

Request for Proposal for Design, Supply, Installation, Commissioning, Operations and Maintenance support for Digital Smart Kiosk Infrastructure solution at designated locations under "Smart City Mission" at Puducherry

Volume I: Instruction to Bidders



**RFP for Digital Smart Kiosk in Puducherry** 

Tender No: 008/PSCDL/2019

July 2019

Puducherry Smart City Development Limited

Puducherry

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# **Abbreviations**

ABD ATM BIS	Area Based Development  Automatic Teller Machine  Bureau of Indian Standard  Bank Guarantee  Command Control Center  Chief Executive Officer
	Bureau of Indian Standard  Bank Guarantee  Command Control Center
BIS	Bank Guarantee Command Control Center
	Command Control Center
BG	
CCC	Chief Evecutive Officer
CEO	Chief Executive Officer
Day	Calendar day
DD	Demand Draft
DPR	Detailed Project Report
EMD	Earnest Money Deposit
FDR	Fixed Deposit Receipt
FY	Financial Year
GoI	Government of India
GoP	Government of Puducherry
GST	Goods and Service Tax
INR	Indian Rupee
IT	Information Technology
JV	Joint Venture
LLP	Limited Liability Partnership
LOA	Letter of Acceptance
Ltd.	Limited
MoHUA	Ministry of Housing and Urban Affairs
O&M	Operation and Maintenance
PAN	Permanent Account Number
PMC	Project Management Consultant
PPP	Public Private Partnership
PSCDL	Puducherry Smart City Development Limited
PQ	Pre-Qualification
PWD	Public Works Department
QCBS	Quality and cost based selection

# RFP for Setting-up of Digital Smart Kiosk Infrastructure solution at Puducherry

RFP	Request for Proposal	
Sq.Km	Square Kilometre	
ULB	Urban Local Body	



# **Definitions**

In this RFP, the following word(s) shall have the meaning(s) assigned to them herein below:

"Arbitration tribunal" means an organ composed of an odd number of persons known as arbitrators, who decide on the solution of a conflict in which the parties have expressly waived recourse to the ordinary civil courts.

"Bid Process" means the process of selection of the Successful Bidder through competitive bidding and includes submission of Bids, scrutiny and evaluation of such Bids as set forth in the RFP.

"**Bid**" means the proposals submitted by the Bidder(s) in response to this RFP in accordance with the provisions hereof including, technical proposal and financial proposal along with all other documents forming part and in support thereof.

"Bidder" means any firm, including a sole proprietor or a partnership firm or a company or a Joint Venture or a Consortium or a cooperative society, who submits a Bid along with Bid Security under this RFP within the stipulated time for submission of Bids.

"Commencement Date" means the date stipulated by PSCDL for commencement of the operations by the Concessionaire under the Concessionaire Agreement and shall not be earlier than 90 days from the date of signing of Concessionaire Agreement. The Concessionaire shall make available 100 per cent of the manpower by the commencement date in operational readiness along with supporting maintenance infrastructure.

"Go-Live" Go-Live shall occur in respect of the System,

### When

- a) the Final Acceptance Tests, as specified in the agreed and finalized project plan have been successfully completed; or
- b) the Final Acceptance Tests have not been successfully completed or have not been carried out for reasons that are attributable to the Purchaser within a period of fifteen (15) days from the date of installation or any other agreed-upon period; or
- c) the Purchaser has put the System into production or use for 60 consecutive days. If the System is put into production or use in this manner, the System Integrator shall notify the Purchaser and document such use.

"Concessionaire Agreement" means the Agreement including, without limitation, any and all Annexure thereto, which will be entered into between PSCDL and the Successful Bidder



- "Concessionaire Facilities" means the facilities (software, hardware and infrastructure) and equipment produced or developed by the Concessionaire that are required for the due implementation of this Contract.
- "Concessionaire" means the successful bidder selected under this RFP with whom PSCDL has entered into a Concessionaire Agreement.
- "Consortium" shall mean an association of two (2) entities / firms formed specifically for the purpose of bidding for this RFP.
- "Contract Period" means the time when the Concessionaire Agreement is valid.
- "**DBFOT**" means Concessionaire has to "Design, Build, Finance, Operate and Transfer of Assets" under the Digital Smart Kiosk Project.
- "Expiry Date" shall mean the date on which the Agreement expires in the normal course with the efflux of time.
- "**PSCDL Representative**" means any person duly authorized by Puducherry Smart City Development Limited for the purposes of this RFP.
- "Letter of Acceptance" or "LOA" means the letter issued by PSCDL to the Successful Bidder to provide Digital Smart Kiosk Services in conformity with the terms and conditions set forth in the RFP.
- "**Project Asset**" means hardware, software and infrastructure supplied by successful bidder at project facilities which includes 21 Digital Smart Kiosk locations, the Control Room, and any other facility created as part of the Digital Smart Kiosk Solution
- "RFP" and/or "RFP Document" means this Document.
- "**Service Certificate**" means a document that accredits compliance by the Concessionaire with all requirements established in the contract to allow the Digital Smart Kiosk Solution to begin operations.
- "Successful Bidder" shall mean the Bidder who got selected by the technical and financial evaluation criteria defined in this RFP and to whom a Letter of Award of contract is consequently issued by PSCDL.
- "Vandalism" means destruction of or damage to a Project Asset, deliberately and for no good reason by the persons other than the employee or subcontractor of the Concessionaire and/or for no reasons attributable to omission of act or breach of obligation of the Concessionaire.

Any other term(s), not defined herein above but defined elsewhere in this RFP shall have the meaning(s) ascribed to such term(s) therein and shall be deemed to have been included in this Section.



# **REQUEST FOR PROPOSAL (RFP)**

Puducherry Smart City Development Limited (PSCDL) invites Bids from eligible System Implementation agencies for "Request for Proposal for Design, Supply, Installation, Commissioning, Operation and Maintenance support for Digital Smart Kiosk Infrastructure solution" at designated locations under "Smart City Mission" at Puducherry. Interested System Implementation agencies are advised to study this RFP document carefully before submitting their proposals in response to the RFP. Submission of a proposal in response to this RFP shall be deemed to have been done after careful study of the proposed location and detailed examination of this document with full understanding of its terms, conditions and implications.

Puducherry Smart City Development Limited (PSCDL) will be the Facilitator in the entire bidding process and will participate in all clarification to enquiries, pre-Bid meeting, response to bidders, evaluation process etc.

# 1 Notice Inviting Tender

Sl.	Particulars	Details
No.		
1	Tender Notice No: 008/PSCDL/2019	
2	Name & Address of the Client	Name: Puducherry Smart City Development Limited (PSCDL)
		Address: The Chief Executive officer
		Puducherry Smart City Development Limited,
		No.2, Bussy Street,
		Old Court Building,
		Puducherry 605 001
		E-Mail ID: gmplanpscdl@gmail.com
		Telephone :- +91 413 22 24 431
3	Name of Work	Request for Proposal for Design, Supply, Installation,
		Commissioning, Operations and Maintenance support
		for Digital Smart Kiosk at designated locations under
		"Smart City Mission" at Puducherry City
4	Tender Type	Public Private Partnership (PPP) DBFOT Basis
5	Consortium	Applicable (Maximum of 2 Companies)
6	Bidding Type	Two Bid System
7	Bid Call (No's)	1

# RFP for Setting-up of Digital Smart Kiosk Infrastructure solution at Puducherry

8	Downloading of tender	The tender document for this work can be
0	G	
	Documents	downloaded from website <a href="https://pudutenders.gov.in">https://pudutenders.gov.in</a>
		From on long loads to as load said.
		From 05/07/2019 to 02/08/2019 up to 15:00 Hrs
9	Pre-Bid Meeting & Time	18/07/2019 from 10.30 Hrs
		Bidder shall have to post their queries on E-mail
		address <u>gmplanpscdl@gmail.com</u> on or before
		13/07/2019 up to 17.00 hrs.
		(D D)   0 (
		Venue of Pre-Bid Conference –
		PSCDL Office, No.2, Bussy Street
		Old Court Building, Puducherry 605 001.
10	Bidding Procedure	Two Bid System
		Cover (1) – Technical Bid (Online & Hard Copy)
		Cover (2) – Financial Bid (Online)
11	Online Submission (Last	On or before date 02/07/2019 upto 15:00 Hr through
	Date)	online portal: <a href="https://pudutenders.gov.in">https://pudutenders.gov.in</a>
		Technical Bid
		Scanned copy of Bankers Cheque / Demand Draft as
		Tender fee.
		Scanned copy of FDR/Bankers Cheque /DD as EMD.
		Scanned copy of PAN card
		Certificate of Incorporation / Registration Certificate /
		Registered partnership deed.
		Scanned copies of GST Registration Certificate
		Scanned copies of Experience certificates showing
		successful completion of work (with certificate)
		Statutory Audit accounts statement for past 3
		financial years (FY 2018-19, FY 2017-18, FY 2016-17).
		Financial statements from statutory auditor regarding
		net worth.
		Undertaking on Non-block ligting
		Undertaking on Non-black listing
		Copy of valid ISO 9001:2000 or SEI CMMI Level 3 or
		above certificate or equivalent certificate
		Project compliance documentation as specified under
		Section A to D (Technical Evaluation Criteria)
		Section A to D (Technical Evaluation Criteria)
		In addition to the documents mentioned shows the
		In addition to the documents mentioned above, the



		Annexure are also to be their offer i.e. Technical Electronic format on mentioned in the tender Financial Bid On or before the date	as per attached Forms & e uploaded. Bidder shall submit al bid as well as Financial Bid in stipulated website & date as er document.  e & time stated above through fer (Financial Bid) in physical
12	Physical submission of Tender Fee, Earnest Money Deposit EMD) and all other documents in the Technical Bid. (Physical Submission only)	Hard copy of Technical bid, Original document of Tender fees and EMD shall be submitted to CEO PSCDL, No.2, Bussy Street, Old Court Building, Puducherry 605 001  Up to 02/08/2019 upto 15:00 Hr	
		submitted in electron (by scanning etc.) and will not be accepted se CEO PSCDL reserves or all tenders without	oporting to tender bid shall be aic format only through online d submission only in hard copy parately the right to accept or reject any t assigning any reason thereof. Shall form a part of contract
13	Bid Details	Opening of Bid (Online) & PQ documents submitted electronically Opening of Price Bid (Online)	If possible, on 02/08/2019 at 16:00 hrs.  Will be intimated later on.
		Bid validity period  Project Duration	120 days from the date of submission of the bid.  Installation period – 6 Months Operation and Maintenance Period – 10 Years
14	Payment Details	Tender Fee	Rs.10,000/-+ 18% GST In form of Account Payee Demand Draft payable in favour of Puducherry Smart City Development Limited, payable at Puducherry with bid submission



		EMD	Rs 5,00,000/- (Five Lakhs
		(Bid Security)	only) by the way of Bankers
			Cheque / FDR / Demand
			Draft in favour of Puducherry
			Smart City Development
			Limited payable at
			Puducherry.
15	Address for Correspondence	CEO, Puducherry Smart City Development Limited	
	and Submission of Bid	No.2, Bussy Street, Ol	d Court Building
	document	Puducherry 605 001	
		gmplanpscdl@gmail.com	
		Phone: - +91 413 2224	4431

#### 1.1 Terms

- a. The complete bid document can be viewed / downloaded from official portal of <a href="https://smartnet.niua.org/tenders">https://smartnet.niua.org/tenders</a>, <a href="https://pondicherrysmartcity.in">https://pondicherrysmartcity.in</a> and e-procurement portal of Govt. of Puducherry <a href="https://pudutenders.gov.in">https://pudutenders.gov.in</a>
- b. Bids shall remain valid for 120 days (One hundred Twenty days) from the date of submission of the tender.
- c. To obtain first-hand information on the assignment, Contractors are encouraged to attend the pre-Bid meeting. Attending the pre-Bid meeting is optional.
- d. Any Bid (Technically & Financial) not accompanied by Tender fees and Earnest Money as mentioned in the notice for RFP will be rejected and treated as non-responsive.
- e. Bid that are received after the deadline will not be considered in this procurement process. All documents that form a part of the proposal response submitted by Contractor, should be submitted at the venue mentioned in the above table.
- f. PSCDL will not be responsible for any delay in submission of online bid.
- g. PSCDL reserves all rights to accept or reject any bid, and to cancel the bidding process and reject all bids, at any time prior to award of the Contract, without assigning any reason thereof and incurring any liability to the participated firms or any obligation to inform the bidder or bidders participated on the grounds of



employer's action thereof.

#### **Address of Communication:**

The Chief Executive Officer
Puducherry Smart City Development Limited,
No.2, Bussy Street,
Old Court Building,
Puducherry 605 001

E-mail: <a href="mailto:gmplanpscdl@gmail.com">gmplanpscdl@gmail.com</a>
Telephone: +91 413 22 24 431

For any Technical related queries about bidding online, please call 24 x 7 Help Desk Number 0120-4200462, 0120-4001002, 0120-4001005,0120-6277787. International Bidders are requested to prefix 91 as country code. Or email to: support-eproc@nic.in, support-eproc.pon@nic.in. The Contact details of the Local help desk - eProcurement Cell, 3rd Floor, A Block, Chief Secretariat, Puducherry, 0413-2220225 and 0413-2220262.

Sd/-Chief Executive Officer PSCDL, Puducherry 605 001



# 2 Disclaimer

This Request for Proposal (RFP) contains brief information about the Project and qualification process for the selection of System Integrator / Agency for the work of "Design, Supply, Installation, Commissioning, Operations and Maintenance support for Digital Smart Kiosk Infrastructure solution" at designated locations under "Smart City Mission" at Puducherry City on PPP mode. This RFP is not an agreement or an offer by the purchaser/authority to the Bidders or any other person. The purpose of the document is to provide the Bidders with information to assist the formulation of their RFP Proposal ("the Proposal").

While all efforts have been made to ensure the accuracy of information contained in this RFP Document, this document does not purport to contain all the information required by the Bidders. The Bidders may conduct their own independent assessment, site visit, investigations and analysis and check the reliability, accuracy and completeness of the information at their end and obtain independent advice from relevant sources as required before submission of their Proposal. Puducherry Smart City Development Limited (PSCDL), Government of Puducherry or any of its employees or advisors / representatives shall incur no liability under any law, statute, rules or regulations as to the accuracy or completeness of the RFP Document.

PSCDL reserves the right to change any or all conditions/ information set in this RFP Document by way of revision, deletion, updating or annulment through issuance of appropriate addendum / corrigendum as the department may deem fit without assigning any reason thereof.

PSCDL reserves the right to accept or reject any or all applications without assigning any reasons thereof. PSCDL will not entertain or be liable for any claim for costs and expenses in relation to the preparation of the RFP Proposal to be submitted in terms of this Document.



# 3 Introduction

# 3.1 About the Puducherry Smart City Development Limited

i. The Government of India has announced creation of 100 Smart cities to drive economic growth and improve the quality of life of people by enabling local development and harnessing technology as a means to create smart outcomes for citizens. Puducherry is one of the shortlisted cities for the smart city initiative under Ministry of Urban Development, Government of India. Puducherry Smart City Development Limited (PSCDL) is a Govt. Company for implementing the Smart City mission at the city level. PSCDL will plan, appraise, approve, release funds, implement, manage, operate, monitor and evaluate the Smart City development projects.

As a part of the Smart City Plan, PSCDL would like to set-up Digital Smart Kiosks infrastructure across some of the prominent locations across Puducherry, for providing information as well municipal services to the visitors and citizens respectively. Puducherry Smart City Limited intends to invite Request for Proposal for setting up of Digital Smart Kiosk infrastructure solution.

PSCDL invites detailed proposals (herein after referred to as "Proposal") for setting up of Digital Smart Kiosk infrastructure solution at designated locations at Puducherry herein after referred to "Proposal". The Proposals would be evaluated on the basis of the evaluation criteria for determining financial bid of the technically qualified Bidders set out in this RFP document ("Evaluation Criteria") in order to identify the Successful Bidder. The Successful Bidder ("Concessionaire") would then have to enter into a Concession Agreement with PSCDL and perform the obligations as stipulated therein, in respect of Project.

- ii. The Concessionaire would be responsible for designing, financing, building, operating and maintaining of Digital Smart Kiosk infrastructure solution for a period as stipulated in the Concession Agreement subject to his fulfilling the requirements set out in this RFP document.
- iii. Terms used in this RFP document, which have not been defined herein, shall have the meaning as cribbed to them in the Concession Agreement



# 3.2 Executing Agency

The Executing Agency of this project is Puducherry Smart City Development Limited.

# 3.3 Type of Contract

The form of this contract is Public Private Partnership (PPP) mode

# 3.4 Concession Agreement

The successful bidder has to execute a Concession Agreement with PSCDL. Hence forth, the Concessionaire has to start an Escrow account and share the revenue of Digital Smart Kiosk infrastructure facility to PSCDL/Puducherry Municipality.

The Escrow Arrangement as a tripartite between the Concessionaire, Authority and the Escrow Agent (a Bank) to ensure that the project cash flows are routed through the Escrow Account only with supplementary escrow arrangements for payments and receipts to and from different sources.

The Concessionaire to share monthly MIS and quarterly financial statements including the Profit & Loss Statement, Cash flow statement and Balance sheet. The financial statement need to be certified by the Statutory Auditor.

### 4 Content of RFP Document

### 4.1 Volume-I

- a) Request for Proposal
- b) Instruction to Bidders
- c) Eligibility Criteria
- d) Evaluation of Bids
- e) Qualification Schedules

#### 4.2 Volume-II

a) Scope of Work and Technical Specifications Annexures 1 & 2

#### 4.3 Volume-III

- a) General conditions of contract
- b) Special conditions of contract Part "A" & "B



# 4.4 Volume-IV

a) Financial Bid

# 5 Scope of Work

All works, proposed for execution under the contract, are specified in Volume-II of the RFP document under the headline "Scope of Work and Technical Specifications".

# 5.1 Specification

The Bidder shall read the specification and study the scope of work carefully before bid submission. The detailed Functional and Technical Specifications are mentioned in RFP Vol 2.

# **5.2** Terms and Conditions

- i. The Bidder shall abide by all the terms and conditions as laid down in this RFP.
- ii. Bidders shall submit only unconditional RFPs. Conditional RFPs are liable to be rejected summarily. The RFP documents show already the specific terms and conditions on which bids are required by the PSCDL. Hence all proposals should be in strict conformity with the RFP documents and should be filled in, digitally signed. Incomplete proposals are liable to be rejected. The terms and conditions of the RFP document are firm; and are not altered unless otherwise warranted by PSCDL
- iii. If it is found that the proposals are not submitted in the manner prescribed, and Unreasonable rates or amounts, it would be open for Employer not to consider the proposal, forfeit the amount of Earnest Money and/or de-list the Bidder
- iv. The bidder shall quote for concession period of 10 years.

# 5.3 Instruction

The Bidder is required to carefully study all Instructions, forms, terms, conditions and other details in the RFP documents. Failure to upload complete and legible information and documents as required in the RFP documents or submission of a RFP not substantially responsive as per requirements of the RFP document in every respect will be at the Bidder(s) risk and may result in rejection of its proposal.



# **6** Address for communication

# 6.1 All communication in reference to this RFP must be made to:

# **Chief Executive Officer**

Puducherry Smart City Development Limited, No.2, Bussy Street, Old Court Building, Puducherry 605 001 E-mail: gmplanpscdl@gmail.com

E-mail: gmplanpscdl@gmail.con Telephone: +91 413 22 24 431

# 7 Period of Completion

The Project will be implemented as per the project timelines defined in RFP Volume 2.

Sl. No	Particulars	Pre-Qualification Requirement	<b>Supporting Documents</b>
1	Legal Entity / Presence in India	The Bidder shall be a single legal entity (firm, company etc.) or a JV firm to implement the project(s). The Bidder shall be in existence for at least 3 years	All members  Certificate of Incorporation / Registration Certificate  (Memorandum and Articles of Association of the applicants should be submitted)  Copy of Registered partnership deed.
2	GST & Income Tax Registration	The Bidder shall have valid GST Registration and Income Tax Registration in India	All members  Copy of GST Registration PAN Number
3	Financial Turnover	The Bidder's average annual turnover should be not less than Rs. 5.0 crores during each of the last 3 audited financial year	Sole or Lead Member  Copy of the Audited Profit and Loss statement and certificate from statutory auditor.



4	Net worth	The Bidder should not have negative net worth as per the audited consolidated financial statements is not more than one of the last 3 financial years (FY 2018-19, 2017-18 & 2016-17).	Sole or Lead Member  Copy of the consolidated financial statements from statutory auditor regarding net worth.
5	Technical Capability	The Bidder must have completed / in the process of implementation of "similar projects": At least one project of 20 Digital Kiosks or At least two projects of 10 Digital Kiosks last three financial years (FY 2018-19, FY 2017-18, FY 2016-17)  *Similar projects means project scope should include the supply, installation, testing, management and operation for Digital Kiosk	Sole Member or any member  Related Work Order and Work Completion certificate(s)

# 8 Eligibility Criteria

6	Certification	The Bidder should have a valid ISO 9001:2000 certification or should be an SEI CMMI Level 3 or above certified organization or equivalent certificate	Sole or Lead Member Copies of the valid certificates from authorized agencies
7	Blacklisting	The Bidder should not be under a Declaration of Ineligibility for corrupt or fraudulent practices or blacklisted with any of the Government agencies.	All members  Self-certificate letter of undertaking to this effect on company's letter head signed by company's authorized signatory

# **Notes:**

- The number of consortium members shall not exceed two, including the Lead Concessionaire.
- Each Consortium members including Lead Bidder can't be part of any other consortium.



- An Original Equipment manufacturer (OEM) or Product Company can be part of multiple bids as a vendor however not as a part of consortium.
- Signed Consortium and Teaming Agreement along with teaming details, original Power of Attorney (PoA) in support of their authorization to sign the document. The PoA should be submitted on a stamp paper of Rs. 200.

#### 8.1 Site Visit

The Bidder and any of its personnel or agents will be granted permission by the PSCDL to enter upon its premises and lands for purpose of such site visits, but the Bidder and its personnel will be responsible for any loss or damage to property and any other loss, damage, costs and expenses including loss of life/injury to any person incurred as a result of the site visits.

The Bidder will be deemed to have satisfied himself as to all the conditions and circumstances affecting the contract price (e.g. as to the general circumstance at the site(s) of the work, the general labour position at the site, the availability of construction material, water, electricity, the transport conditions, the climatic and meteorological conditions) and to have fixed his prices according to his own view about these.

The PSCDL will not be responsible for the personnel of the Bidder and for all acts in relation with site inspection. The Bidder shall be responsible for any misunderstanding or incorrect information however obtained except the information given in writing by the PSCDL.

# 8.2 Omissions, Errors and clarification; Pre bid Meeting

Bidders shall carefully examine the scope of work and specifications and shall be fully informed as to the conditions and matters which may in any way affect the work or the cost thereof. Should a Bidder find discrepancies or omissions in the documents or should he be in doubt as to their meaning he should notify PSCDL in writing before the due date specified in the Notice Inviting Tender or present his request in written from during the pre-bid meeting. PSCDL will respond to any request which is made prior to or during the pre- bid conference.

Any resulting interpretation or modification of the RFP documents shall be issued online to all Bidders as an addendum / corrigendum which will become a part of the RFP documents. The Bidders shall acknowledge in writing the receipt of each addendum / corrigendum.



No claims except as otherwise expressly provided will afterwards be accepted due to non understanding or misinterpretation of the RFP documents and addendum / corrigendum's issued.

The Bidders designated representative (having authority letter) is invited to attend a pre-bid meeting, which will take place at the venue and time notified in RFP.

In an effort to bring all terms and conditions and specifications of works on a common platform, before the submission of qualification and financial bids, and for any explanation that is desired in reference to the document mentioned in Clause-5 of the document, a pre- bid meeting shall be held. The Bidders designated representative (having authority letter) are invited to attend a pre- bid meeting which will take place at the venue and time as mentioned in RFP. The Bidders are invited to participate in the pre- bid meeting at the date and time mentioned in RFP. They may acquaint themselves with the different conditions of installation site(s) prior to this meeting. The purpose of this meeting is to clarify issues raised at that stage which requires clarification in reference to the execution of work. The Bidders are requested to analyze the terms and conditions, specifications, design, drawings, quotation sheets etc. of the document. The deviations thought necessary, along with clarifications required must be pointed out.

Bidder is requested, to submit all queries in writing or by e-mail, to reach the PSCDL not later the date mentioned in the Notice Inviting Tender before the pre bid meeting or give the clarifications desired in pre-bid meeting in writing.

Any modification of the documents listed in Clause- 7, of the document, which may become necessary as a result of the pre- bid conference, shall be made by the PSCDL exclusively through online issuance of addendum / corrigendum.

# 9 Amendment of RFP Documents

At any time prior to the deadline for submission of RFPs, PSCDL may, for any reason, whether at its own initiative, or in response to a clarification requested by a prospective Bidder, amend the RFP documents.

The amendment will be notified online to all bidders and it shall be binding on them. It will be assumed that the information contained therein has been considered by the Bidder in its RFP.

In order to provide prospective Bidders reasonable time to take the amendment into account, in preparing their RFP, PSCDL may, at its discretion, extend the deadline for



the submission of proposals, in which case, the PSCDL will notify on line to bidders of the extended deadline, for submission of proposals.

#### PREPARATION OF PROPOSALS

#### 10 Language of Proposal

The proposal prepared by the Bidder and all correspondence and documents related to the proposal exchanged by the Bidder and PSCDL shall be written in English.

# 11 Financial Proposal

The Bidder will provide the financial proposal as furnished in the RFP document.

Financial Bid for the concession period of 10 years.

The PSCDL will be the final authority for deciding the concession period.

# 12 Proposal-Financial bid

The contract will be for the complete work as described in the RFP document. The rate quoted shall remain firm and fixed and no price/rate variation shall be admissible.

The Bidder will quote his rates only in English. Rates should be quoted in figures as well as in words and in case the rates so quoted differ, the lower of the two shall be treated as the rate quoted by the Bidder.

The Bidder will provide their financial proposal as given in prescribed format of Volume IV of the RFP document, as per the specifications given for installation and commissioning with other direct and indirect costs to be incurred during period.

The Concessionaire will satisfy himself regarding the availability of the material required for execution within the time frame prescribed for the work and if desired will take into account the cost of superior material to be used as its replacement. No time extension or additional cost shall be allowed on this account.

The Concessionaire will keep all the data as described in the Volume II of RFP document or as per system approved by PSCDL. PSCDL have all the rights to cross check the data at any time.



# 13 Proposal Currency

All prices shall be quoted in the Indian Rupee. The PSCDL will not arrange any foreign currencies for import of any type of material/spares etc. The PSCDL will not pay any amount due to foreign exchange fluctuation for procurement of goods/equipment.

# 14 Earnest Money Deposit

An amount of Earnest money as mentioned in RFP as by way of an Bankers Cheque/FDR/ DD issued by a scheduled bank in India in favour of Puducherry Smart City Development Limited, must accompany the Proposal as required under the Concession Agreement.

# 14.1 The Earnest money may be forfeited:

- i. If the Bidder withdraws its proposal during the period of proposal validity.
- ii. If the Bidder fails within the specified time limit to sign the Contract.
- iii. Agreement For any other act of the Bidder detailed herein, for forfeiture of Earnest Money.

# 14.2 Return of the Earnest Money

The Earnest money of un-successful Bidder would be returned within a period of Eight (8) weeks from the date of announcement of the Successful Bidder.

The Earnest money of Successful Bidder would be returned on acceptance of Work Order / LoA and submission of Security Deposit as per Clause 15.3 herein under.

# 14.3 Security Deposit and Performance Security

An amount of Security Deposit as mentioned in RFP as **Rs 50**, **oo**,**ooo**/- (**Rupees Fifty Lakhs Only**) by way of an irrevocable Bank Guarantee/ DD issued by a scheduled bank in India in favour of Puducherry Smart City Development Limited, must be submitted by the successful bidder

The Security Deposit as submitted by the Successful Bidder would be released upon furnishing of the Performance Security in the form and manner stipulated in the Concession Agreement.

# 15 Period of Validity of proposal

The proposals for the works shall remain open for acceptance for the period of 120 days from the date of submission of Bid. A proposal valid for a shorter period shall be



rejected by the PSCDL as being non-responsive. If any Bidder withdraws his proposal prior to expiry of said validity period or mutually extended period or make modification in the rates, terms and conditions of the proposal within the said period, which are not acceptable to the PSCDL, or fails to commence the work in the specified period/fails to execute the agreement, the PSCDL shall, without prejudice to any other right or remedy, be at liberty to forfeit the amount of earnest money given in any form absolutely. If any Bidder, who having submitted a proposal does not execute the agreement or start the work or does not complete the work and the work has to be put to re-bidding, he shall stand debarred from participating in such re-bidding in addition to forfeiture of Earnest Money and Security deposit and other action under agreement.

In exceptional circumstances, the PSCDL may seek the Bidder's consent to an extension of the proposal validity period. The request and responses thereto shall be made in writing or by e-mail. If a Bidder accepts to prolong the period of validity, the instruments for Earnest Money shall also be suitably extended.

#### **SUBMISSION OF PROPOSALS**

# 16 Format and Signing of proposal

Bidder shall submit their offer online in electronic format both for technical and financial proposals and all documents should be digitally signed. Bidder shall also submit Hard copy of the Technical Bid on or before the date & time stated in the NIT and submission only in hard copy will not be accepted. Bidder shall procure digital certificate as per IT act. In case of a partnership firm, bid must be digitally signed separately by each partner, thereof, or in the event of the absence of any partner, it must be digitally signed on his behalf, by a person holding power of attorney, authorizing him to do so, such power of attorney will be submitted with the proposal and it must disclose that the firm is duly registered under the Indian Partnership Act, by submitting the copy of registration certificate. In case of a company, the duly authorized representative of the company holding a valid power of attorney on proposal the date of respective correspondence shall digitally sign the proposal.

The scanned copy of Proposal fees, processing fees, EMD should be uploaded along with the technical bid.

All omissions in the Schedule of price must be serially numbered and attested by the officer opening the bids, so as to make further dispute impossible on this score.

The documents listed in Clause-18 of the document, along with addendum / corrigendum's issued till the date of bid submission, shall be filled by the bidder to bind the bidder to contract. A certificate regarding all pages of the bid has been digitally signed should be attached with prequalification bid.

Sealed bids shall be received by the Authority on the e-Procurement portal <a href="https://pudutenders.gov.in/">https://pudutenders.gov.in/</a> in before the time and date specified in the schedule of the



tender notice. In the event of the specified date for the submission of tender offers being declared a public holiday by the Government of Puducherry, the offers will be received up to the appointed time on the next working day. The Authority may, at its discretion, extend this deadline for submission of offers by issuing corrigendum and uploading the same on e-Procurement portal.

Telex, cable or facsimile offers will be rejected.

The Bidders must be registered with the E-tendering system provider for participating in the bidding process; bidders are required to go through the procedure as specified in <a href="https://pudutenders.gov.in/">https://pudutenders.gov.in/</a>, portal to upload the Bid document.

The bidders are required to upload their tender in <a href="https://pudutenders.gov.in/">https://pudutenders.gov.in/</a> portal only. PSCDL shall not be held responsible for the delay, if any, in the non-receipt of the same

Any revisions, clarifications, corrigenda, addenda, time extensions, etc. to this tender will be posted on <a href="https://pudutenders.gov.in/">https://pudutenders.gov.in/</a> website only. Bidders should regularly visit the website to keep themselves updated.

All the qualification information shall be submitted through prescribed forms and statements given in the Annexure-ure of tender document, along with all supporting documents meeting the qualification criteria. Bidder shall upload Scan Copies of such prescribed forms and supporting document as a part of his submission.

# 17 Sealing and Marking of Proposals

Bidder shall submit their offer in online electronic format both for Technical and Financial proposal and all documents should be digitally signed. Bidder shall also submit Hard copy of the Technical Bid on or before the date & time stated in the NIT and submission only in hard copy will not be accepted. However, scanned copy of Proposal fees, EMD and all original papers related to Bank guarantee, power of attorney etc. should be uploaded along with the technical bid.

#### 17.1 Contents of Technical Bid

#### A. COVER-A: Technical Bid:

### SCANNED COPIES OF:

- a) Proof of Tender Fee in shape of FDR /DD Payable at Puducherry
- b) Proof of Earnest Money in shape of DD/Pay Order/FDR as per NIT
- c) The name and designation of a person signing shall be clearly indicated. In case of partnership firm / limited company/ group of companies, a power of attorney for the person authorized to sign issued by the partners or authorized signatory shall accompany the proposal.
- d) The ESI & EPF registration as per Labour Law of Government of India / UT of Puducherry.



- e) The proposal letter which shall be duly filled in and signed, as per Annexure-3.
- f) Format for General Information as per Annexure-4
- g) Declaration for Non-Black listing as per Annexure-5
- h) No deviation Certificate as per Annexure -6
- i) Total Responsibility Certificate- Annexure-7
- j) Detailed of Experience of the Bidder as per Annexure- 8 and Experience certificate for the projects as per Annexure-9
- k) Anti-collision certificate as per Annexure- 10
- 1) Performance bank guarantee as per Annexure-11
- m) Power of Attorney should be given as per the format given in Annexure- 12.
- n) Key Personal Details as per Annexure -13
- o) Details indicating Financial Capacity as per Annexure-14
- p) Joint venture information (If Applicable) as per Annexure-15
- q) Agreement (format placed at Annexure- 16 (DRAFT) along with Annexure-17 as Bidder of Works)
- r) Joint Bidding Agreement as per Annexure- 18
- s) All addendum / corrigendum s issued till date of proposal shall be submitted with the proposal duly singed and stamped.
- t) Bidders proposal for project execution included to the following information

Organization

Personnel

Bidders experience in execution of similar projects.

Project schedule

Implementation strategy, plan and procedure

Company profile (Financial status, company premises)

#### AND ALSO SCANNED COPIES OF:

Qualification Schedules as required in this Vol-I along documents, with supporting consisting of:

- a) Document showing annual turnover for last three financial years (ending, March 2019)
- b) Documents in support of experience of bidder for project execution, and O&M and service network as per provisions mentioned Experience Criteria as in Clause 4.



The Qualification information for eligibility has to be provided very carefully since it will be a basis for the qualification of firms. Only relevant and to-the-point information shall be indicated. Bidders must not supply information not requested in the proposal documents nor make any comments.

# 17.2 Contents of Financial Bid

## B. COVER-B Financial Bid/Price Bid

This shall contain only the Financial Bid Rate for amount the concessionaire is willing to share with PSCDL as percentage of Gross Revenue share (annual) as per the format attached in *Volume -IV Financial Bid* of the bid document.

# 18 Late Proposals

The system does not permit electronic submission of proposals after the due time and date.

#### PROPOSAL OPENING AND EVALUATION

# 19 Opening of Proposals by PSCDL

The CEO, PSCDL on behalf of PSCDL or his representative will open the proposals online in presence of Bidder (s) or their authorized representative(s) who may choose to be present at the time of proposal opening. The proposals shall be opened in two stages. In first stage Cover -A of Technical Bid will be opened and the Bidder's name, the status of deposition of earnest money, will be announced by the Evaluation Committee at the time of opening.

Other Documents in Technical Bids received will be evaluated by the Evaluation Committee appointed by the PSCDL and eligible bidders will be shortlisted for the Opening of Financial Bid.

In the second stage, Cover -B of Financial Bid shall be opened of the shortlisted Bidders through online by giving prior intimation

# 20 Preliminary Examination of Proposals

All contents of Cover "A" of the individual proposals will be downloaded summarily in order to access their formal conformity and agreement with the instructions and guidance to the Bidders and the completeness. Any proposal not confirming to any of these requirements may be disqualified forthwith at the discretion of PSCDL.



# 21 Substantial Proposal & Technical Eligibility

Notwithstanding the preliminary examination, the PSCDL will determine the technical eligibility of the Bidder. Technically eligible proposals are those, which meet the following requirements.

- a) Earnest money in the required format from a nationalized/scheduled bank is enclosed.
- b) Meeting the Financial and Technical eligibility criteria as detailed in the Eligibility Criteria
- c) No deviations and reservations affecting the scope and quality of the work, limiting the rights of the PSCDL or the Bidders obligations, or whose rectification would affect the competitive position of the other substantial Bidder.

If a Bidder is not found to be technically eligible the bid will be rejected by PSCDL and will not be used for further evaluation.

The financial bid of technically eligible bidders shall only be opened.

#### 22 Financial Evaluation

- a) The financial offer of the technically qualified Bidders will be opened at a date and time as informed. The technical specification/design given in the schedules or that negotiated shall only be used while execution of work.
- b) The CEO PSCDL or his/her representative will open the proposals in the presence of any Bidder(s) or their authorized representatives who choose to be present at the time of opening of financial proposals, and will enter the rate/amount of all proposals in the register of Opening of Proposals.
- c) Bidders quoted rate is inclusive of all taxes and duties including GST, Labour CESS, Income Tax etc. for the Installation, Operation & Maintenance.
- d) The Income tax liability on the revenue share shall be borne by PSCDL.
- e) Please refer to the Volume IV for the format of the financial bid submission.

### 23 Final Bid Evaluation

The final selection of the "*Successful Bidder*" shall be done using Quality and Cost Based Selection (QCBS) approach, wherein bidder with the highest combined score shall



be adjudged the Successful Bidder. The technical quality of the proposal will be given weight of 70%. The financial proposal shall be allocated weight of 30%.

- a) All the bids received for this tender would be scrutinized based on the Technical Evaluation Criteria & other relevant tender conditions mentioned in this tender. The Bidders who comply with Technical Evaluation Criteria shall be declared as "Technically Qualified Bidders" other bids shall be declared as "Technically Disqualified Bidders" and not considered for further course of evaluation.
- b) The Financial bid of only those consultants who qualify technically (*Minimum Qualifying Marks: 70% in the Technical Evaluation*) will be opened for further evaluation. The commercial bid would be scrutinized for any errors in case of any mathematical errors in the Financial Bid then unit rate would be used as reference for estimation of the final bid value.
- c) Wherever there is a discrepancy between the figures entered in numerals and words, the values written in words will be governing and shall be considered for evaluation.
- d) The proposal with the highest revenue sharing to the PSCDL may be given a financial score of 100 and the other proposal given financial score that are proportionate to their prices.



Sr. No	Parameter	Description	Break up of Score	Max Marks
1	Financial Turnover	The Bidders average annual turnover generated from ICT (Information and communication technologies) should be not less than Rs. <b>5.0 crores</b> during each of the last 3 audited financial year (FY 2018-19, FY 2017-18, FY 2016-17)	Sole or any Member  Turn Over of 5.0 Crore - 6 Marks  Add 1 Marks every 5.0 Crore subjected to Maximum of 10 Marks	
		*This turnover should be on account of ICT Systems Development and Implementation (i.e. revenue should be on account of System Integration / Turnkey solutions or products and their associated maintenance or implementation service, packaged software etc.) only		10
2	Relevant Experience	The Bidder should have completed at least one Project of supply and implementation (including operations and maintenance) of Digital Smart Kiosk infrastructure of minimum value of <b>Rs. 5.00 crore</b> during last three financial years (FY 2018-19, 2017-18 and 2016-17).	Sole Member or any member  For 1 Project of Rs.5.0 crore - 9 Marks Add 2 Marks additional 1 Project of Rs.5.0 Crore Subject to Maximum of 15 Marks	15



за	Similar Experience	Digital infrastructure implementation: Design, supply & implementation of Modular street furniture infrastructure projects (scope shall include the implementation of Modular toilets, Bus shelters, Digital Signage, Smart bins, cycle shelters / docking station) of minimum project value of 1 crore during last three financial years (FY 2018-19, FY 2017-18, FY 2016-17)	Sole or any Member One work of Minimum Rs. 1.0 Crore - 3 Marks Add 1 mark for additional 1 Project of worth Rs. 1 Cr. subjected to maximum of 5 marks	5
3b	Similar Experience	Wi-Fi Project Implementation Project Implementation and operation experience in Public Wi-Fi project of minimum 50 Access Points	Sole or any Member One Project of 50 Access Points - 3 Marks Add 1 mark for additional 1 Project of minimum 50 Access point subjected to maximum of 5 marks	5
3c	Similar Experience	Augmented Reality project Experience of implementing and 3D content creation for use-cases relevant to (Smart City, Tourism, Sanitation, Health, Education, Entertainment, Digital Advertisements)	Sole or any Member One Similar Project of - 6 Marks Add 2 mark for additional 1 Project subjected to maximum of 10 marks	10
3d	Similar Experience	CCTV surveillance project Project experience of supply, installation, implementation and operating minimum 50 CCTV surveillance for any city / kiosk surveillance in a single project	Sole or any Member One Project of 50 CCTV Surveillance - 3 Marks Add 1 mark for additional 1 Project of minimum 50 CCTV subjected to maximum of 5 marks	5



4	Approach and Methodology	<ul> <li>Project requirement understanding</li> <li>a. On site study carried by the bidder supported with the reports and explaining how the technical proposal is meeting project objectives in Puducherry.</li> <li>b. Compliance to RFP with detailed compliance statement meeting pointwise RFP volume-1 and 2 requirements</li> </ul>	Sole or Lead Member	5
		<ul> <li>Work plan documentation:</li> <li>a. Detailed work plan with resolution, methodology for reporting project progress (template/ tool) on weekly basis. Project risks assessment and mitigation plan.</li> <li>b. Proposed reporting methodology and tools for measuring and reporting uptime and KRA's on monthly basis during implementation phase.</li> </ul>	Sole or Lead Member	5
		Approach during implementation and operation and maintenance phases: Bidder to furnish detailed documentation covering each aspect of below activities along with typical examples a. Installation b. Safety c. Preventative maintenance d. Operations e. Maintenance f. Redundancy	Sole or Lead Member	5



5a	Key Personal-1	Experience of Project Manager proposed for work. (Consent to be given along with the Bid)	MBA and B-Tech in Information Technology / Computer Science / Electronics with at least 8 years of experience in handling PPP / IT projects	3
5b	Key Personal-2	Experience of Solution Architecture proposed for work. (Consent to be given along with the Bid)	B.Tech in Information Technology / Computer Science / Electronics with at least 5 years of experience in handling IT projects	2
6	Presentation	(a) Solution highlights		
	on	Solution components		
		<ul><li>Technical architecture</li><li>Integration aspects</li></ul>		
		<ul><li>Kiosk designs options</li></ul>		15
		> Structural infrastructure		
		<ul><li>ICT &amp; Non-ICT infrastructure</li></ul>		
		proposed for the kiosk)		
		(b) Relevant case studies on highlights		2.5



(c) Alliances with OEM formed and presented during presentation		2.5
(d) Awareness, Innovative and break- through ideas		2.5
(e) Flexibility demonstrated		2.5
(f) Understanding on Project KPIs		5.0
Total Technical Score (Marks)		100

Table 23.1 Technical Evaluation Criteria



The final selection of the "Successful Bidder" shall be done using Quality and Cost Based Selection (QCBS) approach, wherein bidder with the highest combined score shall be adjudged the Successful Bidder. The technical quality of the proposal will be given weight of 70%. The financial proposal shall be allocated weight of 30%.

For working out the Total Points, the employer will use the following formula:

Total points  $(H-1) = T(w) \times T(s) + F(w) \times F(s)$ ,

where

T (w) stands for weight of the technical score. (70%)

T (s) stands for technical score

F (w) stands for weight of the financial proposal. (30%).

F(s) stands for Financial score

 $F(s) = \{(EC/HEC) *100\}$ 

EC stands for Evaluated Revenue of the financial proposal HEC stands for Highest Evaluated Revenue of the financial proposal  $\{Bidder\ Quoted\ Highest\ Revenue\ will\ get\ Score\ (Marks)\ F(s)=100\}$ 

#### AWARD OF PROPOSAL

# 24 Contract award Criteria

The Bids shall be evaluated based on the Scoring as *per Clause-23 above*. The proposals will be ranked in terms of total points scored. The proposal with the highest total points (H-1) will be considered for award of contract and will be called for negotiations, if required

### 25 PSCDL's Right to Accept Any Proposal and to reject any or all Proposals

The acceptance of the proposal will rest with the PSCDL who does not bind itself to accept the proposal and reserves right to reject any or all of proposals received without assigning any reason.

The PSCDL's right to accept or reject any or all proposals at any time prior to award of contract, will not incur any liability, to the affected Bidders, of the grounds for the PSCDL's action.



#### **26** Notification of Contract

Prior to the expiry of the period of proposal validity, the PSCDL will notify the successful Bidder that its proposal has been accepted. The notification of award will constitute the formation of the Contract and Concessionaire agreement, for all legal purposes.

# 27 Signing the Concession Agreement

Within Thirty (30) days from award of work by PSCDL, the successful Bidder shall sign the Concession Agreement. The following, duly filled in and signed documents, shall form the Concession Agreement:

- a) Agreement (format placed at Annexure- 15 (DRAFT) along with Annexure 16 as Bidder of Works)
- b) Letter of award and any pre-award correspondence between PSCDL and the Bidder.
- c) Proposal documents (bearing stamp of the firm and initials of the authorized Signatory for this proposal on behalf of the firm) Contained in:

Vol.-I: Instructions to bidders

Vol.-II: Scope of Work and Technical Specification, Annexure & Drawings

Vol.-III: General conditions of contract and special conditions of contract

Vol.-IV: Priced Bid

d) The proposal offers by the bidder

On acceptance of the proposal, the name of the accredited representative(s) of the Bidder (with a photograph and signature attested) who would be responsible for taking instructions from the PSCDL / PMC, shall be communicated to the Engineer in charge.

After acceptance of the proposal, the Bidder or all partners (in the case of partnership firm) or the authorized representative of the firm with a valid power of attorney will append photographs and signatures duly attested, at the time of execution of agreement.

If any Bidder, who having submitted a proposal does not execute the agreement or does not start the work or does not complete the work and the work has to be put to rebidding, debarred from participating such re-bidding he shall stand in addition to forfeiture of Earnest Money and Security Deposit and other action under agreement.

#### 28 Performance Security:

The Successful Bidder shall furnish Performance Security by way of an irrevocable Bank Guarantee issued by a scheduled bank in India in favour of Puducherry Smart City Development Limited, as required under the Concession Agreement. Value of Performance Security should be **Rs.50,00,000/- (Rupees Fifty Lakhs only).** Performance security shall be valid till end of concession period.



#### 29 Insurance

The successful bidder shall provide insurance as required as per the Agreement.

### 30 Corrupt or Fraudulent Practices

The PSCDL defines, for the purposes of this provision, the terms set forth below as follows:

- a) "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in contract execution: and
- b) Fraudulent practice means a misrepresentation of facts in order to influence the execution of a contract to the detriment of the PSCDL and includes collusive practice among Bidders (prior to or after proposal submission) designed to establish proposal prices at artificial non- competitive levels and to deprive the benefits of free and open competition.

Any efforts by a Bidder to influence the PSCDL in the PSCDL's proposal evaluation, proposal comparison or contract award decisions may result in rejection of the Bidder's proposal.

The PSCDL will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.

#### 31 Documents sanctity

All documents /certificates submitted by the Bidder on line, shall be considered by the PSCDL at the time of the prequalification and technical evaluation. If at any point of time on verification of the documents/certificates submitted by the bidder found to be false/fraud/fake/bogus/counterfeit etc. the contract shall be liable to be rejected and necessary action shall be taken against the Concessionaire/firm as per rule/law in force.



# 32 Code of Integrity

Any person participating in the procurement process shall –

- a) 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;
- b) not misrepresent or omit that misleads or attempts to mislead so as to obtain a financial or other benefit or avoid an obligation;
- c) not indulge in any collusion, Bid rigging or anticompetitive behavior to impair the transparency, fairness and progress of the procurement process;
- d) not misuse any information shared between the procuring Entity and the Bidders with an intent to gain unfair advantage in the procurement process
- e) 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;
- f) Not obstruct any investigation or audit of a procurement process;
- g) Disclose conflict of interest, if any; and
- h) 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.

#### 33 Conflict of Interest

The Bidder participating in a bidding process must not have a 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.

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:

- a) Have controlling partners/shareholders in common; or
- b) Receive or have received any direct or indirect subsidy from any of them; or
- c) Have the same legal representative for purposes of this Bid; or
- d) 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



- e) 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
- f) 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
- g) Bidder or any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity as PMC/ consultant for the contract



# **Annexure 1- Template for Pre-Bid Queries**

Bidder shall submit all pre-bid queries in excel in the following format.

Sl. No.	RFP Volume, Section	RFP Page No	Contents in RFP	Clarification Sought



# **Annexure 2 - Technical Bid checklist**

Sl. No.	Checklist Items – Compliance	(Yes or No)	Page No & Section No in BID
1	Tender fees		
2	Earnest Money Deposit		
3	Pre-Qualification Covering letter		
4	<ul> <li>Copy of Certification of</li> <li>Incorporation/Registration Certificate</li> <li>PAN card</li> <li>GST registration</li> </ul>		
5	Audited financial statements for the last three financial years And Certificate from the Statutory Auditor		
6	Declaration of non-blacklisting		
7	Experience Certificate		
8	No Deviation Certificate		
9	Total Responsibility Certificate		
10	Anti-Collusion Certificate		



# **Annexure 3 - Technical Bid Covering Letter**

Date:	dd/	mm	/ уу:	уу.
То,				
[	]			

Sub: Request for proposal For Setting up of Digital Smart Kiosk Infrastructure Solution including Design, Build, Finance, Operate and Maintain through Public Private Partnership (PPP) at designated locations under "Smart City Mission" at Puducherry City Ref: RFP No. <<....>> dated << ....>>

Dear Sir,

With reference to your "Request for proposal For Setting up of Digital Smart Kiosk Infrastructure Solution including Design, Build, Finance, Operate and Maintain through Public Private Partnership (PPP) at designated locations under "Smart City Mission" at Puducherry City", we hereby submit our qualification bid, Technical Bid and Commercial Bid for the same.

### We hereby declare that:

- a) We hereby acknowledge and unconditionally accept that the Authority can at its absolute discretion apply whatever criteria it deems appropriate, not just limiting to those criteria set out in the RFP and related documents, in short listing of Agency for providing services.
- b) We have submitted EMD of INR [ ] and Tender fee of INR [ ] through DD/FDR/
- c) We hereby declare that all information and details furnished by us in the Bid are true and correct, and all documents accompanying such application are true copies of their respective originals.
- d) We agree to abide by our offer for a period of PSCDL 120 days from the date of submission of bid prescribed by Authority and that we shall remain bound by a communication of acceptance within that time.
- e) We have carefully read and understood the terms and conditions of the RFP and the conditions of the contract applicable to the RFP. We do hereby undertake to provision as per these terms and conditions.
- f) In the event of acceptance of our bid, we do hereby undertake:



- To Design, finance, Build, Operate and Maintain as stipulated in the RFP document
- ii. To undertake the project services for entire contract period from the date of signing of the contract as mentioned in the RFP document.
- iii. We affirm that the prices quoted are inclusive of design, development delivery, installation, commissioning, providing facility training, management and hand-holding support, and inclusive of all out of pocket expenses, taxes, levies discounts etc.
- g) We do hereby undertake, that, until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and notification of award of contract, shall constitute a binding contract between us.
- h) We understand that the Authority may cancel the bidding process at any time and that Authority is not bound to accept any bid that it may receive without incurring any liability towards the bidder.
- i) We fully understand and agree to comply that on verification, if any of the information provided in our bid is found to be misleading the selection process, we are liable to be dismissed from the selection process or termination of the contract during the project, if selected to do so

In case of any clarifications please contact email at gmplanpscdl@gmail.com

Thanking you,
Yours sincerely,
(Signature of the Lead bidder)
Printed Name
Designation
Seal
Date:
Place:
Business Address:



# **Annexure 4 - Format for General Information**

Brief company profile (To be submitted for each firm in case of consortium/joint venture)

Sl.No	Particular Name of Bidder	Description or Details
1	Name of Bidder	
2	Legal status of Bidder (company, Pvt. Ltd., LLP etc.)	
3	Products/services offered	
4	Registered office address	
5	Management Team & No of employees	
6	Incorporation date and number	
7	GST number	
8	PAN details	
9	Primary Contact Person (Name, Designation, address, mobile number, fax, email)	
10	Secondary Contact Person (Name, Designation, address, mobile number, fax, email)	
11	Annual sales volume (in rupees)	
12	Major clients	
13	Business partners (and the services/products they offer	



# **Annexure 5 - Declaration of Non- Blacklisting**

(To be provided on the Company letter head)
Declaration for Lead Bidder:
Place
Date
To,
[ ]
Subject: Self Declaration of not been blacklisted in response to the Request for proposal for Setting up of Digital Smart Kiosk Infrastructure Solution including Design, Build, Finance, Operate and Maintain through Public Private Partnership (PPP) at designated locations under "Smart City Mission" at Puducherry City" at designated locations for Period of Ten Years
Ref: RFP No. <<>> dated <<>>  Dear Sir,  We confirm that our company or firm, , is currently not blacklisted in any manner whatsoever by any of the State or Union Territory and or Central Government in India on any ground including but not limited to indulgence in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.
(Signature of the Lead Bidder)
Printed
Name
Design
ation
Seal
Date:
Place:
Business Address:
Puduchorry Smart City Volume 1 Page 45   69



### **Annexure 6 - No Deviation Certificate**

This is to certify that our offer is exactly in line with your tender enquiry/RFP (including amendments) no. dated . This is to expressly certify that our offer contains no deviation either Technical (including but not limited to Scope of Work, Business Requirements Specification, Functional Requirements Specification, Hardware Specification and Technical Requirements Specification) or Commercial in either direct or indirect form.

(Authorized Signatory)	
Signature:	
Name:	
Designation:	
Address:	
Seal: Date:	



# **Annexure 7 - Total Responsibility Certificate**

This is to certify that we undertake the total responsibility for the defect free operation of the proposed solutions as per the requirement of the RFP for the duration mentioned in all the volumes of the RFP.

(Authorized Signatory)	
Signature:	
Name:	
Designation:	
Address:	
Seal:	
Date	



# **Annexure 8 - Details of Experience of Bidder**

Sl.No	Detail	
1	Name of the work	
2	City/State	
3	Name of Client and contact details of reference contact person	
4	Work order no	
5	Amount in Lakh	
6	Scope of Work	
7	No of Digital Smart Kiosk Operational	
8	Operation and Maintenance Period	
9	Status of Project	
10	Project Completion Date	
11	Mode of Execution	
12	No of subscription and usage details	
13	Other details any ( as necessary)	

### NOTE:

Client Certificate towards satisfactory completion of work / Successfully ongoing from Competent Authority (Engineer In charge, not below the rank of Executive Engineer) should be attached in respect of each work in Model Format along with copy of work order.



# **Annexure 9 - Experience Certificate - Model Format**

# To whomsoever it may concern

Certified t	that	$\mathbf{M}$	/s	have	suc	cessfully	com	pleted	and
commission	ned t	he w	vork of		as	awarded	vide	work	order
number	da	ted	costing Rs	Lakhs as per followin	g de	etails: -			

Sl.No	Locations Give the Address Details)	Status of the project	Capacity	Remarks

Date: -

Place: -

Signature & Seal of Competent Authority with seal (Not below the rank of Executive Engineer)



# **Annexure 10 - Anti-Collusion Certificate**

We hereby certify and confirm that in the preparation and submission of our Bid for Request for Proposal for Setting up of Digital Smart Kiosk Infrastructure Solution including Design, Build, Finance, Operate and Maintain through Public Private Partnership (PPP) at designated locations for Period of 10.5 Years in Puducherry, against the RFP issued by Authority, we have not acted in concert or in collusion with any other Bidder or other person(s) and also not done any act, deed or thing, which is or could be regarded as anti-competitive. We further confirm that we have not offered nor will offer any illegal gratification in or kind to any person or organization in connection with the cash instant bid.

(Signature of the Lead Bidder)
Printed Name
Designation
Seal
Date:
Place:
Business Address:



### Annexure 11 - Performance Bank Guarantee

Ref:	Date
Bank Guarantee No.	
<name></name>	
<designation></designation>	
<address></address>	
<phone nos.=""></phone>	
<fax nos.=""></fax>	
<email id=""></email>	

Whereas, <<name of the Bidder and address>> (hereinafter called "the Bidder") has undertaken, in pursuance of contract no. <Insert Contract No.> dated. <Date> to Digital Smart Kiosk services for <<name of the assignment>> to Puducherry Smart City Limited (hereinafter called "the Authority")

And whereas it has been stipulated by in the said contract that the bidder shall furnish you with a bank guarantee by a recognized bank for the sum specified therein as security for compliance with its obligations in accordance with the contract;

And whereas we, <Name of Bank> a banking company incorporated and having its head/registered office at <Address of Registered Office> and having one of its office at <Address of Local Office> have agreed to give the supplier such a bank guarantee.

Now, therefore, we hereby affirm that we are guarantors and responsible to you, on behalf of the Bidder, up to a total of Rs.<Insert Value> (Rupees <Insert Value in Words> only) and we undertake to pay you, upon your first written demand declaring the Bidder to be in default under the contract and without cavil or argument, any sum or sums within the limits of Rs. <Insert Value> (Rupees <Insert Value in Words> only) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.



We hereby waive the necessity of your demanding the said debt from the bidder before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the Bidder shall in any way release us from any liability under this guarantee and we hereby waive notice of addition or any such change, modification.

This Guarantee shall be valid until << Insert Date>>)

Notwithstanding anything contained herein:

Date

**Puducherry Smart City** 

- i. Our liability under this bank guarantee shall not exceed Rs. <Insert Value> (Rupees <Insert Value in Words> only).
- ii. This bank guarantee shall be valid up to <Insert Expiry Date>)

It is condition of our liability for payment of the guaranteed amount or any part thereof arising under this bank guarantee that we receive a valid written claim or demand for payment under this bank guarantee on or <Insert Expiry Date> failing which our liability under the guarantee will automatically cease.

Place	Signature
Witness	Printed Name
(Bank's common seal)	

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# **Annexure 12 - Format for Power of Attorney to Authorize Signatory**

#### POWER OF ATTORNEY

To be executed on non-judicial stamp paper of the appropriate value in accordance with relevant Stamp Act. The stamp paper is to be in the name of the company, who is issuing the power of attorney.]

(name of the firm or company with address of the registered office) hereby We, M/s. constitute, appoint and authorize Mr. or Ms. (Name and residential address) who is presently employed with us and holding the position of Attorney to do in our name and our behalf all or any of the acts, deeds or things necessary or incidental to our RFP for the Project (name of the Project), including signing and submission of the RFP response, participating in the meetings, responding to queries, submission of information or documents and generally to represent us in all the dealings with Client or any other Government Agency or any person, in connection with the works until culmination of the process of bidding till the Project Agreement is entered into with (Client) and thereafter till the expiry of the Project Agreement. We hereby agree to ratify all acts, deeds and things lawfully done by our said Attorney pursuant to this power of attorney and that all acts, deeds and things done by our aforesaid Attorney shall and shall always be deemed to have been done by us. (Add in the case of a Consortium) Our firm is a Member or Lead bidder of the Consortium of , and \_\_\_\_\_. Dated this the \_\_\_\_\_ day of \_\_\_\_\_ 2019. (Signature and Name of authorized signatory) (Signature and Name in block letters of all the remaining partners of the firm Signatory for the Company) Seal of firm Company Witness 1: Witness 2: Notes: a) To be executed by all the members individually. b) The Mode of execution of the power of attorney should be in accordance with the

in accordance with the required procedure.

procedure, if any laid down by the applicable law and the charter documents of the executants(s) and when it is so required the same should be under common seal affixed



# Annexure 13 - Form - Personnel

Give details of key technical and administrative Personnel (Who could be assigned the work) in the following pro-forma.

- A) Details of the Board of Directors.
  - 1. Name of Directors.
  - 2. Organization.
  - 3. Address.
- B) Key technical &

Administrative personnel.

- 1. Individual's name
- 2. Qualification.
- 3. Present position of offices
- Professional experience and details of works carried out.
- 5. Year with Bidders.
- 6. Language known.
- 7. Additional information.
- C) Skilled and other labour (indicate number categorically)
- 1. Skilled labour.
- 2. Other labour.
- Note: In case of Joint venture or Consortium the above form shall be filled by The JV members separately

Signature of Bidder:

Date:

- (i) Project Manager in overall charge of work.
  - (ii) Solution Architecture
  - (iii) Support Engineer / Site Engineer
  - (iv) Others

Puducherry S	Smart City
--------------	------------



# **Annexure 14 - Details Indicating Financial Capacity**

- 1. Name of firm
- 2. Name of Partner / Director
- 3. Capital
  - a) Authorized
  - b) Issued and Paid up
- 4. Furnish balance sheet and profit and loss statement with auditor's report & income tax
- a) Working Capital

Sl.No.	Year	Gross Turnover in Rs. Crores	Reference Page No. of Balance Sheet
1.	2018-2019		
2.	2017-2018		
3.	2016-2017		
Sl.No	Year	Gross Income in Rs. Crores	Reference Page No. of Balance Sheet
1.	2018-2019		
2.	2017-2018		
3.	2016-2017		
Sl.No.	Year	Turnover from ICT in Rs. Crores	Reference Page No. of Balance Sheet
1.	2018-2019		
2.	2017-2018		
3.	2016-2017		

- 5. List your sources of finance.
- 6. Certificate of financial soundness by bank.
- 7. Name and address of Bank from whom reference can be obtained.
- 8. Have you ever been declared bankrupt?



[If, yes please give details]

# Note:

- Firms owned by individuals, and partnerships, may submit their balance sheets certified by a registered accountant, and by copies of tax supported returns. Attach Certificate(s) issued by any Bank or Financial Institution for available credit to the Lead partner and joint venture partner
- In case of Joint Venture, the above form shall be filled separately

Signature of Bidder

Date:



# **Annexure 15 - Joint Venture Data**

In case the joint venture agreement is not acceptable to Puducherry Smart city Development Limited the joint venture may be requested to modify the agreement accordingly. Failure to submit a modified Joint venture agreement within twenty-one days upon receipt by the Bidder of the request for modification will disqualify the Bidder for further consideration.

Names of all partners of a joint venture		
Partners	Partners Name of Firm	
1. Lead partner		
2. Partner		



# **Annexure 16 - Concession Agreement (Deleted)**

# **Shall be Provided on award of Contract**



# Annexure 17 - Bidder for works

I / We hereby submit the proposal for the execution of 'Design, Supply, Installation, Commissioning and Maintenance support for Digital Smart Kiosk Infrastructure solution' through Public Private Partnership (PPP) at designated locations under "Smart City Mission" at Puducherry City, including maintenance for a period of Ten Years after installation in given locations. I / We have visited the site of work and am / are fully aware of all the difficulties and conditions likely to affect carrying out the work. I / We have fully acquainted myself / ourselves about the conditions regarding accessibility of site and the extent of ground, working, including stacking of material, stools and conditions effecting accommodation and movement of labour etc. required for the satisfactory execution of contract Memorandum

		Digital Smart Kiosk Infrastructure Solution including	
a)	General description:	Design, Build, Finance, Operate and Maintain through Public Private Partnership (PPP) at designated locations under "Smart City Mission" at Puducherry City	
b)	EMD / Bid Security	Rs. Five Lakhs (Rs. 5.00 Lakhs) as mentioned in RFP	

Time allowed for the completion of the work (to be reckoned from the 10th day after the date of written order to commence the work) is as per proposal document. I/We hereby agree to abide by and fulfil in the terms and provisions of the conditions of the contract Annexure-d hereto and of the detailed notice for technical and financial bids, or in default thereof, to forfeit pay to PSCDL, the sum of money mentioned in the said and conditions.

A sum of Rs ......lakh is forwarded herewith in the form of bank draft/ FDR as Earnest money. This amount of earnest money shall absolutely be forfeited to PSCDL, should I/We fail to commence the work specified in the above memorandum. Signature of witness

Signature of Concessionaire

Witnesses address & occupation

Address of Concessionaire

Date

The above proposal is hereby accepted by me on behalf of PSCDL



# **Annexure 18 - Joint Bidding Agreement**

Format for Joint Bidding Agreement for Joint Venture
(To be executed on Stamp paper of appropriate value)
THIS JOINT BIDDING AGREEMENT is entered into on this the day
of20
AMONGST
1. {
referred to as the "First Part" which expression shall, unless repugnant to the context
include its successors and permitted assigns)
AND
2. {
referred to as the "Second Part" which expression shall, unless repugnant to the
context include its successors and permitted assigns)
The above mentioned parties of the FIRST, & SECOND } PART are collectively
referred to as the "Parties" and each is individually referred to as
a "Party"
WHEREAS,
(A) Puducherry Smart City Development Limited (PSCDL), established under the
Government of Puducherry , represented by its CEo, and having its principal office at
Puducherry (hereinafter referred to as the "Authority" which expression shall, unless
repugnant to the context or meaning thereof, include its administrators, successors
and assigns) has invited bids (the Bids") by its Request for Proposal No dated
(the "RFP") for award of contract for "Design, Built, Finance, Operate and
Transfer (DBFOT) the Digital Smart Kiosk Infrastructure Solution System facility for
a period of 10.5 (Ten years and six months) years in PSCDL area under Puducherry
Smart City Development Limited"(the "Project").
(B) The Parties are interested in jointly bidding for the Project as members of a
Joint Venture and in accordance with the terms and conditions of the RFP document
and other bid documents in respect of the Project, and
(C) It is a necessary condition under the RFP document that the members of the
Joint Venture shall enter into a Joint Bidding Agreement and furnish a copy thereof
with the Application.
NOW IT IS HEREBY AGREED as follows:
1. Definitions and Interpretations



In this Agreement, the capitalized terms shall, unless the context otherwise requires, have the meaning ascribed thereto under the RFP.

- 2. Joint Venture
- 2.1 The Parties do hereby irrevocably constitute a Joint Venture (the "Joint Venture") for the purposes of jointly participating in the Bidding Process for the Project.
- 2.2 The Parties hereby undertake to participate in the Bidding Process only through this Joint Venture and not individually and/ or through any other Joint Venture constituted for this Project, either directly or indirectly.

#### 3. Covenants

The Parties hereby undertake that in the event the Joint Venture is declared the selected Bidder and awarded the Project, it shall enter into a Concession Agreement with the Authority for performing all its obligations as the Contractor in terms of the project execution through DBFOT (Design, Build, Finance, Operate and Transfer) mode for the Project.

#### 4. Role of the Parties

The Parties hereby undertake to perform the roles and responsibilities as described below:

- (a) Party of the First Part shall be the Lead member of the Joint Venture and shall have the power of attorney from all Parties for conducting all business for and on behalf of the Joint Venture during the Bidding Process and until the Appointed Date under the Contract;
- (b) Party of the Second Part shall be {the Member of the Joint Venture; and}
- (c) Party of the Third Part shall be {the Member of the Joint Venture.}

# 5. Joint and Several Liability

The Parties do hereby undertake to be jointly and severally responsible for all obligations and liabilities relating to the Project and in accordance with the terms of the RFP and the Concession Agreement, till such time as the completion of the Project is achieved under and in accordance with the Contract.

# 6. Share of work in the Project



The Parties agree that the work/activity in the DBFOT mode of project execution, operation, maintenance and transfer to the Authority, to be allocated among the members shall be as follows:

First Party:

Second Party:

Further, the Lead Member shall by itself undertake and perform ------ %, if the Contract is allocated to the Joint Venture.

7. Representation of the Parties

Each Party represents to the other Parties as of the date of this Agreement that:

- (a) Such Party is duly organised, validly existing and in good standing under the laws of its incorporation and has all requisite power and authority to enter into this Agreement.
- (b) The execution, delivery and performance by such Party of this Agreement has been authorized by all necessary and appropriate corporate or governmental action and a copy of the extract of the charter documents and board resolution/ power of attorney in favour of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the Joint Venture Member is Annexure-d to this Agreement, and will not, to the best of its knowledge:
- (i) require any consent or approval not already obtained;
- (ii) violate any Applicable Law presently in effect and having applicability to it;
- (iii) violate the memorandum and articles of association, by-laws or other applicable organisational documents thereof;
- (iv) violate any clearance, permit, concession, grant, license or other governmental authorization, approval, judgement, order or decree or any mortgage agreement, indenture or any other instrument to which such Party is a party or by which such Party or any of its properties or assets are bound or that is otherwise applicable to such Party; or
- (v) create or impose any liens, mortgages, pledges, claims, security interests, charges or Encumbrances or obligations to create a lien, charge, pledge, security interest, encumbrances or mortgage in or on the property of such Party, except for encumbrances that would not, individually or in the aggregate, have a material adverse effect on the financial condition or prospects or business of such Party so as to prevent such Party from fulfilling its obligations under this Agreement;



(c) this Agreement is the legal and binding obligation of such Party, enforceable in accordance with its terms against it; and

there is no litigation pending or, to the best of such Party's knowledge, threatened to which it or any of its Affiliates is a party that presently affects or which would have a material adverse effect on the financial condition or prospects or business of such Party in the fulfillment of its obligations under this Agreement.

#### 8. Termination

This Agreement shall be effective from the date hereof and shall continue in full force and effect until Project completion (the "Defects Liability Period") is achieved under and in accordance with the Concession agreement, in case the Project is awarded to the Joint Venture. However, in case the Joint Venture is either not pre-qualified for the Project or does not get selected for award of the Project, the Agreement will stand terminated in case the Bidder is not pre-qualified or upon return of the Bid Security (EMD) by the Authority to the Bidder, as the case may be.

- 9. Miscellaneous
- 9.1 This Joint Bidding Agreement shall be governed by laws of Government of India.
- 9.2 The Parties acknowledge and accept that this Agreement shall not be amended by the Parties without the prior written consent of the Authority.

IN WITNESS WHEREOF THE PARTIES ABOVE NAMED HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN. SIGNED, SEALED AND DELIVERED

For and on behalf of	
LEAD MEMBER by:	SECOND PART
(a' )	(0' )
(Signature)	(Signature)
(Name)	(Name)
(Designation)	(Designation)
(Address)	(Address)
In the presence of:	
1	2



Request for proposal for Design, Supply, Installation,
Commissioning and Maintenance support for Digital Smart
Kiosk Infrastructure solution at designated locations under
"Smart City Mission" at Puducherry City

Volume II: Scope of Work and Technical Specifications



**RFP for Digital Smart Kiosk** 

Tender No: 008/PSCDL/2019

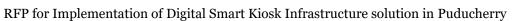
June 2019

**Puducherry Smart City Development Limited** 



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# Abbreviations

Term	Definition	
ABD	Area Based Development	
B2C	Business to Consumer	
CEO	Chief Executive Officer	
CSC	Common Service Centre	
Day	Calendar day	
DPR	Detailed Project Report	
GIS	Geographic Information System	
GoI	Government of India	
GoP	Government of Puducherry	
GPRS	General Packet Radio Services	
G2C	Government to Citizen	
ICCC	Integrated Command and Control Centre	
ICT	Information and Communication Technology	
INR	Indian Rupee	
IT	Information Technology	
LED	Light-Emitting Diode	
LLP	Limited Liability Partnership	
Ltd.	Limited	
NAS	Network-Attached Storage	
OEM	OEM Original Equipment Manufacturer	
O&M	Operation and Maintenance	
PMC Project Management Consultant		
PPP	Public Private Partnership	
PSCDL	Puducherry Smart City Development Limited	
PTDC	Puducherry Tourism Development Corporation	
PTZ	Pan-Tilt-Zoom	
PWD	Public Works Department	
RFP	Request for Proposal	
SAN	Storage Area Network	
TRAI	Telecom Regulatory Authority of India	
ULB	Urban Local Body	
VLAN	Virtual Local Area Network	
WSP	Wi-Fi Service Provider	



#### 1 Overview of Digital Smart Kiosk initiative

PSCDL intends to deploy Digital Smart Kiosk infrastructure to facilitate information and municipal services for tourists and citizens of Puducherry. The infrastructure is proposed to be deployed at 21 locations (DBFOT model) in two different scenarios, based on Indoor and Outdoor locations.

The size of the Digital Smart Kiosk for indoor and outdoor location is estimated to be (3ft. (L) x 3ft. (W) x 7 ft. (H) and (15ft. (L) x 10ft. (W) x 12 ft. (H) respectively.

It is envisaged that apart from citizen and tourist services, the proposed Digital Smart Kiosk infrastructure shall also deliver the following services / initiatives:

- 1. Public Wi-Fi
- 2. Surveillance Cameras
- 3. Augmented Reality Zone
- 4. Solar Panels
- 5. Provisioning for Smart City initiatives (emergency call button, environmental sensors, public address system, public information displays, digital signage) for future use.

The below table indicates the details on the facility which shall be made available by the selected bidder on each of the proposed location.

Name of facility	Indoor location	Outdoor location
Digital Smart Kiosk	Yes	Yes
Public Wi-Fi	Yes	Yes
Camera for Surveillance	Yes	Yes
Camera for Augmented Reality	No	Yes
Interactive video wall for Augmented Reality	No	Yes
Solar	No	Yes
Digital Panels	Yes (one)	Yes (three)
Control room set-up for service monitoring and management	Common	Common

To ensure business viability for the selected SI, both Indoor and Outdoor models can be monetized through:

- 1. Wi-Fi Advertisements
- 2. Digital display advertisements
- 3. Augmented Reality advertisements
- 4. Rental vendor shop inside the Digital Smart Kiosk (17 outdoor locations) on the prime city locations (Ref. Annexure 2)

Bidder may also propose any additional revenue stream from the above mentioned.



Below is the proposed layout plan for Digital Smart Kiosk infrastructure:

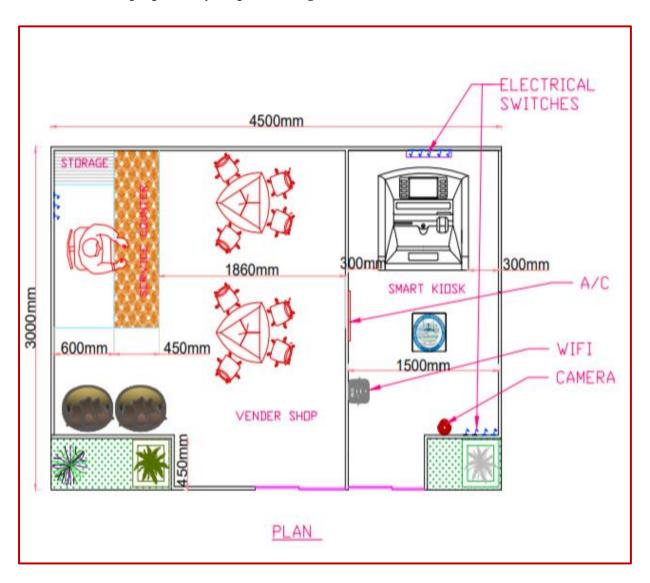


Fig. 1: Plan for Digital Smart Kiosk



#### 2 Brief Scope of Work:

The complete solution for Digital Smart Kiosk should include Design, Supply, Installation, Configuration, Commissioning and Maintenance support for Digital Smart Kiosk solution that mainly comprises of two important aspects:

- 1. Kiosk ICT components
- 2. Kiosk Non-ICT Infrastructure components

### 2.1 Kiosk ICT Components:

The key list of ICT components that shall form part of Digital Smart Kiosk solution are provided below:

# Digital Smart Kiosk with the following capabilities:

- i. Citizen application interface (Tamil, French and English interface) to access Digital Smart Kiosk services.
- **ii. Multi-lingual audio guide** (preferred languages English, Tamil and French)
- **iii. Centralized Digital Smart Kiosk management platform** to manage Smart Kiosk remotely; that shall be hosted at cloud servers.
- iv. Highly Interactive responsive touch screen display to access various services.
- v. LED display digital panel on either side of the physical kiosk for digital advertisements.
- vi. Content Management Platform for content creation and management for Digital Advertisements, Augmented Reality, Information Services etc.

Further details on the requirement for each component is provided in subsequent sections.

### Other IT Systems

i. **Public Wi-Fi access** within 30 meters from the proposed location.

#### ii. Camera

- Camera for Augmented Reality
- Camera for surveillance of external environment around kiosk
- iii. **Solar panels** to run kiosk operations during maximum permitted time.
- iv. **Augmented reality** to enhance visitors experience by provisioning informative 3-D content.
- v. **Control room Infrastructure** set-up for surveillance cameras and IT service management and monitoring.
- vi. **Integration with payment aggregator platform** for provisioning Card Swipe facility (card acceptor infrastructure) for payment of



bills/fees, etc. through debit/credit cards/prepaid city card through Point of Sale machines integrated with the Touch Screen Monitors.

vii. **Bandwidth allocation** for the proposed Digital Smart Kiosk infrastructure.

### 2.2 Kiosk Non-ICT Infrastructure components

The proposed list of Non-ICT infrastructure components that shall form part of Digital Smart Kiosk solution is listed below:

# Kiosk physical infrastructure requirements

The proposed kiosk shelter shall have the following facilities:

- One wall mounted AC
- > One wall mounted fan
- Electrical switch socket
- ➤ LED lights
- > Two Digital display screens
- Solar panels

#### Kiosk structural design requirements

- Modular design Overall design of the proposed digital smart kiosk should be modular in nature and shall be flexible to accommodate size expansion.
- ➤ **Indoor and Outdoor variants** Shall be designed to best fit for indoor locations like government building's and outdoors like nearby beach promenade, boulevard area, bus stops, key tourist spots, high footfall areas in the city.
- ➤ Safety features Electronic components as well as structure of the entire Digital Smart Kiosk infrastructure (including outdoor shelter and interiors) should be disaster resilience and resistant to environmental conditions like rainfall, high temperature, climate change, dust resistant, corrosion etc. Compliant to IP66 standard.
- Physical security Overall structure should be secured with lock and key arrangements or any other suitable mechanism that will prevent theft of any useful belongings.
- ➤ **Color:** Uniformity of color scheme for the Smart Kiosk throughout the city will help public/users to identify and associate those colors with the given facilities and can help them remember it better.
- ➤ **Branding:** Puducherry Smart City branding at the prominent spots inside and outside the Digital Smart Kiosk is desirable.

#### Civil works

➤ It is envisaged that minor civil works would be required to implement the Digital Smart Kiosk infrastructure along with various related components like electrical fixtures, Solar panels installation, Kiosk installation, Shelter installation, end mile connectivity requirements etc.



# 3 Smart Kiosk Component #1: Digital Smart Kiosk & Services

### 3.1 Overview

As a step towards providing digital informative and Government services to the tourists and citizens, PSCDL wishes to deploy a number of touch points in the form of Digital Smart Kiosks across the Puducherry city. These Digital Smart Kiosks shall act as a touch-point for accessing various services from city administrative departments. While delivery of G2C services shall be the primary focus of these Digital Smart Kiosk, in order to ensure broader adoption and ensure business viability, B2C services shall also be provided through this infrastructure. Digital Smart Kiosk is planned to be installed at various 21 key locations in the city like government offices, bus stops, market places, tourist spots, key footfall areas etc. to ensure service delivery platform all across the city.

### 3.2 Objectives

- 1) Digital Smart Kiosk shall be the single window access for all city administration informative services. In addition transactional services from various departments shall also be provisioned at various convenient locations for citizens and commuters.
- 2) Digital Smart Kiosk shall also serve as a channel to improve city services through feedback mechanism.
- 3) The proposed infrastructure will also support in promoting Smart City initiatives and City branding.



# 3.3 Solution Architecture:

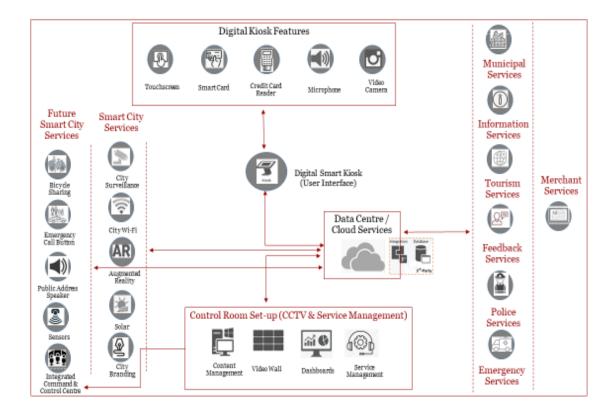


Fig. 2: Solution Architecture for Digital Smart Kiosk

#	Features of Digital Smart Kiosk	Requirement
1.	Camera	To record users' interaction with kiosk.
2.	Touchscreen	Kiosk will support a touchscreen interface to the users.
3.	Speakers	For enabling multimedia output through kiosk.
4.	Card Reader	Will allow citizens to accept Credit / Debit / PTDC card / proposed Smart City card to interact and carry out transactions within the kiosk. The reader shall also allow the existing PTDC card / proposed Smart City card to be recharged with pre-fixed denominations.
5.	Payments Interface	Interface to accept payments through credit card and debit card through kiosk. Wireless payments through NFC should also be supported.
6.	Microphone	Shall support speech based interaction.
7.	Digital Display	Shall support digital interactive content for G2C / B2C services.



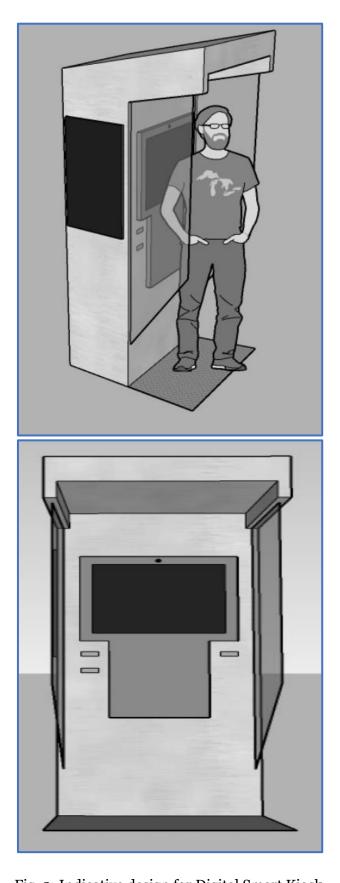


Fig. 2: Indicative design for Digital Smart Kiosk



# 3.4 Digital Smart Kiosk Service Portfolio

Below is an indicative listing of services which are expected to be made available in Digital Smart Kiosk. These have been categorized as below, however, SI shall be responsible for integrating and deployment of various other services on kiosk during the project period.

Sl. No.	Technology (Smart city initiatives)	Description
	•	
1.	Smart City initiatives	<ul> <li>Information on Public Bicycle Service stations.</li> </ul>
		<ul> <li>Information on Public toilet locations.</li> </ul>
		<ul> <li>Information on Water ATM locations.</li> </ul>
		<ul> <li>Information about other Smart City initiatives.</li> </ul>
		<ul> <li>Provisioning of other Smart City initiatives (like Environmental sensors, Emergency Call Button, public bicycle services, variable messaging displays, public address system, and digital signage) for future use.</li> </ul>
2.	Information /	<ul> <li>Information about various citizen emergency helpline numbers</li> </ul>
	Tourism Services	<ul> <li>Information on Land Records of UT of Puducherry</li> </ul>
	Scrvices	<ul> <li>Guide Line Register Values for Puducherry Region</li> </ul>
		<ul> <li>Information on Who's Who of Department Ministers</li> </ul>
		■ Information about total revenue collected for each month (Property tax, Entertainment tax and User charges)
		<ul> <li>Information on Public utilities (Banks / ATMs, Municipality offices, Postal, Hospitals, NGOs, Schools)</li> </ul>
		Audio / Video Interactive Services
		Glance of Raj Niwas
		<ul> <li>Information on history of local iconic hotspots</li> </ul>
		<ul> <li>Information on nearby Hotspots</li> </ul>
		<ul> <li>Information on To-Do's</li> </ul>
		<ul> <li>Information on city events</li> </ul>
		<ul> <li>Information on city festivals</li> </ul>
		<ul> <li>Information on city activities</li> </ul>
		<ul> <li>Information on City tours</li> </ul>
		<ul> <li>Information about history of Puducherry and Raj Niwas</li> </ul>
		<ul> <li>Information about Puducherry's legacy of Lieutenant Governors</li> </ul>
		<ul> <li>Information on Upcoming tourism initiatives</li> </ul>

Sl. Technology		Description
No.	(Smart city initiatives)	
		Information about medical / health institutions
		<ul> <li>Information about CSC centres</li> </ul>
		<ul> <li>Information about Ward facilities</li> </ul>
		<ul> <li>Information about Emergency contact numbers</li> </ul>
		<ul> <li>Information on important places</li> </ul>
		<ul> <li>Information about Puducherry Municipality, Tourism and other departments</li> </ul>
		<ul> <li>Information on Heritage walk spots</li> </ul>
3.	Municipal	Electricity Bill payment
	and Other Transactional	<ul> <li>Payment of professional tax</li> </ul>
	Services	<ul> <li>Issue of Trade License</li> </ul>
		<ul> <li>Payment of professional tax</li> </ul>
4.	Grievance	Grievance registration
registration		■ Feedback system
5.	Other	<ul> <li>Publicity of Raj Niwas Internship Programme</li> </ul>
	Promotional Services	<ul> <li>Request for Raj Niwas Tour</li> </ul>
	2011200	<ul> <li>Promotion of central / local government schemes</li> </ul>
6.	Awareness	Smart City initiatives
	Initiatives (audio /	<ul> <li>Health Advisory</li> </ul>
	video)	<ul> <li>Pollution Advisory</li> </ul>
		■ Traffic Rules Advisory
		<ul> <li>Environmental Advisory</li> </ul>
		■ Global Warming Advisory
		<ul> <li>Water Conservation Advisory</li> </ul>
		■ Energy Conservation Advisory
		<ul> <li>Protecting Natural Forest Advisory</li> </ul>
		<ul> <li>Disaster Management Advisory</li> </ul>
		<ul> <li>Sanitation &amp; Solid Waste Management Advisory</li> </ul>
7•	Booking	Bus ticket booking
	Services	Railway ticket booking
		Movie ticket booking
		Mobile Recharge

Sl. No.	Technology (Smart city initiatives)	Description	
		<ul><li>Mobile bill payment</li><li>Other utility payment</li></ul>	

#### 3.5 Scope for Digital Smart Kiosk:

The System Integrator shall be responsible for Design, Development, Procurement, Supply, Installation, Testing and Commissioning of City Kiosk Infrastructure & Systems (field as well as Cloud data centre) along with 10 years of Operations & Maintenance Support, from the date of Go Live.

#### Finalization of Kiosk Design & Service Portfolio

- 1. SI shall submit various possible Digital Smart Kiosk Terminal designs (Physical Design), 3D and AutoCAD design, to PSCDL for seeking Sign Off. All the proposed designs should be in total conformance with the Technical & Functional requirement specification of this RFP and the same is suggested to be submitted as part of the bidder's Technical Bid.
- 2. SI shall also finalize the Digital Smart Kiosk Service Portfolio in consultation with the PSCDL / respective department; covering all the essential citizen centric services as indicated above.

## **Detailed Site Survey**

- SI shall undertake site survey of all the identified Digital Smart Kiosk locations to ascertain
  infrastructure (IT & non IT) requirements, civil requirement, network requirement,
  operational & administrative challenges etc. This shall be done in consultation with
  officials assigned by PSCDL or its authorized entity. PSCDL intends to deploy 21 such
  Smart Kiosk Terminals at various strategic locations across the city; probable list of such
  locations is attached at Annexure 2.
- 2. Post detailed site survey, the SI shall prepare and submit site survey report (map view/3D design) and highlight key issues/challenges and support required. SI shall obtain the PSCDL's sign off on the submitted Site Survey Report.

## Design, Develop, Supply and Installation of Digital Smart Kiosk System

- 1. SI shall be responsible for provisioning end to end IT & non IT Infrastructure & System Applications both at the field level, identified Digital Smart Kiosk locations, as well as at the centralized location, Smart City Control Room, as per Indicative Bill of Material, but not limited to, including supply & installation of materials / accessories / consumables / libraries / assemblies etc. necessary for the installation of the IT and non IT Infra.
- 2. SI shall be responsible for executing requisite site preparation work including electrical, civil, administrative etc. in order to ensure that the site is ready and secure for hosting solution.



- 3. SI shall be responsible for performing the reinstatement and restoration of the sites back to the previous/normal conditions as per the prevalent norms and to the satisfaction of the PSCDL / concerned entity.
- 4. SI shall also provide comprehensive onsite OEM warranty for all the supplied products/services at all the designated project locations for the entire project period.

#### **Backbone Network Connectivity:**

- 1. The SI shall be responsible to provision Network last mile connectivity at all the identified Digital Smart Kiosk field location, based on the site survey and site feasibility.
- 2. The SI shall provision Internet Bandwidth connectivity at each of the Digital Smart Kiosk Terminal, and Smart City Control Room.

#### Note:

- Provisioning of IT active equipment like switches, UPS, power banks etc. at the field level as well as at the centralized level, Smart City Control Room, shall be provided by the SI.
- SI shall provide requisite Cloud Data Centre space for hosting centralized Digital Smart Kiosk management systems and associated hardware.
- SI, as part of its Technical Bid, is required to suggest Cloud data centre requirement.



#### 4 Smart Kiosk Component #2: Public Wi-Fi

### 4.1 Key Objectives

- 1. The broad level objectives of the proposed Puducherry Public Wi-Fi initiative are as follows:
  - To provide easily accessible, cost effective and highly available Hi-speed Internet connectivity to all residents / visitors of Puducherry
  - Enabler to reduce the digital divide and easy accessibility to citizen-centric, interactive model of governance
  - To open up information channels for more citizen engagement and increased transparency
  - To promote Smart City initiatives and Government services across Puducherry citizens
- 2. City Wi-Fi Internet access shall be free at the proposed Digital Smart Kiosk locations, which are going to be places of high footfalls, major tourist attractions points in Puducherry.
- 3. Wi Fi shall be offered to residents / visitors (national / international) with a maximum download limit of 200 MB per day per user or free for 1 hour in a day whichever is earlier, after which it will be available on a paid basis or free as per mutual agreement between PSCDL and selected bidder.
- 4. Offered solution shall allow wireless access through various kinds of devices such as smart phones, laptops, tablets, and desktops. All e-Governance applications by Government of Puducherry and Central Government shall be excluded from this download / free time limit.

#### 4.2 Scope for Public Wi-Fi:

The broad scope of work for the Wi-Fi Service Provider (WSP) would include providing Internet Connectivity to public through Wi-Fi network at selected locations (herewith called as Digital Smart Kiosk locations as given in Annexure 2 of this document) within the city of Puducherry. This includes Supply, Installation, Commissioning and Maintenance of software, hardware and networks components required for providing Wi-Fi in these locations.

WSP shall be required to undertake following activities for the same:

- a) Site survey to assess and confirm the exact requirement for each of the site (in order to adhere to the QoS requirements)
- b) Secure necessary approvals from concerned authorities for the digging requirements or for any field level work
- c) Supply of necessary hardware / software and their installation, configuration
- d) Testing and commissioning of the Wi-Fi Network
- e) Implementation of the Wi-Fi access portal, co-branded with PSCDL
- f) Monitoring of the usage, comprehensive maintenance for the period of 10 years post successful Go Live, WSP shall maintain the sufficient spares to ensure 24 X 7 uptime.



#### 4.3 Functional Requirements for Wi-Fi Services

- a) Provide secure, easy and metered Internet access to different devices through the Wi-Fi network.
- b) Provide the web based portal for users to login/authenticate for the Wi-Fi Access. The Landing Web Page to be co-branded (between PSCDL & WSP).
- c) Provisioning the access control and audit trail mechanism as per industry standard and security norms defined by various regulatory bodies.
- d) Provide the web based management console to monitor and manage the Wi-Fi access points.
- e) Ensure adherence to the following QoS parameters
  - Bandwidth Commitment: Minimum 5 Mbps per user (1:1) within 30 meters area
  - 24\*7\*365 Wi-Fi network availability
  - Seamless roaming facility within the Puducherry, across all Smart Kiosk locations (Wi Fi hotspots)
- f) Users must be able to use same access details (login id/ username and password) even if he/she moves from one Wi Fi spot zone to another to provide unified experience of connectivity for the citizen.
- g) Facility to define rule based access depending on usage, time duration, etc.
- h) Facility to restrict access based on URL, application, category, signature, etc. Facility to the designated Government agency / agencies to restrict the Wi-Fi access in case of certain circumstances.
- i) Free Access to tourist and citizens for the first 1 hour or 200 MB of download in a day (whichever is earlier) (or within max. 23 hours)
- j) Seamless facility to extend the usage of Wi-Fi services (beyond free time) through multiple payment mechanisms within the network provided by the WSP
- k) All e-Governance applications by Government of Puducherry and Central Government (the list to be shared / updated by DIT) to be whitelisted on the network for free usage, through-out the day, unlimited use.
- l) Provision of customizable reports for Wi-Fi Access Logs. Role Based Access Control to all management and reporting functions.
- m) Facility to enable/disable specific user/system from Wi-Fi Access based on system MAC address, mobile number used for authentication etc.
- n) Provide Customer Care Toll free number, E-mail ID for support.



## 4.4 Standards, Policies and Other Compliances

- a) WSP shall ensure a secure wireless connectivity and Internet access through user name and password or Mobile OTP based to all the subscribers with centralized authentication mechanism.
- b) WSP shall ensure the uniqueness of usernames. Simultaneous multiple logons shall not be allowed.
- c) Wireless access points shall be encrypted with cryptographic keys to ensure that only authorized and authenticated users can use the wireless service.
- d) Proposed Wi-Fi network shall be secure and in compliance with Indian Laws and DoT directives.
- e) WSP shall maintain logs of the Internet users for prescribed period as per the DOT guidelines.
- f) WSP shall suggest and help in deploying required policies at various levels to prevent any intrusion attack in the wireless network.
- g) Physical security of the equipment and relevant accessories should be the sole responsibility of the WSP.
- h) WSP shall impose restrictions on access and download from malicious sites for Public Wi-Fi users. Such sites shall be as notified by TRAI/ regulatory agencies and also be notified to Successful Bidder from time to time by PSCDL.
- PSCDL will only provide the space for locations. Any infrastructure, furnishings and hardware at each of the locations will be done by the WSP, as part of the proposed service.
- j) No overhead cables will be allowed.

#### 4.5 Design Requirements

- a) Hotspots should cover at least 30 meters area of locations given in RFP document. WSP will be responsible for design and engineering of all the network components to meet coverage and capacity requirements of hotspots based on the parameters: Area of Wi-Fi hotspot, Peak load and Density of user devices/concurrent users/Connections required in the area. Successful bidder should test the entire location and ensure availability of the Wi-Fi services before declaring it ready for rollout to PSCDL.
- b) Based on the hotspots capacity requirements, WSP shall determine the required Internet bandwidth (both per Hotspot and per user) and aggregated total bandwidth per hotspot. WSP can consider the contention ratio of 1:10 per user from day 1 of implementation of the project.
- c) Successful Bidder must ensure appropriate bandwidth allocation for free and paid Wi-Fi users as well for carrying data for all the sub systems with built in scalability for enhanced usage needs as time goes within the contractual period. Within the contractual period, if Wi-Fi technology is changed, the newer technology to be provided by the WSP to ensure cutting edge solution to the end consumers.



## 4.6 Technical Requirements

Components to be provided and installed by the WSP should perform following functions for throughput and bandwidth requirements.

Particulars	Description	
Access Point	Outdoor Wi-Fi Access Point	
WLAN Controller	Wireless Controller to control and manage Wi-Fi	
	Access Points	
Edge Level Switch	Field level PoE Switches to connect APs	
Wired & Wireless Network	For Network & WLAN infrastructure Management	
Management System		
Backbone Network	Connectivity from the Edge Level	

Please refer Annexure 1, (Technical Specifications) for more details.

#### 4.7 Wired & Wireless Network Management System

- a) Manage all Access Points and Controllers proposed under this requirement.
- b) Provide real-time monitoring, pro-active alerts, historical reporting, efficient troubleshooting through centralized intuitive user interface
- c) Allow quick location of users and wireless devices for troubleshooting, planning and asset tracking.
- d) Provide client troubleshooting tools, including showing client Signal to Noise Ratio (SNR), Received Signal Strength Indicator (RSSI) and session throughput.
- e) Provide tools to help better manage RF coverage, address security issues, location tracking to provide a clear picture of who is on the network, their location and how the network is performing.
- f) Aggregate, correlate, alerts and logs wireless attacks that have been detected and reported on the network, providing a comprehensive picture of infrastructure.
- g) Provide detailed performance statistics for WLAN equipment (statistics related with bandwidth, coverage etc.), also provide graphical details of WLAN utilization, average data rate, WLAN traffic etc. on a per AP basis

#### 4.8 Backbone Network

- a) The public Wi-Fi network architecture design should follow all the relevant, latest MeitY, IEEE guidelines, and WPC standards for access points.
- b) The network should support mesh technology and provide seamless and connectivity with the controllers and backhaul network.
- c) Backbone Network should perform load balancing users' traffic between multiple access points (umbrella coverage) as well as different bands in an access point so that there is a fair allocation of airtime to each user.
- d) Backbone Network should have built-in encryption mechanism to encrypt all communications and data transfer over the Wi-Fi for all the users of Wi-Fi, for sake of security and privacy.



## 6 Smart Kiosk Component #3: Surveillance Cameras

### 6.1 Functional Requirements

Functional Requirement of the overall Surveillance System can be categorized into following components:

- 1. Information to be Captured by Edge Devices
- 2. Information to be analyzed at Control Room/ICCC
- 3. Role Based Access to the Entire System
- 4. Storage / Recording Requirements
- 5. Other General Requirements

#### 6.2 Information to be captured by Edge Devices

Surveillance Cameras being one of the significant module for the Digital Smart Kiosk initiative, it is important that their selection and placement is carefully done to ensure the proper coverage of the Digital Smart Kiosk infrastructure, nearby traffic junction or city-street or government building. The proposed solution shall be rugged, durable & compact.

These cameras need to work on 24 X 7 basis and transmit quality video feeds to the Control Room & ICCC (in future) and would capture the video feeds at 15 FPS for 30 days storage. However, PSCDL / Puducherry Police may take the regular review of the requirements for video resolution, FPS and may change these numbers to suit certain specific requirements (for example, there could be a situation when certain cameras are required to be viewed at higher FPS for specific period. It is estimated that not more than 20% of the cameras would be required to be viewed at higher FPS at a given point of time).

#### 6.3 Information to be analyzed at Control Room /ICCC

The proposed Video Management System should provide a complete end-to-end solution for security surveillance application. The control room shall allow an operator to view live / recorded video from any surveillance camera on the IP network.

It has been envisaged that all surveillance cameras would not be simultaneously viewed at Control Room. The viewing shall vary from time to time which shall help to manage crowd, alert on suspicious activity on city streets / suspicious package on road, Vehicle moving wrong way in a one way street, managing traffic at the junctions and coordinate with the field police officers.

#### 6.4 Role-Based Access to the Entire System

Various users should have access to the system using single sign on and should be role based. Different roles which could be defined (to be finalized at the stage of implementation) could be Administrator, Supervisor, Officer, Operator, etc. Apart from role based access, the system should also be able to define access based on location. Other minimum features required in the role based authentication systems are as follows:



- a) The management module should be able to capture basic details (including mobile number & email id) of the Police Personnel & other personnel requiring Viewing / Administration rights to the system. There should be interface to change these details, after proper authentication.
- b) Rights to different modules / sub-modules / functionalities should be role based and proper log report should be maintained by the system for such access.
- c) The system should be with login name & password enabled to ensure that only the concerned personnel are able to login into the system
- d) There should be provision to specify hierarchy of operators / officers for control of the cameras from various locations.
- e) The number of users shall increase as per phase wise implementation. MSI is expected to estimate and provision the same based on the phase wise requirements.
- f) Windows Active Directory/LDAP or any such system can be used to design role based access.

## 6.5 Storage/Recording Requirements

- a) It is proposed that the storage solution shall be modular enough to ensure compliance to the changes in storage / recording policy, to be evolved upon initial deployment of the system. The following storage requirements shall be fulfilled by the SI as scope for the project:
  - i. The Data Center (DC) shall be co-located at Cloud.
  - ii. The storage estimation shall be done basis of following requirements:

S. No	System	Number of Days for recording	Primary Storage Requirement	Secondary Storage Requirement
1	Surveillance System	30 days	7	23 Days and 90 days for Flagged data (critical incidents) for 10% of total number of cameras

- b) Data on storage would be over-written automatically by newer data after the stipulated time period. If some data is flagged by police personnel (or by designated personnel) as important data / evidence data due to some reporting of crime or accident in the area or due to court order or due to suspicious activity, it would need to be stored for longer duration, as per requirements. Puducherry Police would analyse such flagged data every 3 months to take such decisions for preservation of the flagged data beyond 90 days.
- c) Full audit trail of reports to be maintained for 90 days.
- d) Archival/Backup to be done on NAS / SAN / Unified or equivalent storage solution
- e) Retrieval time for any data stored on secondary storage should be max. 4 hours for critical data & 8 hours for other data.
- f) The recording servers / system, once configured, shall run independently of the Video



- Management system and continue to operate in the event that the Management system is off-line.
- g) The system shall support the use of separate networks, VLANs or switches for connecting the cameras to the recording servers to provide physical network separation from the clients and facilitate the use of static IP addresses for the devices.
- h) The system shall record the native frame rate and resolution supplied by the camera or as configured by the operator from the system administration server.
- i) The system should not limit amount of storage to be allocated for each connected device.
- j) The on-line archiving capability shall be transparent and allow Puducherry Police to browse and archive recordings without the need to restore the archive video to a local hard drive for access.
- k) The system shall allow for the frame rate, bit rate and resolution of each camera to be configured independently for recording. The system shall allow the user to configure groups of cameras with the same frame rate, bit rate and resolution for efficient set-up of multiple cameras simultaneously.
- 1) The system shall support archiving or the automatic transfer of recordings from a camera's default database to another location on a time-programmable basis without the need for user action or initiation of the archiving process. Archiving shall allow the duration of the camera's recordings to exceed the camera's default database capacity. Archives shall be located on either the recording server or on a connected network drive. If the storage area on a network drive becomes unavailable for recording the system should have the ability to trigger actions such as the automatic sending of email alerts and sound alerts to necessary personnel.

#### m) Bandwidth optimization

- The Recording Server / System shall offer different codec (H.264, MJPEG, MPEG-4, etc.) and frame rate (CIF, 4CIF, QCIF or higher) options for managing the bandwidth utilization for live viewing on the Client systems. (through use of multiple systems such as transcoding server)
- From the Puducherry Police, the user shall have the option of having video images continually streamed or only updated on motion to conserve bandwidth between the Client systems and the Recording Server.
- n) The Recording Server / System shall support camera (analogue and IP cameras) devices from various manufacturers.
- o) The Recording Server / System shall support the PTZ protocols of the supported devices listed by the camera OEMs.

# p) Failover Support

- The system shall support automatic failover for recording servers. This functionality shall be accomplished by failover server as a standby unit that shall take over in the event that one of a group of designated recording servers fails. Recordings shall be synchronized back to the original recording server once it is back online.
- The system shall support multiple failover servers for a group of recording servers.

#### q) SNMP Support

• The system shall support Simple Network Management Protocol (SNMP) in order for third-party software systems to monitor and configure the system.



• The system shall act as an SNMP agent which can generate an SNMP trap as a result of rule activation in addition to other existing rule actions.

#### 6.6 Other General Requirements

# 6.6.1 Management/Integration functionality

- a) The Surveillance System shall offer centralized management of all devices, servers and users.
- b) The Surveillance System should not have any limit on the number of cameras to be connected for Surveillance, Monitoring and recording. Any increase in the no. of cameras should be possible by augmentation of Hardware components.
- c) The Surveillance System should have ability to knit the video streams from multiple cameras, based on the date/time stamp. Every video stream shall have date, time, source camera location, FPS etc. water-marked. These attributes shall be finalized at the System Design time. There shall be a centralized NTP server, from which all devices shall synchronize the date and time.
- d) The Surveillance System shall support distributed viewing of any camera in the system using Video walls or big screen displays.
- e) The Surveillance System shall support alarm management. The alarm management shall allow for the continuous monitoring of the operational status and event-triggered alarms from system servers, cameras and other external devices.
- f) It should be possible to integrate the Surveillance System with 3rd-party software, to enable the users to develop customized applications for enhancing the use of video surveillance solution.
- g) It should be possible to integrate social media platforms to Surveillance System to enable Puducherry Police to track and monitor certain trending incident or crime.
- h) The Management system shall store the overall network elements configuration in central database, either on the management server computer or on a separate DB Server on the network.
- i) System should be able to be integrated with Event Management / Incident Management System, if implemented by Puducherry Police in future.

#### 6.6.2 System Administration functionality

- a) The System Administration Server shall provide a feature-rich administration client for system configuration and day-to-day administration of the system.
- b) The System Administration Server shall support different logs related to the Management Server.
- The System Log
- The Audit Log
- The Alert Log
- The Event Log

#### **6.6.3** Rules

The system shall support the use of rules to determine when specific actions occur. Rules shall define what actions shall be carried out under specific conditions. The system shall support



rule initiated actions such as:

- Start and stop recording
- Set non-default live frame rate
- Set non-default recording rate
- Start and stop PTZ patrolling
- Send notifications via email
- Pop-up video on designated Client Monitor recipients

#### 6.6.4 Client System

The Client system shall provide remote users with rich functionality and features as described below.

- Viewing live video from cameras on the surveillance system (live view of up to 6 cameras)
- Browsing recordings from storage systems
- Creating and switching between multiple of views.
- Viewing video from selected cameras in greater magnification and/or higher quality in a designated hotspot.
- Controlling PTZ cameras.
- Using digital zoom on live as well as recorded video.
- Using sound notifications for attracting attention to detected motion or events.
- Getting quick overview of sequences with detected motion.
- Getting quick overviews of detected alerts or events.
- Quickly searching selected areas of video recording for motion (also known as Smart Search).

#### 6.6.5 Remote Web Client

The web-based remote client shall offer live view of up to 6 cameras. The Remote Client shall support logon using the user name and password credentials.

#### 6.6.6 Other Miscellaneous Requirements

- a) System should have a facility to create CDs or other storage media for submission to Judiciary, which can be treated evidence for legal matters. Such storage media creation should be tamper proof and SI to provide appropriate technology so that integrity and quality of evidence is maintained as per requirements of the judiciary. Bidder is required to specify any additional hardware / software required for this purpose & the same can be listed in miscellaneous section of the commercial bid.
- b) All the systems proposed and operationalization of Video Management System should comply with requirements of IT Acts.
- c) Any hardware or software required to achieve the functional requirement and technical solution of the overall Project (may not be not specified in the schedule) is to be proposed in the Bid and the applicable cost shall be borne by the SI.



d) Bidder shall be required to provide a standardized Mobile Application to integrate smart phones and tablets for 2-way communication with the Surveillance System in a secure manner. Puducherry Police may provide such tablets / smart phones to the designated Police Personnel. It shall be responsibility of SI to configure such tablets / Smartphone, for the Surveillance System being implemented a part of this project, and ensure that all the necessary access is given to these mobile users. Functionalities to be provided through mobile application: Viewing of any video steam from Central VMS, uploading of video / pictures central VMS, Location based GIS Map access, tagging of mobile device/location information for all relevant functionalities.

There would be the provision for Third party audit periodically, paid by PSCDL separately. PSCDL reserves the right to appoint any Independent Evaluation Agency at any time during the phases of the project.

# **6.7** Scope for Surveillance Cameras:

The broad scope of work to be covered under this sub module shall include the following, but is not limited to:

- a) The SI shall install Surveillance System IP Cameras for CCTV monitoring and management at 21 locations proposed for Digital Smart Kiosk.
- b) SI shall do the assessment of these 21 locations and identify the potential spot to install the IP Surveillance cameras. SI may propose to make use of existing infrastructure (existing pole infrastructure, pole arm etc.) identified during the assessment that can be used to mount the Surveillance cameras. It shall be proposed near the vicinity (within 50 meters) of Digital Smart Kiosk infrastructure to track and monitor the proposed Digital Smart Kiosk infrastructure along with other requirements. SI shall propose field junction box of suitable size to house the field equipment. The proposal to use the existing infrastructure shall be covered in the technical bid of the SI.
- c) SI can also make use of Digital Smart Kiosk infrastructure (outdoor shelter) to mount these cameras, provided it ensures the optimized coverage of the traffic junction, Public Streets and other locations. SI shall propose the design of the outdoor shelter which can accommodate these cameras and serve the surveillance purpose.
- d) SI shall secure written permission from the relevant authority before utilizing any existing infrastructure. PSCDL will support SI in facilitating this permission.
- e) SI has to fulfill the bandwidth required to run and monitor the Surveillance cameras proposed under this initiative.
- f) The SI shall undertake due diligence for selection and placement of surveillance cameras to ensure the optimized coverage of the traffic junction, public street and other locations along with all associated junction arms, accuracy of the information captured on the field and for rugged operations.
- g) The SI shall design, supply, and install the surveillance cameras as defined in the RFP; all wiring connections for the system shall be installed by the SI. The SI shall supply all of the necessary equipment for the camera operations including camera housings and mountings, switches, cabling, and shall make the final connections to the junction box.
- h) The SI shall be responsible for providing the entire necessary IT infrastructure for monitoring, recording, storage & retrieval of the video streams at Viewing Center or Control Room or any other location as specified in the RFP.



- i) The functional requirements and technical specifications provided in this RFP are indicative and carry guiding rule. The SI is free to offer products and solutions which meet requirements of the RFP focusing on the outcome, future scalability, security, reliability and adherence to specified SLA under this RFP, in line with applicable standards & best practices adopted in the industry. The SI is encouraged to design an Optimized solution which is technically superior, innovative, proven, better in terms of functionality and is cost effective. The SI is fully responsible for the specified outcome to be achieved.
- j) For more details on technical specifications of Surveillance Cameras, SI should refer to Annexure 1 of this RFP.



## 7 Smart Kiosk Component #4: Augmented Reality (AR)

# 7.1 Functional Requirements

- a) To promote tourism and create awareness about the societal issues among tourists and citizens, PSCDL intends to create an AR zone inside the Digital Smart Kiosk shelter. The purpose of this AR zone is to create interactive user-experience while providing informative content for both tourists and citizens.
- b) In addition to promote tourism and social awareness information, AR zones should also be used for promotion of local sectors like (Fisheries, Industries, Marine products, Textile, Pharma, Handcrafts, Leather products etc.)
- c) 17 outdoor Digital Smart Kiosk locations have been identified for the installation of AR zones.
- d) 3-D interactive content (supporting audio & video) shall be used to display information on each of above mentioned service category.
- e) AR zone shall provide the above mentioned services to the tourists and citizens visiting these locations, in the below manner:
  - Marking a point of identification for AR zone
  - Superimposition of augmented objects to the real user environment and display it on video wall
  - Recommendation about the nearest places of interest for visitors
  - Selection of option through Gesture Control feature
  - Display of Interactive 3-D designs and models based on selection of place of interest (audio and video features)
  - Display of Interactive 3-D models for each theme (mentioned below) shall also be provisioned.

#### 7.2 Scope of Work

- a) SI shall prepare digital 3-D designs (tourist destinations, smart city infrastructure and ICT initiatives, Puducherry hotspots etc.) and interactive content (supporting audio & video) for each of the below theme, that can be displayed on the AR zones in 17 locations:
  - Theme 1 History of Puducherry, local habitat
  - Theme 2 Tourist destinations in and around Puducherry
  - Theme 3 Smart City Initiatives
  - Theme 4 Awareness about Social Issues
  - Theme 5 Promotion of local sectors

Sl. No.	Theme	No. of digital 3-D designs*
1.	History of Puducherry, Local habitat	At least 5 creatives
2.	Tourist destinations in and around Puducherry (including upcoming tourism initiatives)	At least 40 creatives
3.	Smart City Initiatives	At least 15 creatives
4.	Awareness about Social Issues	At least 15 creatives
5.	Promotion of local sectors	At least 5 creatives

<sup>\*</sup>Selected bidder shall create at least one additional 3-D design and interactive content for



each of the above 5 themes, periodically after every six months during O&M phase.

- b) SI shall propose appropriate hardware and software components to implement endto-end AR zone which includes (Content Management software, 3-D scanner (if applicable), bandwidth provisioning, proximity sensor, camera etc.)
- c) SI shall be able to manage and monitor the content being displayed at these sites through centralized as well as local site.
- d) SI has to finalize and take prior written permission from PSCDL before projecting the 3-D designs at the selected locations.
- e) The audio & video content for each of the theme shall be approved by PSCDL. SI shall coordinate with the Tourism department for the existing tourism content that can be used for creating the 3-D design content.
- f) SI may also use this AR platform to showcase products and services from market players for generating additional revenue. SI shall propose web-based revenue management tool that shall provide facility for the market vendors for online booking for any product advertisement. The access of this tool shall also be provided to PSCDL for revenue monitoring from this facility.
- g) In order to ensure effective service delivery, SI shall propose the advertising slots in such a manner that will not impact any AR services. SI in consultation with PSCDL shall finalize these slots.
- h) SI shall provide this promotional advertisement facility with transparency and non-discretion to the market players.
- i) The digital advertisements catered through this facility shall abide the digital advertising guidelines of GoI.
- j) SI, in discussion with PSCDL, shall define the policy & procedure for advertisement along with rates for advertising through this facility.
- k) SI has to fulfill the bandwidth required to run and monitor the Augmented Reality Zone proposed under this initiative.



#### 8 Smart Kiosk Component #5: Solar Panels

#### 8.1 General Requirements

- a) Total capacity of Solar PV power plant to be installed is approximately 17 kW, which shall be distributed on 17 Smart Kiosk outdoor locations (1 kW per location).
- b) Solar panels and array junction boxes shall be installed on shade free areas while the PCU and distribution boards, etc. shall be housed inside an appropriate canopy. In case of string inverters, the client shall carefully weigh the option of indoor vs outdoor installation and shall be finalized during design stage.
- c) Array structure of PV yard and all electrical equipment's such as PCU, inverters, etc. shall be grounded properly. All PCU/inverters should be enclosed in appropriate housing that are rated IP 65/66. Towards this end, the SI will supply and install an adequate number and appropriate size of IS: 3043 1987 compliant earthing kits; at least one each for AC circuit, DC circuit and lighting protection system.
- d) Suitable marking shall be provided on the bus for easy identification.
- e) PV modules may be connected in series up to the maximum allowed operating voltage of the PV modules and the PV inverter whichever is lower.
- f) The reverse current of blocking diodes (connected in series), if required/provided, shall be rated for 2 X VOC STC of the PV string. Reverse blocking diode would not be required if inverter has reverse polarity protection feature.
- g) All cables that are in contact with water should be with IP 68 rating defined in IEC 60529.
- h) Proper sealing arrangements at the points of cables entering the enclosures should be incorporated. Although not mandatory, manufacturers are however encouraged that the cables entering into the enclosures be sealed with modular EPDM based cable sealing and protection system based on multi-diameter technology.

## 8.2 Scope of Work

- a) SI will do the site survey and ensure collection of the data from the respective sites and meeting of the design criteria.
- b) SI must obtain all the necessary approvals/Consents/Clearances required for Erection, Testing, Commissioning and O&M of the project including Grid connectivity. PSCDL will support SI in facilitating the required permission from the departments.
- c) Any deviation from the proposed design needs to be approved by the PSCDL. Any basic infrastructure required for installation of the solar panels, all the required infrastructure, is to be taken care by the bidder.
- d) Bidder to conduct non-destructive tests on each site to get the safety certificate
- e) After erection at site, all components, equipment as described shall be tested to prove satisfactory performance and /or fulfilment of functional requirements without showing any sign of defect as individual equipment and as well as a system



#### 9 Common Project Requirements

# 9.1 Requirement Gathering and Analysis

- a) System Integrator (SI) shall do the requirement gathering with all the respective departments (which includes but not limited to Tourism department, Municipality, Police department, Electricity department, and Local Administration department) and prepares the requirement gathering traceability matrix document. As a part of this exercise, SI shall also assess the usability of existing infrastructure (poles, junction arm etc.) for surveillance cameras deployment and submit the report to PSCDL.
- b) System Integrator (SI) shall prepare comprehensive system study documents by assessing non-functional and functional requirements of the solution.
- c) A high-level functional requirement of the system is available from Section 2 to Section 8 of the Vol 2 of this RFP.
- d) SI in consultation with PSCDL (or its representative) shall prepare High Level Design (HLD) document for the proposed solution covering functionalities and integration mechanism.
- e) SI shall finalize the system requirement specifications (SRS) in consultation with PSCDL (or it's representative) based on Functional Requirement Specifications (FRS), Technical solution (Technical Requirements and Technical specifications provided therein), and also based on individual assessment.
- f) The SRS shall be prepared by the SI and the formal sign-off needs to be obtained from PSCDL before proceeding with the Development / Customization / Implementation of the solution application.

#### 9.2 System Design

- a) Having conducted a comprehensive analysis of the requirements for the Digital Smart Kiosk solution, SI shall design the system architecture and specifications for meeting the System Requirement Specifications, finalized by the SI and approved by PSCDL.
- b) The architecture document should give the complete architecture of the proposed Digital Smart Kiosk Solution (web-based application & Mobile App). The documents including, but not limited to the following:
  - Application Architecture
  - User Interface (both app and web)
  - Security Architecture
  - Hardware Deployment Architecture
  - Database structures
  - Operational Architecture
  - Access control mechanisms, data security and audit trails to ensure that databases are not tampered with or modified by unauthorized users.
  - Format for all reports which would be generated through the Digital Smart Kiosk solution.
- c) SI shall ensure that the data models, interface designs and other components are designed as per industry standards and best practices.



- d) SI shall ensure that the architecture is scalable and capable of delivering high performance for the entire duration.
- e) Build a complete audit trail of all transactions (for e.g. add, update and delete) using transaction log reports, so that errors in data, intentional or otherwise, can be traced and reversed. Access Controls must be provided to ensure that the databases are not tampered with or modified by the system operators. Implement data security to allow for changes in technology and business needs. Based on the requirements analysis conducted above, the SI must develop a comprehensive solution (web-based application & Mobile App).
- f) The SI shall be entirely responsible for the architecture of the system implemented to satisfy all features, functions, performance and security as described in this document including sizing of the required hardware.
- g) The Digital Smart Kiosk portal should be able to support all latest version of common browsers like Internet explorer, Mozilla, Chrome, Firefox, Safari etc.
- h) The SI shall consider departmental inputs when they are finalizing all design components including user interfaces, mode of data entry, storage and retrieval, outputs reports, queries and the application design as a whole.

# 9.3 Integration with Third party applications and other sub-system(s) applications

- a) The System Integrator (SI) shall ensure that the proposed Digital Smart Kiosk solution provides interfacing mechanisms (both at the application and data level) with a view to integrate with email gateway, payment gateway, SMS gateway and social media and third party as well as future applications like ICCC, PBS, any departmental applications for future use.
- b) The integration of the Digital Smart Kiosk solution with these external systems / subsystems to be done as per required industry standards and policies.

#### 9.4 User Acceptance Testing (UAT)

- a) The SI must ensure deployment of necessary resources and tools during the testing phases. The SI shall perform the testing of the solution based on the approved test plan, document the results and shall fix the bugs found during the testing. It is the responsibility of the SI to ensure that the end product delivered by the SI meets all the requirements specified in the RFP. The SI shall take remedial action based on outcome of the tests.
- b) The SI shall provide test details being carried out during the implementation of the system (including Unit testing, System Integration Tests (SIT) including Performance Tests (PT), Security Testing, and final User Acceptance Tests (UAT) to PSCDL and/or its designated Third-Party Audit Agency (TPA) and make the necessary changes to the Digital Smart Kiosk solution (web-based portal & mobile app) to optimize performance.
- c) The SI would be responsible for making sure that all the above considerations are adequately met and approved by PSCDL before deploying the application in production environment.
- d) SI shall provide the user manuals /administration manuals / training material and any



- other such documents (as a part of deliverables) to the respective stakeholders before the start of UAT.
- e) SI shall provide training to the respective Digital Smart Kiosk stakeholders as per the training plan submitted to PSCDL.

## 9.5 Final Acceptance Testing (FAT)

- a) The UAT would be the first stage of testing and will be performed with a limited set of users. The set of users will be mutually agreed between PSCDL / Tourism / Police and the SI.
- b) The PSCDL, Municipality, Tourism & Police department shall review and finalize the detailed acceptance test plan proposed by the bidder. The PSCDL and Police department may also conduct audit of the process, plan and results of the Acceptance Test carried out by the bidder.
- c) The PSCDL, Municipality, Tourism and Police department would issue certification of completion for which PSCDL, Tourism & Police department shall verify availability of all the defined services as per the contract signed between the SI and PSCDL. The SI shall be required to demonstrate all the services, features, functionalities as mentioned in the agreement and submit internal test report certified by their execution and QA team before offering any system for acceptance testing.
- d) All acceptance testing, project review and monitoring shall be enabled through a Thirdparty audit agency (TPA) nominated by PSCDL prior to certification by PSCDL and Tourism & Police department.
- e) The final acceptance shall cover 100% of the respective phase deliverables covered under Digital Smart Kiosk project, after successful testing by the PSCDL, Municipality, Tourism and Police department; a Final Acceptance Test (FAT) Certificate shall be issued by PSCDL to the SI.

#### f) Prerequisite for Carrying out FAT activity:

- SI shall prepare and submit the detailed test plan and shall be agreed by PSCDL / Municipality / Tourism / Police department.
- All documentation related to Digital Smart Kiosk Project and relevant acceptance test document should be completed & submitted before the final acceptance test to the PSCDL, Municipality, Tourism, and Police department.
- The training requirements as mentioned should be completed before the final acceptance test.

#### g)The FAT shall include the following:

- All Digital Smart Kiosk systems and sub-systems must be deployed and integrated with other supporting systems.
- Availability of all the defined services shall be verified.
- The SI shall be required to demonstrate all the features / facilities / functionalities as mentioned in the RFP



- The SI shall arrange all test equipment and services required for performance verification, and system acceptance and will also provide documented test results.
- The SI shall be responsible for the security audit to be carried out by the third party as agreed by PSCDL.

## 9.6 Security Requirements

- a) The bidder must provide an end-to-end security model that protects data and the infrastructure from malicious attacks, theft, natural disasters etc. For server security, the SI shall on an ongoing basis perform Vulnerability Assessment of the server, perform server hardening and provide additional layer of security to applications through Firewalls.
- b) The SI will have to establish all the necessary procedures / infrastructure/ technology to ensure that the Digital Smart Kiosk solution is not compromised.
- c) Security features should be compliant with the e-Governance Security Guidelines (e Gov. Security Standards Framework).
- d) All systems should have integrated security features that are configurable by the system administrator to control access to the application, functional modules, transactions, and data.
- e) The system and sub-system application(s) should require the use of unique user IDs and passwords for authentication purposes.
- f) The application should allow for the following:
  - The enforcement of password standards
  - The establishment of a specified period for password expiration, and
  - The prohibition of recent password reuse
    - > System administrator should be able to define functional access rights and data access rights by assigned user ID, functional role, and owner organization.
    - The systems should permit the system administrator to assign multiple levels of rights to a single user.
    - System administrator should be able to restrict access to sensitive data elements by named user, groups of users, or functional role.
    - > System should be auditable as per requirements from time to time.
    - System should have audit logging capability to record access activity, including the following:
      - All log-in/log-out attempts by user and workstation;
      - User-submitted transactions;
      - Initiated processes:
      - System override events; and direct additions, changes, or deletions to application-maintained data
      - System should provide the ability to query the audit log by type of access, date and time stamp range, user ID, or terminal ID.
- g) All the information assets (information and information systems) should be classified and security should be defined according to criticality of the information asset. All the



- data / information contained within systems or in hard copies related to this project, are owned by PSCDL. No information should be made public either directly or indirectly nor allowed to be accessed by an unauthorized person.
- h) System audit should be enabled for all the information assets to establish detective controls. System should have evidences, like audit trails, logs, registers, proof of background checks, approvals from PSCDL or its designated agency, support for various decisions, support for accounts etc. for the purpose of third party security audit.
- i) Should have system development and change control procedures including effective segregation of duties and environment.
- j) Proper protection against malicious software should be ensured. This would include implementation of an effective anti-virus solution, scanning viruses at regular intervals or on certain triggers and updating the solution as and when new patch is received from the anti-virus solution provider.
- k) Should have proper logical access security for all the information assets. Entire network including servers, communication links, database etc., should be logically segregated from rest of the networks.
- 1) Should ensure suitable technical and procedural controls to protect the network.
- m) Wherever the project network comes in contact with an untrusted network, additional security measures should be taken like firewall, IDS, DMZ, proxy server, encryption etc.
- n) Should have a business continuity plan and a disaster recovery plan that should be implemented before commencement of the operations. Robust backup procedures should be established for the same.
- o) Security clearance certificate should be obtained by SI before hosting Mobile App. Security clearance certificate should be provided from certified auditor to address this requirement.

# 9.7 Training and capacity building:

- a) Onsite training to stakeholders on overall workflow of the developed solution and backend administration functions at the location decided by PSCDL.
- b) The SI will do a detailed analysis of the training requirements as per the solution requirement. Following training needs to be provided by SI to the PSCDL staff:
- Overall Solution Management Training on:
  - i. Report generation and data analysis
  - ii. Dashboard generation
  - iii. Managing alert notifications
  - iv. Training to make configuration changes and maintain the proposed solution
- c) The SI will prepare a detailed training plan to imbibe the aforesaid training requirements for PSCDL / Municipality and Police staff. The plan will explicitly mention the above training needs and shall be duly approved by the PSCDL before execution.
- d) SI shall intimate respective department and PSCDL about the training schedule well in advance (at least two weeks before the commencement period) to ensure the



effectiveness of the schedule training.

## 9.8 Project Management

- a) The System Integrator (SI) shall arrange a project kick-off meeting of the proposed team members with the PSCDL (or it's representative) on the said date.
- b) SI shall propose the deployment plan of key resources at onsite and offsite for the project. The resources propose must not be changed unless replaced with equivalent or higher qualification and experience with the approval from PSCDL.
- c) The SI shall propose the detailed Project Plan for the entire project that covers all aspects of the project including but shall not be limited to Hardware, Software, Integration, Hosting, Training and Capacity building, IT operations, as part of the project.
- d) SI is required to design and implement a comprehensive and effective project management methodology.
- e) The SI needs to prepare and submit an Inception Report, which will serve as the foundation document for all activities related to the project. The Inception Report must cover the risks the SI anticipates and the plans they propose towards mitigating those risks. The inception report must also cover the roles and responsibility of the project team along with the support arrangement that are expected from PSCDL.
- f) The acceptance of the Inception Report by PSCDL is necessary before proceeding to the next stage of the project.



# 10 Key Deliverables and Project Implementation Timelines

Sr. No.	Milestone	Deliverables	Timelines
1.	Resource Mobilization Phase		T+10 days
1.1	Resource Mobilization, Inception Report submission	<ul> <li>Resource Mobilization Plan</li> <li>Submission of Inception Report</li> </ul>	T+10 days
2.	Manufacturing, Supply, Installati and Integration Phase	on and Commissioning	T+100 days
2.1	Project Initiation and Site Survey	Submission of Detailed Survey Report covering     Requirement gathering and Feasibility study report     Site assessment report     Infrastructure readiness report     GIS coordinates for all the proposed locations     Detailed civil, structural & engineering layouts for the proposed infrastructure (Smart Kiosk, Outdoor Shelter and layouts)      Submission of Detailed project plan     Self-certified copy of traceability matrix	T+25 days
2.2	Solution Design for Digital Smart Kiosk for Outdoor and Indoor locations	<ul> <li>High and Low level         Design documents for         the entire Digital Smart         Kiosk solution         including         <ul> <li>Finalized FRS</li> <li>(Functional</li></ul></li></ul>	T+ 40 days

		the respective departments Submission of System Requirements Specification (SRS) document Detailed Solution Architecture document	
2.3	Supply, Construction / Fabrication, Installation, Commissioning of Digital Smart Kiosks including all accessories	<ul> <li>Submission of Purchase Order (PO) of the supplied and installed IT / Non-IT items</li> <li>Submission of Factory test reports</li> <li>Self-certified report for civil Infra, system delivery and site readiness</li> </ul>	T+90 days
2.4	Integration and unit testing of Smart Kiosk solution	<ul><li>Integration testing report</li><li>Unit testing report</li></ul>	T+ 100 days
3.	UAT and Go-Live Phase		T+180 days
3.1	User Acceptance Testing of the Digital Smart Kiosk solution	<ul><li> UAT report</li><li> Self-certified copy of completion of UAT</li></ul>	T+130 days
3.2	User-training	<ul> <li>Training to department user's and staff</li> <li>Submission of training manual</li> <li>Self-certified training completion report</li> </ul>	T+140 days
3.3	Final Acceptance testing	• FAT report	T+140 days
3.4	Go-Live (T1)	<ul> <li>Weekly SLA         compliance report</li> <li>Third Party audit         report</li> </ul>	T+180 days



4.	Operation & Maintenance Phase		T1+10 Years
4.1	Operation & Maintenance	<ul> <li>SLA Compliance         Report for particular         quarter</li> <li>Submission of weekly         and monthly MIS         report</li> </ul>	Quarterly

# Note:

- T is the date of issue of Work Order
- T1 is the date of Go-Live of the Digital Smart Kiosk solution



# **Annexure 1 - Technical Specifications**

# 1. Technical Specifications for Digital Smart Kiosk

Sl. No.	Parameter	Minimum Specifications	Bidder Complianc	Product Document
			e (Yes/No)	ation
1.	Screen	<ul> <li>Minimum 39" LED touch screen with TCO 6 certification.</li> <li>HD IPS LED Display, Direct LED Backlight with 3mm or higher antiglare &amp; overlay tempered vandal resistant glass.</li> <li>Capacitive touch display, all-glass touch-screen.</li> <li>Shall support - 1920 x 1080 pixels or better</li> <li>Aspect Ratio - 16:9 widescreen</li> <li>Viewing angle (Horizontal / Vertical - 178 degree / 178 degree)</li> <li>Response time - 5 ms or less</li> <li>Brightness &gt;= 1500 cd/m2</li> <li>Contrast &gt;= 5000:1\</li> <li>Display colors - 16.7 M</li> <li>Should be placed at such a distance which can be easily accessible by user.</li> </ul>		Reference
2.	Computing Model	<ul> <li>Platform shall support         Windows 8.1 or higher/         Linux based operating         systems</li> <li>Intel Core i5 equivalent with         2.6 GHz or Higher with Min         4 GB RAM</li> <li>Internal persistent storage         capacity of minimum 20 GB         Slots and support for         connecting other         components as required</li> </ul>		
3.	Keyboard	Onscreen keyboard, fully compatible with the list of proposed services		

	1 0			
Sl. No.	Parameter	Minimum Specifications	Bidder Complianc e (Yes/No)	Product Document ation Reference
4.	Speaker	In-built speakers, Output: 20 Watts or better. Shall be able to deliver clear stereo sound		
5.	Microphone	<ul> <li>Shall support speech based interaction during video conferencing when enabled through kiosk</li> <li>Shall support speech based interaction during audioguide tours when enabled through kiosk</li> <li>Shall be able to isolate the main sound source and minimize background noise, highlighting the performance</li> </ul>		
6.	Ethernet	Integrated Gigabit Ethernet Controller with IPv6 complaint		
7.	Wireless	IEEE 802.11 or Higher, Wi-Fi enabled		
8.	Physical Forms	<ul> <li>Kiosk body enclosed in a protective shell made of robust weather proof material and disaster resilient material. IP Class of the Kiosk should be more than IP 66</li> <li>Suitable for both Indoor and Outdoor environment</li> <li>Appropriate LED lights shall be fitted in the Kiosk enclosure for proper lighting during night.</li> <li>Design of the kiosk shall be aesthetically adapted to Puducherry region.</li> <li>Form and color shall be suitably chosen for look and feel of the kiosk.</li> <li>PSCDL branding on the kiosk.</li> </ul>		
9.	Size	Not more than 3 ft. (L) x 3 ft. (W) x 7 ft. (H)		
10.	Side	Either side of the kiosk should be fitted with another digital		

Sl. No.	Parameter	Minimum Specifications	Bidder Complianc e (Yes/No)	Product Document ation Reference
		display screen (39 inches) for displaying digital content		
11.	USB Ports	2 X USB 2.0, 1 X USB 3.0		
12.	Other Ports	RJ45, VGA, HDMI, Display Port out		
13.	Cooling	Suitable no. of fans to be provided inside the chassis for automatic cooling		
14.	Sensors	Temperature and brightness sensor for automatic control		
15.	UPS	UPS with battery backup of 1 hour		
16.	Security Requirements	<ul> <li>Kiosk machine shall ensure that any data stored within or being transferred is encrypted as per industry standards. Machine shall ensure no data loss to the extent possible.</li> <li>Kiosk machine shall be equipped with sufficient tamper-proof mechanisms to ensure detection in case of physical tampering to the kiosk.</li> </ul>		
17.	Other Requirements	<ul> <li>Kiosk shall be upgradable through a central system remotely over internet</li> <li>It shall be possible to monitor critical parameters related to health of the kiosk device remotely</li> <li>Kiosk shall be able to provide details related to inventory requirements to central system</li> <li>Multilingual support: Shall necessarily offer support for multiple languages including English and Tamil and French (min)</li> <li>Kiosk shall provide for custom branding complete</li> </ul>		

Sl. No.	Parameter	Minimum Specifications	Bidder Complianc e (Yes/No)	Product Document ation Reference
		with signage and digital displays  • Kiosk shall work fine under following operating conditions:  • Temperature 0°-70°C  • Humidity 10%~90% RH Ta<40°C  • Power: On mode: DC +12V, 100~240 V@ 60/50Hz, Max 220 W Off mode / Sleep mode: Less than 0.5 W		
18.	Accessibility Features	Proposed Kiosk should have all latest accessibility features to help people with disabilities use technology more easily as per the rules & regulations of Govt.		
19.	Control	On screen display (OSD)		
20.	Certification	ULL, CE certified		
21.	Warranty	• On site Comprehensive support and warranty for 5 years		
22.	Service access	• Front or Rear		

# 2. Technical Specifications for CCTV equipment

# 2.1. High Definition PTZ Dome Camera

Sl. No.	Parameter	Minimum Specification	Bidder Compliance (Yes/No)	Product Documenta tion Reference
1.	Image Sensor	1/2.8 Progressive Scan CMOS or better		
2.	Operating Frequency	Min 50 Hz		
3.	Day/ Night Operation	Automatic with IR Cut Filter		
4.	Minimum Illumination	Colour: Min. 0.05 Lux B/W": 0.01 Lux or better		
5.	High-speed pan-tilt functionality	360° endless pan range and a 180° tilt range		

Sl. No.	Parameter	Minimum Specification	Bidder Compliance (Yes/No)	Product Documenta tion Reference
6.	Optical Zoom	30x Minimum & 12x Digital Zoom, Total 360x Zoom or better		
7.	Lens	4.5-129 mm or better		
8.	S/N Ratio	>50 Db		
9.	Pan, tilt, manual and pre-set speed The speed shall be applicable for Manual, Tour and Pre-set Mode	Auto 360° endless pan range and a 160° tilt range or better Manual Pan: 0.5°/s - 240°/s; Manual Tilt: 0.5°/s - 120°/s; preset speed: 240°/s or better		
10.	Image Resolution	1920 x 1080 or better		
11.	Compression	H.265 Baseline, Main and High Profiles, Motion JPEG		
12.	Frame Rate and Bit Rate	25 FPS at all resolutions with Controllable Bit Rate/ Bandwidth and Frame Rate. In CBR Priority to be defined for Video quality or frame rate and the bandwidth upper limit shall not exceed the defined limit		
13.	GOP/ GOV	Ability to change the GOP/GOV Length to optimize the bandwidth and storage		
14.	Video Streams	Minimum 3 Streams @ 1920x1080, H265, 25 fps		
15.	Motion Detection	Yes built in with multiple configurable areas in the video stream		
16.	Electronic Shutter	1/10000 s to 1 s or better		
17.	Electronic Exposure & Control	Automatic/ Manual		
18.	Wide Dynamic Range	90 dB or Better		

Sl. No.	Parameter	Minimum Specification	Bidder Compliance (Yes/No)	Product Documenta tion Reference
19.	Backlight Compensatio n	Required		
20.	Electronic Image Stabilization	Required		
21.	Image Freeze on PTZ	Required		
22.	Privacy Masks	Minimum 8 configurable 3D zones or better		
23.	Pre-set Positions	Minimum 256 or better		
24.	Image Flip	Yes Automatic		
25.	Guard Tour	Minimum 2 Nos		
26.	Built In Heater & FAN	Required		
27.	Temperature Control	Required		
28.	Alarm	Min 2 Alarm Input / Output ports or better		
29.	On-screen directional indicator	Required		
30.	Compression	The camera shall for its H.265 implementation support scene adaptive bitrate control, in order to lowering bandwidth and storage requirements.  31. The camera shall support automatic dynamic GOP for optimal bitrate utilisation. The camera shall support automatic dynamic ROI to reduce bitrate in un-prioritized regions.		
32.	Event Triggers	The camera shall be able to send and received trigger directly from any other camera without interface of VMS. Live Stream Accessed, Motion Detection, Shock Detection, Audio Detection, Network, Temperature, Manual Trigger,		

Sl. No.	Parameter	Minimum Specification	Bidder Compliance (Yes/No)	Product Documenta tion Reference
		Virtual Inputs, Alarm Inputs, PTZ: Error, Moving, Pre-set Reached, Ready, Storage Disruption, Storage Recording, System Ready, User schedule		
33.	Event Actions	File upload via FTP, SFTP, HTTP and email Notification via email, HTTP and TCP Pre- and post-alarm video buffering, External output activation, PTZ pre-set, guard tour, Video recording to edge storage, Day/night mode, Overlay text		
34.	Pixel Counter	Built in		
35.	Edge Storage	Built in SD card slot with support up to 128 GB with Class 10 speed		
36.	Storage	The Cameras shall have the feature to directly record the videos/ images onto NAS without any Software		
37.	Protocols	At least IP, HTTP, HTTPS, SSL/TLS, TCP, ICMP, SNMPv1/v2c/v3 (MIB-II), RTSP, RTP, UDP, IGMP, RTCP, SMTP, FTP, DHCP, UPnP, ARP, DNS, DynDNS, NTP. IPv4 & IPv6		
38.	Text Overlay	Date & time, and a customer- specific text, camera name, graphical image etc.		
39.	Security	Password protection, IP address filtering, HTTPS encryption, IEEE 802.1Xa network access control, Digest authentication, User access log		
40.	Firmware Upgrade	The firmware upgrade shall be done though web interface, The firmware shall be available free of cost		
41.	Logs	The camera shall provide Minimum 200 logs of latest connections, access attempts,		

Sl. No.	Parameter	Minimum Specification	Bidder Compliance (Yes/No)	Product Documenta tion Reference
		users connected, changes in the cameras etc.		
42.	Interface	RJ 45, 100 Base TX		
43.	Enclosure	Die Cast Aluminium, IP66 rated, polycarbonate clear dome and sunshield, PVC free complying to WEEE Standards		
44.	Mount	Wall / Pole Mount		
45.	Power requirements	Power over Ethernet (POE/PoE+) IEEE 802.3at Type 2 Class 4, max. 24 W, Typical 9W; 24 V DC max. 30 W 24 V AC, max. 40 VA or better		
46.	Operating Temperature	-10 °C to 55 °C or better (As per City weather conditions)		
47.	Operating Humidity	20–85% RH or better		
48.	Certification	UL, CE, FCC		
49.	Embedded Applications	The camera shall provide a platform allowing the upload of third party applications into the camera		
50.	Application Programmers Interface	The interface shall be available for integration with 3rd party analytics and applications in public domain free of cost		
51.	Onvif	S required		
52.	Warranty	Min 3 Years OEM warranty		
53.	Casing	NEMA 4X / IP-66 rated, Built in Heater and Blower		



2.2. Specifications for Field Junction Box

Sl. No.	Parameter	Minimum Specification	Bidder Compliance (Yes/No)	Product Document ation Reference
1.	Make	<to be="" bidder="" by="" provided="" the=""></to>		
2.	Model	<to be="" bidder="" by="" provided="" the=""></to>		
3.	Size	Suitable size as per site requirements to house the field equipment		
4.	Cabinet Material	GI with powder coated		
5.	Material Thickness	Min 1.2mm		
6.	Number of Locks	Minimum Two		
7.	Protection	IP 55, Junction Box design should ensure to keep the temperature within suitable operating range for equipment's and should also avoid intentional water splash and dust intake		
8.	Mounting	On Camera Pole / Ground mounted on concrete base		
9.	Form Factor	Rack Mount/DIN Rail		
10.	Other Features	Rain Canopy, Cable entry with glands, proper earthing and Fans/any other accessories as required for operation of equipment's within junction box.		

2.3. Specifications for Video Management System

Sl. No.	Parameter		Bidder Compliance (Yes/No)	Product Documentat ion Reference
1.	Make			
2.	Model			
3.	Management	VMS shall be used for centralized management of all field camera devices, video servers and client users.		
4.	VMS server	VMS server shall be deployed in a clustered server environment or support inbuilt mechanism for high availability and failover.		
5.	Rule-based system	VMS shall support a flexible rule- based system driven by schedules and events.		
6.	Interoperable	VMS shall be supported for fully distributed solution for monitoring and control function, designed for		



Sl. No.	Parameter	Minimum Specification	Bidder Compliance (Yes/No)	Product Documentat ion Reference
		limitless multi-site and multiple server installations requiring 24/7 surveillance with support for devices from different vendors.		
7.	Open standards	VMS shall support ONVIF compliant internet protocol (IP) cameras.		
8.	Integration support	VMS shall be enabled for any standard storage technologies and video wall system integration.		
9.	Integration support	VMS shall be enabled for integration with any external Video Analytics Systems both server & edge based.		
10.	Virtual Environment	VMS shall be capable of being deployed in a virtualized server environment without loss of any functionality.		
11.	GUI	All Surveillance cameras locations shall be overlaid in graphical map in the VMS Graphical User Interface (GUI). The cameras selection for viewing shall be possible via clicking on the camera location on the graphical map. The graphical map shall be of high resolution enabling operator to zoom-in for specific location while selecting a camera for viewing.		
12.	Interface	VMS shall have an administrator interface to set system parameters, manage codecs, manage permissions and manage storage.		
13.	Interface	VMS day-to-day control of cameras and monitoring on client workstations shall be controlled through the administrator interface.		
14.	Video replay feature	Whilst live control and monitoring is the primary activity of the monitoring workstations, video replay shall also be accommodated on the GUI for general review and also for pre- and post-alarm recording display.		
15.	Solution design	The solution design for the VMS shall provide flexible video signal compression, display, storage and retrieval.		
16.	Video inputs to viewing centres	All Surveillance camera video signal inputs to the system shall be		



Sl.			Bidder	Product
No.	Parameter	Minimum Specification	Compliance	ion
			(Yes/No)	Reference
		provided to various command		
		control center(s), viewing center		
		etc., and the transmission medium		
		used shall best suit the relative		
		camera deployments and access to		
		the Surveillance Network.		
		VMS client shall have the		
		capability to work with touch enabled multi-monitor		
		workstations. It shall be capable of		
		displaying videos in up to three (3)		
	Display	monitors simultaneously		
17.	Capability	(AVI files,		
	cupusing	Motion- Joint Photographic		
		Experts Group (M-JPEG),		
		Moving Picture Expert Group-4		Documentat ion
		(MPEG-4),		
		MP4 Export or Latest)		
		All streams to the above locations		
		shall be available in real-time and		ion
_		at full resolution. Resolution and		
18.	Configuration	other related parameters shall be		
		configurable by the administrator		
		in order to provide for network		
		constraints.		
		The VMS shall support the following operations:		
		Adding an IP device		
		<ul> <li>Adding an IF device</li> <li>Updating an IP device</li> </ul>		
		<ul> <li>Updating an IF device</li> <li>Updating basic device</li> </ul>		
		parameters		
		Adding/removing channels		
		Adding/removing output		
19.	Compatibility	signals		
19.	Compatibility	Updating an IP channel		
		Removing an IP device		
		• Enabling/disabling an IP		
		channel		
		Refreshing an IP device (in		
		case of firmware upgrade)		
		Multicast at multiple		
		aggregation points		
		The VMS shall support retrieving		
		data from edge storage. Thus when		
		a lost or broken connection is		
20.	Retrieval of	restored, it shall be possible to		
20.	data	retrieve the video from SD card and		
		store it on central storage. System		
		should support to view the		
		recordings available over cameras		



Sl. No.	Parameter	Minimum Specification	Bidder Compliance (Yes/No)	Product Documentat ion Reference
		local storage device (such as an SD card), and copy them to the server.		
21.	Live / past incidents monitoring	The VMS shall support bookmarking the videos. Thus, allowing the users to mark incidents on live and/or playback video streams.		
22.	Load distribution	The VMS shall allow the administrator to distribute camera load across multiple recorders and be able shift the cameras from one recorder to another by simple drag and drop facility.		
23.	Recording	VMS shall support automatic failover for recording.		
24.	Recording / Mirroring	VMS should also support dual recording or mirroring if required.		
25.	Support	VMS shall support manual failover for maintenance purpose.		
26.	Mobile access	VMS shall support access and view of cameras and views on a smartphone or a tablet (a mobile device).		
27.	Integration support	VMS shall support integration with the ANPR application.		
28.	Integration support	VMS shall support integration with other online and offline video analytic applications.		
29.	Alerts	VMS shall be able to accept alerts from video analytics built into the cameras, other third party systems, sensors etc.		

# 2.4. Specifications for Mobile Client

Sl. No.	Parameter	Minimum Specifications	Bidder Complianc e (Yes/No)	Product Documenta tion Reference
1.	Two-way Communication	The bidder shall be required to provide a standardized Mobile Application to integrate smart phones and tablets for 2-way communication with the Video Management System in a secure manner. It shall be responsibility of MSI to configure such tablets / Smartphone with the Surveillance System and ensure		



Sl. No.	Parameter	Minimum Specifications	Bidder Complianc e (Yes/No)	Product Documenta tion Reference
		that all the necessary access is given to these mobile users.		
2.	Encryption	Communication with mobile client and server shall be encrypted with Digital Certificate.		



### 1. Technical Specifications for Public Wi-Fi equipment

#### 1.1. Wi-Fi Access Point

Sl. No.	Parameter	Minimum Specifications	Bidder Compliance (Yes/No)	Product Document ation Reference
1.	Coverage	Access Point radio should have minimum 3x3:MU-MIMO capability		
2.	Certification	802.11 a/b/g/n/ac functionality certified by the Wi-Fi alliance		
3.	Antenna	Access Point can have integrated or external Antenna		
4.	Design	Access point should be industrial design for harsh outdoor environments		
5.	QoS	Access point should support Quality of Service for Unified Communication Apps Network traffic should be prioritized according to applications/users and handled in the AP/Controllers or upstream devices so that critical traffic is processed immediately and network congestions are avoided.		
6.	Optimization	Access point should optimize the RF environment including channel width, channel selection and transmit power		
7.	Functional	Access point should support spectrum analyser which remotely scans the 2.4-GHz and 5-GHz radio bands to identify sources of RF interference		
8.	Connectivity	Access point should support Wireless mesh connections		
9.	Security	Access point should support IP reputation and security services to identify, classify, and block malicious files, URL and IPS and provide comprehensive protection against advanced online threats		
10.	Connectivity	Access point should support Space- time block coding for increased range and improved reception		

Sl. No.	Parameter	Minimum Specifications	Bidder Compliance (Yes/No)	Product Document ation Reference
11.	Throughput	Access point should support low- density parity check for high- efficiency error correction and increased throughput		
12.	Range	Access point should support Transmit beam-forming for increased signal reliability and range		
13.	Range	Access point should support 802.11ac beamforming		
14.	Security	The access point should be capable of performing security scanning and serving clients on the same radio. It should also be capable of performing spectrum analysis and security scanning using same radio		
15.	Utility	Access point should support 802.3af/at POE standard		
16.	Roaming	Must support Proactive Key Caching and/or other methods for Fast Secure Roaming		
17.	Security	Must operate as a sensor for Wireless IPS (WIPS)		
18.	Security	AP model proposed must be able to be both a client-serving AP and a monitor-only AP for Intrusion Prevention services		
19.	Functional	The Access Point should have the technology to improve downlink performance to all mobile devices		
20.	Management	Access point must incorporate radio resource management for power, channel, coverage hole detection and performance optimization		
21.	Bandwidth	There shall be no capping on bandwidth being utilised by an access point. The maximum limit being 1 Gbps, which is shared dynamically between all access points.		

Sl. No.	Parameter	Minimum Specifications	Bidder Compliance (Yes/No)	Product Document ation Reference
22.	Roaming	This shall allow seamless movement of users between access points.		
23.	Roaming	Session should be continued without break throughout the coverage area, even if user is moving from one access point to other access point till usage limit of 1 hour per user per day is achieved.		
24.	Security	Wireless solution should have the technology to eliminate sticky clients and boost Wi-Fi performance by ensuring that clients associate with the best access point. It also groups the MU-MIMO clients together for simultaneous transmission to multiple devices, improving the overall WLAN capacity		
25.	Support	Should support an ability to dynamically adjust channel and power settings based on the RF environment		
26.	Control	Wireless solution should control and shape all user traffic and flexibility to control exactly which users can use which ports, apps to restrict usage as per requirements of PSCDL, TRAI and other Government laws or court orders.		
27.	Safety Standards	Comply key International and Indian standards for safety, including RF radiations. APs must protect internally stored configuration information.		
28.	Certification	AP itself should be IP66 certified or better for outdoor deployment.		
29.	Operating temperature	-10 to +60°C or better		
30.	Enclosure	Should be IP67 rated or higher for outdoor application		



Sl. No.	Parameter	Minimum Specifications	Bidder Compliance (Yes/No)	Product Document ation Reference
31.	Features	<ul> <li>The wireless solution should be based on dual radio.</li> <li>802.11 a/b/g/n/ac / 2x2:2 (or 3x3:3) MIMO Wave1/Wave2, dual radio, access point.</li> <li>The Access Point should have single 10/100/1000 Ethernet interfaces</li> <li>The AP should be able to handle security, mesh, , RF Management, QOS , roaming, local forwarding without the need for a controller so as to increase performance of the WLAN network</li> <li>802.11 a/b/g/n/ac Access Point should be able to power up using standards 802.3 af/at POE input.</li> <li>All 2.4 GHz (2.4000GHz to 2.4835GHz) bands authorized in G.S.R. (45E)</li> <li>Radio 2: 2.4GHz: Chan 1-13 (2412-2472 MHz) 5GHz: All channels from 5200 MHz to 5825 MHz Actual operating frequencies depend on national regulatory limits</li> <li>Maximum available transmit power: 2.4GHz: 21dBm per chain, 5.0GHz: 20dBm per chain</li> <li>Antenna configuration: 1x1, 1x2, 2x2, 3x3</li> </ul>		
32.	Antenna Characteristi cs	<ul> <li>Internal Antenna Gain or equivalent or better RF coverage as per planning</li> <li>2.4 GHz-2.5 GHz: 4 dBi</li> <li>5.150 GHz-5.875 GHz: 5dBi</li> </ul>		
33.	Operating temperature	-10 to +60°C or better		



Sl. No.	Parameter	Minimum Specifications	Bidder Compliance (Yes/No)	Product Document ation Reference
34.	Storage Temperature Regulatory	<ul> <li>-20 to 70°C or better</li> <li>FCC certified</li> <li>CE Mark / WPC Compliance</li> </ul>		
35.	Enclosure	Should be IP67 rated or higher for outdoor application		
36.	AP Characteristi cs	<ul> <li>Able to be powered over 802.3af/at standard Power-over-Ethernet (PoE). Auto sensing, 10/100/1000 on the network port</li> <li>16 BSSIDs per AP</li> <li>On Demand Channel Scan, Auto Channel Select</li> <li>Capable of multi-function services including: data access, intrusion detection, intrusion prevention, location tracking, real-time non-disruptive packet capture, RF monitoring with no physical touch and no additional cost</li> <li>The AP should proactively probe other rates to determine if greater throughput is available, intelligently adjusting its selection tables to favor higher performance. The AP should support mesh backhaul feature in which the root AP will determine if its wired connection is down and take action correspondingly. AP should support Self-Healing, Self-forming, dynamic path selection Wireless MESH function</li> <li>Automatic neighbor detection and route determination</li> <li>AP will provide make before break handovers</li> <li>The wireless meshing AP shall support low hop latency (&lt; 1 ms per hop) under clear channel conditions and high SNR</li> </ul>		



Sl. No.	Parameter	Minimum Specifications	Bidder Compliance (Yes/No)	Product Document ation Reference
		<ul> <li>MESH link should support         AES encryption on the MESH         link</li> <li>MESH link should support         extending corporate network         with VLAN Tags and VLAN         priority tags to the remote site</li> <li>A wireless meshing AP with         redundant links shall select         an alternative route within         100 ms</li> <li>AP shall provide external         antenna options</li> <li>Wi-Fi alliance 802.11ac         certified APs</li> </ul>		

#### 1.2. Technical Specifications for Wi-Fi Controller

1,2,	1.2. Technical Specifications for WI-FI Controller			
Sl. No.	Parameter	Minimum Specification		
1.	Manageability	<ul> <li>Should be, capable of managing at least 500         Wireless AP and should be scalable as and when required.         Should be deployed in high availability mode.</li> <li>The controller solution should facilitate monitoring, management, control, and upgradation from the centralized Wi-Fi Management Center.</li> <li>The proposed architecture should be based on Centralized Controller deployment model.         AP's should download OS and configuration from controller for improved security.</li> </ul>		
2.	Throughput	Throughput performance should be at least 20Gbps or more		
3.	Security	The controllers should communicate back and forth with the centralized security system and network management system in real time.		

Sl. No.	Parameter	<b>Minimum Specification</b>	
		<ul> <li>The systems should be able to detect malicious attacks such as Evil Twin, Honeypot, Denial of Service, ARP Poisoning-based attacks which can cripple down the public Wi-Fi system</li> <li>The WLAN solution should have the hardware/software to implement advance WIDS &amp; WIPS</li> </ul>	
4.	Hardware	Redundancy Features: Controller Must support Active: Active and Active: Standby. Same license should be shared by both the controller.	
5.	General Feature Requirements	<ul> <li>Ability to map SSID to VLAN.</li> <li>Should support automatic channel selection – interference avoidance (Cochannel management, Adjacent Channel Management, Channel reuse management).</li> <li>Internal / External Captive Portal.</li> </ul>	
6.	Auto Deployment of APs at different locations	<ul> <li>Access points can discover controllers on the same L2 domain without requiring any configuration on the access point.</li> <li>Access points can discover controllers across Layer-3 network through DHCP or DNS option</li> </ul>	
7.	System Architecture	<ul> <li>Centralized MAC addresses filtering</li> <li>Should support onboard/external DHCP server</li> <li>Controller should support Onboard / External AAA server</li> <li>The proposed architecture should be based on controller based Architecture with thin AP deployment. While Encryption / decryption of</li> </ul>	

Sl. No.	Parameter	Minimum Specification	
		<ul> <li>802.11 packets should be performed at the AP.</li> <li>Support roaming between access points deployed on same subnet and different subnets</li> </ul>	
8.	QoS features	<ul> <li>Per user bandwidth Rate         Limiting</li> <li>Self-healing (on detection of         RF interference or loss of RF         coverage)</li> <li>Should support per user, per         device, and per         application/TCP-port         prioritization</li> <li>Dynamic load balancing to         automatically distribute clients         to the least loaded 802.11         channel and AP; load         balancing must not require any         client specific configurations         or software</li> <li>Adaptive RF management that         provides the capability to         pause channel scanning /         adjust RF scanning intervals         based on application and load         presence.</li> <li>Capability to provide preferred         access for —fast clients over —         slow clients (11n vs. 11g) in         order to improve overall         network performance.</li> <li>Support advanced multicast         features with multicast rate         optimization, multi-channel         use and IGMP snooping</li> </ul>	
9.	RF Management	<ul> <li>Should be able to load balance clients across channels and access points</li> <li>Should be able to load balance clients based on client count</li> <li>Should be able to load balance clients based on effective throughput on AP</li> </ul>	

Sl. No.	Parameter	Minimum Specification	
		Should be able to use client and throughput as a measure to load balance between bands	
10.	Inline Security Features	<ul> <li>Should allow authenticated client devices to roam securely from one access point to another, within or across subnets, without any perceptible delay Security during re association.</li> <li>Controller should support AES-128 and AES-256 encryption, with site-to-site and client-to-site VPN capabilities; should have provision to supports IPSEC/GRE tunnels</li> </ul>	

### 2. Technical Specifications for Solar panel installation

#### Solar panels / Solar Photovoltaic Modules

Sl. No.	Parameter	Minimum Specifications	Bidder Complia nce (Yes/No)	Product Documentati on Reference
1.	Type of panel	Crystalline Silicon		
2.	Make	Made in India		
3.	Wattage of Solar panels	1. 260W 2. 320W		
4.	Dimensions of 260W panel	1660 x 970 (Dimensions in mm)		
5.	Dimensions of 320W panel	1970 x 990 (Dimensions in mm)		
6.	Efficiency of the panel	>= 13%		
7.	Fill factor	>= 70%		
8.	GI material for mounting	(90 microns) as per MNRE standards.  Module frame - Non-corrosive and electrolytically compatible with the mounting structure material		
9.	Module minimum rated power	The nominal power of a single PV module shall not be less than 74Wp.		

			Bidder	Product
Sl.	Parameter	Minimum Crossifications	Complia	Documentati
No.	Parameter	Minimum Specifications	nce	on
			(Yes/No)	Reference
10.	Certifications	The PV modules used must qualify to the latest edition of IEC PV module qualification test or equivalent BIS standards Crystalline Silicon Solar Cell Modules IEC 61215/IS14286. In addition, the modules must conform to IEC 61730 Part-2-requirements for construction & Part 2 – requirements for testing, for safety qualification or equivalent IS. For the PV modules to be used in a highly corrosive atmosphere throughout their lifetime, they must qualify to IEC 61701/IS 61701.		
11.	The Manufacturer should provide the following minimum information must be mentioned in each module (This can be inside or outside the laminate, but must be able to withstand harsh environmental conditions).	<ul> <li>Made in India (to be subscribed in words)</li> <li>Company Name/ Logo</li> <li>Model Number (It should indicate the voltage and related wattage of the module)</li> <li>Serial Number</li> <li>Year of Make</li> </ul>	•	
12.	Degradation warranty	Panel output (W <sub>p</sub> ) capacity to be >=90% of design nominal power after 10 years and >=80% of design nominal power after 25 years.		



# **Invertor / Power Conditioning Unit**

Sl. No.	Parameter	Minimum Specifications	Bidder Compliance (Yes/No)	Product Document ation Reference
1.	Control Type	Voltage source, microprocessor assisted, output regulation		
2.	Output voltage	<ul> <li>Single Phase, 230 V ac</li> <li>(+12.5 %, - 20 % V ac)</li> <li>3 phase, 415 V ac (+12.5</li> <li>%, - 20 % V ac)</li> </ul>		
3.	Output Frequency	50 Hz (+3 Hz, -3 Hz)		
4.	Protection of enclosure	IP-20 (Minimum) for indoor IP-65 (Minimum) for outdoor		
5.	Total Harmonic Distortion	less than 3%		
6.	Grid frequency tolerance range	+3 Hz or more		
7.	Grid voltage tolerance	-20% to +15%		
8.	No-load losses	Less than 1% of rated power		
9.	Operating temperature Range	o to 55-degree C		
10.	THD	<3%		
11.	PF	>0.9		



# ${\bf 3.}\ \ {\bf Technical\ Specifications\ for\ Work station}$

Sl. No.	Parameter	Minimum Specification	Bidder Complian ce (Yes/No)	Product Document ation Reference
1.	Processor	Latest generation 64bit X86 Quad core processor(3Ghz) or better		
2.	Chipset	Latest series 64bit Chipset		
3.	Motherboard	OEM Motherboard		
4.	RAM	Minimum 8 GB DDR3 ECC Memory @ 1600 Mhz. Slots should be free for future upgrade. Minimum 4 DIMM slots, supporting up to 32GB ECC		
5.	Graphics card	Minimum Graphics card with 2 GB video memory (non- shared)		
6.	HDD	2 TB SATA-3 Hard drive @7200 rpm with Flash Cache of 64GB SSD. Provision for installing 4 more drives.		
7.	Media Drive	NO CD / DVD Drive		
8.	Network interface	10/100/1000 Mbps autosensing on board integrated RJ-45 Ethernet port.		
9.	Audio	Line/Mic IN, Line-out/Spr Out (3.5 mm)		
10.	Ports	Minimum 4 USB ports (out of that 2 in front)		
11.	Keyboard	104 keys minimum OEM keyboard		
12.	Mouse	2 button optical scroll mouse (USB)		
13.	PTZ joystick controller (with 2 of the workstations in Control Room)	☐ PTZ speed dome control for IP cameras ☐ Minimum 10 programmable buttons ☐ Multi-camera operations ☐ Compatible with all the camera models offered in the solution ☐ Compatible with Monitoring software offered		

Sl. No.	Parameter	Minimum Specification	Bidder Complian ce (Yes/No)	Product Document ation Reference
		22" TFT LED monitor,		
		Minimum 1920 x1080		
14.	Monitor	resolution, 5 ms or better		
		response time, TCO 05 (or		
		higher) certified		
15	Certification	Energy star 5.0/BEE star		
15.	Certification	certified		
16.	Operating System	64 bit pre-loaded OS with		
10.	Operating System	recovery disc		
		BIOS controlled electro-		
17.	Security	mechanical internal chassis		
		lock for the system.		
		Advanced antivirus,		
		antispyware, desktop firewall,		
		intrusion prevention		
		(comprising of a single,		
18.	Antivirus feature	deployable agent) which can be		
		managed by a central server.		
		(Support, updates, patches and		
		errata for the entire contract/		
		project period)		
		SMPS; Minimum 400-watt		
		Continuous Power Supply with		
10	Power supply	Full ranging input and APFC.		
19.	1 ower suppry	Power supply should be 90%		
		efficient with EPEAT Gold		
		certification for the system.		



# 4. Technical Specifications for Edge Switch

Sl. No.	Parameter	Minimum Specification	Bidder Complian	Product Documenta
			ce (Yes/No)	tion Reference
1.	Ports	Minimum 16 port,10/100/TX PoE/PoE+ (May require higher port density at some locations, depending upon site conditions; and May require fiber ports at some locations, depending upon site conditions/distances)		
2.	PoE Standard	IEEE 802.3af/ IEEE 802.3at or better		
3.	Protocol Support	<ul> <li>IPV4,IPV6</li> <li>Support 802.1Q VLAN</li> <li>DHCP support</li> <li>IGMP</li> <li>SNMP Management</li> <li>Should support Loop protection and Loop detection</li> <li>Should support Ring protection</li> <li>End point Authentication</li> </ul>		
4.	Operating Temperature	o – 60-degree C or better		
5.	Support	The industrial grade switches shall support —  • IEEE 802.3, 802.3u, 802.3ab, 802.3z, 802.3x protocols.  • IEEE 802.1D for STP, 802.1w for Rapid STP, 802.1s for Multiple Spanning Tree Protocols.  • IEEE 802.1q for VLAN tagging, 802.1p for CoS, 802.1X for Authentication and 802.3ad for port trunk LACP.  • Broadcast storm protection, port lock/port security,		

Sl. No.	Parameter	Minimum Specification	Bidder Complian	Product Documenta
			ce (Yes/No)	tion Reference
		RADIUS, TACAS+, SSL/SSH security  The industrial grade switches shall support –  • IPv4/v6, SNMP v1/v2/v3, LLDP, port mirror, RMON, Server/Client DHCP, TFTP, Telnet, Flow control, IGMP v1/v2		
6.		All switches installed on-field shall be capable of working in the harsh environmental conditions with immunity to EMI and heavy electrical surges. They shall support:  • EN-60950-1 or equivalent • EN 55022/24 or CISPR 22 • FCC Part 15B Class A • IEC 60068-2-27 and 2-32 or equivalent		
7.		• IEC 60068-2-6 or equivalent The switches shall be powered by 12/24/48VDC or 24VAC input as per the design requirements with dual redundant inputs and integrated power supply. The terminal blocks for the power supply options shall support reliable, maintenance-free connections		
8.		The industrial grade switches shall support operating temperature range of o°C to +65°C (without any fans) with ambient relative humidity of 5-95%, non-condensing.		
9.		All Layer 2 Ethernet switches shall be managed switches and shall comply with IEEE standards, Safety Standards, Electromagnetic Emissions standards		

Sl. No.	Parameter	Minimum Specification	Bidder Complian ce (Yes/No)	Product Documenta tion Reference
		All Layer 2 switches at a minimum shall support the following:		
10.		<ul> <li>IPv4/IPv6</li> <li>CoS</li> <li>IP Multicast</li> <li>Security</li> <li>Storm Control</li> <li>Dynamic Trunking Protocol</li> <li>Spanning Tree Route Guard</li> <li>Secure Sockets Layer (SSL)/SSH</li> <li>Network Management</li> <li>Non-Blocking Type</li> <li>Support Auto-Sensing</li> <li>Support Auto-Negotiation</li> <li>The fibre optic ports shall</li> </ul>		
11.		support the required distance i.e. between switches at different locations		
12.		All switches shall support standard 19" rack mount or DIN rail mounting options. In addition, the industrial grade switches shall also support mounting on streetlight poles and shall be compact style		
13.		All switches shall have the function to enable/disable ports for limiting unauthorized access to the network		
14.		<ul> <li>All switches shall support</li> <li>SNMP (v1/v2/v3) to allow for management</li> <li>Network Time Protocol (NTP) for time synchronization</li> <li>Multilevel user passwords for prevention against unauthorized configuration</li> <li>SSH or SSL based security and MAC based port security</li> <li>RADIUS authentication service</li> </ul>		

Sl. No.	Parameter	Minimum Specification	Bidder Complian ce (Yes/No)	Product Documenta tion Reference
15.		The device shall have LED indicators for Power, LAN, Signal, RS-232, and Ethernet Link & Activity		

# 5. Technical Specifications for LED Display

Sl. No.	Parameter	Minimum Specification	Bidder Complian ce (Yes/No)	Product Documenta tion Reference
1.	Screen	<ul> <li>Minimum 39" LED screen with CE certification</li> <li>HD IPS LED Display, Direct LED Backlight with 3mm or higher antiglare &amp; overlay tempered vandal resistant glass.</li> <li>Shall support - 1920 x 1080 pixels or better</li> <li>Aspect Ratio - 16:9 widescreen</li> <li>Viewing angle (Horizontal / Vertical - 178 degree / 178 degree)</li> <li>Response time - 5 ms or less</li> <li>Brightness &gt;= 2500 cd/m2</li> <li>Contrast &gt;= 5000:1</li> <li>Display colors - 16.7 M</li> </ul>		
2.	Display Input	VGA - 1 HDMI -2 USB 2.0 - 1 USB 3.0 - 1 RS 232 -1		
3.	Other Ports	Display Port out		
4.	Temperature & Brightness sensor	Yes		
5.	Auto cooling system	Yes		
6.	Built in speaker	20 W		
7.	Power Requirements	Operating Voltage (100 – 240 V)		

Sl. No.	Parameter	Minimum Specification	Bidder Complian ce (Yes/No)	Product Documenta tion Reference
8.	Motion detection	Yes		
9.	Luminance sensor (Auto Brightness)	Yes		
10.	Environmental Conditions	Temperature operational (°C) – (o degree to 60 degree) Celsius  Humidity (non-condensing) (%) (20 to 90) %		
11.	Certification	ULL, CE certified		
12.	Warranty	On site Comprehensive support and warranty for 5 years		
13.	Ethernet	Integrated Gigabit Ethernet Controller with IPv6 complaint		
14.	Wireless	IEEE 802.11 or Higher, Wi-Fi enabled		



#### Annexure 2 - List of locations finalized for Digital Smart Kiosk

#	Identified site	Identified location	Type (Indoor / Outdoor)	Lat	Long
1	Opposite to Park Guest House		Outdoor	11°55'31.86"N	79°50'1.08"E
2	Indira Gandhi Indoor and Outdoor Stadium		Outdoor	11°55'21.74"N	79°49'42.10"E
3	Railway Station		Outdoor	11°55'30.53"N	79°49'40.88"E



#	Identified site	Identified location	Type (Indoor / Outdoor)	Lat	Long
4	Botanical Garden		Outdoor	Lat. 11°55'49.70"N	79°49'19.90"E
5	Opposite to Providence Mall		Outdoor	11°55'44.93"N	79°49'9.93"E
6	Near Puducherry Bus Stand		Outdoor	11°55'56.51"N	79°48'55.78"E



#	Identified site	Identified location	Type (Indoor / Outdoor)	Lat	Long
7	Perunthakaivar Kamarajar Centenary Educational Complex		Indoor	11°55'58.48"N	79°48'28.93"E
8	Municipal Office, Kamban Kalai Arangam		Outdoor	11°55'48.14"N	79°49'27.56"E
9	Calve College		Outdoor	11°56'18.43"N	79°49'54.36"E



#	Identified site	Identified location	Type (Indoor / Outdoor)	Lat	Long
10	Opposite to East Traffic Police Station, JN Street		Outdoor	11°56'7.60"N	79°49'57.75"E
11	Bharathi Park Corner, Opposite to Indira Gandhi Government General Hospital		Outdoor	11°55'56.16"N	79°49'59.55"E
12	LAD office, Suffren Street (North corner)		Outdoor	11°55'46.33"N	79°49'59.37"E



#	Identified site	Identified location	Type (Indoor / Outdoor)	Lat	Long
13	PTDC Old office, Beach Road	Le Café	Indoor	11°55'45.36"N	79°50'6.31"E
14	Marie Building		Indoor	11°55'51.69"N	79°50'7.48"E
15	Gandhi Thidal (South-west corner)		Outdoor	11°55'57.16"N	79°50'6.38"E



#	Identified site	Identified location	Type (Indoor / Outdoor)	Lat	Long
16	Rue Desbassyn de Richemont, Beach road north-east corner (on the road)	LINES TORROGATE  TOTAL PROCESSION OF THE PROCESS	Outdoor	11°56'16.34"N	79°50'9.93"E
17	Bharathidasan Govt. College for Women	COLLEGE STATE OF THE STATE OF T	Outdoor	11°56'39.07"N	79°49'50.53"E
18	Opposite to Electricity department office		Outdoor	11°55'26.59"N	79°49'50.83"E



#	Identified site	Identified location	Type (Indoor / Outdoor)	Lat	Long
19	Inside Taluka office, Near RTO office		Indoor	11°55'11.35"N	79°48'33.44"E
20	Inside Old Sub- Collector office	COUNTROL	Outdoor	11°56'27.39"N	79°48'42.89"E
21	Water tank Opposite Pothys, Anna Salai Road		Outdoor	11°55'58.67"N	79°49'27.90"E



Request for Proposal for Design, Supply, Installation, Commissioning, Operations and Maintenance support for Digital Smart Kiosk Infrastructure solution at designated locations under "Smart City Mission" at Puducherry

Volume III: General Conditions of Contract



RFP for Digital Smart Kiosk Infrastructure in Puducherry

Tender No: 008/PSCDL/2019

**July 2019** 

**Puducherry Smart City Development Limited** 



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# A. General Conditions of Contract

# 1 Security Deposit

All compensation or other sums of money payable by the Concessionaire to PSCDL under the terms of his contract may be deducted from or paid by the sale of a sufficient part of his Security Deposit, or from interest arising there from, or from any sums, which may be due or may become due to the Concessionaire by PSCDL on any account whatsoever, and in the event of his Security Deposit being reduced by reason of any such deduction or sale as aforesaid, the Concessionaire shall within ten days thereafter, make good in cash or Bank Guarantee of Nationalized bank, as aforesaid, any sum or sums which may have been deducted from or raised by sale of his Security Deposit or any part thereof.

In case of Bank Guarantee of any Nationalized Bank is furnished by the Concessionaire to PSCDL, as part of the Security Deposit and the bank goes into liquidation or, for any reason is unable to make payment against the said Bank Guarantee, the loss caused thereby shall fall on the Concessionaire and the Concessionaire shall forthwith, on demand, furnish additional security to PSCDL to make good the deficit.

The liability or obligation of the bank under the Guarantee Bond shall not be affected or suspended by any dispute between the Engineer-in-Charge and the Concessionaire, and the payment, under the Guarantee Bond by the bank to PSCDL shall not wait till disputes are decided. The bank shall pay the amount under the Guarantee, without any demur, merely on a demand from PSCDL stating that the amount claimed is required to meet the recoveries due or likely to be due from the Concessionaire.

The demand, so made, shall be conclusive as regards to amount due and payable by the Bank, under the guarantee limited to the amount specified in the Guarantee Bond. The guarantee will not be discharged due to the change in the constitution of the Bank or the Concessionaire. The Bank Guarantee shall remain valid up to the specified date unless extended on demand by the Engineer-in- Charge which shall include the period of completion of the contract and the defect removal period as per terms of the Agreement. Bank's liability shall stand automatically discharged unless a claim in writing is lodged with the Bank within the period stated in the Bank Guarantee including the extended period. After satisfactory completion of the contract and clearance of all dues by the Concessionaire, PSCDL will discharge the Bank Guarantee after expiry of the original or the extended period, as the case may be. In case the date of expiry of the Bank Guarantee is a holiday, it will be deemed to expire on the close of the next working day. Authority is not concerned with any interest accruing to Concessionaire.



The Concessionaire on any form of Security (primary or collateral) lodged by him with the bank or any sums payable to sureties obtained by the Bank as counter guarantee to secure its own position. This will matter between the Bank and the Concessionaire.

The Security deposit shall be forfeited in any of the following cases:

- a) If the successful Concessionaire modifies/ withdraws its Proposal
- b) If the Concessionaire withdraws its Proposal during the interval between the Proposal Due Date and expiration of the Proposal Validity Period; or
- c) If the Concessionaire fails to sign the Agreement within specified time; or
- d) If the Successful Concessionaire fails to provide the Performance Security within the stipulated time or any extension thereof provided by PSCDL or
- e) If any information or document furnished by the Concessionaire turns out to be misleading or untrue in any material respect.

# **2** Liquidated Damages and Penalties

Liquidated Damages provisions ("SLA") shall become the part of Agreement between PSCDL and the Selected Bidder / SI. SLA defines the terms of the Successful Bidder's responsibility in ensuring the timely delivery of the deliverables and the correctness of the same based on the agreed Performance Indicators as detailed in this section. The Successful Bidder has to comply with Service Levels requirements to ensure adherence to Project timelines, quality and availability of services.

The Successful Bidder has to supply software/automated tools to monitor all the SLAs mentioned below.

**Note:** Liquidated Damages shall not be levied on the SI in the following cases:

- a) There is a Force Majeure event effecting the SLA which is beyond the control of the SI
- b) The non-compliance to the SLA has been due to reasons beyond the control of the SI.
- c) Theft cases by default would not be considered as "beyond the control of SI". However, certain cases, based on circumstances & certain locations, PSCDL may agree to qualify as "beyond the control of SI". Damages due to any accident / mishap shall be considered as "beyond the control of SI". However, Power shut down or deliberate damage to field devices would not be considered as "beyond the control of SI". Any such deliberate damage to be covered through insurance mechanism, and such field devices would need to be replaced within SLA period by the SI.

The purpose of this Service Level Agreement (hereinafter referred to as SLA) is to



clearly define the levels of service which shall be provided by the System Integrator to PSCDL for the duration of this Agreement.

#### 2.1 Definitions

For the purposes of these schedule, the definitions and terms are specified in the Agreement along with the following terms shall have the meanings set forth below:

- a) "Uptime" shall mean the time period for the specified services / components with the specified technical service standards are available to the user department. Uptime, in percentage, of any component (Non- IT & IT) can be calculated as:
  - i. Uptime = {1- [(Downtime) / (Total Time Maintenance Time)]} \* 100
- b) "Downtime" shall mean the time period for which the specified services / components with specified technical and service standards are not available to the user department and excludes downtime owing to Force Majeure & Reasons beyond control of SI.
- c) "Incident" refers to any event / abnormalities in the functioning of the Services specified as part of the Scope of Work of the Systems Integrator that may lead to disruption in normal operations of the Monitoring and Surveillance System.

#### 2.2 Measurement of SLA

The SLA metrics provided specifies the performance parameters which will be used to measure the SLA's.

The SLA parameters shall be measured as per the individual SLA parameter requirements and measurement methods, through appropriate SLA Measurement tools to be provided by the SI and audited by PSCDL or its appointed third part agency for accuracy and reliability.

PSCDL shall also have the right to conduct, either itself or through any other agency as it may deem fit, an audit / revision of the SLA parameters. The SLAs defined, shall be reviewed by PSCDL on an annual basis after consulting the SI, Project Management Consultants and other experts. All the changes would be made by PSCDL after consultation with the SI and might include some corrections to reduce undue relaxation in Service levels or some corrections to avoid unrealistic imposition of liquidated damages, which are noticed after project has gone live.

PSCDCL would have right to invoke termination of the contract in case the liquidated damages increase above 10% of the total contract value, specific details of which are provided in SLA matrix.



# 2.3 SLA Planned Downtime

Any planned application / server downtime would not be included in the calculation of application / server availability. However, the Successful Bidder should take at least 10 days prior approval from PSCDL in writing for the planned outage, which should not be for more than 30 minutes, would be in lean period (non-movement period, like post mid-night) and limited to maximum four outages in a year. In case of planned outages at Data Centre level, services of other Data Centre services to be used to service the clients, while there would be no planned outages for field devices.

# 2.4 SLA's Performance Matrix

Sl. No.	Service Parameter	Measurement Metric	Minimum Requirement	Liquidated Damages
1	Team Mobilization and commencement of work	SI is expected to mobilize project team for commencement of work which would mean reporting and availability of SI's resources at the Purchaser's office for the project within defined period of 10 days from the award of contract	Within 10 days from the award of contract	Delay beyond 10 calendar days = INR 5,000 for 1 week delay Subject to maximum of INR 20,000.
2	Completion of UAT	SI is expected to complete the UAT within defined period as defined in the RFP Vol 2.	Within 130 days from the award of contract	Delay beyond 10 calendar days = INR 5,000 for 1 week delay Subject to maximum of INR 20,000.
3	Reports generation and acceptance by PSCDL / respective departments	SI is expected to provide the MIS report on weekly basis for the SLA's compliance from UAT period till Final Go-Live (as defined in the RFP Vol 2.)	From 130 days till 180 days from the award of contract	Delay beyond 10 calendar days = INR 10,000 for 1 week delay Subject to maximum of INR 50,000.



Post-	Post-Implementation SLA's				
		Wi-	Network Availability (%) = (Total minutes during the month – Planned downtime - Downtime minutes during the month) *100 / Total minutes during the month Total Time shall be measured on 24*7 basis. Using SLA Measurement Tool	> 98.0 %	■ Slab1: Wi-Fi services availability - > 98 %  Liquidated Damages: 0.1% of the total estimated contract value**  ■ Slab 2: Wi-Fi services availability - 98% to 95.00%  Liquidated Damages: 0.2 % of the total estimated contract value**  ■ Slab 3: Application availability below 95.00%  Liquidated Damages: 0.4 % of the total estimated contract value**



Availability of Digital Smart Kiosk software application	The proportion of the time that the Digital Smart Kiosk software application is up and running (per quarter).  Bidder will provide access to the necessary tool to monitor the same.	> =99 %	■ Slab1:     Application availability
--	--	---------	---------------------------------------



			• Slab1: Application
			availability - >
			97 % < 99%
			Liquidated Damages: 0.1% of the total estimated contract value**
	The proportion of the time		• Slab 2:
	that the Video Management software		Applicati on availabilit
Availability of Video Management software application	application is up and running (per quarter).	> =99 %	y – 95% to 97.00%
software application	Bidder will provide access		
	to the necessary tool to monitor the same.		Liquidated Damages:
			0.2% of the total estimated
			contract value**
			Slab 3: Application availability below 95.00%
			o.4% of the total estimated contract value**



Availability of Kiosk Services across all the proposed locations	The proportion of the Digital Smart Kiosk services that are functional across all the locations (per quarter).	All services shall be functional across the proposed 21 locations.	<ul> <li>All services shall be functional across the proposed 21 locations.</li> <li>Citizen / tourist feedback on the proposed services-</li> <li>Up to - 20 negative feedbacks per quarter - No LD</li> <li>20-30 negative feedbacks per quarter = INR 10,000</li> <li>More than 30 negative feedbacks per quarter = INR</li> </ul>
			INR 20,000

Note: In case the Bidder reaches 10% of the total estimated value in the form of Liquidated Damages (Cumulative value of Liquidated Damages during O&M phase), during the post-implementation phase, PSCDL reserves the right to invoke the termination clause.

<sup>\*</sup>SI shall ensure that all relevant events are logged and such logs are made accessible to PSCDL appointed agency for review / report.



\*\* Total estimated contract value for deriving the Liquidated Damages is considered as INR 4,00,00,000 (four crores).

Liquidated Damages levied for non- performance as per SLA requirements shall be deducted through subsequent payments due from PSCDCL or through the Performance Bank Guarantee (hereinafter "PBG").

# 3 Extension of Time

If the Concessionaire shall desire an extension of the time for completion of the work on the ground of his having been unavoidably hindered in its execution or on any other grounds, he shall apply, in writing, to the Engineer-in-Charge within 5 working days for each location of the date of the hindrance, on account of which he desires such extension as aforesaid, and the Authority Competent to grant extension under the rules/delegations of power or other duly authorized Engineer shall, if in his opinion, (which shall be final) reasonable grounds be shown therefore, authorize such extension of time, if any, as may, in his opinion, be necessary or proper, if the period of completion of contract expires before the expiry of the period of 5 days provided in this clause, the application for extension shall be made before the expiry of the period stipulated for completion of the contract.

# 4 Work to be Open to Inspection: Concessionaire to be Present:

All work, under or in course of execution or executed in pursuance of the contract shall, at all times, be opened to inspection and supervision of the PSCDL, and his subordinates and any other authorized agency of PSCDL and the Concessionaire shall, at all times during the usual working hours, and at all other times at which reasonable notice of the intention of the Engineer-in-charge or his subordinate and any other authorized agency of PSCDL to visit the works shall have been given to the Concessionaire, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for the purpose. Orders given to the Concessionaire's agent shall be considered to have the same force as if they had been given to the Concessionaire himself.

# 5 Settlement of Disputes

#### 5.1 Amicable Resolution

a) Save where expressly stated contrary to this terms and conditions and the RFP, any dispute, difference or controversy of whatever nature between the parties, howsoever arising under, out of or in relation to this Agreement (the "Dispute") shall in the first instance be attempted to be resolved amicably in accordance with the procedure set forth below.



b) Either Party may require such Dispute to be referred to the Chairperson, PSCDL and the Chief Executive Officer/Partner of the Concessionaire for the time being, for amicable settlement. In respect of disputes of a technical nature the Parties may engage an Expert.

Upon such reference, the two shall meet at the earliest mutual convenience and in any event within 15 days of such reference to discuss and attempt to amicably resolve the Dispute. If the dispute is not amicably settled within 15 (fifteen) days of such meeting between the two, either Party may refer the Dispute to arbitration in accordance with the provisions of Article below.

#### 5.2 Arbitration

- a) In case, a dispute is referred to arbitration, the arbitration shall be under the Arbitration and Conciliation Act (Amendment Act), 2015 and any statutory modification or re-enactment thereof.
- b) If during the subsistence of this Contract or thereafter, any dispute between the Parties hereto arising out of or in connection with the validity, interpretation, implementation, material breach or any alleged material breach of any provision of this Contract or regarding any question, including as to whether the termination of this Contract by one Party hereto has been legitimate, the Parties hereto shall endeavor to settle such dispute amicably and/or by Conciliation to be governed by the Arbitration and Conciliation Act, 1996 or as may be agreed to between the Parties. The attempt to bring about an amicable settlement is considered to have failed as soon as one of the Parties hereto, after reasonable attempts; which attempt shall continue for not less than thirty (30) days, gives thirty (30) day notice to refer the dispute to arbitration to the other Party in writing.
- c) The Arbitration proceedings shall be governed by the Arbitration and Conciliation Act 1996 and any statutory modification or re-enactment thereof The Arbitration proceedings shall be held in Puducherry, India
- d) The Arbitration proceeding shall be governed by the substantive laws of India. The proceedings of Arbitration shall be in Tamil/English language. Except as otherwise provided elsewhere in the contract if any dispute, difference, question or disagreement arises between the parties hereto or their respective representatives or assignees, at any time in connection with construction, meaning, operation, effect, interpretation or out of the contract or breach thereof the same shall be referred to a Tribunal of three (3) Arbitrators, constituted as per the terms of and under the (Indian) Arbitration and Conciliation Act 1996,. Each party to the contract shall appoint/ nominate one



Arbitrator each, the two Arbitrators so appointed/ nominated by the Parties herein shall together choose the third Arbitrator, who shall be the Presiding Arbitrator of the Tribunal. The consortium of the three Arbitrators shall form the Arbitral Tribunal.

- e) In case, a party fails to appoint an arbitrator within 30 days from the receipt of the request to do so by the other party or the two Arbitrators so appointed fail to agree on the appointment of third Arbitrator within 30 days from the date of their appointment upon request of a party, the Chief Justice of the Puducherry High Court or any person or institution designated by him shall appoint the Arbitrator/Presiding Arbitrator upon request of one of the parties.
- f) Any letter, notice or other communications dispatched to Concessionaire relating to either arbitration proceeding or otherwise whether through the post or through a representative on the address last notified to the Authority by Concessionaire shall be deemed to have been received by Concessionaire although returned with the remarks, refused 'undelivered' where about not known or words to that effect or for any other reasons whatsoever
- g) If the Arbitrator so appointed dies, resigns, incapacitated or withdraws for any reason from the proceedings, it shall be lawful for the Authority to appoint another person in his place in the same manner as aforesaid. Such person shall proceed with the reference from the stage where his predecessor had left if both parties consent for the same; otherwise, he shall precede.
- h) It is a term of the contract that the party invoking arbitration shall specify all disputes to be referred to arbitration at the time of invocation of arbitration and not thereafter.
- i) It is also a term of the contract that neither party to the contract shall be entitled for any interest on the amount of the award.
- j) The Arbitrator shall give reasoned award and the same shall be final, conclusive and binding on the parties.
- k) The fees of the arbitrator, costs and other expenses incidental to the arbitration proceedings shall be borne equally by the parties.

# 6 Definition of Engineer in Charge

The term "Engineer-in-charge" means Project Management Consultancy (PMC) or any designated person of PSCDL who shall supervise and be in charge of the work on behalf of PSCDL.



# 7 Concessionaire to Adhere to Labour Laws/ Regulation

The Concessionaire shall adhere to the requirements of the Workmen's Compensation Act and Labour Legislation in force from time to time and be responsible for and shall pay any compensation to his workmen which would be payable for injuries under the Workmen's Compensation Act, here-in-after called the said Act. If such compensation is paid by the State as Principal employer under Sub Section (1) of section 12 of the said Act, on behalf of the Concessionaire, it shall be recoverable by the State from the Concessionaire under Sub Section (2) of the said section.

- i. Registration under Tax, Labour Laws, Electrical Laws, IT Acts etc.
- ii. The Applicant should have a registered number of:
  - A. GST.
  - B. Income Tax PAN.
- iii. The ESI & EPF registration as per Labour Laws.
- iv. Registration of other Labour Licenses, as applicable.

#### 8 Cost of Execution of Work

The cost of all water supply, Electric connections, if necessary for the execution of work, and the cost of water consumed and hire charges of meters and the cost of electricity consumed in connection with the execution of work, shall be paid by the Concessionaire on commercial rates, except where otherwise specifically indicated.

# 9 Fair Wage Clause

- a) The Concessionaire shall pay not less than fair wages/minimum wages to labourers engaged by him on the work as revised from time to time by Authority, but Authority shall not be liable to pay anything extra for it. Explanation: "Fair Wage" means minimum wages for time or piece work, fixed or revised, under Minimum Wages Act, 1948 (Amended in 2015).
- b) The Concessionaire shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wages to labourers indirectly engaged on the work, including any labour engaged by his Sub-Concessionaire in connection with the said work as if the labourers have been immediately or directly employed by him.
- c) In respect of all labourers immediately or directly employed on the work, for the purpose of the Concessionaire part of this agreement, the Concessionaire shall comply with or cause to be complied Authorities' Contract's Labour



Regulations made, or that may be made by Authority, from time to time, in regard to payment of wages, wages period,

- d) deductions from wages, recovery of wages not paid, and unauthorized deductions,
- e) maintenance of wages registers, wage card, publication or scale of wages and other.
- f) terms of employment, inspection and submission of periodical returns and other matters of a like nature.
  - The Engineer-in-charge shall have right to deduct from the security money due to the Concessionaire any sum required or estimated to be required for making good the loss suffered by a worker or workers, by reasons of non-fulfilment of the conditions of the contract, for the benefit of the worker or workers, non-payment of wages or of deductions made there from, which are not justified by the terms of the contract, or as a result of non-observance of the aforesaid regulations.
- g) The Concessionaire shall be primarily liable for all payments to be made and for the observance of the regulations aforesaid, without prejudice to his right to claim indemnity from his Sub-Concessionaire.
- h) The regulations, aforesaid, shall be deemed to be part of this contract and any breach, thereof, shall be deemed to be breach of the Contract.

# 10 Safety Code

The Concessionaire shall follow the safety code (s) of Authority and as specified in special conditions of contract.

#### 11 Retired Gazetted Officers Barred for 2 Years

No Engineer of Gazetted rank or other Gazetted officer, employed in Engineering or Administrative duties in PSCDL or Government of Puducherry, is allowed to work as a Concessionaire for a period of 2 years of his retirement from Government service without the previous permission of PSCDL /Government of Puducherry. This contract is liable to be cancelled, if either the Concessionaire or any of his employees is found, at any time, to be such a person, who had not obtained the requisite permission, as aforesaid, before submission of the proposal or engagement in the Concessionaire's service, as the case may be.



# 12 Quality Control

Authority shall have the right to exercise proper Quality Control measures. The Concessionaire shall provide all assistance to conduct such tests.

# 13 Force Majeure

Neither party shall be liable to each other, for any loss or damage, occasioned by or arising out of acts of God such as unprecedented floods, volcanic eruptions, earthquake or other invasion of nature and other acts.

# 14 Jurisdiction of Court

In the event of any dispute arising between the parties hereto, in respect of any of the matters comprised in this agreement, the same shall be settled by a competent Court having jurisdiction over the place, where agreement is executed and by no other court, after completion of proceedings.

# 15 Operation and Maintenance

- a) The Concessionaire shall operate and maintain the Digital Smart Kiosk Infrastructure Solution in accordance with the RFP.
- b) The Concessionaire shall, during the Operations Period:
  - i. Have requisite organization and designate and appoint suitable officers/representatives as it may deem appropriate to supervise the Project Facilities, to deal with the personnel deployed by PSCDL for monitoring proper operations and maintenance of the Project, consistent with requirements of the RFP, and to be responsible for all necessary exchange of information required pursuant to this Agreement.
  - ii. Provide PSCDL access to their application software/platform for ensuring the real time monitoring of service parameters.
  - iii. Provide MIS reports to track service level benchmarks or operational requirements.
- In the event, the Concessionaire has failed to operate and maintain the Digital Smart Kiosk Infrastructure Solution in accordance with the RFP, and such failure has not been remedied despite a notice to that effect issued by the PSCDL ("Notice to Remedy"), PSCDL may, without prejudice to any of its other rights/remedies under this Agreement, be entitled to cause the repair and maintenance of the Digital Smart Kiosk Infrastructure Solution at the risk and cost of the Concessionaire.



- d) The Concessionaire shall reimburse one and half times the costs incurred by PSCDL on account of such repair and maintenance within 7 days of receipt of PSCDL' claim therefor.
- e) The Concessionaire shall be deemed to be in material breach of requirements of the RFP, if PSCDL, acting reasonably and in accordance with the provisions of this Agreement, has determined that due to breach of its obligations by the Concessionaire;
- f) The maintenance of the Digital Smart Kiosk Infrastructure Solution or any part thereof has deteriorated to a level which is below the acceptance level prescribed by the RFP;
- g) There has been a serious or persistent breach in adhering to the requirements of the RFP and thereby the Digital Smart Kiosk Infrastructure Solution or any part thereof is not safe for operations.
- h) Upon occurrence of a Material Breach of requirements of the RFP, PSCDL shall, without prejudice to and notwithstanding any other consequences provided therefor under this Agreement, be entitled to terminate this agreement.



#### 16 SPECIAL CONDITIONS OF CONTRACT

#### 16.1 Communication between PSCDL and Concessionaire

Address for Communication: Notices with legal and contractual issues shall be addressed to the Chief Executive officer Puducherry Smart City Development Limited, No.2, Bussy Street, Old Court Building, Puducherry 605 001.

All certificates, notices given by the Concessionaire under terms of the contract shall be sent by post, courier, email, or fax to or left at the office of the the Chief Executive officer Puducherry Smart City Development Limited, No.2, Bussy Street, Old Court Building, Puducherry 605 001.

All certificates, notices or instructions to be given to the Concessionaire by the Authority under the terms of the contract shall be sent by post, courier, email, or fax to or left at the Concessionaires principal address or the addresses as the Concessionaire shall indicate for this purpose only. It shall be essential for the Concessionaire to obtain a receipt of authorized officer otherwise the notice shall be treated as "null and void".

#### 16.2 Contract

The works described in this proposal document is considered to be a Public Private Partnership (PPP) work. The Concessionaire(s) shall be responsible for Designing, financing, Build, installing, operating and maintaining of Digital Smart Kiosk Infrastructure Solution at Public Places through Public Private Partnership (PPP) at given study boundary where installations are done, monitoring reporting-repair and testing of all installations done/supplied made by them during the contract period including defect liability period as defined in these proposal document.

#### 16.3 Priority of contract

The documents forming part of the agreement are to be taken as mutually explanatory documents of one another. In case of discrepancies they shall be explained and adjusted by the Engineer in charge. The priority of the contract documents shall be as follows:

- I. Letter of award.
- II. Concession Agreement.
- III. Special conditions of Contract.
- IV. General conditions of Contract.
- V. Instructions to Bidders.
- VI. Scope of work and Technical specifications.
- VII. Financial Bid.



VIII. All other documents in the Technical Bid.

#### 16.4 Agreement

Successful Bidder shall to execute an agreement in the prescribed form on non-judicial stamp paper of **Rs. 200** or as revised by PSCDL on the date of agreement, with the any other officer authorized by PSCDL within a period of 30 days of the date of issue of letter of acceptance/ work order. The expenses of completing and stamping the agreement shall be paid by Concessionaire. The Successful shall submit following documents with proposal/agreement. However, where the delay in execution of agreement on bonafied grounds, PSCDL can condone such delay. The firm shall submit following documents with proposal/agreement.

- i. All pages of the RFP document/letter of acceptance copy including amendment and terms & conditions of the NIT duly signed.
- ii. Notarized copy of Article of Associations and Memorandum/ Partnership deed (if not provided with proposal).
- iii. In case of partnership firm, notarized copy of registration certificate issue by registrar of firms.
- iv. Notarized copy of power of attorney to authorized signatory to execute agreement and copy of resolution of directors of board (in case of limited company). Power of Attorney should be signed by all partners in case of partnership firm (if not provided with proposal).
- v. Copy of valid GST clearance certificate attested by notary public valid at the time of opening of first envelope (if not provided with proposal).
- vi. Copies of list of fixed assets and balance sheet duly notarized (if not provided with proposal) for the latest preceding financial year for which returns have been submitted.
- vii. If the bid is submitted by a consortium/group of firms, that is, Joint Venture (maximum Two firms (Lead member + 1 Other Members) the sponsoring firm, shall submit complete information required in the forms pertaining to each firm in the group and state along with the Bid as to which of the firms shall have the responsibility for tendering and completion of the Contract document and furnish evidence admissible in law in respect of the authority assigned to such firm on behalf of the group of firms for tendering and for completion of the Contract documents. Full information and satisfactory evidence pertaining to the participation and responsibility of each member of the group of firm in the Tender shall be furnished along with the tender. A certified copy of the Joint Venture Agreement in prescribed form (specified at Form-I) shall be submitted along with the Tender.



viii. The tender documents uploaded in the name of an individual applicant shall not be used by a Joint Venture. Joint venture shall have to upload the tender document in the name of JV only, if he wants to apply.

# 16.5 Joint Venture Consortium (JV)

Joint venture consortium of Maximum Two firms/ members / companies, as partners shall be allowed for the works.

All the Members of the JV shall be jointly and severally responsible for this Contract. The Member of the JV holding highest stake shall be the Lead Partner. The JV shall comply with the following requirements:

- (a) A Joint venture agreement must be submitted along with the documents in which minimum share of lead member shall have to be 60% and share of other members, individually shall not be less than 15%.
- (b) All the members of the Joint Venture firms shall have to collectively satisfy all the criteria mentioned.

Note: In case, the applicant/JV partner has achieved physical & financial performance for the criteria mentioned above in past, in joint venture with other Contractor (other than present JV partner), the portion of the work (physically and financially) of the contractor included in their Joint Venture Agreement in original contract work shall only be considered for evaluation purpose In joint venture consortium the lead partner shall only be an Indian citizen Indian partnership firm or Indian private/ public limited company.

- (c) The individual members who join in JV shall have to give an undertaking that they will maintain status-quo till the completion of the work is awarded to the JV Consortium, the same JV Consortium shall be maintained till the satisfactory completion of the work. This undertaking shall be submitted on Stamp paper Rs 100. Duly signed by authorized signatory, which shall be notarized.
- (d) In case of Bidder participating as a Joint Venture, on his selection for award of contract, all the partners/members of the Joint Venture will have to sign the Contract with the employer and will be jointly and severally liable for performance of the contract. Award of Contract will be in the name of Joint Venture consortium which will be considered as "Legal Entity" as far as this Bid/ Contract is concerned.
- (e) The Bid, and in case of a successful bid, the Form of Contract Agreement, shall



- be signed with the name of Joint Venture which will be legally binding on all the partners.
- (f) Lead partner shall be declared as Prime Bidder authorized to be in charge; and this authorization shall be evidenced by submitting a Power of Attorney signed by legally authorized signatories of all the partners;
- (g) The member in charge shall be authorized to incur liabilities, receive payments and receive instructions for and on behalf of any or all partners of the Joint Venture and the entire execution of the contract including defect liability period.
- (h) All members of the Joint Venture shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms, and a relevant statement to this effect shall be included in the Authorization mentioned under (b) above as well as in the Bid Form and the Form of Contract Agreement (in case of a successful Bid); and
- (i) A copy of the stamped and notarized agreement entered into by the Joint Venture partners shall be submitted with the Bid. Roles, responsibilities and financial stakes of all members of the Joint Venture consortium shall be clearly and unambiguously prescribed in the Joint Venture agreement. In case of non prescription, the JV agreement will be declared as invalid and the bid will be treated as non-responsive.
- (j) In case of Joint Venture financial strengths of each of the JV members individually shall not be less than minimum qualifying criteria worked out in proportionate to their financial stakes in the JV.
- (k) In case of physical criteria, either of the JV members shall meet the qualifying requirement in any single completed project without taking into account their financial stake in the JV agreement.
- (l) Each JV member shall have required registration certificate, solvency certificate, existence of company as per tender requirement. Each member shall satisfy these requirements separately.
- (m) The contractors participating in the name and form of a Joint Venture consortium shall have to clearly and unambiguously define the role, responsibilities and financial stake of each of the partners, the lead partner shall also have to be defined. On award of contract to such a Joint Venture consortium, each of the members of the Joint Venture consortium shall have



to sign the Contract. Each member of the JV shall be jointly and severally responsible for the performance of the contract.

- (n) In case of conflict between the terms in contract agreement and the Joint Venture documents, the terms in the contract agreement shall prevail.
- (o) The JV partners shall also need to be registered anywhere in India.

# 16.6 Monthly Reports

Monthly progress reports shall be prepared by the Concessionaire and submitted to the PSCDL. The first report shall cover the period up to the end of the first calendar month following the commencement date. Reports shall be submitted monthly thereafter, each within five working days after the last day of the month to which it related.

Reporting shall continue during both implementation and operation period. Each report shall include the following but shall not be limited to:

MIS Report for the Digital Smart Kiosk Infrastructure Solution which includes but not limited to Wifi Usage, Downtime and Band width usage, Digital Smart Kiosk application availability, no. of citizen complaints locked in the grievance portal, tourist feedback about the Digital Smart Kiosk facilities etc.

Selected SI shall finalize the MIS format with PSCDL.

Circumstances which may jeopardize the completion in accordance with the contract, and the measures being (or to be) adopted to overcome delays.

The reporting format shall be developed by the Concessionaire in consultation with the Engineer-in- charge (and consultants appointed if any) within 10 days of commencement. In consultation with Authority, the report format may evolve as required during the course of execution.

# 16.7 Meetings

Meetings shall be held in the office of Engineer-in-Charge or at other places as mutually fixed in advance. The proposed agenda for the meetings shall be exchanged at least two days in advance. It is required that a decision- maker of the Concessionaire is present at the meetings so that binding decisions can be taken about outstanding issues. Generally, the following issues shall be discussed.



# 16.8 Concessionaire's Representative

The Concessionaire shall appoint the Concessionaire's representative in consultation with the PSCDL and shall give them all authority necessary to act on the Concessionaire's behalf under the contract. He shall similarly submit the name and particulars of other persons appointed for the work. The Concessionaire shall not, without the prior consent of the PSCDL, revoke the appointment of the Concessionaire's representative or appoint a replacement. The Concessionaire's representative shall, on behalf of the Concessionaire, receive instructions. The Concessionaire's representative may delegate any powers, functions, and authority to any person, and may at any time revoke the delegation. Any delegation or revocation shall not to take effect until the PSCDL has received prior notice signed by the Concessionaire's representative, naming the person and specifying the powers, functions and authority being delegated or revoked.

# **16.9 The Safety Procedures**

The Concessionaire shall:

- i. Comply with all applicable safety regulations,
- ii. Take care for the safety of all person's entitled to be on the site,
- iii. Choose reasonable efforts to keep the site and work clear of Unnecessary obstruction so as to avoid danger to these persons,
- iv. Provide any temporary works (including road ways, foot ways, guards and fences) which may be necessary, because of the execution of works, for the use and protection of the public and of owners and occupy a server adjacent land.

# 16.10 Quality Assurance

In addition to the provisions of agreement of general conditions of contract, the Concessionaire shall institute a quality assurance system to demonstrate compliance with requirements of the RFP. The system shall be in accordance with the details stated in the contract and the quality assurance program will be got approved from the competent authority. PSCDL shall be entitled to audit any aspect of the system.

Compliance with the quality assurance system shall not relieve the Concessionaire of any of his duties, obligations or responsibilities under the contract.



#### 16.11 Unforeseeable Difficulties

- i. The Concessionaire shall be deemed to have obtained all necessary information as to risk, contingencies and other circumstances that may influence or affect the works;
- ii. By signing the contract, the Concessionaire accepts the total responsibility for having sustained all difficulties and costs of successfully completing the work and
- iii. The contract rates shall not be adjusted to take account of any unforeseen difficulties or costs.

# 16.12 Right of Way and Facilities

The required Right of Way shall be provided to the Concessionaire as per the approved Drawing (Plan) and in accordance with their Construction Programme. The Concessionaire shall bear all costs and charges for special and/or temporary rights of way, which he may require, including those for access to the site. The Concessionaire shall also obtain, at risk and costs, any additional facilities outside the side which he may require further purposes of the works.



# 16.13 Avoidance of Interference

The Concessionaire shall not interfere unnecessarily or improperly with:

- i. The convenience of the public, or
- ii. In the access to and use and occupation of all roads and other land, irrespective of whether they are public or in the possessor, of the PSCDL or others.

The Concessionaire shall indemnify and hold the PSCDL free against any form of damages, losses and expenses (including legal fees and expenses) resulting from any omission or commission of Concessionaire during the period of the concession.

# 16.14 Security of Site

Unless otherwise stated in particular conditions:

- i. The Concessionaire shall be responsible for keeping unauthorized persons off the site offices, campus etc. within the scope of work and
- ii. Authorized person's shall be limited to the Concessionaire personnel and the PSCDL's personnel; and to any other personnel notified to the Concessionaire, by (or on behalf of) the PSCDL.

# 16.15 Concessionaire's operations On-Site

The Concessionaire shall confine his operations to the site, and to any additional areas which may be obtained by the Concessionaire and agreed by the PSCDL as working areas The Concessionaire shall take all necessary precautions to keep Concessionaire's equipment and Concessionaire personnel within the site and these additional areas, and to keep them off adjacent land. The Concessionaire shall keep the site free from all unnecessary obstruction and not shall store or dispose of any Concessionaire's equipment or surplus materials. The Concessionaire shall clear away and remove from the site any wreckage, rubbish and temporary works which are no longer required.

# 16.16 Refund of Security Deposit

The security deposit submitted by the Successful Bidder would be released upon furnishing of the Performance Security in the form and manner stipulated in the Concession Agreement.

#### 16.17 Operation and Maintenance Manuals

Prior to the commencement of the tests on completion, the Concessionaire shall supply to the PSCDL provisional operation & maintenance manuals in sufficient



detail as specified in Vol. II of the RFP. The work shall not be considered to be completed for the purposes of completion of works until the PSCDL has received final operation & maintenance manuals in such detail.

#### 16.18 Performance Guarantee of Services

The bidder shall guarantee that the services shall comply with the agreed requirements and that the units installed will operate satisfactory at the time of commissioning and thereafter during period and also at that time of handing over, with the desired performance level.

# 16.19 Bank Guarantee Against Performance of Contract

(Performance Guarantee)

Bidder has to provide contract performance guarantee in the form of Bank guarantee as mentioned in Contract.

# 16.20 Forfeiture of Performance Security

Security amount in full or part may be forfeited in the following cases:-

- a) When any terms and conditions of the contract is breached.
- b) When the Applicant fails to make complete work/ O&M satisfactorily.

#### **16.21** Change in Consortium of Firm

- a) Any change in the constitution of the firm/company etc. shall be notified forthwith by the firm in writing to the PSCDL within a period of 30 days from the date of its occurrence & such changes shall not relive any new member or the member of the firm at the time of proposal from any liability under the contract.
- b) No new partner/partners shall be accepted in the firm/company by the Applicant in respect of the contract unless he/they agree(s) to abide by all its terms and conditions and deposit with the PSCDL on a written agreement to this effect. The firm's receipt of acknowledgement or that of any partner(s) subsequently accepted as above shall bind all of them and will be sufficient to discharge any liability under this contract

#### **16.22** Repudiation of Contract

The contract for Digital Smart Kiosk Infrastructure Solution can be repudiated at anytime by the PSCDL after giving an opportunity to the Concessionaire of being heard, if the work is not completed or maintained to its satisfaction. The reasons for repudiation shall be recorded by the PSCDL.



# 16.23 Legal Proceeding

All Legal proceedings, if necessary arises to institute may by any of the parties (PSCDL or Concessionaire) shall have to be lodged in Court situated in Puducherry and not elsewhere.

# 16.24 Failure of Breach of Contract

In case of breach of the contract, full/part of Performance guarantee can be forfeited and the action against defaulting firms may be taken like Black listing, suspension of business, banning of business etc. along with termination of the contract by PSCDL, without any compensation to the Concessionaire.

# 16.25 Termination

#### 16.26 Concessionaire's default

The PSCDL shall be entitled to terminate this Contract for the following reasons attributable to the Bidder, unless arising as a result of a Force Majeure Event

- a) Non-performance of material obligations or failure to perform under this Contract .
- b) Not providing timely repairs and maintenance and redistribution resulting in in non-functioning the Digital Smart Kiosk Infrastructure Solutions.
- c) Repeated non-performance even after giving notices.

# 16.27 Consequences of termination by PSCDL

If the PSCDL, with reasonable grounds, terminates the contract under Clause 16.26 above, the Security Deposit, and any other sums of the Concessionaire with the PSCDL, shall be fortified and action shall be taken against him as per General Conditions of Contract, if deemed appropriate.



#### 16.28 Indemnification

The Concessionaire to indemnify the PSCDL against the following:

- a) The Concessionaire shall at its own expense make good any physical loss or damage to the units occasioned by it in the course of the performance of its obligations under this Contract if and to the extent such loss or damage is caused by the willful misconduct or failure to follow Good Engineering Practices of the Concessionaire,
- b) The Bidder shall indemnify, defend and hold harmless the PSCDL and its officers, employees, agents and affiliates against any and all claims of loss, damage and expense of whatever kind and nature, including all related costs and expenses incurred in connection therewith, in respect of personal injury to or death of third parties and in respect of loss of or damage to any third party to the extent that the same arises out of:
  - i. Any breach by the Concessionaire of its obligations hereunder.
  - ii. Any negligent act or omission on the part of the Concessionaire, its sub Concessionaires or their respective agents or employees, and
  - iii. Any willful misconduct or breach of statutory duty on the part of the Bidder, its sub Concessionaires or their respective agents and employees.
  - iv. Any other event where such indemnification has been expressly mentioned in this Conditions of Contract for Operation and Maintenance.

# 17 General Requirements

- a) The Applicant shall acquaint himself with the proposed site of work, its approach roads, working space available before submitting the bid.
- b) If for any reason, any area in whole or part is not available for work, the agreed execution schedule shall be suitably modified. However, under no circumstances the Concessionaire shall be entitled to any relaxation, whatsoever, on this ground and he shall re-organize his resources to suit the modified schedule.
- c) The project cost on the part of the Applicant would include the cost of hardware, software, civil, electrical works, manpower and other costs. There will be recurring annual cost associated with operation and maintenance of these facilities as per the scope of the work defined in the Tender document.
- d) The Concessionaire shall be responsible for the operations and maintenance as per the



terms set out in the Tender document.

- e) If during the course of execution of the project any minor revisions to the work requirements like technical specifications, equipment sizing, etc. are to be made to meet the goals of the project; such changes shall be carried out without any cost. The quantities of hardware and software items if any as mentioned in this Tender document are indicative.
- f) LOST PROFITS/CONSEQUENTIAL DAMAGES: In no event shall either party be liable for any lost profits or consequential damages arising out of, or relating to this Agreement.

# 17.1 Ownership

PSCDL shall have an absolute & exclusive right/title/interest in Digital Smart Kiosk facilities and in no way shall the user of such property for implementing, managing and operating these facilities imply of granting any title or ownership to the Concessionaire.

#### 18 Administrative Guidelines

- a) This section describes the administrative guidelines, policies and procedures to be followed by the Concessionaire while undertaking operational activities. PSCDL is particular about safeguarding the aesthetics and regulatory norms of Puducherry and expects the Concessionaire to strictly abide to the same. This includes, but is not limited to, approach related to operational activities, safety and security aspects, repair and maintenance, vandalism, damage to public property, misuse of public amenities, misuse of public space and other key PSCDL requirements. The Concessionaire is responsible for adhering to the following administrative guidelines:
  - PSCDL reserves the right to intervene at any point throughout the Concession Agreement for all administrative, operation and maintenance activities.
  - Any civil and architectural work or structural changes required while implementation should go through proper approvals from PSCDL. Every plan that is submitted would be reviewed and approved with necessary amendments (if any) by the Project Implementation Committee of PSCDL based on the project plan. The Concessionaire is responsible for incorporating the amendments proposed by the Project Implementation Committee, and submit the revised plan for approval to PSCDL. All civil and architectural changes are to be implemented by the Concessionaire only after the plans are approved by PSCDL.
  - All regulatory approvals required for executing this project, acquired from concerned parties (Public and Private) should be planned and arranged by the Concessionaire. PSCDL will extend assistance in getting the requisite permission



from statutory bodies in this regard.

- The Concessionaire shall be responsible to keep all the tangible and intangible assets under this Agreement in good, operational and serviceable conditions at all times.
- The Concessionaire shall not cause any damage to Government buildings / other premises / property/ public places etc. If any damage occurs, the Concessionaire will perform necessary restoration work with their own cost.
- The work of Concessionaire shall be subject to inspection at various stages. The Concessionaire shall abide and follow all Safety and Security Regulations and practices at all times. The Concessionaire should not use any sub-standard products at any point of time.
- The Concessionaire would also be required to maintain a centralized service management and monitoring system at the Central Control Center, which will track new installations, complaints, issues logged by the Technical team, PSCDL and public.
- b) All the hardware and software supplied and replaced should be new and from reputed OEMs as per the Tender document. The Concessionaire shall ensure that the products procured are of the OEM (Original Equipment Manufacturer) proposed in the bid. The material shall be checked/validated/audited through agency identified by PSCDL, along with Quality tests before dispatching to site or thereafter. The Concessionaire is responsible to check and validate all material including hardware, software and peripherals and provide the list of the same to PSCDL before installation.

# 19 Operation and Maintenance (O&M) Guidelines

The Concessionaire shall follow the following Operation and Maintenance guidelines:

a) The Concessionaire has to adhere to the operation and maintenance policies and procedures, as directed by PSCDL, for managing and operating the Project. This includes (but not limited to) approach related to manpower, resources, vendor management, security, customer service, repair and maintenance of Digital Smart Kiosk solution components and other primary functions, user manuals, technical manuals, financial management, risk management, life/safety management, employee management and administrative policies and procedures. It also includes the key elements of a management plan for this project to include considerations for cost containment/ expense reduction, revenue enhancement (including non-operating revenue sources), customer service improvement, enhanced economic impact generation and more which would be some of the key functionalities for the



project operational characteristics.

- b) Concessionaire will be responsible to deploy on-field and off-field (but on-site at PSCDL) resources for appropriate up-keeping, maintenance, and operation of all network, hardware, and software components, and ensure smooth functioning of the project throughout the entire concession period of 10.5 years. The Concessionaire has to manage all Digital Smart Kiosk terminals (21 Locations) and assist the users till they get familiarized with the operation.
- c) The Central Control Center will be hosted and operated at premises provided by PSCDL(if available). Concessionaire will operate and maintain all equipment installed at Data Centre. Day to day operations at Central Control Centre will be monitored and operated by the Concessionaire. All the hardware and software issues will be the responsibility of the Concessionaire.
- d) The comprehensive Operations and Maintenance (O&M) period for all sensors, devices, equipment and its related hardware, software, electrical and network infrastructure components supplied and installed for this project including configuration of servers, desktops, routers, switches, firewall, Surveillance Cameras, LED displays, digital signages and various other active and passive components along with repair, replacement of parts, sensors, providing spare parts, updating, security alerts and patch updating, regular backup of the data etc. shall be upto a period of 10.5 years from the date of signing of concession agreement and handing over of Digital Smart Kiosk terminal (at 21 locations) to the PSCDL. The Concessionaire shall provide comprehensive on-site warranty for all the hardware items and peripherals, both on field and inside the Central Control Centre throughout the concession period.
- e) The Concessionaire shall depute adequate manpower as full time dedicated onsite team. The team shall be deputed to identify, acknowledge, troubleshoot, manage, replace and repair the hardware/ system software. The team shall undertake day-to-day troubleshooting and maintenance requirements for this project.
- f) The team shall also be responsible for regular monitoring of all the equipment, proactively perform warranty checks, and generate monitoring reports.
- g) The team shall be required to take regular backup of the application data as per the frequency defined by PSCDL. Security and safety arrangements for safe custody of the backup data shall also be the responsibility of Concessionaire.
- h) The Concessionaire shall ensure that the team has appropriate skill-sets for managing data centre, networking, and hardware and application software tools. The Concessionaire shall ensure that the instruction manuals, technical manuals and user manuals supplied by the manufacturer/ OEMs/ Concessionaire are referred,



referenced, reviewed and maintained up-to-date at all times.

- All patches and updates to any software and hardware devices shall be provided by the Concessionaire without any additional costs throughout the tenure of the Concession Agreement.
- j) PSCDL reserves the right to ask for replacement of any hardware, software and network components if it is not from a reputed brand and does not conform to all the requirements specified in the Tender document.
- k) After completing life of equipment, the Concessionaire has to replace them with new hardware / software of same or better specifications free of cost throughout the concession period.
- During the concession period, if any hardware or software needs to be replaced, the same will be replaced with same or better OEM and with same or higher configuration free of cost.

# 20 Passive Cabling Guidelines

- a) The Concessionaire is required to carry out all work related to passive cabling under the scope of this project. All work under passive cabling should be governed by a set of standards that specify wiring data centers, offices, and other buildings for data or voice communications, using fiber cables, category 5 (CAT 5E), category 6 (CAT 6), category 6A (CAT 6A) and modular sockets will be used as per requirement of data transfer. All material used shall be conforming to relevant ISO Standards.
- b) The Concessionaire should ensure that appropriate communication channels are setup for data, voice along with wireless compatibility. The Concessionaire should ensure that the cable layouts are neat and distinguishable. The termination of cables needs to be planned for future expansion of scope.

#### 21 No nuisance clause

The Applicant shall take all necessary precautions to prevent any nuisance or inconvenience to the owners, tenants or occupiers of adjacent properties during execution of work.

#### 22 Work Hindrance due to restrictions

a) In the event of any restrictions being imposed by the PSCDL, security agencies, traffic agencies, or any other authority in the working area, Concessionaire shall strictly follow such restrictions and nothing shall be excused from doing the stipulated work on this account. The loss of time on this account, if any, shall have to be made by deploying additional resources to complete the work in time. Other restrictions are



given as under:-

- b) The Concessionaire shall be responsible for behaviour and conduct of his staff. The Concessionaire shall engage no staff with doubtful integrity or having a bad record;
- c) The workers of the Concessionaire should strictly observe code of conduct and manner befitting security. If any employee of the Concessionaire fails to absolve proper conduct, the Concessionaire shall be liable to remove him from deployment, immediately in receipt of the instructions of the PSCDL;
- d) The Concessionaire shall be responsible for the conduct and behaviour of its workers employed for the work;
- e) The PSCDL shall have the right to have any person removed who is considered unacceptable due to the reasons of security, efficiency, conduct and the likes. Similarly, Concessionaire reserves the right to change the staff as per its requirement;
- f) The PSCDL shall not be responsible for any compensation, which may be required to be paid to the worker(s) of the Concessionaire consequent upon any injury/ mishap.

# 23 Third Party Audit

- a) PSCDL shall establish appropriate processes for notifying the successful bidder of any shortcomings from defined requirements at the earliest instance after noticing the same to enable the successful bidder to take corrective action. All gaps identified shall be addressed by the successful bidder immediately. It is the responsibility of the successful bidder to take any corrective action required to remove all shortcomings, before/during the roll out of the project. PSCDL may get the acceptance testing done either on its own or through a third party. It is to be noted that the involvement of the third party for acceptance testing and certification, does not absolve the successful bidder of his responsibilities to meet all SLAs as laid out in this RFP document.
- b) The PSCDL may also get the system audited either on its own or through a third party at any stage to ensure the success of the project.
- c) Such third-party agency for carrying out the acceptance testing and certification of the entire solution shall be nominated by the PSCDL.

# 24 Change Request

- a) PSCDL may at any time, by a written order given to the SI, make changes in scope of the work or schedule of services as specified in the RFP document.
- b) All changes outside the scope of work or Schedule of Services having financial implications in terms of the overall cost/ time of the project, shall be undertaken by the SI, only after securing the express consent of the PSCDL.



- c) While approving any change request, if required, PSCDL may ask the SI to deploy the required resources on-site.
- d) The change request/ management procedure will follow the following steps:
  - (i) Identification and documentation of the need for the change: The information related to initiator, initiation date and details of change required and priority of the change will be documented by PSCDL.
  - (ii) Analysis and evaluation of the Change Request: Impact of the change in terms of the estimated effort, changed schedule, cost and the items impacted will be analysed and documented by the SI.
  - (iii) Approval or disapproval of the change request: PSCDL will approve or disapprove the change requested including the additional payments (as per the quoted man-month rate), after discussion with SI on the impact of the change on schedule. Any change request where the total man-month effort requirement is up to the 15 man-days shall not be considered as change request.
  - (iv) Implementation of the change: The change will be implemented in accordance to the agreed cost, effort, and schedule by the SI.
  - (v) Verification of the change: The change will be verified and tested by the PSCDL on completion of implementation of change request prior to deployment on the production server.
    - Any change request shall be dealt with in accordance with the Change Control Schedule set out in this RFP.

# 25 Acceptance Testing

SI should self-certify the work which will be implemented during the preimplementation phase and provide the reports with all compliance to functional and non-functional requirements defined in this RFP. SI will do the beta testing for at least 1 month before handling the entire Digital Smart Kiosk infrastructure solution to PSCDL before project Go-Live.

The primary goal of Acceptance Testing, Audit & Certification is to ensure that the system meets requirements, standards, and specifications as set out in this RFP and as needed to achieve the desired outcomes. The basic approach of this will be ensuring that the following requirements are associated with clear and quantifiable metrics for accountability:

- 1) Refined Functional requirements
- 2) Infrastructure Compliance Review
- 3) Availability of Services in the defined locations
- 4) Performance and Scalability
- 5) Application Security



## 6) SLA Reporting System

#### 7) Project Documentation

As part of Acceptance testing, performed through a third party agency, PSCDL shall review all aspects of project development and implementation covering software and hardware including the processes relating to the design of solution architecture, design of systems and sub-systems, coding, testing, business process description, documentation, version control, change management, security, service oriented architecture, performance in relation to defined requirements, interoperability, scalability, availability and compliance with all the technical and functional requirements of the RFP and the agreement.

PSCDL will establish appropriate processes for notifying the Selected Bidder of any deviations from defined requirements at the earliest instance after noticing the same to enable the Selected Bidder to take corrective action. Such an involvement of the Acceptance Testing & Certification agencies, nominated by PSCDL, will not, however, absolve the SI of the fundamental responsibility of designing, developing, installing, testing and commissioning the various components of the project to deliver the services in perfect conformity with the SLAs.

# Following discusses the acceptance criteria to be adopted for system as mentioned above:

#### 1) Refined Functional Requirements Review

The system developed/customized by the Selected Bidder shall be reviewed and verified by the agency against the Refined Functional Requirements/ SRS. Any gaps, identified as a severe or critical in nature, shall be addressed by the Selected Bidder immediately prior to Go-live of the system. One of the key inputs for this testing shall be the traceability matrix to be developed by the Selected Bidder from the system. Apart from Traceability Matrix, an agency may develop its own testing plans for validation of compliance of the system against the defined requirements. The acceptance testing w.r.t. the refined functional requirements shall be performed by both independent third-party agencies (external audit) as well as the select internal departmental users (i.e. User Acceptance Testing).

#### 2) Infrastructure Compliance Review

Third party agency shall perform the Infrastructure Compliance Review to verify the conformity of the Infrastructure supplied by the Selected Bidder against the requirements and specifications provided in the RFP and/or as proposed in the proposal submitted by the Selected Bidder. Compliance review shall not absolve Selected Bidder from ensuring that proposed infrastructure meets the SLA requirements.



# 3) Security Review

The software developed/customized for the system shall be audited by the agency from a security & controls perspective. Such audit shall also include the IT infrastructure and network deployed for the system. Following are the broad activities to be performed by the Agency as part of Security Review. The security review shall, subject the system for the following activities:

- a) Audit of Network, Server and Application security mechanisms
- b) Assessment of authentication mechanism provided in the application /components/ modules
- c) Assessment of data encryption mechanisms implemented for the solution
- d) Assessment of data access privileges, retention periods and archival mechanisms
- e) Server and Application security features incorporated etc.

#### 4) Performance

Performance is another key requirement for the system and the agency shall review the performance of the deployed solution against certain key parameters defined in SLA described in this RFP and/or agreement between PSCDL & Selected Bidder.

Such parameters include request-response time, workflow processing time, concurrent sessions supported by the system, Time for recovery from failure, Disaster Recovery drill, etc. The performance review also includes verification of scalability provisioned in the system for catering to the requirements of application volume growth in the future.

# 5) Availability

The system should be designed to remove all single point failures. Appropriate redundancy shall be built in all the critical components to provide the ability to recover from failures. The agency shall perform various tests to verify the availability of the services in case of component/location failures. The agency shall also verify the availability of services to all the users in the defined locations.

#### 6) SLA Reporting System

The Selected Bidder shall provide the tool to monitor the performance indicators listed under SLA prescribed in this RFP. The Acceptance Testing & Certification agency shall verify the accuracy and completeness of the information captured by the SLA monitoring system implemented by the Selected Bidder and shall certify the same.

# 7) Project Documentation

The Agency shall review the project documents developed by Selected Bidder including requirements, design, source code, installation, training and administration manuals, version control etc. Any issues/gaps identified by the Agency, in any of the above areas, shall be addressed to the complete satisfaction of PSCDL.



# 26 Data Ownership

All the data created as the part of the project shall be owned by PSCDL. The SI shall take utmost care in maintaining security, confidentiality and backup of this data. Access to the data / systems shall be given by the SI only as per the IT Security Policy, approved by PSCDL. PSCDLs authorized representative(s) shall conduct periodic / surprise security reviews and audits, to ensure the compliance by the SI Vendor to data / system security.

# **27 Intellectual Property Rights**

- a) For the customized solution developed for the project, IPR of the solution would belong exclusively to the PSCDL. The SI shall transfer the source code to PSCDL at the stage of successful implementation of the respective Smart Kiosk component stream. SI shall also submit all the necessary instructions for incorporating any modification / changes in the software and its compilation into executable / installable product. PSCDL may permit the SI, right to use the customized software for any similar project being executed by the same SI, with payment of reasonable royalty to PSCDL for the same.
- b) Deliverables provided to PSCDL by System Integrator during the course of its performance under this Agreement, all rights, title and interest in and to such Deliverables, shall, as between System Integrator and PSCDL, immediately upon creation, vest in PSCDL. To the extent that the System Integrator Proprietary Information is incorporated within the Deliverables, System Integrator and its employees engaged hereby grant to PSCDL a worldwide, perpetual, irrevocable, non-exclusive, transferable, paid-up right and license to use, copy, modify (or have modified), use and copy derivative works for the benefit of and internal use of PSCDCL.

# 28 Exit Management

#### (i) Exit Management Purpose

This clause sets out the provisions, which will apply during Exit Management period. The Parties shall ensure that their respective associated entities carry out their respective obligations set out in this Exit Management Clause.

The exit management period starts, in case of expiry of contract, at least 6 months prior to the date when the contract comes to an end or in case of termination of contract, on the date when the notice of termination is sent to the SI. The exit management period ends on the date agreed upon by the PSCDL or Six months after the beginning of the exit management period, whichever is earlier.



#### (ii) Confidential Information, Security and Data

Systems Integrator will promptly on the commencement of the exit management period, supply to the PSCDL or its nominated agencies the following:

- a) Information relating to the current services rendered and performance data relating to the performance of the services; Documentation relating to Digital Smart Kiosk Project, Project's Intellectual Property Rights; any other data and confidential information related to the Project;
- b) Project data as is reasonably required for purposes of the Project or for transitioning of the services to its Replacing Successful Bidder in a readily available format.
- c) All other information (including but not limited to documents, records and agreements) relating to the services reasonably necessary to enable the PSCDL and its nominated agencies, or its Replacing Vendor to carry out due diligence in order to transition the provision of the Services to PSCDL or its nominated agencies, or its Replacing Vendor (as the case may be).

# (iii) Employees

Promptly on reasonable request at any time during the exit management period, the Successful Bidder shall, subject to applicable laws, restraints and regulations (including in particular those relating to privacy) provide to PSCDL a list of all employees (with job titles and communication address) of the Successful Bidder, dedicated to providing the services at the commencement of the exit management period; To the extent that any Transfer Regulation does not apply to any employee of the Successful Bidder, PSCDL or Replacing Vendor may make an offer of contract for services to such employee of the Successful Bidder and the Successful Bidder shall not enforce or impose any contractual provision that would prevent any such employee from being hired by the PSCDL or any Replacing Vendor.

## (iv) Rights of Access to Information

At any time during the exit management period, the Successful Bidder will be obliged to provide an access of information to PSCDL and / or any Replacing Vendor in order to make an inventory of the Assets (including hardware / Software / Active / passive), documentations, manuals, catalogs, archive data, Live data, policy documents or any other material related to the Digital Smart Kiosk project.

#### (v) Exit Management Plan

Successful Bidder shall provide PSCDL with a recommended exit management plan ("Exit Management Plan") within 90 days of signing of the contract, which shall deal with at least the following aspects of exit management in relation to the SLA as a whole and in relation to the Project Implementation, the Operation and Management SLA and Scope of work definition.



- a) A detailed program of the transfer process that could be used in conjunction with a Replacement Vendor including details of the means to be used to ensure continuing provision of the services throughout the transfer process or until the cessation of the services and of the management structure to be used during the transfer;
- b) Plans for the communication with such of the Successful Bidder, staff, suppliers, customers and any related third party as are necessary to avoid any material detrimental impact on Project's operations as a result of undertaking the transfer;
- c) Plans for provision of contingent support to the Digital Smart Kiosk project and Replacement Vendor for a reasonable period (minimum one month) after transfer.
- d) Successful Bidder shall re-draft the Exit Management Plan annually to ensure that it is kept relevant and up to date.
- e) Each Exit Management Plan shall be presented by the Successful Bidder to and approved by PSCDL or its nominated agencies.
- f) During the exit management period, the Successful Bidder shall use its best efforts to deliver the services.

# 29 Proposed Manpower

Below is the list of manpower proposed for the project:

#### 1. Project Manager

- > MBA and B.Tech in Information Technology / Computer Science / Electronics
- ➤ With at least 8 years of experience in handling PPP / IT projects.

#### 2. Solution Architecture

- ➤ B.Tech in Information Technology / Computer Science / Electronics
- > with at least 5 years of experience in handling IT projects

# 3. Support Engineer / Site Engineer

- ➤ B.Tech in Civil
- ➤ with at least 3 years of experience in handling infrastructure projects (including engineering drawings, site preparation, civil parameters)

# 30 PSCDL Right to Advertisement

After every 10 minutes of the time used by concessionaire. PSCDL information will be displayed for two minutes. The concessionaire will design the content for the same and display it on the advertisement panels.



# 31 Loss and Theft of Property

a) The Concessionaire shall be responsible for the up keeping of all the assets created and any loss and damage thereof shall be made good by him immediately at his own cost to continue the services under the scope of Tender document available for use. If Concessionaire fails to create new assets which are damaged by theft or any other reason and Services are affected then the penalties will be levied for not meeting the desired level of SLA. If the level of services goes below the minimum level as prescribed in the SLA then PSCDL will get it done at risk and cost of the Concessionaire or take any suitable action including termination of Concession Agreement.

# 31.1 Punitive Clause

#### 31.1.1 Liquidated Damages (LD) for delay

PSCDL will impose LD on the Concessionaire for not meeting the post Implementation Service Level Agreements (SLAs). This would be supported by the respective facts and figures. The quantum of fine would be decided on case to case by PSCDL.

SLAs during implementation: These SLAs shall be used to evaluate the timelines for completion of deliverables that are listed in the deliverable. These SLAs will be applicable from the day of commissioning of the project.

# 31.1.2 Other penalties

- a) It is expected that the Concessionaire should comply with all the Policy / Procedural / Regulatory Guidelines enforced by Government of India, Government of Puducherry, and other statutory and related bodies, as amended from time to time. The Concessionaire should also safeguard the Application Security and Application Integrity. LD would be applicable for non-compliance of relevant security certifications. There would be Zero Tolerance policy against such breaches.
- b) The penalties across various breaches could be categorized as follows (this includes but not limited to the following):
  - i. Information Security Breach: Any data leakage, information sharing, reports sharing without the consent of PSCDL.
  - ii. Network & System Security Breach: Any instance of hacking, information / data compromise, unauthorized access to public Wi-Fi.
  - iii. Guidelines Breach: Non-compliance to guidelines shared by various government agencies such as complying with standards for website/mobile app development etc.
- c) For any of the breach for the above-mentioned category, a LD would be levied on the Concessionaire for every instance of occurrence and if not responded within the



- agreed timeline and response time, then PSCDL has the right to take necessary action. The response time refers to immediate remedial action taken and preventive measures updated by the Concessionaire on occurrence of the event.
- d) Guidelines Breach includes non-compliance to certain guidelines as set by various agencies like Ministry of Electronics and Information Technology, Department of Telecommunications, Department of Science and Technology, or other statutory Authorities etc. In such cases, resolution of the issue is mandatory. The Concessionaire would be required to respond with the action plan / change request, as applicable, in order to resolve the guidelines breach within the specified response time.

# 31.1.3 No Damage Clause

- a) Penalties shall not be levied on the Concessionaire in the following cases:
  - i. In case of a force majeure event affecting the SLA which is beyond the control of the Concessionaire, Force Majeure events shall be considered in line with the Force Majeure clause mentioned in this Tender document.
  - ii. Theft cases by default/ vandalism would not be considered as "beyond the control of Concessionaire". Hence, the Concessionaire should be taking adequate anti-theft measures, spares strategy, Insurance and other safe measures as required to maintain the desired required SLA.

#### 32 Events of Default and Termination

## 32.1.1 Events of Default

Any of the following events shall constitute an event of default.

- a) The Concessionaire has failed to adhere to the project execution requirements and the Implementation Schedule and such failure, in the reasonable estimation of the Engineer-in-Charge, is likely to delay complete implementation of the scope of work defined in this Tender document beyond 8 weeks of the Scheduled Date;
- b) The Concessionaire has failed to complete implementation of the scope of work defined in this Tender document beyond 8 weeks of the Scheduled Date;
- c) The Concessionaire is in Material Breach of O&M Requirements;
- d) Any representation made or warranties given by the Concessionaire under this Tender document is found to be false or misleading;
- e) The Concessionaire has created any Encumbrance on the Project Site in favour of any Person, as otherwise expressly permitted under this Tender document;
- f) The Concessionaire has failed to ensure minimum shareholding requirements.



- g) A resolution has been passed by the shareholders of the Concessionaire for the voluntary winding up of the Concessionaire;
- h) Any petition for winding up of the Concessionaire has been admitted and liquidator or provisional liquidator has been appointed or the Concessionaire has been ordered to be wound up by Court of competent jurisdiction except for the purpose of amalgamation or reconstruction with the prior consent of PSCDL, provided that, as part of such amalgamation or reconstruction, the property, assets and undertaking of the Concessionaire are transferred to the amalgamated or reconstructed entity and that the amalgamated or reconstructed entity has unconditionally assumed the obligations of the Concessionaire under this Tender document, and provided further that:
- the amalgamated or reconstructed entity has the technical capability and operating experience necessary for the performance of its obligations under this Tender document;
- j) the amalgamated or reconstructed entity has the financial standing to perform its obligations under this Tender document and has a credit worthiness at least as good as that of the Concessionaire as at Commencement Date; and Tender document remains in full force and effect.
- k) The Concessionaire has abandoned the Project Facilities.
- 1) The Concessionaire has repudiated this Tender document or has otherwise expressed an intention not to be bound by this Tender document.
- m) The Concessionaire has suffered an attachment levied on any of the assets located or comprised in the Project Site/Project Facilities, causing a Material Adverse Effect on the Project and such attachment has continued for a period exceeding 90 days.
- n) The Concessionaire has otherwise been in Material Breach of any of its other obligations and terms and conditions under this Tender document.
- o) The Concessionaire is not able to meet the SLAs minimum requirements at all the times or otherwise.
- p) The Concessionaire reporting bankruptcy to the PSCDL, or any appropriate statutory forum.
- q) If the Concessionaire or any of its principal officers is involved in any moral turpitude or any illegal activity in the understanding of the PSCDL or is convicted by any orders of the Court.
- r) If the PSCDL has a reason to believe that the Digital Smart Kiosk Infrastructure Solution contract has been transferred/sold or in any way alienated to any third party or that the Kiosk infrastructure has been leased, sub-leased, rented or sub-let or in



- any way alienated or if any money/loan has been raised/procured by pledging, mortgaging or otherwise such Kiosk space
- s) The Concessionaire permitted to use the allotted Kiosk space / Infrastructure with prior approval of PSCDL. The all expenses for setting up additional facilities shall be borne by the Concessionaire
- t) If the Concessionaire makes any encroachment on the public land.
- u) If the Digital Smart Kiosk facility is constructed in such a way that it obstructs the passage for the pedestrian traffic.
- v) If the Concessionaire obstructs the entry of Chairperson/ Commissioner/Deputy Commissioner/project engineers of the PSCDL or any other Officer authorized by him/her.
- w) If the Concessionaire obstructs the entry of any elected representatives of the Indian Federal System governing the PSCDL and their respective officers authorized by him/her.
- x) If the Concessionaire does not resolve the complaints of the citizen/PSCDL within the reasonable time.
- y) If the Concessionaire puts up any super-structure in contravention of the terms & conditions.



# Request for Proposal for Design, Supply, Installation, Configuration, Commissioning and Maintenance support for Digital Smart Kiosk at designated locations under "Smart City Mission" at Puducherry

Volume IV: Financial Bid



RFP for Digital Smart Kiosk on PPP Mode

Tender No: 008/PSCDL/2019 July 2019

Puducherry Smart City Development Limited
Puducherry



# **Annexure B**

# **Format for Financial Bid**

Bidder shall offer a Revenue Share in the form of ........ per cent (in words) out of the Gross Revenues (annual) of the Project as share of PSCDL for undertaking the aforesaid Project in accordance with the Bidding Documents and the Concession Agreement

The payment to PSCDL shall be done on quarterly basis.

# I. Evaluation Methodology

- a) Commercial Bids of only top bidders who have obtained 70 % (Seventy percentage) or above marks in the technical bid evaluation process will be opened.
- b) The Highest revenue sharing proposal {HEC} should be given a financial score of 100 points. The financial scores of other proposals should be determined proportionately.

#### Formula:

Total points  $(H-1) = T(w) \times T(s) + F(w) \times F(s)$ ,

Where

T (w) stands for weight of the technical score. (70%)

T (s) stands for technical score

F (w) stands for weight of the financial proposal. (30%).

F(s) stands for financial score

 $F(s) = \{(EC/HEC) *100\}$ 

EC stands for Evaluated Revenue of the financial proposal

HEC stands for Highest Evaluated Revenue of the financial proposal

{Bidder Quoted Highest Revenue will get Score (Marks) F(s) = 100