the Satisfactory Pollution level	
		g. Remote configuration of Sensors	
13	Data Analytics	a. lead pollutants, trends & Source level apportionments	
		b. Integration and analysis of various northbound API's including traffic / parking & Environment to derive insights.	
<b>Additional Item</b>			
1	SIM Charges along with Data Plan as required + subscription charges of APIs + subscription charges for any other related requirement for contract period		

<b>Item 18: Variable Messaging Signage</b>			<b>Quantity: 10</b>
<b>BRAND NAME:</b>			
<b>MODEL NO.:</b>		<b>PART NO. (IF ANY):</b>	
<b>Sr. No</b>	<b>Parameter</b>	<b>Compliance Yes/No</b>	
1	VMS solution shall be able to display real-time as well as static data.		
2	VMS solution shall be a fully customizable solution for each display/ location to show live traffic-related information, live congestion related information specific to that location/ corridor.		
3	VMS solution shall be able to provide automatic real time information like weather updates, alternate route options useful to the road user.		
4	VMS Solution shall have the capability to be integrated with disaster management & emergency response data sources to provide instant alerts to road users & public.		
5	SMART VMS solution shall allow integration with Speed Radars/lasers for speed monitoring and Driver feedback applications to reduce accident on roads.		

6	SMART VMS solution shall allow distribution of emergency messages to specific individual / group or all VMS boards via secured Mobile/ Tablet application.	
7	SMART VMS solution shall be capable of reading live data from road side sensors. Example: - Parking, Air Quality etc.	
8	If there is no data connectivity due to network issues on the thin client then the VMS shall display the last uploaded content / programmed content, thus ensuring uninterrupted performance.	
9	The system should be easy to manage and operate from a single control room and the central control software is capable of managing at least 500 boards.	
10	In the event of central server failure, each of the SMART VMS boards should be individually capable of continuous & uninterrupted display of real time traffic & other information as per last configuration thereby ensuring continuous operation.	
11	There shall be an option to view latest content screen shot of every display on the centrally hosted VMS Manager Application	
12	Android App shall be provided for entering Emergency messages and distributing to the VMS Displays from the App with clear time lines (Start time & Date, End time and Date). Authentication key shall be provided to the authorized users only.	
13	Automated email alerts at set intervals shall be provided in case the VMS thin clients are not connecting to the central manager application.	
14	The system shall maintain the history of messages archived for future reference and analysis.	
15	All boards shall be connected and controlled centrally via one software application and server. The software patches/upgradation should be free for 5 years.	
16	It shall be capable to integrate with other Intelligent Transport Solutions as and when required on availability of protocols. It should have the ability to integrate common content wherever possible.	
17	The intended information to be displayed shall have the feature to schedule and display data at any date and time.	
18	VMS solution shall be installed at the control center and shall also be capable of providing viewing facilities as directed by the Engineer.	
19	VMS shall be capable to maintain logs on the server for a period of 12 months.	
20	VMS solution shall display pictograms and text message in English, Hindi and other regional languages.	
21	VMS Solution shall have the capability to define groups for displays, so that specific messages can be displayed to targeted boards.	
22	VMS solution shall work in an automated fashion. No manual intervention shall be required for displaying the contextual, real-time information.	
23	VMS solution shall be a cloud-based solution.	
24	Display should have certifications for FCC, CE, RoHS, IP65 from front side and IP55 for whole cabinet as a regulatory compliance.	
25	Display should be CB certified.	

A	<b>i. Variable Message Display Specifications</b>		
	<b>Parameter</b>		
	LED Type	DIP	
	Pixel Pitch	10mm	
	Pixel Configuration	1R/1G/1B	
	Board size	Customized	
	Cabinet Pixels	10000/m2	
	Pixel Density	10,000 dots/m2	
	Color type	Real Full Color	
	Brightness	7000-7500 cd/m <sup>2</sup> (Ensure excellent Images)	
	Brightness Adjustment	Manual and Automatic	
	Best Viewing Distance	10m – 100m	
	Power Consumption	Maximum 800W/m <sup>2</sup> Average 400W/m <sup>2</sup>	
	Control Method	Synchronized with System	
	Frame Frequency	≥60 Hz.	
	Grey Level	≥ 16K Grade	
	Color Temperature	6000K-95000 K	
	Color	≥16 Million Colors	
	Working Temperature	-10°C ~ 60°C	
	Defect Ratio	≤0.1%	
	Working Voltage	AC230V±15%; 50Hz	
	Video Interface	Supports RJ45 and DVI	
	Communication	Wired through RJ45/Wireless through Dongle	
	Life Span	1,00,000 HRS	
	Ingress Protection Rating	IP 55- Cabinet	
		IP 65- Front side.	
	Operating Windows	Windows 7 Embedded OS.	
	Viewing Angle	Horizontal 140° / Vertical 120°	
	Functional Features	The VMS boards shall have the facility to generate Real Time information of Traffic Data i.e. Traffic Live Congestion, Journey Time, Traffic rerouting, Live Weather, automatically using a thin client windows embedded system. The VMS solution should provide Android based application for Disaster Management and Emergency Messages	
B	<b>Client Player Software (at the Display)</b>		

	The Software should run on Microsoft Windows Platform: Windows 7 Embedded.	
	The Software powers up the Media Player at pre-determined times on all functioning days of the Station.	
	The Software powers off the unit during the closing hours of the Station.	
	No Personnel should be required to either switch on, switch off, power off, log in or log out procedures. All the above functions should function automatically as scheduled.	
	Multiple Screen Layouts with Multiple Independent Zones.	
	Play Standard Multimedia Files: Flash, Videos, Images, etc.	
	Time-Sensitive Content – Expired old content to be purged.	
	Unattended, Continuous Playback	
	Remote Shutdown, Reboot Mode.	
	Connect on “as-and-when-needed” basis	
	Can use Dial-Up or Broadband Connectivity	
	Scalable Network	
	No need of dedicated bandwidth	
	Play Scheduled Playlist in day parts	
	Proof of Play and Log Retrieval	
	Support Major Indian Language Fonts	
	Minimum 4 GB RAM and 16 GB Flash, 1.66 GHZ	
	24x7 Operations	
<b>C</b>	<b>Client Player Software (at the Display)</b>	
	The Software should run on Microsoft Windows Platform: Windows 7 Embedded.	
	The Software powers up the Media Player at pre-determined times on all functioning days of the Station.	
	The Software powers off the unit during the closing hours of the Station.	
	No Personnel should be required to either switch on, switch off, power off, log in or log out procedures. All the above functions should function automatically as scheduled.	
	Multiple Screen Layouts with Multiple Independent Zones.	
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	Can use Dial-Up or Broadband Connectivity	
	Scalable Network	
	No need of dedicated bandwidth	
	Play Scheduled Playlist in day parts	
	Proof of Play and Log Retrieval	
	Support Major Indian Language Fonts	
	Minimum 4 GB RAM and 16 GB Flash, 1.66 GHZ	



	24x7 Operations	
<b>D</b>	<b>Network Control Software (at the User)</b>	
	Web Based Solution (Hosted Manager Application) anywhere access on the Clients Network	
	Desirable Integration with Windows Server 2008 / 2012 based Active Directory System.	
	Screen Layout Designer Module with Drag and Drop interface and supporting more than 2 Media Zones, 3 Scrolling Zones, Date and time zone along with Weather Module. Supports any screen resolution in both the screen Formats (Portrait and Landscape).	
	Alert Manager: Option to assign player or Group of players to an email id to receive the Player logs between set intervals.	
	Players can be placed in multiple Groups and schedules can be sent to a Group or a selection of Players in a Group or to the Whole Network.	
	Can add any number of media players in the Network.	
	Default - Screen can be divided into 7 zones. 3 Media zones supporting all Media formats (Videos, Images, Flash, Web URLs), 3 Ticker, Date Zone & Clock Zone.	
	Media zone can play Videos, Flash, Images, Web pages, Office Files & PDF documents.	
	Media can be organized in Tree View Folders.	
	All the zones in the Screen Layout can be scheduled independently.	
	Feature to set the different shutdown time and reboot time for all days of a week for the Remote Players.	
	Dashboard view of the Network connectivity Status between the Media Players and the Central Server, Players current IP Address & Free Space available on Players.	
	Drag and Drop feature to create a playlist, modify the position of the files in the playlist.	
	Each file in the Media Playlist to have Start and End time and option for looping.	
	Option to set the files in the playlist to play in a set day of the Week or entire week	
	Option to force download selected Media files in the playlist.	
	Option to set Screen shot with time stamp during Media Playback on Media player and upload back the screenshot to be viewed from the Manager.	
	Reports of Media Exposure between Date ranges. Should be able to export this data to Microsoft Excel & PDF.	
	User access & management - Multi Level user access, Administrator will have all the rights and he can create users and assign rights, User access can be provided for a Player, Group of Players or each module like Playlist creation, Layout Management, Reports etc.	
	The Schedules, Playlists, Logs and other information for the players are uploaded to a Content Server in an encrypted format.	
	Self-Healing Watch Dog Module on the player to ensure sure that all the zones in the current Layout are up and running.	
	Encryption of Data to increase secure downloads on the player –	

	Minimum 128-bit encryption is to be supported.	
	Intelligent Download Module on the player helping in content and schedules to be downloaded meant for the particular player.	
	Player programmed to play unattended 24 x 7	
	Reports Customizable based on the Clients requirement with no additional Charges.	
	Log Viewer Module in the Manager application to give instant reports for Active Playlists on each player, Content upload and download time, player start up and shutdown times.	
	Option to send Emergency messages to the players. Messages should override the current content on the Screen and Display FULL Screen. Also option to set the Start and End time for Emergency Messages and the frequency interval so that the player will alternate between the Emergency Messages and current content.	
	Support for preventing play back of content that is not authenticated in the Manager Application.	
	Support Multiple File types in a Loop (Multiple file formats in a Playlist).	
	Option to play selected Media files in Day Time Parting by providing the Start time and End Time	
	Preset Weather Zones for Portrait and Landscape (can be customized based on client requirement) will display the current weather and forecast for next 2 days for selected cities. Players to have internet connectivity	
<b>Additional Items</b>		
1.	The content should be managed by a dedicated content developer deputed at JDA IT Cell who will work under the guidance of JDA's IT staff.	

<b>Item 19: Smart Bi-cycle Solution</b>		<b>Quantity: 100</b>
<b>BRAND NAME:</b>		
<b>MODEL No.:</b>		<b>PART No. (IF ANY):</b>
<b>Sr. No</b>	<b>Parameter</b>	<b>Compliance Yes/No</b>
<b>A. Bi-cycle - 100</b>		
1	One-Size Fits all with Step Through Frame	
2	Visible difference of the cycle from regular cycles in the market through design	
3	Seat Adjustable without any tools	
4	Sturdy, light weight Frame	
5	Integrated Lock + Kick Stand	
6	Front mounted Basket with a capacity up to 10kg	
7	Ad Space on basket and the sides of the bicycle	
8	Simple reliable braking system	
9	Simple gear system with a minimum of 3 speed gear	
10	Rust and Graffiti Resistant	

11	Front and Rear mud guards with fenders	
12	Enclosed mechanisms	
13	Lighting System in the front and back	
14	Bell	
15	Reflectors on front, sides and back	
<b>B. Smart Bi-cycle Stations - 7</b>		
1	Modular design- easy to construct and de-construct. Station location can easily be changed.	
2	Installed in a manner that ensures safety of the stations infrastructure and cycles	
3	Covered Station- Cycles and space for station attendants should be covered to ensure protection from the heat and rain	
4	Accommodates gaps caused by on-street obstructions such as manhole covers	
5	Space/ kiosk for display of system information, station attendants to register users and undertake cash or card transactions and store devices, fresh smart cards, keys to cycle locks and money	
6	One panel of 6ft*6ft for Advertisements at each station	
7	Rust and Graffiti Resistant design of docks/ locking posts and advertisement panels	
<b>C. Docking System - 7</b>		
1	Separate docks for each cycle	
2	Locking Mechanism if any for the docks are easy to operate.	
3	System Cycles are locked on to docks/ locking posts and never to each other	
4	Simple design which do not consume a lot of space	
5	Rust and Graffiti free material	
6	Guaranteed life of at least 5 years	
<b>D. GPRS Device - 125</b>		
S. No.	Description	Compliance Yes/No
1	Simple and non-bulky design	
2	GPRS enabled. Able to communicate real time information to the Central control room.	
3	Reads Smart cards and indicates validity of the card and availability of minimum balance within 5 seconds	
4	Transmits information about user ID and time of check in and check out to the Central Control Room	
5	Able to communicate with the control room check in and check out of cycle at the station and number of cycles available at any given point at the station.	
<b>E. Central Control System Application - 1</b>		
1	Connected to all the registration centres and station check in and check out equipment at the stations	
2	Able to compile information at station level and system level	
3	Able to track the availability of cycles and docks at each station of the system	

4	Able to use the cycle and dock availability information to make decision on redistribution of cycles	
5	Able to provide real time information of the system to BMC	
6	Able to receive and save all records on a searchable database	
7	Guarantees data security as per Indian law and international best practices	
8	All data is the property of BMC	
9	Central Computer System should be upgraded and maintained daily	
10	System is integrated with the ITS system of the BRT	
11	The Contractor will provide reports to BMC in accordance with an agreed upon schedule or on request.	
12	Physically staffed Office space housing the central control system	
13	Computer terminals and communications equipment allowing Service Provider staff to monitor system status	
14	Call centre clause: The service provider shall provide a call centre number for queries and feedback for the system.	
<b>F. Redistribution Vehicles - 4</b>		
1	Designed to ensure transfer of cycles with minimal damage.	
2	Follows the same brand guidelines for the entire system. Should look like a part of the rest of the system	
<b>G. Depots/ Workshop - 2</b>		
S. No.	Description	Compliance
		Yes/No
1	Space to store extra/ back up cycles for the system	
2	Space to store back up check in/ check out devices and other equipment	
3	Space to undertake repair of cycles of the system	
4	Space to store the required tools for repairs and maintenance	
<b>H. Registration Centre - 7</b>		
1	Enabled to collect ID proofs and other required documents to register a user to the system	
2	Enabled with the required equipment or technology to issue a new user id to new customer	
3	Enabled to issue personalised cards with user id and information for ID proofs linked to the card.	
4	Enabled to collect and return security deposits	
5	Enabled to handle card and cash transactions for subscription fees and top up of smart cards.	
6	Enabled to link the transactions to the relevant user id.	
<b>I. Smart Phone App</b>		
1	Smart Phone apps are provided for at least the Android and Apple operating system	
2	Should be able to provide information about the system- static and real time for the ease of the user	
3	Should be linked to Google maps.	
4	Should be enabled to integrate information of the BRT system on a later date, if required by BMC.	

Additional Item		
1.	SIM Charges along with Data Plan as required + subscription charges of APIs + subscription charges for any other related requirement for contract period	

Item 20: IP Public Addressing System and Emergency Control Board		Quantity: 60
BRAND NAME:		
MODEL NO.:		PART NO. (IF ANY):
I	Public Address System-14 Nos	
1	Should have the capability to control individual PAS i.e. to make an announcement at select location (1:1) or multiple locations (1: many). The PAS should also support both, Live and Recorded inputs	
	Field Side Equipment – 60 Nos	
2	IP amplifier with minimum 200 Watts, Class D, redundant power supply	
3	IP Based connectivity	
4	0 to 55 C Temperature rating for Amplifier	
5	Automatic Volume Control	
6	Frequency Response: 50Hz to 15000 Hz for Amplifier	
7	2Inputs and 1Output relay contacts in Amplifier	
8	Speaker: Minimum 4 Speakers 20 W capacity	
9	Frequency Response of Speaker 350 -10,000Hz	
10	Line Monitoring Facility for speakers	
11	IP 55 Housing for amplifier	
	CCR Side Equipment -1Nos	
1	Central Software based server application capable of working on virtual environment with 100% redundancy	
2	Access control mechanism would be also required to establish so that the usage is regulated.	
3	Integration with VaMS and Command and control centre or any other component if required	
4	PA Master Controller to have facility for multiple mic inputs, direct dialling buttons, LCD screen	
5	Software Client for making Calls to PA and ECB	
6	Automatic Volume Control	
7	Transmission bandwidth 16000 KHz	
8	Operating temperature for control desk 0 to +60C	
II	ECB- 60 Nos.	
S. No.	Field Side Equipment	Compliance
		Yes/No

1	• Construction: Cast Iron/Steel Foundation, Sturdy Body for equipment	
2	Call Button: Watertight Large Push Button, Visual Feedback for button press	
3	Connectivity: GSM/RF/PSTN/Ethernet as per solution offered	
4	Sensors: For tempering/ vandalism	
5	IP66, IK09 Protection	
6	Operating Temperature 0 to 70 C	
7	Speaking Distance minimum 5 ft	
8	Inbuilt Class D Amplifier	
9	Minimum 3 Inputs and 2 Output relay contacts	
10	ECB should be able to make calls to the PA system	
III	<b>CCR Side Equipment -1Nos.</b>	
	CCR Side Equipment	
1	Central Software based server application capable of working on virtual environment with 100% redundancy	
2	Access control mechanism would be also required to establish so that the usage is regulated.	
3	Integration with VaMS and Command and control centre or any other component if required	
4	PA Master Controller to have facility for multiple mic inputs, direct dialling buttons, LCD screen	
5	Software Client for making Calls to PA and ECB	
6	Automatic Volume Control	
7	Transmission bandwidth 16000 KHz	
8	Operating temperature for control desk 0 to +60C	
IV	<b>Monitoring Staff</b>	
1.	Dedicated staff, working in two shifts, 1 staff per shift, deputed at CCR.	

<b>Item 21: Integrated Smart Rack System</b>			<b>Quantity: 1</b>
<b>BRAND NAME:</b>			
<b>MODEL No.:</b>		<b>PART No. (If ANY):</b>	
<b>Sr. No.</b>	<b>Feature</b>	<b>Description</b>	<b>Compliance (Y/N)</b>
The Integrated Rack System shall comprise of one row.			
1	Rack	No. of Racks: Min. 6 racks (as per layout diagram) (2 x 42U racks of 600MM to accommodate IT Equipment, 1 x 42U rack of 800MM for Network Equipment, 2 x 42U rack of 700MM approx. for Precision AC, 1 x 42U rack of 700 MM approx. for	

		Electrical Panel)	
		Usable U space (3 x 42U Racks for IT and Network equipment): 114	
		Blanking Panel: 20%	
		Overhead cable tray	
		Dimensions (H x D x W)MM: 2500 x 1800 x 4000	
		Modularity/ Expandability: Provision to add an extra rack in future	
2	Connectivity to other rack	1 x 24 port LC Fiber Patch Panel, with necessary cables terminated to patch panel of other unit/ row.	
		1 x 24 port CAT-6A Patch Panel, with necessary cables terminated to patch panel of other unit/ row.	
		Overhead cable tray (on 800MM rack.) for connecting both units/ rows	
3	Cooling	Precision Air conditioner with variable capacity cooling, heater, humidifier, and digital scroll compressor.	
		Cooling Capacity = 2 x 35KW (N+N)	
		Containment: Cold Contained Front Aisle & Rear Contained Hot Aisle (front flow back return), insulation and remote management	
5	Electrical Panel	Electrical system with essential MCB/MCCB, for 2 power sources, with complete redundancy (separate/ compartmentalized)	
6	Security system	Access Control, biometric, integrated within rack	
7	Remote Monitoring/ Safety System	Monitoring Device	
		Fire Detection & Suppression; NOVEC1230 Based, as per NFPA guidelines	
		Temperature Monitoring	
		Humidity Monitoring	
		Water Leak Sensor	
		Rodent repellent system	
		Beacon	
		Event Alerts (buzzer + flash)	
		RS485 Port	

		SNMP	
		Email and SMS Notification (excluding SIM card)	
8	LCD Console Tray with integrated KVM Switch	1U Slide-In	
		Min. 17-inch LCD console, with Keyboard and Trackpad	
		USB Keyboard/ Mouse connector	
		VGA Video connector	
		Integrated 16-port KVM switch, IP-based with remote access	
		Cables for KVM connectivity with IT Equipment, Min. 3 Mtr.	
9	Guidelines	TIA 942, NFPA, Tier-3	

Item 22: Modular UPS with Modular Battery			Quantity: 1
BRAND NAME:			
MODEL No.:		PART NO. (If ANY):	
Sr. No.	Feature	Description	Compliance (Y/N)
01	Modular UPS	Modular UPS Rack of minimum capacity 150 KVA	
		2 Modules of 30 KVA (30 KVA X 2)	
		Output Power Factor: 1 (module should be 30 KVA = 30 KW)	
		UPS to be scalable in future	
		Efficiency of UPS: 95%	
		Inverter Input: <ul style="list-style-type: none"> <li>320V-460V VAC</li> <li>Three-phase four-wire (3 phase + N)</li> <li>40 Hz – 70 Hz</li> <li>Power Factor: &gt; 0.99</li> <li>THDI: &lt; 3%</li> </ul>	
		Inverter Output: <ul style="list-style-type: none"> <li>380/400/415 VAC</li> <li>Three-phase four-wire (3 phase + N)</li> <li>50/60 Hz</li> <li>Power Factor: 1</li> </ul>	
		Bypass Input Voltage: <ul style="list-style-type: none"> <li>380/400/415 VAC</li> <li>Three-phase four-wire (3 phase + N)</li> <li>50/60 Hz</li> </ul>	
		Digital current sharing technology and high parallel reliability	
		Completely redundant power and control system	



		Parallel technology allowing four (4) system cabinets up to 150kW per cabinet to be paralleled, without the need for centralized bypass cabinet and additional external control modules	
		Monitoring: Remote Panel with 100Mtrs Cable to be provided SNMP Card to be provided	
	Modular Battery	Modular Batteries with 15 min. backup time Should be hot swappable & replaceable without any down time Should be in fixed in rack	
		Battery backup calculations to be provided.	
		Intelligent battery management for automatic battery maintenance	

Item 23: Ruggedized Laptop			Quantity: 3
BRAND NAME:			
MODEL NO.:		PART NO. (IF ANY):	
Sr. No.	Feature	Description	Compliance (Y/N)
1	Minimum Specifications	12.1" widescreen LCD notebook with optical disc drive	
		Windows 10 Pro, Windows 7 Professional (available through downgrade rights from Windows 10 Pro)	
		Intel® Core™ i5-5300 vPro™ processor (2.30GHz with Turbo Boost up to 2.90GHz)	
		12.1" HD+ (1600 x 900)	
		4GB DDR3L RAM and 500GB HDD	
		Long-lasting 9-hour battery life	
		Perfect wireless connectivity	
		Passed a 76cm free-fall test and a 100-kgf pressurized vibration test	
		Ultra-portable 1.19kg weight	

Item 24: Wireless Management System (on-premise)			Quantity: 1
BRAND NAME:			
MODEL NO.:		PART NO. (IF ANY):	
Sr. No.	Feature	Description	Compliance (Y/N)
1	AAA Software	In High Availability	
		Real-time accounting over RADIUS	
		Authentication, authorization & accounting of subscribers & their devices	
2	Service & Policy Control	Bandwidth & QoS Management	
		Quota Allocation – Data & Time	
		Time-of-day, day-of-week, holidays based rating keys	

3	Reporting	Usage Report	
		Session Report	
4	Log Server	NAT log management system	
5	Captive Portal UI	Captive Portal User Interface should be easily customizable	
		Portal Should support Self Registration	
		It should be possible to display Pre-login & Post-login information.	
		Should support OTP based authentication	
6	Self-Care Portal	There should be a Self-Care Dashboard for the Users showing the Usage details	
7	BNG (for 2 Sites)	In High Availability	
		Should Support both 1 Gb/s and 10 Gb/s Network Interfaces	
		Should support VLAN & Virtual Interfaces	
		DHCP server support	
		NATing	
		Session Authentication	
		Policy enforcement & service control	
		Routing	
		NAT Logs (NetFlow/ IPFix)	
		Redundant Power Supply	
8	Capacity	System should support minimum 10,000 concurrent users and multiple Wireless Controllers in distributed network.	

<b>Item 25: Internet Bandwidth</b>		<b>Quantity: 1</b>
<b>Service Provider:</b>		
S. No.	Category	Description
1.	Type of Connectivity	Internet Leased Line on OFC Media Only
2.	Capacity	300Mbps, 1:1 Pure Duplex, Symmetric Bandwidth
3.	Latency Domestic	<=120ms
5.	Packet Loss	<1%
6.	Network Availability	99.5 %
7.	Public IP Pool	62 (x.x.x.x/22 Pool) Public IPv4 IP addresses

<b>Item 25: Dark Fiber Network 10G (Point-to-Point)</b>		<b>Quantity: 1</b>
<b>Service Provider:</b>		
S. No.	Category	Description
1.	Location From	Network Operation Center, Jaipur Development Authority (Opp. Birla Mandir, Jaipur)
2.	Location To	Nearest STP along the riverfront
2.	Core	6 core
3.	Laying (if required)	As per DOT guidelines and approval of the concerned local authority
4.	Latency Interval	<=100ms

### Annexure-3: Technical Bid Evaluation Checklist (On bidder's letter head)

#### Part – A: Authorizations / Undertakings / Declarations

S. No.	Specific Requirements	Documents Required	Page No. (to be filled by bidder)
1.	The Bidder should deposit Tender Fee, RISL Processing Fee and Bid Security Deposit (EMD) along with the Technical bid.	Receipt of online submission	
2.	Tender Form	As given in Annexure 4 on Bidders letterhead	
3.	Bidder's Authorization Certificate	As given in Annexure 5 on Bidders Letterhead	
4.	Self-declaration – No Blacklisting	As given in Annexure 6 on Bidder's Letterhead	
5.	Certificate of Conformity / No deviations/End of Service Support	As given in Annexure 7 on Bidders Letterhead	
6.	Undertaking on authenticity of items	As given in Annexure 8 on Rs. 100 non-judicial stamp paper	
7.	Manufacturer's Authorization Form (MAF) – Suggested Format	As given in Annexure 9 on OEM's letter head	
8.	Technical Bid Undertaking	As given in Annexure 12 on Bidder's Letter head	
9.	Financial Bid Undertaking	As given in Annexure 13 on Bidders Letterhead	
10.	Declaration by the Bidder regarding Qualification Under Section 7 of the ACT	As given in Annexure 14 on Bidders Letterhead	

#### Part – B: Eligibility Criteria

S. No.	Basic Requirement	Specific Requirements	Documents Required	Page No. (to be filled by bidder)
1.	General Requirement	The Bidder or any of the parties of the consortium/ JV partner should be an established IT System Integrator and should have been engaged in Supply, Installation, Commissioning and Operations & Maintenance Services of ICT/large infrastructure projects for a period of at least 3 financial years as on date of submission	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". The maximum nos. of consortium/JV partner should be 3.  Any of the parties of the	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	

		<p>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.</p> <p>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, at the time of the bidding.</p>	<p>should also clearly define the Prime Bidder/Lead Bidder and should be individually and jointly signed by each of the Consortium/JV parties.</p>	
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.	<p>c) Certificates of incorporation and/ or</p> <p>d) Registration Certificates</p>	e)
4.	Turnover	The Prime Bidder/Lead Bidder must have annual turnover of at least Rs. 50.00 Crores solely from Infrastructure / ICT Business and IT Services during each of the last 3 financial years.	Audited and Certified Balance Sheet and Profit/Loss Account for the last 3 Financial Years should be enclosed. CA Certificate be enclosed.	
5.	Technical Capability	<p>The Bidder or any of the parties of the consortium/ JV partner must have successfully completed, during last 3 financial years, at least the following numbers of Wi-Fi systems &amp; Smart Elements of value specified herein:</p> <p>One project of similar nature for not less than 100 Access Points (AP)/ Switches in a single work order</p> <p>OR</p> <p>Two projects of similar nature for not less than 50 Access Points (AP)/ Switches in a single work order</p> <p>AND</p> <p>One Project which includes Smart elements (any 6 Mentioned Below) in a single project with CCC like Environmental Sensors, AVLS, PIS Display, Kiosk, Parking Management with sensors, Surveillance, ANPR, Wi-Fi.</p>	Copies of work order or contract agreement and the client certificates/Project Sign-off 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 3 financial years.	CA Certificate mentioning net profit should be enclosed.	

		The bidder shall have bank Solvency certificate not less Rs. 50.00 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 any two of the below Certifications at the time of bidding: e) ISO 9001:2008 Certification for System Integration. f) ISO 20000:2011 for IT Service Management (Facility Management Services) g) ISO 27001:2005 for Information Security Management System h) CMMi-3 for IT Services	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. GST Number b. Income Tax PAN	Copies of relevant(s) Certificates of Registration.	
9.	Technical Specifications of BOQ items	The quoted product/item should fulfill 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.	

**Annexure-4: Tender Form  
(On bidder's letter head)**

1. Addressed to:

Name of the Procuring Entity	Executive Engineer (Elect.-II), Jaipur Development Authority
Address	Room No. 26, Main Building, Jaipur Development Authority, Ram Kishore Vyas Bhawan Indira Circle, Jawahar Lal Nehru Marg Jaipur – 302 004 (Rajasthan)
Telephone	0141- 2569696
Email	dgjdajpr@gmail.com (clearly mention the NIB no. in the subject of the mail)

2. Firm Details:

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

3. Deposited Tender Fee, Processing Fee & Bid Security Vide Challan No. \_\_\_\_\_ Date \_\_\_\_\_ of online Receipt generated after applying online.

4. 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).

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

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**Annexure-5: Bidder's Authorization Certificate**  
**(On bidder's letter head)**

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To:

Executive Engineer (Elect.-II) [Procuring Entity]  
Room No. 26, Main Building,  
Jaipur Development Authority,  
Ram Kishore Vyas Bhawan  
Indira Circle, Jawahar Lal Nehru Marg  
Jaipur – 302 004 (Rajasthan)

I/ We {Name/ Designation} hereby declare/ certify that {Name/ Designation} is hereby authorized to sign relevant documents on behalf of the company/ firm in dealing with NIB Reference No. \_\_\_\_\_ Dated \_\_\_\_\_.

He/ She is also authorized to attend meetings & submit technical & commercial information/ clarifications as may be required by you in the course of processing the Bid. For the purpose of validation, his/ her verified signatures are as under.

Thanking you,

Name of Bidder	
Address:	
Authorised Signatory:	
Signed :	
Date :	
Pace :	
Seal of the Organization:	Signature Verified



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**Annexure-6: Self-Declaration – No Blacklisting  
(On bidder's letter head)**

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To:

Executive Engineer (Elect.-II) [Procuring Entity]  
Room No. 26, Main Building,  
Jaipur Development Authority,  
Ram Kishore Vyas Bhawan  
Indira Circle, Jawahar Lal Nehru Marg  
Jaipur – 302 004 (Rajasthan)

In response to the NIB Ref. No. \_\_\_\_\_ dated \_\_\_\_\_ 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 :	

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**Annexure-7: Certificate of Conformity/No Deviation/ End of Service Support  
(On bidder's letter head)**

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To:

Executive Engineer (Elect.-II) [Procuring Entity]  
Room No. 26, Main Building,  
Jaipur Development Authority,  
Ram Kishore Vyas Bhawan  
Indira Circle, Jawahar Lal Nehru Marg  
Jaipur – 302 004 (Rajasthan)

This is to certify that, the specifications of Hardware & Software 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 the all items.

Thanking you,

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

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**Annexure-8: Undertaking On Authenticity of Items  
(On Non-Judicial Stamp Paper of Rs. 100/-)**

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To:

Executive Engineer (Elect.-II) [Procuring Entity]  
Room No. 26, Main Building,  
Jaipur Development Authority,  
Ram Kishore Vyas Bhawan  
Indira Circle, Jawahar Lal Nehru Marg  
Jaipur – 302 004 (Rajasthan)

Reference: NIB No. : \_\_\_\_\_ Dated: \_\_\_\_\_

This has reference to the items being supplied/ quoted to you vide our bid ref. no. \_\_\_\_\_ dated \_\_\_\_\_.

We hereby undertake that all the components/ parts/ assembly/ software used in the equipment shall be genuine, original and new components /parts/ assembly/ software from respective OEMs of the products and that no refurbished/ duplicate/ second hand components/ parts/ assembly/ software are being used or shall be used. In respect of licensed software, we undertake that the same shall be supplied along with the authorized license certificate. Also, that it shall be sourced from the authorized source for use in India.

If this undertaking is found to be incorrect, we at the time of delivery or during installation, for the equipment already billed, agree to take back the equipment already supplied at our cost and return any amount paid to us by you in this regard and that you will have the right to forfeit our Performance Security Deposit and other deposits for this bid and/ or debar/ black list us or take suitable action against us.

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

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**Annexure-9: Manufacturer's Authorization Form (MAF) – Suggested Format  
(On OEM's letter head)**

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To:

Executive Engineer (Elect.-II) [Procuring Entity]  
Room No. 26, Main Building,  
Jaipur Development Authority,  
Ram Kishore Vyas Bhawan  
Indira Circle, Jawahar Lal Nehru Marg  
Jaipur – 302 004 (Rajasthan)

Subject: Issue of the Manufacturer's Authorization Form (MAF).

Reference: NIB No. : \_\_\_\_\_ Dated: \_\_\_\_\_

Sir,

We {name and address of the OEM} who are established and reputed original equipment manufacturers (OEMs) having factories at {addresses of manufacturing location \_\_\_\_\_} do hereby authorize {M/S \_\_\_\_\_} who is our {Distributor/ Channel Partner/ Retailer/ Others <please specify>} to bid, negotiate and conclude the contract with you against the aforementioned tender reference for the following Hardware/ Software manufactured by us: -

{OEM will mention the details of all the proposed product(s) with their make/ model. This should be in sync with the overall proposed technical specification. Also, OEM shall provide to the bidder, the Compliance Sheets (duly supported by the datasheets) for all the products as per Technical Specifications mentioned in this bidding document.}

The item/ items (hardware/ software) being quoted is/are have not been declared or is likely to be declared End of Sale within next 12 months and End of Service / Support within next 60 months, from the date of supply.

Yours faithfully,

Name :	M/s (Name of the manufacturer) (Authorized Signatory)
Address:	
In the capacity of :	
Signed :	
Date :	
Place :	
Seal of the Organization :	

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**Annexure-10: Certificate for exemption of bid Security  
(On bidder's letter head)**

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To:

Executive Engineer (Elect.-II) [Procuring Entity]  
Room No. 26, Main Building,  
Jaipur Development Authority,  
Ram Kishore Vyas Bhawan  
Indira Circle, Jawahar Lal Nehru Marg  
Jaipur – 302 004 (Rajasthan)

Subject: Issue of the Manufacturer's Experience Certificate (MEC).

Reference: NIB No. : \_\_\_\_\_ Dated: \_\_\_\_\_

I/ We \_\_\_\_\_{Name of the PSU/Corporation/Department} \_\_\_\_\_  
hereby \_\_\_\_\_{Name of the PSU/Corporation/Department}\_\_\_\_ is owned or  
controlled or managed by the \_\_{Name of the State}\_\_ State Government/Central Government  
Undertaking/Department. I/ We hereby declare/ certify that it is eligible for exemption from the  
bid security submission as per Document. Legal document/Certificate of Incorporation  
establishing the exemption is attached.

Yours faithfully,

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

## Annexure-11: Technical Bid Undertaking (On bidder's letter head)

To:

Executive Engineer (Elect.-II) [Procuring Entity]  
Room No. 26, Main Building,  
Jaipur Development Authority,  
Ram Kishore Vyas Bhawan  
Indira Circle, Jawahar Lal Nehru Marg  
Jaipur – 302 004 (Rajasthan)

We, the undersigned, declare that:

1. We have examined and have no reservations to the Bidding Document, including Addenda No. \_\_\_\_\_.
2. We offer Smart Corridor 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 :	

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**Annexure-12: Financial Bid Undertaking  
(On bidder's letter head)**

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To:

Executive Engineer (Elect.-II) [Procuring Entity]  
Room No. 26, Main Building,  
Jaipur Development Authority,  
Ram Kishore Vyas Bhawan  
Indira Circle, Jawahar Lal Nehru Marg  
Jaipur – 302 004 (Rajasthan)

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

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**Annexure: 13- Declaration by the Bidder regarding Qualification  
Under Section 7 of the ACT  
(On bidder's letter head)**

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**Declaration**

In relation to my/our Bid submitted to \_\_\_\_\_ for procurement of \_\_\_\_\_ in response to their Notice Inviting Bids No. \_\_\_\_\_ Dated \_\_\_\_\_ I/we hereby declare under Section 7 of Rajasthan Transparency in Public Procurement Act, 2012, that:

1. I/we possess the necessary professional, technical, financial and managerial resources and competence required by the Bidding Document issued by the Procuring Entity;
2. I/we have fulfilled my/our obligation to pay such of the taxes payable to the Union and the State Government or any local authority as specified in the Bidding Document;
3. I/we are not insolvent, in receivership, bankrupt or being wound up, not have my/our affairs administered by a court or a judicial officer, not have my/our business activities suspended and not the subject of legal proceedings for any of the foregoing reasons;
4. I/we do not have, and our directors and officers not have, been convicted of any criminal offence related to my/our professional conduct or the making of false statements or misrepresentations as to my/our qualifications to enter into a procurement contract within a period of three years preceding the commencement of this procurement process, or not have been otherwise disqualified pursuant to debarment proceedings;
5. I/we do not have a conflict of interest as specified in the Act, Rules and the Bidding Document, which materially affects fair competition.

Name :	
Address:	
In the capacity of :	
Signed :	
Date :	
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).

[Validate](#)
[Print](#)
[Help](#)
[Wise BoQ](#)

**Tender Inviting Authority:** Executive Engineer (Elect.-II), Jaipur Development Authority, Room No. 26, Main Building, Second Floor, Ram Kishore Vyas Bhavan, Indira Circle, Jawahar Lal Nehru Marg, Jaipur – 302 004 (Rajasthan)

**Name of Work:** Implementation and O&M for various smart solutions for developing JDA's 30 Kms Dravyavati Riverfront stretch as Smart Corridor with 5 years FMS Services

**Contract No:** JDA/Ex. Eng. Elect.-II/14/2017-18

Name of the Bidder/ Bidding Firm / Company :								
PRICE SCHEDULE								
Sl. No.	Item Description	Quantity	Units	Base Unit Cost in INR (Incl. all type of charges and all Taxes but excluding GST) Rs. P	GST in INR Rs. P	Amount in INR (Including all and Taxes) per Unit col (7) = (5) + (6) in Rs. P	Total Cost in INR col (8) = (3) * (7) in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	6	7	8	9
	<b>Part A : CAPEX – SITC of equipment and services</b>							
	Core Router	4	Nos.			0.00	0.00	INR Zero Only
2	Core Switch (Fiber)	2	Nos.			0.00	0.00	INR Zero Only
3	Aggregation Switch (Fiber)	16	Nos.			0.00	0.00	INR Zero Only
4	Distribution Switch (POE+)	16	Nos.			0.00	0.00	INR Zero Only
5	Ruggedized Field Switch (POE)	500	Nos.			0.00	0.00	INR Zero Only
6	Hyper Converged Infrastructure	1	No.			0.00	0.00	INR Zero Only
7	Surveillance Storage	1	No.			0.00	0.00	INR Zero Only
8	Video Conference Unit	1	No.			0.00	0.00	INR Zero Only
9	Outdoor Access Point	65	Nos.			0.00	0.00	INR Zero Only
10	Indoor Access Point	30	Nos.			0.00	0.00	INR Zero Only
11	Enterprise Management System	1	No.			0.00	0.00	INR Zero Only
12	Unified Management System (for Server)	1	No.			0.00	0.00	INR Zero Only
13	AAA Appliance Based Solution for Network Devices	2	No.			0.00	0.00	INR Zero Only
14	Backup/ Replication Software	1	No.			0.00	0.00	INR Zero Only
15	Interactive Kiosk	10	Nos.			0.00	0.00	INR Zero Only
16	Smart Waste-bins	100	Nos.			0.00	0.00	INR Zero Only
17	Smart Environment Sensor	10	Nos.			0.00	0.00	INR Zero Only
18	Variable Message Signage	10	Nos.			0.00	0.00	INR Zero Only
19	Smart Bicycle	100	Nos.			0.00	0.00	INR Zero Only
20	Public Address System and Emergency Response System	60	Nos.			0.00	0.00	INR Zero Only
21	Integrated Smart Rack System	1	Nos.			0.00	0.00	INR Zero Only

Short Term NIB for Implementation and O&M for various smart solutions for developing JDA's 30 Kms Dravyavati Riverfront stretch as Smart Corridor with 5 years FMS Services

Sl. No.	Item Description	Quantity	Units	Base Unit Cost in INR (Incl. all type of charges and all Taxes but excluding GST) Rs. P	GST in INR Rs. P	Amount in INR (Including all and Taxes) per Unit col (7) = (5) + (6) in Rs. P	Total Cost in INR col (8) = (3) * (7) in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	6	7	8	9
22	Modular UPS with Modular Battery	1	Nos.			0.00	0.00	INR Zero Only
23	Ruggedized Laptops	3	Nos.			0.00	0.00	INR Zero Only
24	Wireless Management System	1	Nos.			0.00	0.00	INR Zero Only
25	Internet Bandwidth 300Mbps	1	Nos.			0.00	0.00	INR Zero Only
26	Dark Fibre Network (Point to Point)	1	Nos.			0.00	0.00	INR Zero Only
27	Existing Wireless Controller (Cisco WLC-5520) - Additional Licenses for APs	100	Nos.			0.00	0.00	INR Zero Only
28	Existing Command Centre Application - Additional Licenses for Wi-Fi Hotspots	95	Nos.			0.00	0.00	INR Zero Only
29	Existing Command Centre Application - Additional Licenses for Environmental Sensors	10	Nos.			0.00	0.00	INR Zero Only
30	Existing Collaboration Application – Additional Licenses for Interactive Kiosk	10	Nos.			0.00	0.00	INR Zero Only
31	Existing Command Centre Application - Additional Licenses for Waste-Bins	100	Nos.			0.00	0.00	INR Zero Only
32	Existing Command Centre Application - Additional Licenses for Smart Bi-cycle	100	nos.			0.00	0.00	INR Zero Only
33	Existing Command Centre Application - Additional Licenses for Variable Message Signage	10	nos.			0.00	0.00	INR Zero Only
34	Existing Command Centre Application - Additional Licenses for SCADA	5	Nos.			0.00	0.00	INR Zero Only
35	Existing Command Centre Application - Additional Licenses for Smart Lighting	750	Nos.			0.00	0.00	INR Zero Only
36	One-time OEM Implementation & Integration Service Cost for integrating new smart solutions with existing IOT Platform	1	No.			0.00	0.00	INR Zero Only
37	One-time OEM Implementation & Integration Service Cost for Hyper Converged Solution, Storage Solution for Surveillance & Core Network Design	1	No.			0.00	0.00	INR Zero Only
<b>Part-B : B. OPEX – O&amp;M and FMS services</b>								
38	Repair/replace time of Core Components (Core Router, Core Switches, Aggregation switch, Distribution Switch, Field Switch, Servers, Storage, Backup Server and other tools)	60.00	Months			0.00	0.00	INR Zero Only
39	Wi-Fi Hotspots solution	60.00	Months			0.00	0.00	INR Zero Only
40	Smart Bicycle sharing system	60.00	Months			0.00	0.00	INR Zero Only
41	Variable Messaging System	60.00	Months			0.00	0.00	INR Zero Only
42	Smart Waste bins Solution	60.00	Months			0.00	0.00	INR Zero Only
43	PA and ECB System	60.00	Months			0.00	0.00	INR Zero Only
44	Environment Sensor solution	60.00	Months			0.00	0.00	INR Zero Only
45	Interactive Experience Kiosks solution	60.00	Months			0.00	0.00	INR Zero Only

Short Term NIB for Implementation and O&M for various smart solutions for developing JDA's 30 Kms Dravyavati Riverfront stretch as Smart Corridor with 5 years FMS Services

Sl. No.	Item Description	Quantity	Units	Base Unit Cost in INR (Incl. all type of charges and all Taxes but excluding GST) Rs. P	GST in INR Rs. P	Amount in INR (Including all and Taxes) per Unit col (7) = (5) + (6) in Rs. P	Total Cost in INR col (8) = (3) * (7) in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	6	7	8	9
46	Internet Bandwidth	60.00	Months			0.00	0.00	INR Zero Only
47	Dark Fibre Network (Point to Point)	60.00	Months			0.00	0.00	INR Zero Only
48	Integrated Smart Rack System & Modular UPS with Modular Battery	60.00	Months			0.00	0.00	INR Zero Only
49	Technical team Leader	72.00	ManMonths			0.00	0.00	INR Zero Only
50	System / Network Administrator	120.00	ManMonths			0.00	0.00	INR Zero Only
Total in Figures						0.00	0.00	INR Zero Only
Quoted Rate in Words		INR Zero Only						

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

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### **Annexure-15: Bank Guarantee Format – BID Security Format**

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(To be stamped in accordance with Stamp Act and to be issued by a Nationalized/ 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,  
Ram Kishore Vyas Bhawan  
Indira Circle, Jawahar Lal Nehru Marg  
Jaipur – 302 004 (Rajasthan)

Sir,

1. In accordance with your Notice Inviting Bid for <please specify the project title> vide NIB Reference No.....Dated ..... (Name & full address of the firm) (Hereinafter called the “Bidder”) hereby submits the Bank Guarantee to participate in the said procurement/ bidding process as mentioned in the bidding document.
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.....Dated .....issued by Executive Engineer (Elect.-II) [Procuring Entity] Room No. 26, Main Building, Jaipur Development Authority, Ram Kishore Vyas Bhawan Indira Circle, Jawahar Lal Nehru Marg Jaipur – 302 004 (Rajasthan) (hereinafter referred to as “JDA”) by a Bank Guarantee from a Nationalised 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 submission 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 (EMD).
4. Now, therefore, we the ..... (Bank), a body corporate constituted under the Banking Companies (Acquisition and Transfer of Undertaking) Act. 1969 (delete, if not applicable) and branch Office at..... (hereinafter referred to as the Guarantor) do hereby undertake and agree to pay forthwith on demand in writing by the JDA of the said guaranteed amount without any demur, reservation or recourse.
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 Earnest Money 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.
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 thereunder.
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 court.
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 .....  
(Printed Name) ..... (Designation) .....  
(Bank's common seal) .....

In presence of:

WTTNESS (with full name, designation, 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 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,  
Ram Kishore Vyas Bhawan  
Indira Circle, Jawahar Lal Nehru Marg  
Jaipur – 302 004 (Rajasthan)

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**Annexure-16: Bank Guarantee Format – Performance Security  
(On non-Judicial Stamp Paper)**

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(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,  
Ram Kishore Vyas Bhawan  
Indira Circle, Jawahar Lal Nehru Marg  
Jaipur – 302 004 (Rajasthan)

1. In consideration of the Executive Engineer (Elect.-II) [Procuring Entity] (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 Order No.....dated ..... for the work .....(hereinafter called "the said Agreement") of Security Deposit 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), we .....(indicate the name of the Bank), (hereinafter referred to as "the Bank") at the request of .....Contractor(s) do hereby undertake to pay to the JDA an amount not exceeding Rs.....(Rupees.....only) on demand.
2. We..... (Indicate the name of Bank), do hereby undertake to 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 be completely at the disposal of the JDA and We..... (Indicate the name of Bank), 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).
3. We.....(indicate the name of Bank), undertake to pay to the 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, unequivocal and unconditional.
4. We.....(indicate the name of Bank) further agree that the performance guarantee herein contained shall remain in full force and effective up to <DATE> and that it shall continue to be enforceable for above specified period till all the dues of JDA under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till the JDA certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.
5. We .....(indicate the name of Bank) further agree with the 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..... (indicate the name of Bank), under this guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).
7. We..... (indicate the name of Bank), lastly undertake not to 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.
10. We..... (indicate the name of Bank) verify that we have a 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.

Date ..... (Signature) ..... Place .....  
(Printed Name) ..... (Designation) .....  
(Bank's common seal) .....

In presence of:

WITNESS (with full name, designation, 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 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,  
Ram Kishore Vyas Bhawan  
Indira Circle, Jawahar Lal Nehru Marg  
Jaipur – 302 004 (Rajasthan)

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**Annexure–17: Agreement**

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**(On Non-Judicial Stamp Paper as mentioned in Work Order/ LOI)**

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### **Agreement**

THIS AGREEMENT made on this ..... day of ..... between of ..... (herein after “the Procuring Entity”), of the one part, and ..... Of (here in after “the Supplier”), of the other part:

Whereas the procuring Entity invited Bids for Implementation and O&M for various smart solutions for developing JDA's 30 Kms Dravyavati Riverfront stretch as Smart Corridor with 5 years FMS Services for JDA and has accepted a Bid by the Supplier for the sum of ..... (herein after “the Contract Price”).

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-Qualification / 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 Implementation and O&M for various smart solutions for developing JDA's 30 Kms Dravyavati Riverfront stretch as Smart Corridor with 5 years FMS Services for JDA 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 Implementation and O&M for various smart solutions for developing JDA's 30 Kms Dravyavati Riverfront stretch as Smart Corridor with 5 years FMS Services for JDA 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.

Short Term NIB for Implementation and O&M for various smart solutions for developing JDA's 30 Kms Dravyavati Riverfront stretch as Smart Corridor with 5 years FMS Services

5. Performance Security deposited vide ..... dated ..... of .....  
amounting to Rs. .... valid up-to .....

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 :

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

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**FORM No. 1**

**[See rule 83]**

**Memorandum of Appeal under the Rajasthan Transparency in Public  
Procurement Act, 2012**

Appeal No \_\_\_\_\_ of \_\_\_\_\_  
Before the \_\_\_\_\_ (First / Second Appellate Authority)

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**