

Rajkot Smart City Development Limited had invited tenders for Selection of MSI for Implementation of Smart Solutions in Rajkot City from 16th March, 2018. Pre-Bid meeting of which was held on 27th March, 2018 . The, the following addendum and corrigendum is hereby issued.

Addendum and Corrigendum

1.1. Terms and Conditions

The Bidders are requested to take note of the following changes made in the RFP documents, which are to be taken in to account while submitting the RFP. They shall be presumed to have done so and submitted the RFP accordingly.

- This Addendum and Corrigendum shall be the part of the RFP documents.
- All items specified in this Addendum and Corrigendum supersede relevant items to that effect as provided in the original RFP documents. All other specifications, terms and conditions of the original RFP document shall remain unchanged.
- The Amendments to certain clauses / terms as per Annexure – A are made in the RFP.
- Clarifications and replies to the all queries received from prospective bidders are as per Annexure-B.

Regd. Office:

RMC Commissioner Branch 1st Floor,
Ambedkar Bhavan, Dhebar Road, Rajkot – 360 001.

Correspondence Address:

3rd Floor, ICCR RMC Office, Nana Mauva Chowk,
150 Feet Ring Road, Rajkot – 360 005.

1.2. Annexure A – Annexure A: Amendments to certain clauses / terms of tender

Bidder shall read and consider following points, which shall be a part of the RFP documents.

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150 Feet Ring Road, Rajkot – 360 005.

Sr No	Clause No.	Page No.	Original Clause	Revised Clause
1.	Vol I - Instruction to Bidders	Page 9 of 103	For International project if the original client certificate and other documents are in language other than English than a translated copy duly verified by Indian embassy shall be submit with bid document	Notarized copy of translated document shall be acceptable , same should be signed by authorized signatory of the company
2.	Vol I, 2.2, Consortium Conditions	Page 12 of 103	Roles and responsibilities of each consortium partner, the identification of the lead partner, and providing for joint and several liability for each partner.	Lead bidder is liable for full scope of work and consortium member will be responsible for its own scope.
3.	Volume I – Instructions to Bidders 2.8 Earnest Money Deposit (EMD)	Page 14 of 103	The bidder should also pay EMD of Rs. 85,00,000/- (Rupees Eighty Five Lakhs Only) whereby in the form of Demand Draft or the form of Bank guarantee of any nationalized / scheduled banks with validity of 180 days beyond the original validity period for the bid. No exemption for submitting the EMD will be given to any agency. Bid security in any other form will not be entertained.	The bidder should also pay EMD of Rs. 85,00,000/- (Rupees Eighty Five Lakhs Only) whereby in the form of Demand Draft or the form of Bank guarantee of any nationalized / scheduled banks with validity of 180 days beyond the original validity period for the bid. No exemption for submitting the EMD will be given to any agency. Bid security in any other form will not be entertained.
4.	Volume I, 2.11.1, Pre-Qualification Criteria, Clause # 1	16 of 103	The Sole Bidder OR Lead Bidder (in case of consortium) and Consortium Members Should be: Either a company registered under the Indian Companies Act 1956/2013 or a Limited Liability	The Sole Bidder OR Lead Bidder (in case of consortium) and Consortium Members Should be: Either a company registered under the Indian Companies Act 1956/2013 or a Limited Liability Partnership Firm under Limited Liability Partnership Firm Act 2008 and should be

			Partnership Firm under Limited Liability Partnership Firm Act 2008 and should be operational at least for last 7 years as on date of publishing of RFP. Max 3 companies are allowed in a consortium including lead bidder	operational at least for last 7 years as on date of publishing of RFP. Max 5 companies are allowed in a consortium including lead bidder
5.	Volume I, 2.11.1, Pre-Qualification Criteria, Clause # 5	17 of 103	The bidder (or any Consortium member) should have expertise and experience in implementation of at least 1 ERP and e-governance project of value not less than INR 25Crore in last seven years ending on 31 st Dec 2017)	The bidder (or any Consortium member) should have expertise and experience in implementation of at least 1 ERP project of value not less than INR 10 Crore in last seven years ending on 31 st Dec 2017)
6.	Volume I, 2.11.1, Pre-Qualification Criteria, Clause # 6	18 of 103	The bidder (or any Consortium member) should have expertise and experience in implementation of at least 1 GIS solution for a municipal corporation, worth not less than INR 10 Crore in last seven years ending on 31 st Dec 2017)	The bidder (or any Consortium member) should have expertise and experience in implementation of at least 1 GIS solution for a municipal corporation/ government agencies/ semi-government establishments /PSU/Smart Cities worth not less than INR 5 Crore in last seven years ending on 31 st Dec 2017)
7.	Volume I, 2.11.1, Pre-Qualification Criteria, Clause# 7	19 of 103	The bidder (or any Consortium member) should have experience of implementing both of the following scope worth not less than Rs. 20 Crore in last 7 years ending 31 st Dec 2017 Systems like Turnstile/flap gates, AFCS, Public Information	The bidder (or any Consortium member) should have experience of implementing both of the following scope in last 7 years ending 31 st Dec 2017 Systems like Turnstile/flap gates/ETM and AFCS for public transit operators with at least 50,000 daily transactions (AFCS Projects)

			System (PIS),PA system, variable message sign system/CCTV Surveillance for at least 30 nos. of bus stops or 50 nos. of buses or at metro or Airport or Govt./ Public offices. At least 20 semi actuated or fully actuated or centrally controlled traffic signals with a centralized software system	Public Information System (PIS)/ Public Address system / variable message sign system/CCTV Surveillance for at least 30 nos. of bus stops or 50 nos. of buses or at metro or Airport or Govt. / Semi Govt./Smart Cities/Urban Local Body. (ITMS Projects) It is not necessary that both components (ITMS and AFCS) be a part of single project only. The bidder may showcase two distinct projects with each project having either ITMS or AFCS scope; however, both projects together must entail ITS and AFCS scope.
8.	Additional Clause			The bidder (or any Consortium member) should have experience of implementing the following scope in last 7 years ending 31st Dec 2017 At least 20 semi actuated or fully actuated or centrally controlled traffic signals with a centralized software system
9.	Additional Clause – Documentary evidence			Documentary evidence (Citation, Copy of completion / Ongoing client certificate and work order / Contract) Note: In case project is on-going a certificate from the project Implementing Authority has to be provided mentioning that 50% of Capex complete In case the experience shown is that of the bidder's parent / subsidiary /sister concern company (Minimum ownership of parent company should be 50%), then the following additional documents are required: Certificate signed by the Company Secretary/statutory Auditor/2 Board of Directors

				of the bidder certifying that the entity whose experience is shown is parent/subsidiary/sister concern Company. Shareholding pattern of the bidding entity as per audit reports																		
10.	Additional Clause – OEM citation			One OEM can participate with only one consortium																		
11.	Volume I, 3.5.1, Technical Bid Evaluation Criteria Clause # B3	33 of 103	<p>The bidder (or any Consortium member) having expertise and experience in implementation of at least 1 ERP and e-governance project of value not less than INR 25 Crore in last seven years ending on 31st Dec 2017) will get 4.5 marks</p> <p>For every additional ERP project (worth at least INR 25 Cr.), the bidder will get 1 mark subject to a maximum of 10 marks.</p> <table><tr><th>No of Projects</th><th>Marks</th></tr><tr><td>>=4</td><td>7.5</td></tr><tr><td>=3</td><td>6.5</td></tr><tr><td>=2</td><td>5.5</td></tr><tr><td>=1</td><td>4.5</td></tr></table>	No of Projects	Marks	>=4	7.5	=3	6.5	=2	5.5	=1	4.5	<p>The bidder (or any Consortium member) having expertise and experience in implementation of at least 1 ERP project of value not less than INR 10 Crore in last seven years ending on 31st Dec 2017) will get 5.5 marks</p> <p>For every additional ERP project (worth at least INR 10 Cr.), the bidder will get 1 mark subject to a maximum of 7.5 marks. For the additional project - OEM citations will be accepted; however one project which fetches 5.5 marks has to be executed by lead bidder or member of consortium. In absence of evidence of one project executed by the lead bidder or consortium member – no marks will be awarded for this criteria.</p> <table><tr><th>No of Projects</th><th>Marks</th></tr><tr><td>>=3</td><td>7.5</td></tr><tr><td>=2</td><td>6.5</td></tr><tr><td>=1</td><td>5.5</td></tr></table>	No of Projects	Marks	>=3	7.5	=2	6.5	=1	5.5
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12.	Volume I, 3.5.1, Technical Bid Evaluation Criteria Clause # B4	34 of 103	The bidder (or any Consortium member) having expertise and experience in implementation of at least 1 GIS solution for a municipal corporation/ government	The bidder (or any Consortium member) having expertise and experience in implementation of at least 1 GIS solution for a municipal corporation/ government agencies/ semi-government establishments /PSU/Smart Cities																		

			<p>agencies/ semi-government establishments /PSU/Smart Cities worth not less than INR 10 Crore in last seven years ending on 31st Dec 2017) will get 4.5 marks</p> <p>For every additional Enterprise GIS project (worth at least INR 10 Cr.), the bidder will get 1 mark subject to a maximum of 10 marks.</p> <table><tr><th>No of Projects</th><th>Marks</th></tr><tr><td>>=4</td><td>7.5</td></tr><tr><td>=3</td><td>6.5</td></tr><tr><td>=2</td><td>5.5</td></tr><tr><td>=1</td><td>4.5</td></tr></table>	No of Projects	Marks	>=4	7.5	=3	6.5	=2	5.5	=1	4.5	<p>worth not less than INR 5 Crore in last seven years ending on 31st Dec 2017) will get 5.5 marks</p> <p>For every additional Enterprise GIS project (worth at least INR 5 Cr.), the bidder will get 1 mark subject to a maximum of 7.5 marks. For the additional project - OEM citations will be accepted; however one project which fetches 5.5 marks has to be executed by lead bidder or member of consortium. In absence of evidence of one project executed by the lead bidder or consortium member – no marks will be awarded for this criteria.</p> <table><tr><th>No of Projects</th><th>Marks</th></tr><tr><td>>=3</td><td>7.5</td></tr><tr><td>=2</td><td>6.5</td></tr><tr><td>=1</td><td>5.5</td></tr></table>	No of Projects	Marks	>=3	7.5	=2	6.5	=1	5.5
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13.	Volume I, 3.5.1, Bid Evaluation Criteria Clause #B5	34 of 103	<p>The bidder (or any Consortium member) having experience of implementation and Integration with central system following scope worth not less than Rs. 20 Crore in last 7 years (till years ending 31st Dec 2017) will get 5.5 marks</p> <ul style="list-style-type: none">Systems like Turnstile/flap gates, AFCS, Public Information System (PIS), PA system, variable message sign system/CCTV	<p>The bidder (or any Consortium member) having experience of implementation and Integration with central system following scope n last 7 years (till years ending 31st Dec 2017) will get 5.5 marks</p> <ul style="list-style-type: none">Systems like Turnstile/flap gates/ETM and AFCS for public transit operators with at least 50,000 daily transactionsPublic Information System (PIS)/ Public Address system / variable message sign system/CCTV Surveillance for at least 30 nos. of bus stops or 50 nos. of buses or at metro or Airport or Govt. / Semi Govt./Smart Cities/Urban Local Body																		

			<p>Surveillance for at least 30nos of bus stops or 50 nos. of buses at metro or Airport or Govt./ Public offices.</p> <p>For every additional ITMS project of same size, the bidder will get 1 mark subject to a maximum of 7.5 marks.</p> <table><tr><th>No of Projects</th><th>Marks</th></tr><tr><td>>=3</td><td>7.5</td></tr><tr><td>=2</td><td>6.5</td></tr><tr><td>=1</td><td>5.5</td></tr></table>	No of Projects	Marks	>=3	7.5	=2	6.5	=1	5.5	<p>For every additional project of same scope as defined above, the bidder will get 1 mark subject to a maximum of 7.5 marks. For the additional project - OEM citations will be accepted; however one project which fetches 5.5 marks has to be executed by lead bidder or member of consortium. In absence of evidence of one project executed by the lead bidder or consortium member – no marks will be awarded for this criteria.</p> <p>It is not necessary that both components (ITMS and AFCS) be a part of single project only. The bidder may showcase two distinct projects with each project having either ITMS or AFCS scope; however, both projects together must entail ITS and AFCS scope.</p> <p>The OEM for the AFCS project will be the one who provides AFCS solution software. The OEM for the ITMS project will be the one who provides ITMS solution software.</p> <table><tr><th>No of Projects</th><th>Marks</th></tr><tr><td>>=3</td><td>7.5</td></tr><tr><td>=2</td><td>6.5</td></tr><tr><td>=1</td><td>5.5</td></tr></table>	No of Projects	Marks	>=3	7.5	=2	6.5	=1	5.5
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14.	Volume I, 3.5.1, Bid Evaluation Criteria Clause #B6	35 of 103	The Bidder (or any Consortium member) having experience in implementation of At least 20 semi actuated or fully actuated or centrally controlled traffic	The Bidder (or any Consortium member) having experience in implementation of at least 20 semi actuated or fully actuated or centrally controlled traffic signals with a centralized software system in last 7 years as on 31 st Dec 2017 will get 5-5 marks.																

			<p>signals with a centralized software system worth Rs 10 Crore in last 7 years as on 31st Dec 2017 will get 5.5 marks</p> <p>For every additional ATCS project of similar size, the bidder will get 1 mark subject to a maximum of 5 marks.</p> <table><tr><td>No of Projects</td><td>Marks</td></tr><tr><td>>=3</td><td>7.5</td></tr><tr><td>=2</td><td>6.5</td></tr><tr><td>=1</td><td>5.5</td></tr></table>	No of Projects	Marks	>=3	7.5	=2	6.5	=1	5.5	<p>For every additional ATCS project of similar size, the bidder will get 1 mark subject to a maximum of 7.5 marks. For the additional project - OEM citations will be accepted; however one project which fetches 5.5 marks has to be executed by lead bidder or member of consortium. In absence of evidence of one project executed by the lead bidder or consortium member – no marks will be awarded for this criteria.</p> <p>The OEM for the ATCS project will be the one who provides ATCS solution software and controllers.</p> <table><tr><td>No of Projects</td><td>Marks</td></tr><tr><td>>=3</td><td>7.5</td></tr><tr><td>=2</td><td>6.5</td></tr><tr><td>=1</td><td>5.5</td></tr></table>	No of Projects	Marks	>=3	7.5	=2	6.5	=1	5.5
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15.	Vol I 3.5.1 Technical Bid Evaluation Criteria	Page 37 of 103	Minimum absolute technical score to qualify for commercial evaluation is 70 marks out of total 100 marks. However, bidder needs to mandatorily score minimum 18 points in the “Proof of concept “clause.	Minimum absolute technical score to qualify for commercial evaluation is 70 marks out of total 100 marks. However, bidder needs to mandatorily score minimum 18 points in the “Proof of concept “clause.																
16.	RFP Vol I/Clause No. 3.51.1/Notes Technical Bid Evaluation Criteria/1. Documentary evidence	Page 36 of 103	c. Bidder (or consortium member if any) may submit the Self certification, clearly mentioning project details like scope, value, duration, client details etc. as required for the evaluation criteria. The self-	c. Bidder (or consortium member if any) may submit the Self certification, clearly mentioning project details like scope, value, duration, client details etc. as required for the evaluation criteria. The self-certificate shall be signed by at least one members of Board of director/ Authorized person of the Bidder (or consortium member if any).																

			certificate shall be signed by at least 2 members of Board of director of the Bidder (or consortium member if any).	
17.	Volume I – Instructions to Bidders 4.4 Warranty & Maintenance	Page 42 of 103	1. The Contract period shall commence from the date of signing of contract or Issuance of LoI, whichever is earlier, and shall remain valid for 60 Months from the date of signing of contract.	Agreement shall be valid for total contract period i.e. Go live of Request Order 3 + 60 Months.
18.	Vol I, 7.9 Bill of Material	Page 72 of 103		It is expected that bidder will integrate all the systems to be deployed as part of this RFP. Additionally other integrations are also required to be taken care of. Please refer to additional Bill of material section for more details.
19.	Vol I, 7.9 Bill of Material	Page 72 of 103	Data Center, Servers	All the clause related to server is deleted. The bidder is expected to size the compute according to solution requirement. The minimum specification of blade server is detailed below. The bidder is expected to propose computation according to solution. Please refer to updated BOM for server.
20.	Vol I, 7.9, Proposed Bill of Material	Page 72 of 103		If the ICT components is not mentioned in BOM the clause for that ICT component stands deleted. Refer corrigendum for Make and model of all the existing system. The bidder is expected to consider overall sizing requirements and design a system which is scalable for next 5 years, in case any additional components are required the same must be factored as a part of "any other items"
21.	Vol II, 3.1 Components & Services Overview	Page 18 of 615	j) Ensure redundancy at each level	The DR is not expected to function in an HA mode.

22.	Vol II part I Integrated Transport Management	Page 155 of 305		Refer to specification section for specification of Vehicle planning, schedule and dispatch system
23.	Vol II 3. Automatic Fare collection system	Page 38 of 305	Contactless Smartcards	Smart Card will be procured through a separate tender, only integration has to be taken care as part of this RFP. The Smart card will be NCMC compliant and shall work on terminal validator and on any other payment channel
24.	VOL II - Part 1, 3.9 E Governance System and ERP,Third party audit and Go-Live of the solution	Page 112 of 615	The CERT-IN empaneled agency appointed by the client shall conduct audit before Go live and in case of any major change or annually whichever earlier. The cost of audit and the cost of rectification of non- compliance shall be borne by the SI.	The CERT-IN empanelled agency will be appointed by the selected bidder (selection process will be carried out by RSCDL) and shall conduct audit before Go live and in case of any major change or annually whichever earlier. The cost of audit and the cost of rectification of non- compliance shall be borne by the SI.
25.	Vol II Part I 4.1.1.7.3 Adaptive Traffic Control- Traffic Light Aspects	Page 180 of 615		The bidder will have to factor in adapters for AC/DC conversion basis power source available and controller proposed.
26.	Vol II 4.2.3.7.5 Video Management System	Page 206 of 305	The SI shall use the existing Video management system/ other existing systems of RSCDL.	The make and model of VMS and various other systems to be reused is detailed below – Refer Annexure 2
27.	Vol II 4.2.4.3.1 Turnstile	Page 225 of 305	Turnstile specifications	Drop arm is mandatory and solution shall confer to requirements of Disability Act 2016
28.	Vol II 4.2.6.1 Entry Exit Barrier	Page 232 of 305	Three phase 0, 37 CV motor Optional UPS (Uninterrupted Power Supply) to continue operating when mains supply's fails (max. 100 up/ down movements)	Three phase 0, 37 CV motor or equivalent single phase motor UPS is mandatory No of UPS required is 5

			CE, Ukr - Sepcro certified	CE certified is mandatory, UKR sepcro certified is optional
29.	Vol II 4.2.6.5 Parking Variable messaging board	Page 239 of 305	Internal Battery with different charging options (Solar/Mains) Viewing distance: >300 meters Display area: Display size of VMD should be 3x2 mtrs	Internal Battery with different charging options (Solar/Mains) Battery backup required – 3 hours Pixel Pitch – 10 mm Viewing distance: >100 meters Display area: Display size of VMD should be minimum 3x2 mtrs.
30.	Vol II 4.3.6 Data at rest security requirements	Page 265 of 615	<ul style="list-style-type: none"> * The proposed solution should support Teradata V14 and V14.1 database encryption with UDF * The proposed platform should support gateway to encrypt data stored on S3 and Box * The proposed solution should be certified to support Nutanix KMIP * The proposed solution must provide centralized key management for Oracle and MSSQL TDE master key. * The proposed data protection solution must support cloud deployment with Amazon AWS, Rackspace * The encryption key manager must be Common Criteria (ESM PP PM V2.1) certified 	<ul style="list-style-type: none"> * The proposed solution should support database encryption for databases suggested by the bidder * The proposed solution should be certified to support Nutanix KMIP * The proposed solution must provide centralized key management for the databases recommended * The proposed data protection solution must support proposed cloud deployment * The encryption key manager must be Common Criteria certified
31.	Vol II Part I 4.4.2 16 Core Server	Page 289 of 615	16 Core Server Specifications	Clause stands deleted. Please refer Corrigendum for Blade Server details.
32.	Vol II Part II 4.4.3 32 Core Server	Page 290 of 615	32 Core server specifications	Clause stands deleted. Please refer Corrigendum for Blade Server details.

33.	Vol II Section 4.4.6.1	Page 295 of 615		The Field Level switches are suggested to be 8 port with the below mentioned considerations: 1.) This shall not be a single point of failure 2.) the smaller the size the better the ventilation
34.	Vol II Part II 4.4.4 8 Core Server	Page 291 of 615	8 Core server specification	Clause stands deleted. Please refer Corrigendum for Blade Server details.
35.	Vol II Part II 4.5.3 Servers (As Building block, to establishing computing solution for subsystems/solutions)	Page 306 of 615		The bidder is expected to design the solution that performs as an integrated unit. Any additional peripherals must be provisioned by the bidder at no additional cost.
36.	Vol II 4.6.2 Contact center	Page 350 of 615	Contact center Specifications	Live status of calls and agents is expected Expected retention period is one month 10 web chats shall be supported The hardware and software may be from a different OEM however the bidder shall ensure tight coupling
37.	Vol II 4.6.8 IP PBX (Call Control System)	Page 360 of 615	IP PBX Specifications	The compute and storage may be from a different OEM MGCP shall be optional , other terms remain unchanged The product should support G.711, G.729, G.729ab, g.722, ILBC or any other equivalent protocol
38.	Vol II, Functionality 4.7.1	Page 377 of 615	Should support a variety of Mobile Devices & Platforms like	Should support a variety of Mobile Devices & Platforms like Android, IOS, Windows 7 & 8 (Any Version)

	Compliance Matrix #31		Android, IOS, Windows 7 & 8 along with bundled Apps and SDKs for customizing Apps					
39.	Vol II, 4.7.3 Function Requirement Specification of Customized GIS applications Suite (Indicative) and Citizen Portal (Indicative) #1	Page 390 of 615	<p>2. GIS based application will be built for following services (part of post implementation development):</p> <p>a. Property Tax b. Town Planning c. Estate Management d. Advertisement and Hoarding Management e. Disaster Management including, Hospital-Health care units f. Education g. Parks and Gardens, Open Spaces h. Water Supply including Water bodies i. Sewerage Operations j. Roads and Traffic including Transportation (bus stands, taxi stands, petrol pumps) k. Storm Water Drainage.</p>	<p>2. GIS based application will be built for following services (during implementation phase):</p> <p>a. Property Tax b. Town Planning c. Estate Management d. Advertisement and Hoarding Management e. Disaster Management including, Hospital-Health care units f. Education g. Parks and Gardens, Open Spaces h. Water Supply including Water bodies and headwork i. Sewerage Operations including pumping station and STP j. Roads and Traffic including Transportation (bus stands, taxi stands, petrol pumps) k. Storm Water Drainage. l. Street light m. Solid Waste Management including Mapping of area of street sweepers in Rajkot city. n. Construction Activities o. Housing p. Underground Utilities</p>				
40.	Vol II, 5.7.8.16 ERP Training Requirements	Page 475 of 615	<p>Indicative Training Plan for the RSCDL employees</p> <p>The following is an indicative training plan for users of various RSCDL offices based on the nature of their responsibilities.</p>	<p>Indicative Training Plan for the RSCDL employees</p> <p>The following is an indicative training plan for users of various RSCDL offices based on the nature of their responsibilities.</p> <table><tr><th>Particular</th><th>User Matrix</th></tr><tr><td>ERP functional training</td><td>100 users</td></tr></table>	Particular	User Matrix	ERP functional training	100 users
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				<table><tr><td>ERP Administration Training</td><td>10 users</td></tr><tr><td>Refresher training (every year of O&M)</td><td>50 users</td></tr></table>	ERP Administration Training	10 users	Refresher training (every year of O&M)	50 users
ERP Administration Training	10 users							
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41.	Vol II, 6. Annexure III: Payment Schedule and Milestones	Page 487 of 615	The bidder shall be paid 60% of the commercial bid value as part of Implementation and integration phase while remaining 40% will be paid as part of O&M phase	The bidder shall be paid 65% of the commercial bid value as part of Implementation and integration phase while remaining 35% will be paid as part of O&M phase				
42.	Vol II 8. Annexure V- Common guidelines regarding compliance of systems/equipment	Page 214 of 311	OEM certificate in the format given in Volume I of this Tender, where-in the OEM will certify that the product is not end of life product & shall support for at least 6 years from the date of Bid Submission.	OEM will certify that the product is not end of life product & shall support for at least 6 years from the date of Go live.				
43.	Vol II Part II 8. Annexure V- Common guidelines regarding compliance of systems/equipment	Page 519 of 615	6. Technical Bid should be accompanied by OEM's product brochure / datasheet. MSIs should provide complete make, model, part numbers and sub-part numbers for all equipment/software quoted, in the Technical Bid.	The make and model is not required for the DR physical infrastructure; however Meity guidelines must be followed.				
44.	Vol II Part II Section 8	Page 520 of 615	All servers, active networking components (for edge level switches, please refer below for additional information), security equipment, storage systems and COTS Application proposed should be from OEMs	The clause stands deleted for GIS application.				

			who are amongst the top 5 for world-wide market share in terms of revenue as per IDC latest published quarterly report presence in the latest Magic Quadrant of Gartner. MSI is expected to attach the report along with the Technical Bid.	
45.	Vol III 3 Conditions Precedent	Page 7 of 54	Furnish notarized copies of any/all contract(s) duly executed by MSI and its OEMs existing at the time of signing of this contract in relation to the Authority's project. Failure to do so within stipulated time of signing of contract would attract penalty as defined in clause 42 in this Section.	Furnish notarized copies of any/all contract(s) duly executed by MSI and its OEMs existing at the time of signing of this contract in relation to the Authority's project. Failure to do so within stipulated time of signing of contract would attract penalty as per SLA defined in the RFP.
46.	Vol III – Master Service agreement Section19. Dispute Resolution	Page 22 of 54	In case of dispute, the decision of Chairman –RSCDL /Municipal Commissioner, Rajkot Municipal Corporation shall be final.	<p>The RSCDL and the Firm shall make every effort to resolve any dispute amicably, by direct informal negotiation, any disagreement or dispute arising between them under or in connection with the Agreement. If after 30 days from the commencement of such informal negotiations, the RSCDL and the Firm are unable to resolve amicably such dispute, the matter will be referred to the Commissioner, RMC, and his / her decision shall be taken.</p> <p>Furthermore, the arbitration will be processed thereafter on a mutually agreeable term, in accordance with the arbitration and reconciliation Act 1996.</p>

47.	Vol III – Master Service agreement Section 1.4 Post implementation SLAs and SLA Matrix	Page 36 of 54	In addition to the applicable penalty, the RSCDL shall be within its rights to invoke the termination clause if or anytime the penalty increases by 20% of the OPEX value, RSCDL would also have right to invoke the termination clause and blacklisted for three years for any work in RSCDL / RMC	In addition to the applicable penalty, the RSCDL shall be within its rights to invoke the termination clause if or anytime the penalty increases by 20% of the OPEX value, RSCDL would also have right to invoke the termination clause and debarred for three years for any work in RSCDL / RMC
48.	Vol II Part I, 3.4.3.2, Existing Traffic Signal System	Page 32 of 615	3.4.3.2 Existing Traffic Signal system The infrastructure of existing traffic signal systems including the aspects, controllers etc. will be dismantled and replaced with the new systems which are proposed and required under the scope Of the ITMS project. The dismantled infrastructure shall be delivered at the RSCDL designated Location without damage at no extra cost.	Dismantling and transportation of Existing Infrastructure will be responsibility of Bidder.
49.	Vol II 4.2.3.5 Other General Requirements	Page 192 of 615	g. It should be possible to integrate social media platforms to Surveillance System to enable Rajkot Police to track and monitor certain trending incident or crime.	The clause stands deleted
50.	RFP Vol II: 4.7 Enterprise GIS	Page 373 of 615	Should support a variety of Mobile Devices & Platforms like Android, IOS, Windows 7 & 8	Should support a variety of Mobile Devices & Platforms like Android, IOS, Windows 7 & 8

			along with bundled Apps and SDKs for customizing Apps.	
51.	Vol-I & Vol-III 27. Performance Security	Page 26 of 54	The MSI shall submit performance guarantee which is unconditional & irrevocable equal to 10% of the order value of the contract in the format prescribed in RFP issued by any of the Nationalized Banks Only.	The terms of the RFP remains unchanged. PBG should be from Nationalized Banks Only.
52.	Vol III Section 9	Page 9 of 54	The Consortium member has agreed that MSI is the prime point of contact between the Consortium member and the Authority and it shall be primarily responsible for the discharge and administration of all the obligations contained herein and, the Authority, unless it deems necessary shall deal only with MSI. The Prime bidder shall be jointly and severally responsible for complete scope, whereas consortium partners shall be severally responsible only for its respective scope.	Lead bidder is liable for full scope of work and consortium member will be responsible for its own scope.
53.	Vol III Section 10	Page 11 of 54	MSI shall ensure that MSI's Team is competent, professional and possesses the requisite qualifications and experience appropriate to the task they are required to perform under this Contract. MSI shall ensure that the services are performed through the efforts of MSI's	Lead bidder is liable for full scope of work and consortium member will be responsible for its own scope.

			Team, in accordance with the terms hereof and to the satisfaction of the Authority. Nothing in this Contract relieves MSI from its liabilities or obligations under this Contract to provide the Services in accordance with the Authority's directions and requirements and as stated in this Contract and the Bid to the extent accepted by the Authority and MSI shall be liable for any nonperformance, non-compliance, breach or other loss and damage resulting either directly or indirectly by or on account of its Team.	
54.	Vol-III 12. Payments	Page 17 of 54	2. All payments agreed to be made by Authority to MSI in accordance with the Bid shall be inclusive of all statutory levies, duties, taxes and other charges whenever levied/applicable, if any, and Authority shall not be liable to pay any such levies/other charges under or in relation to this Contract and/or the Services.	In case of any changes/amendment in the tax rate i.e. GST, Custom duties, levies, cess, Octroi, WCT etc. by the government or its authorities post submission of bid by the bidder, such changes shall be on account of Authority i.e. In case of increase in GST rate/Custom duty rate, such increase in rate shall be compensated by the Authority to the MSI and in case of vice versa of the same MSI will invoice less to the Authority
55.	Vol-III 14. Taxes	Page 19 of 54	MSI shall bear all taxes and duties etc. levied or imposed on MSI under the Contract including but not limited to Sales Tax, Customs duty, Excise duty, Octroi, GST and relevant	In case of any changes/amendment in the tax rate i.e. GST, Custom duties, levies, cess, Octroi, WCT etc. by the government or its authorities post submission of bid by the bidder, such changes shall be on account of Authority i.e. In case of increase in GST rate/Custom duty rate, such increase in rate

			<p>amendments, Works Contracts Tax and all Income Tax levied under Indian Income Tax Act – 1961 or any amendment thereof during the entire contract period, i.e., on account of material supplied and services rendered and payments received by him from the Authority under the Contract. It shall be the responsibility of MSI to submit to the concerned Indian authorities the returns and all other connected documents required for this purpose. MSI shall also provide the Authority such information, as it may be required in regard to MSI's details of payment made by the Authority under the Contract for proper assessment of taxes and duties. The amount of tax withheld by the Authority shall at all times be in accordance with Indian Tax Law and the Authority shall promptly furnish to MSI original certificates for tax deduction at source and paid to the Tax Authorities.</p>	<p>shall be compensated by the Authority to the MSI and in case of vice versa of the same MSI will invoice less to the Authority</p>
56.	Vol III section 16	Page 21 of 54	<p>Regardless of anything contained (except for MSI's liability for bodily injury arising out of gross negligence or wilful misconduct for which it is legally liable and it's liability for</p>	<p>This limitation of liability shall not affect MSI/ Consortium liability, if any, for damage to Third Parties caused by MSI / Consortium or any person or company acting on behalf of MSI in carrying out</p>

			patent and copyright infringement in accordance with the terms of this Agreement) the total liability of MSI, is restricted to the total value of the contract and MSI is not responsible for any third party claims	the Services and shall not be more than the project cost at any given point of time.
57.	Volume III – Master Service Agreement 18. Term and Extension of the Contract	Page 22 of 54	Bidder shall also provide complete maintenance support for all the proposed integrated solution as outlined in this RFP for a period of sixty Months from the date of go-live i.e. “Go-Live” + 60 months. “Go-live” is the date on which the proposed solution is completely operational as per the requirements provided in this RFP and all the acceptance tests are successfully concluded to the satisfaction of Authority.	Bidder shall also provide complete maintenance support for all the proposed integrated solution as outlined in this RFP for a period of sixty Months from the date of go-live i.e. “Go-Live” + 60 months. “Go-live” is the date on which the proposed solution is completely operational as per the requirements provided in this RFP and all the acceptance tests are successfully concluded to the satisfaction of Authority.
58.	Vol III MSA, B. Special Conditions of Contract, 29	Page 26 of 54	Limitation of Liability: This limitation of liability shall not affect MSI liability, if any, for damage to Third Parties caused by MSI or any person or company acting on behalf of MSI in carrying out the Services.	This limitation of liability shall not affect MSI/ Consortium liability, if any, for damage to Third Parties caused by MSI / Consortium or any person or company acting on behalf of MSI in carrying out the Services and shall not be more than the project cost at any given point of time.
59.	Additional Clause – NPCI Guidelines			Terminal/Validators/Turnstiles / Flap Gate– The terminal/validators/turnstiles provided by the System Integrator should be based on EMV open loop standards and as per NCMC specification.

				Other Payment Channels – Master System Integrator shall support the integration of various digital payment channels including UPI, Bharat QR, BHIM, BBPS etc.
60.	Server/Networking Rack Specifications	Page 299 of 586	Outdoor Type Air-conditioning Unit with Redundancy – 10 kW	Outdoor type air-conditioning unit with Redundancy – 10kW or more
61.	7.9 Proposed Bill of Material G.12 Server load balancer	Page 75 of		Server Load Balancer requirement stands deleted

Revised Payment Terms and Timelines

Reference Section 6 Annexure III: Payment Schedule and Milestones Page 487 Vol II

Clause No.	Page No.	Services	Approximate Time for Issuance of Request Order	Tentative Scope/ Approximate Sizing	Tentative Lead Time
Volume II, Annexure III, Payment Schedule and Milestones	487 of 615	Request Order 1 (for RSCDL)	One week post issue of LOI/ completion of site survey activity	<ul style="list-style-type: none"> • Command and Control Centre (ICCC) IT hardware • Command and Control Centre (ICCC) non-IT equipment • Command and Control Centre (ICCC) – software • Smart DC – Hardware • Smart DC – Software • Smart DC – non-IT equipment • Smart Disaster Recovery (DR) • Implementation and Integration of Public address System • Implementation and integration of Smart Parking • Integration with existing Eye-Way solution 	6 months post issuance of request order (D1)
Volume II, Annexure III, Payment Schedule and Milestones	488 of 615	Request Order 2	6months post issuance of LOI	<ul style="list-style-type: none"> • Implementation and Integration of Intelligent Traffic Management • Implementation and Integration of Integrated Transport Management • Partial Integration of Smart Governance (City Level Application Platform + ERP) • Integration with City wide - GIS Platform • Integration with Smart Card for Transport • Integration with Solid Waste Management • Integration with Smart Parking • Integration with Sewerage (SCADA at treatment plant) • Integration with Health Solution 	6 months post issuance of request Order (D2)

Clause No.	Page No.	Services	Approximate Time for Issuance of Request Order	Tentative Scope/ Approximate Sizing	Tentative Lead Time
Volume II, Annexure III, Payment Schedule and Milestones	488 of 615	Request Order 3	12 months post issuance of LOI	<ul style="list-style-type: none"> Integration of ICT solution for Education Integration with Disaster /Emergency Management Integration with Smart Metering & SCADA for distribution network (water) Integration with Water leak identification system Migration of interim ICCC to ICCC 	6 months post issuance of request order (D3)

ICCC, Data Center, ATCS, ITMS & Smart Parking

D = Date of Signing of Contract Agreement

Clause No.	Page No.	Milestones	Payment Milestones for the Implementation on % Payment of Time Schedule Phase	Payment Schedule	Time Schedule	Deliverables
Volume II, Annexure III, Payment Schedule and Milestones	489 of 615	M1		Value commensurate to the discovered quote for site survey activity as per commercial format	D1+ 1 Month	NA
Volume II, Annexure III, Payment Schedule and	489 of 615	M2.1	Completion of Scoping and Site Survey and Request Order 1 – Requirement Phase Completion	10% of Request Order 1 Value (Capex Cost) post issuance of work order	D1+ 2 Month	<ol style="list-style-type: none"> 1. Inception Report 2. Project Plan 3. Risk Management and Mitigation Plan 4. Site Survey report

Clause No.	Page No.	Milestones	Payment Milestones for the Implementation % Payment of Time Schedule Phase	Payment Schedule	Time Schedule	Deliverables
Milestones						5. Functional Requirement Specification document 6. System Requirement Specification document 7. Requirements Traceability Matrix 8. Final BoQ
Volume II, Annexure III, Payment Schedule and Milestones	490 of 615	M2.2	Request Order 1 – Design Phase Completion	10% of Request Order 1 Value (Capex Cost)	D1+3 Month	2. HLD documents 3. LLD documents 4. Application architecture documents. 5. Technical Architecture documents. 6. Network Architecture documents. 7. Logical and physical database design. 8. Data dictionary and data definitions. 9. GUI design (screen design, navigation, etc.). 10. Test Plans 11. Change management Plan
Volume II, Annexure III, Payment Schedule and Milestones	490 of 615	M2.2.1	Request Order 1 – Material Delivery	30% of Request Order 1 Value (Capex Cost)	D1+ 3 Months	Material delivery at warehouse.

Clause No.	Page No.	Milestones	Payment Milestones for the Implementation % Payment of Time Schedule Phase	Payment Schedule	Time Schedule	Deliverables
Volume II, Annexure III, Payment Schedule and Milestones	490 of 615	M2.2.2	Request Order 1 – Installation, Commissioning and Go-Live of ICC	20% of Request Order 1 Value (Capex Cost)	D1+ 4 Months	1. IT and Non IT Infrastructure Installation Report 2. Completion of UAT and closure of observations report 3. Training Completion report 4. Application deployment and configuration report
Volume II, Annexure III, Payment Schedule and Milestones	491 of 615	M2.3	Request Order 1 – Completion of Integration of smart solution, Go- Live of Phase I	10% of Request Order 1 Value (Capex Cost)	D1+ 6 Months	1. Integration Testing Report 2. Go-Live Report
Volume II, Annexure III, Payment Schedule and Milestones	491 of 615	M2.4	Request Order 1 – Submission of SoP's	10% Value (Capex Cost) post issuance of request order 2	D1+7 Months	1. SOPs
Volume II, Annexure III, Payment Schedule and Milestones	491 of 615	M2.5	Request Order 1 – Three months of successful operation and Maintenance after Project Acceptance	10% of Request Order 1 Value (Capex Cost)	D+3 Months	1. SLA Report
Volume II, Annexure III, Payment Schedule and Milestones	491 of 615	M3.1	Request Order 2 – Assessment of requirement	10% of Request Order 2 Value (Capex Cost)	D2+1 Month	1. Functional Requirement Specification

Clause No.	Page No.	Milestones	Payment Milestones for the Implementation % Payment of Time Schedule Phase	Payment Schedule	Time Schedule	Deliverables
re III, Payment Schedule and Milestones				post issuance of request order 2		document for request order 2
Volume II, Annexure III, Payment Schedule and Milestones	491 of 615	M3.2.1	Request Order 2 – Material Delivery	30% of Request Order 2 Value (Capex Cost) post issuance of request order 2	D2 + 3 Months	Material delivery at warehouse
Volume II, Annexure III, Payment Schedule and Milestones	491 of 615	M3.2.2	Request Order 2 – Completion of Integration Smart Features and Go-Live (Project Acceptance)	30% of Request Order 2 Value (Capex Cost) post issuance of request order 2	D2 + 6 Months	1. Updated System Requirement Specification document 2. Updated Requirements Traceability Matrix 3. Test Plan 4. UAT and Integration Testing Report 4. Go-Live Report
Volume II, Annexure III, Payment Schedule and Milestones	491 of 615	M3.3	Request Order 2 – Submission of SoP's &	20% of Request Order 2 Value (Capex Cost) post issuance of request order 2	D2 +7 Months	1. SOPs
Volume II, Annexure III, Payment	491 of 615	M3.4	Request Order 2 – Three months of successful operation and	10% of Request Order 2 Value (Capex Cost) post issuance of request order 2	D +3 Months	1. SLA Report

Clause No.	Page No.	Milestones	Payment Milestones for the Implementation % Payment of Time Schedule Phase	Payment Schedule	Time Schedule	Deliverables
nt Schedule and Milestones			Maintenance after Project Acceptance			
Volume II, Annexure III, Payment Schedule and Milestones	492 of 615	M4.1	Request Order 3 – Assessment of requirement	10% of Request Order 3 Value (Capex Cost) post issuance of request order 3	D3 + 2 Month	1. Functional Requirement Specification document for request order 2
Volume II, Annexure III, Payment Schedule and Milestones	492 of 615	M4.2	Request Order 3 – Completion of Integration Smart Features and Go-Live (Project Acceptance)	60% of Request Order 3 Value (Capex Cost) post issuance of request order 2	D3 + 6 Months	1. Updated System Requirement Specification document 2. Updated Requirements Traceability Matrix 3. Test Plan 4. UAT and Integration Testing Report 4. Go-Live Report
Volume II, Annexure III, Payment Schedule and Milestones	492 of 615	M4.3	Request Order 3 – Submission of SoP's	20% of Request Order 2 Value (Capex Cost) post issuance of request order 2	D3+7 Months	1. SOPs
Volume II, Annexure III, Payment Schedule	492 of 615	M4.4	Request Order 3 – Three months of successful operation and Maintenance after Project	10% of Request Order 3 Value (Capex Cost) post issuance of request order 2	D + 3 Months	1. SLA Reports

Clause No.	Page No.	Milestones	Payment Milestones for the Implementation % Payment of Time Schedule Phase	Payment Schedule	Time Schedule	Deliverables
e and Milestones			Acceptance			

D1, D2 and D3 are the dates when request order 1, request order 2 and request order 3 are issued.
And D = D1+D2+D3

Enterprise GIS

Sr. No.	Clause No.	Page No.	Item	Completion Milestone (Weeks)	Payment Terms
1	Volume II, Annexure III, Payment Schedule and Milestones	492 of 615	Delivery & Installation of Servers & GIS platform	T+4	20%
2	Volume II, Annexure III, Payment Schedule and Milestones	493 of 615	Post Processing of Satellite Imagery	T+6	5%
3	Volume II, Annexure III, Payment Schedule and Milestones	493 of 615	Data Model Finalization	T+6	5%
4	Volume II, Annexure III, Payment Schedule and Milestones	493 of 615	Final Digitized Base Map	T+12	5%

5	Volume II, Annexure III, Payment Schedule and Milestones	493 of 615	System Requirement Specifications	T+13	5%
6	Volume II, Annexure III, Payment Schedule and Milestones	493 of 615	GIS Application Suite (web based) with Citizen portal development first UAT	T+19	10%
7	Volume II, Annexure III, Payment Schedule and Milestones	493 of 615	Successful Testing of the Customized GIS Application suite with citizen portal	T+21	10%
8	Volume II, Annexure III, Payment Schedule and Milestones	493 of 615	Complete survey, mosaicking and superimposition of 50% of the total TP schemes	T+21	20%
9	Volume II, Annexure III, Payment Schedule and Milestones	493 of 615	Submission of System Documentation & User Documentation	T+25	7%
10	Volume II, Annexure III, Payment Schedule and Milestones	493 of 615	Training	T+29	7%
11	Volume II, Annexure III, Payment Schedule and Milestones	493 of 615	Complete survey, mosaicking and superimposition of 50% of the total TP schemes	T+31	3%

12	Volume II, Annexure III, Payment Schedule and Milestones	493 of 615	Project Completion Certificate by RSCDL	T+33	3%
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Enterprise Resource Planning

Sr No.	Clause No.	Page No.	Phase	Activities		Completion milestones	Payment milestone (% of capex)
1	Volume II, Annexure III, Payment Schedule and Milestones	493 of 615	PHASE I	Establishment and Go-Live of the solution		To+54 weeks	
2	Volume II, Annexure III, Payment Schedule and Milestones	494 of 615		A	Requirement Gathering	To + 18 weeks	5%
3	Volume II, Annexure III, Payment Schedule and Milestones	494 of 615		B	Solution Design	To + 24 weeks	5%
4	Volume II, Annexure III, Payment Schedule and Milestones	494 of 615		C	Supply, installation and commissioning of Client Site Infrastructure	To + 28 weeks	5%
5	Volume II, Annexure III, Payment Schedule and Milestones	494 of 615		D	Software Development / Customization	To + 38 weeks	10%
6	Volume II, Annexure III, Payment Schedule and Milestones	494 of 615		E	Testing and UAT	To + 42 weeks	5%
7	Volume II, Annexure III, Payment Schedule and Milestones	494 of 615		F	Supply of licenses	To+42 weeks	15%
8	Volume II, Annexure III, Payment Schedule and Milestones	494 of 615		G	Capacity building and training	To + 46 weeks	10%

9	Volume II, Annexure III, Payment Schedule and Milestones	494 of 615		H	Third party audit and Go-Live of the solution	To + 50 weeks	20%
10	Volume II, Annexure III, Payment Schedule and Milestones	494 of 615		I	Preparation of standard operating procedures	To + 54 weeks	15%
11	Volume II, Annexure III, Payment Schedule and Milestones	494 of 615		J	Solution Stabilization (for 3 months post go-live)	D + 3Months	10%

Milestones and Payment Schedules for Operations and Maintenance Phase

Sr No.	Clause No.	Page No.	Miles tones	Payment Milestones for the Implementation % Payment of Time Schedule Phase	Payment Schedule	Time Schedule
1	Volume II, Annexure III, 6.2, Milestones and Payment Schedules for Operations and Maintenance Phase	495 of 615	M5	Year 1 payment for O&M after Go-Live	Equal Quarterly O&M Payments	Payment of Year 1
2	Volume II, Annexure III, 6.2, Milestones and Payment Schedules for Operations and Maintenance Phase	495 of 615	M6	Year 2 payment for O&M after Go-Live	Equal Quarterly O&M Payments	Payment of Year 2
3	Volume II, Annexure III, 6.2, Milestones and Payment	495 of 615	M7	Year 3 payment for O&M after Go-Live	Equal Quarterly O&M Payments	Payment of Year 3

	Schedules for Operations and Maintenance Phase					
4	Volume II, Annexure III, 6.2, Milestones and Payment Schedules for Operations and Maintenance Phase	495 of 615	M8	Year 4 payment for O&M after Go-Live	Equal Quarterly O&M Payments	Payment of Year 4
5	Volume II, Annexure III, 6.2, Milestones and Payment Schedules for Operations and Maintenance Phase	Additional clause	M9	Year 5 payment for O&M after Go-Live	Equal Quarterly O&M Payments	Payment of Year 5

The total o & M period will start after the successful completion of three months of Go Live for project as whole.

Additional Bill of Material

The list of items mentioned hereunder is indicative. The Bidder shall consider the Components and quantity to fulfill the RFP and project requirements in totality.

<u>SI#</u>	<u>Line Item</u>	<u>Quantity</u>	<u>Unit of Measurement</u>	<u>Make</u>	<u>Model</u>	<u>Full compliance with RFP</u>
1	Smart Parking – Smart Card Reader	5	Number			
2	Integration with existing eye-way solution	1	Lump Sum			
3	Integration with Smart Card	1	Lump Sum			
4	Sewerage (SCADA at treatment plant)	1	Lump Sum			

5	Integration with health solution	1	Lump Sum			
6	Integration with education solution	1	Lump Sum			
7	Integration with Disaster /Emergency Management	1	Lump Sum			
8	Integration with Smart Metering & SCADA for distribution network (water)	1	Lump Sum			
9	Integration with Water leak identification system	1	Lump sum			
10	Dismantling and transportation cost	1	Lump Sum			
11	Server	10	Lump Sum			
12	Vehicle planning, schedule and dispatch system	1	Lump Sum			

Additional Specifications

Functional Requirement Vehicle planning, schedule and dispatch system

Sr. No.	Requirement	Compliance (Yes/No)	Reference of documentary proof/evidence supported by system screenshot/ MIS/Report/ Brochure etc.
General Requirements			
1.	The Bidder shall conduct a detailed study of the existing IT infrastructure and data of city during the planning stage of the project and propose a migration plan into the new VPSD.		

Sr. No.	Requirement	Compliance (Yes/No)	Reference of documentary proof/evidence supported by system screenshot/ MIS/Report/ Brochure etc.
2.	The VPSD system should be scalable in terms of performance for future increase of users, fleet, crew, depots, etc.		
3.	The Bidder shall provide required number of VPSD licenses for all necessary users and the entire fleet for the entire duration of the Project.		
4.	VPSD application shall consist of: •Planning & Scheduling o Vehicle Scheduling and timetable o Crew Scheduling and Roster •Dispatch and Daily Management o Dispatch of Vehicles & Crew o Daily Management of Vehicles and Crew		
5.	VPSD to be integrated with AVLS as per the requirements.		
6.	VPSD related data shall be available for a minimum period of 3 years.		
7.	Data nomenclature shall follow existing structure as per authority's requirements such as by division, depot, operation, route, schedule, bus type, employee type, employee, bus, etc.		
8.	All terminology in the VPSD application shall be consistent with the current operational terminology used by the authority.		
9.	Application shall have ability to have a separate database instances for testing purposes.		
10.	All its major features shall be available through toolbar icons and all features shall be accessible with dialog boxes.		
11.	All data shall only need to be entered once with no retyping of data necessary.		
12.	Application shall have role based access with read and write level access.		

Sr. No.	Requirement	Compliance (Yes/No)	Reference of documentary proof/evidence supported by system screenshot/ MIS/Report/ Brochure etc.
13.	Flexibility in access of individual screens of the application shall be provided so that each user shall have different (no access/read/write) privileges.		
14.	All components of VPSD shall be integrated with other ITS subsystems so that data entry shall be done only once between the subsystems.		
15.	The system shall be modular so that improvements in one sub system/component do not make other subsystems/components to fail.		
16.	The Bidder shall identify steps to ensure migration to the Bidder's VPSD from the current system with least operational challenges for the authority.		
17.	Ability to produces printouts of crew schedules, duty rosters, route timetables, bus stop timetables etc.		
18.	The system shall provide necessary reports, operations monitoring dashboards and MIS environment.		
Network and Route modeling			
19.	The objective of network modeling is to digitalize and maintain the GIS information (stops, depots, routes, distances, etc...) and produce a statistical speed analysis to be applied during vehicle scheduling.		
20.	The bidder shall collect the existing network databases from authority and propose a migration plan.		
21.	The solution shall have map-based interface with the option to use Google Map as a background and being compatible with Google Transit.		
22.	All GIS objects shall be editable in the map-based interface (stops, stations, depots, distances, paths, etc...).		

Sr. No.	Requirement	Compliance (Yes/No)	Reference of documentary proof/evidence supported by system screenshot/ MIS/Report/ Brochure etc.
23.	The solution shall allow the user to change the path automatically based on road network (with the option to use google map) or manually and enter distances manually.		
24.	The solution shall provide specific features for managing and optimizing the dead run (non-commercial trip) on the map.		
25.	The solution shall have a schematic view of the routes / network.		
26.	The solution shall provide statistical module for analyzing GPS data from AVLS in order to build a speed / travel model for the entire network.		
27.	The speed / travel time model shall be based on type of days and hours of the day for each path / section (including dead run) of the network. The model shall be further used to produce the timetables and schedules in order to integrate the traffic conditions into the planning process.		
Vehicle scheduling and timetables			
28.	The objective of vehicle scheduling is to define the schedules / trips of the vehicles based on targeted frequencies depending on routes, types of day and hours of the day and traffic conditions and available resources.		
29.	The bidder shall collect the existing timetable databases from authority and propose a migration plan.		
30.	The proposed system to allow frequency or number of vehicle approach for producing the vehicle scheduling plan.		
31.	For frequency approach, the user shall be able to give as a parameter the targeted frequency depending on the hour of the day for a type of day. The system will calculate the necessary number of vehicles.		

Sr. No.	Requirement	Compliance (Yes/No)	Reference of documentary proof/evidence supported by system screenshot/ MIS/Report/ Brochure etc.
32.	For number of vehicle approach, the user shall be able to give the maximum number of vehicles (depending on the hour of the day), the system will calculate the optimum frequency at peak hours.		
33.	The proposed application shall display vehicle scheduling using graphical representation for the selected period (time-vehicle graph), with different color for each vehicle (stops for Y-scale and time for X-scale).		
34.	Ability to define types of day (week days, weekends, holidays, festivals, etc.). Each type of day can have different vehicle scheduling and timetables.		
35.	System should have ability/edit specify inbound and/or outbound timetable for a specified day type.		
36.	Ability to add, edit and copy/duplicate timetables		
37.	Ability to link/add trips to the selected timetable.		
38.	Ability to produce and compare what-if scenarios in order to minimize/maximize kilometres (commercial and non-commercial), number of vehicles, crew shifts and hours, extra hours, etc...		
Crew Scheduling and roster			

Sr. No.	Requirement	Compliance (Yes/No)	Reference of documentary proof/evidence supported by system screenshot/ MIS/Report/ Brochure etc.
39.	The objective of crew scheduling is to optimize the crew allocation to the vehicle services. Key indicators are number of crew, hours (driving and non-driving), extra hours, etc... The crew scheduling also helps in providing crew schedules according to personal preferences and social constraints. The proposed solution shall have automatic and manual features for building a roster grid of crew scheduling to be applied to the different types of day.		
40.	The system shall support existing crew rules and regulations of the authority and in-turn authority shall be open to the process improvements suggested by the implementation of VPSD system and tailor their processes for the optimal solution.		
41.	System shall have ability to create crew schedules considering different shifts parameters such as shift spreads, meal time etc.		
42.	System shall have ability to define shift start and end points, break times, etc...		
43.	System shall have ability to support minimizing/maximizing crew hours (driving, breaks...), extra hours, total weekly / monthly respecting the rules & regulations.		
44.	System should be capable of creating crew schedules for Bus schedules which operate from specific depot / division and transfer crew.		

Sr. No.	Requirement	Compliance (Yes/No)	Reference of documentary proof/evidence supported by system screenshot/ MIS/Report/ Brochure etc.
45.	System shall support following reports but not limited to: a) Detailed Crew report for each duty / crew day(s) of the week clearly indicating sign On, Sign Off , Trip details that are to be performed, meal break location, etc.. b) Consolidated Crew report for all duties in a depot for day(s) of the week clearly indicating Sign On, Sign Off , On Vehicle, OFF Vehicle, Steering time and hours of duty for driver and conductors c) Statistics reports of crew and depot. d) Horizontal Blocks to provide duty wise details of each crew along with the Route number on which they will perform duty		
46.	The Bidder shall provide a Crew Rostering Software with choice based duty.		
47.	Crew Rostering module shall be able to create group of users based on set of defined parameters.		
48.	System shall have provisions to easily make changes to the planned roster		
49.	System shall have provision to create rosters for user definable day types such as Public Holidays, weekends etc.		
50.	System should have provision to include non-driving work in the roster		
51.	System should have provision to utilise drivers from other Depots		
52.	Schedule master shall have minimum start place, end place, starting and end time of each trip, rest time in between the trips, distance between the start and end place, distance between stops, overnight stay, etc.		

Sr. No.	Requirement	Compliance (Yes/No)	Reference of documentary proof/evidence supported by system screenshot/ MIS/Report/ Brochure etc.
53.	The crew scheduling module shall provide following MIS reports, but are not limited to: <ul style="list-style-type: none"> • Crew Reports • Driving and non-driving hours • Depot / division reports • Crew Allocation alerts and reports 		
Dispatch and Daily Management			
54.	The objective of the daily dispatch module is to allocate on a daily basis the vehicles and crew to the planned services, depending on maintenance planning for the vehicles and crew holidays or trainings, etc... For each operational day, a type of day shall be applied and physical resources to be allocated. The solution shall have interfaces at the depot for recording the crew operations and store the attendance information (worked and driving hours, absence, etc...).		
55.	The proposed solution shall have a vehicle and crew master database with their attributes (type of vehicle, identification, names, etc...).		
56.	The proposed solution shall have specific features for preparing the allocation plan for the next days / weeks / months depending on the rules and regulations for the crew.		
57.	The proposed solution shall allow change of allocation (vehicle / crew) during the operations at the depot level.		
58.	The proposed solution shall record the crew operations of each day (to be further used by other systems for salary calculation or statistics...).		

Sr. No.	Requirement	Compliance (Yes/No)	Reference of documentary proof/evidence supported by system screenshot/ MIS/Report/ Brochure etc.
59.	<p>The dispatch module shall provide following MIS reports, but are not limited to:</p> <ul style="list-style-type: none"> • Vehicle and crew allocation plan for specific periods (weeks, months, year...) • Statistics based on vehicle (KMs, maintenance...) and crew (driving and non-driving hours, extra hours...) • Depot / division reports • Attendance reports 		

Technical Specification Blade Server with Chassis

S/N	Parameter	Specification
1.	Processor	Latest series/ generation x86 processor(s) with ten or higher cores Processor speed should be minimum 2.2 GHz Minimum 2 processors per each physical server
2.	Blade Chassis	Compatible to support the network and application infrastructure
3.	RAM	Minimum 256 GB Memory per physical server
4.	Internal Storage	2 x 900 GB SAS (10k rpm) hot swap disk
5.	Network interface	2 X 10Gbps ports for providing Ethernet connectivity 2 X Dual-port 10Gbps FC/FCoE/HBA for providing FC connectivity
6.	Power supply	Dual Redundant Power Supply
7.	RAID support	As per requirement/solution
8.	Operating System	Licensed latest version of Linux/ /Microsoft® Windows based Operating system
9.	Form Factor	<ul style="list-style-type: none"> Blade server
10.	Virtualization	Shall support Industry standard virtualization hypervisor like Hyper-V, VMWARE, and Citrix etc.

PL. note the change of Address for future correspondence and physical submission of the Document.

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Dt:21/04/2018

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Chief Executive Officer

Rajkot Smart City Development Limited