

Replies / Clarifications to Queries on RFQ-cum-RFP document for implementation of ATMS for 'Agra to Lucknow Access Controlled Expressway Project'.

Sl. no.	RFP Clause	RFP Statement	Query	Replies/ Clarifications
1	Section 3, Evaluation and Qualification Criteria; Clause 2.1.3, Page 32	The bidder shall have the experience of successfully commissioning a minimum of 75 Kms of ATMS / HTMS for at-least 4-Lane Highway / Expressway in India or abroad during past 5 years (till the year ending March 2016). In the case of a consortium this experience can be the combined experience of the members of the consortium.	<p>Since, this is one of the longest ATMS stretches proposed in India, the bidder should have a capability and demonstrable record in the past of executing works which are comparable. Hence, the ATMS experience of the bidder should be proportional to one-third the length of the stretch (stretch length is 302 kms hence, experience should be at least 100 kms). Would request an amendment to the said clause as follows:</p> <p>"The sole applicant/ each member of consortium should have experience of commissioning and maintaining at least two ATMS projects, covering a highway / expressway stretch totaling to 100 kms or at least one project covering highway / expressway stretch of 150 kms during the last five financial years. Further, an applicant determined non-performing by NHAI or Ministry of Road Transport & Highways, Government of India will not be eligible to participate in the tendering process."</p>	Not tenable
2	Section 3, Evaluation and Qualification Criteria; Clause 2.1.2	The bidder should have an average annual turnover of Indian Rs. 25 Cr. for the last three financial years.	<p>Again, since this is one of the most prestigious and challenging ATMS projects to be delivered in India, the companies participating in the tender should have proven track record of implementing projects of such size and magnitude. Hence, would request an amendment in the clause as follows:</p> <p>"The bidder/consortium should have an average annual turnover of Indian Rs. 100 Cr. for the last three financial years."</p>	Please refer Addendum 1
3	Section 6, clause 3.4.3: Work by others, Page 88	The Contractor shall co-ordinate with other Contractors, Cladding Contractors, and civil and electrical Contractors with regards to site access, availability of civil and electrical provisions, testing and any other co-ordination	<p>1. Kindly clarify laying of power cable to the respective nodes along with junction boxes would be in scope of the client. 2. The monthly bill for power consumption would be in the scope of the client, please clarify.</p>	1. It is herewith clarified that laying the power cable to the respective nodes along with all necessary arrangements including junction boxes and any

		required to complete the work.		other requirement will be in the scope of the ATMS contractor. 2. The monthly bill for power consumption will be borne by the Client. The same will be reimbursed to the ATMS Contractor on the basis of actuals.
4	Section 6, General Requirements Scope of Supply Plant & Services; Clause 3.24.6, Page 102	The positions of equipment are indicated generally in the Employer's Requirements, but the exact locations shall be agreed with the Authority's Engineer before the commencement of installation.	We request to kindly share a location schedule of equipments and the equipment to be installed at every node before the tender submission. This would enable the bidder to estimate the cabling and alternate power requirements.	The location of the equipment will be decided in consultation with the Employer and Authority's Engineer
5	Section 6, clause 4.1: Number of Staff and shift, Page 200	The Contractor shall employ traffic management chief and the suitable number of operators of three (3) shifts for 24 hours, 7 days operation.	The tender is very lucid in providing the details of the tasks to be performed inside the control room. It is requested to kindly clarify whether manpower/ operators would also be required for tasks outside the control room. This will enable bidders to estimate the manpower requirement.	The conditions in the RFP document prevail.
6	Section 6, clause 4.3.2(b): Incident detection, Page 203	If the CCTV system detects an incident such as a vehicle moving in reverse direction, CCTV workstation issues an alarm and incident image will be displayed on the CCTV workstation monitor and video wall.	The system in addition to the functionalities mentioned can also generate alarms in the following scenarios: a. stalled vehicles on a non-stop stretch b. vehicle travelling in counter/opposite direction In the interest of greater safety at Indian highways, would recommend that above functionalities be also included in the functional document.	If the CCTV system detects an incident such as a vehicle moving in reverse direction, stalled vehicles on the Expressway, vehicle travelling in counter/opposite direction, CCTV workstation issues an alarm and incident image will be displayed on the CCTV workstation monitor and video wall. Please refer Addendum 1
7	Section 6, clause 4.2.2, page 202	The operator shall inform the patrol team of the incident so that they can take proper actions at site. If a call involves request for assistance such as dispatching wrecker, the operator shall inform the relevant agencies and request appropriate action to be taken.	Kindly clarify the recurring charges (SMS charges/internet charges/ Telephone lease line charges etc.) for sending emails or calling agencies shall fall under client's scope.	During the implementation and O&M Phase of this Contract, all such recurring costs shall be borne by the Contractor.
8	Section 6, Technical Specifications: Software & Functionality; Clause	It shall monitor and record online all data from the ATCC. The system shall provide the user with the	1. Kindly clarify whether the information to be displayed on the map would be in the form of heat maps.	1. The information can be displayed on the map would be in the form of

	2(b), Page 190	information/display of traffic flow conditions on the MAP. The data shall be updated every one minute.	2. If this is the case, kindly clarify what is termed as densely congested, congested and free-flowing. 3. Would this data be provide to the road users in mobile app form in addition to the desktop form as mentioned in the RFP.	various colour maps. 2. As per IRC Specifications / Guidelines / Manual for Expressways. 3. Data will be provided to the road users as per terms of the conditions of the RFP.
9	Section 6, Technical Specifications: Software & Functionality; Clause 3.3	It shall be possible to display both static and dynamic data on the lap. Two level of mapping shall be supported as a minimum: a) Expressway Overview. b) Expressway section wise detailed view.	1. Please clarify what exactly is meant by static and dynamic data. 2. Kindly provide the minimum stretch length that would be covered in the Expressway section wise detailed view.	1. The term itself is self explanatory. 2. The minimum Expressway section is related to the location of the 3 control centers and will cover approx. 100 Kms length for each section along with overall expressway
10	Section 6, Technical Specifications: Software & Functionality; Clause 3.5, Page 191	For poly-lines representing route data, the user shall be able to configure a number of thresholds for the different data types available. An example would be congestion for links where up to X% percentage thresholds can be defined.	Requesting to kindly elaborate the said deliverable.	The functionality of the software shall have to configure the thresholds for every kind of data as per design developed by the ATMS Contractor and requirement of the Employer.
11	Section 6, Technical Specifications: Software & Functionality; Clause 5.3, Page 192	However, the system shall provide tools for the retrieval, manipulation and presentation of data. Data store shall be clearly marked with an indicator to show day or period type e.g. normal, holiday, weekly off; by reference to the system calendar.	a. The manipulation (or modification) of the data shall be a feature with limited access or supervisory control. Please confirm. b. Our interpretation of the said clause is that the bidder should provide a dashboard where the each and every data in the system should mention the period type. However, it is assumed that the desired period types shall be provided by the client. Please confirm.	a. Both Limited access and supervisory control to be in-built in the System. B. The desired period types shall be provided by the Employer through the Authority's Engineer.
12	Section 6, Technical Specifications: Software & Functionality; Clause 9.0, Page 193	The system shall have a time table facility. The timetable shall allow commands by day of the week, time of day, day type. The system calendar shall allow days to be marked as normal, holiday, weekly off, etc.	Equipment such as VMS have certain predefined messages scheduled to be displayed at certain day and time. However, would request more clarity on the commands envisaged by the client as it might impact the development efforts.	As per IRC or as defined by the Authority's Engineer or the Employer
13	Section 6, Operations & Maintenance; Clause 4.7.2 (e) & (f), Page 207	e) Clearing record of object on road f) Record of traffic regulation	Kindly elaborate the type of information being sought from the said report.	It shall be based on the requirement on of Expressway in order to make the smooth flow of traffic and safety of the user. Such as if any lane is closed,

				then it shall be displayed and periodic display of such information shall be made available on periodic basis to the Employer.
14	Section 9, Contract forms, Advance Payment Security, Page 336	In accordance with the Agreement, the Authority shall make to the Contractor an interest free advance payment (herein after called "Advance Payment"); and that the Advance Payment shall be made subject to the Contractor furnishing an irrevocable and unconditional guarantee by a nationalized / scheduled bank for an amount equivalent to 100% (one hundred percent) of such installment to remain effective till the complete and full repayment of the installment of the Advance Payment as security for compliance with its obligations in accordance with the Agreement.	Would request an amendment to the said clause as follows: In accordance with the Agreement, the Authority shall make to the Contractor an interest free advance payment (herein after called "Advance Payment"); and that the Advance Payment shall be made subject to the Contractor furnishing an irrevocable and unconditional guarantee by a nationalized / scheduled bank for an amount equivalent to 100% (one hundred percent) of the advance disbursed. This ABG value can be progressively reduced on a quarterly basis depending upon the advance adjustment done against the running bills.	Not tenable
15	Section 9 - Contract Forms Appendix 1 - Terms and Procedures of Payment Page No. 9-6 (321 of 339)	(A) Terms of Payment Ten percent (10%) of the total bid price as an advance payment against receipt of invoice and an irrevocable advance payment security for the equivalent amount made out in favor of the Employer. Twenty percent (20%) of the total bid price upon submission and acceptance of design of the ATMS System. Twenty percent (20%) of the total bid price upon issuance of Operational Acceptance Certificate. Fifty percent (50%) of the total bid price in 20 equal quarterly instalment for the operations and maintenance period after the start of commercial operations subject to deduction of penalties on account of: a) Delayed system commissioning and thus a delayed start of commercial operation of the system b) Inability to meet service level requirements in system operations c) Inability to meet service level requirements in system maintenance.	We kindly request you to kindly amend the clause as (A) Terms of Payment Ten percent (10%) of the total bid price as an advance payment against receipt of invoice and an irrevocable advance payment security for the equivalent amount made out in favor of the Employer. Twenty percent (20%) of the total bid price upon submission and acceptance of design of the ATMS System. Fifty percent (50%) of the total bid price upon issuance of Operational Acceptance Certificate. Twenty percent (20%) of the total bid price in 20 equal quarterly instalment for the operations and maintenance period after the start of commercial operations subject to deduction of penalties on account of: a) Delayed system commissioning and thus a delayed start of commercial operation of the system b) Inability to meet service level requirements in system operations c) Inability to meet service level requirements in system maintenance.	Not tenable
16	General	General	We understand that the required approvals for road cutting and right of way shall be issued to us sufficiently in advance to ensure	As per RFP

			smooth progress of work. Any delay of the same shall not be to the account of the bidder. RI/ROW Charges: PI confirm that the charges for RI/ROW need not to be included by the bidder and the same shall not be levied by Employer . Road reinstatement shall not be in the scope of the bidder.	
17	Section 8 - Special Conditions of Contract 26. Completion Time Guarantee Page No. 8-4 (314 of 339)	26. Completion Time Guarantee 26.2 Applicable rate for liquidated damages: 0.5% of the Contract Price per week of delay. Maximum deduction for liquidated damages: 10% of the Contract Price	We kindly request you amend as follow 26.2 Applicable rate for liquidated damages: 0.5% of unfinished portion of Price per week of delay. Maximum deduction for liquidated damages: 5% of the Contract Price	Not tenable
18	1. General Requirements Scope of Supply of Plant and Services 3.9 Training 3.9.1 General, Page No. 95 of 339	3.9 Training 3.9.1 General a. Authority's Engineer reserves the right to request that the Contractor provide on-site training at respective concession sites.	We kindly request you provide the number of persons and number of days for training required. We presume that the training shall be conducted at site only during Installation and Commissioning.	As per RFP
19	1. General Requirements Scope of Supply of Plant and Services 3.19 Power Supply Page No. 99 of 339 & 100 of 339	The Contractor shall supply an interruptible power supply at each toll plaza building of suitable capacity with the output of 230 volt single phase. All equipment shall be provided with a clearly visible label indicating the input power supply type (AC or DC) and voltage. All equipment shall operate with the power supply of 230V plus or minus 10 percent, and 50 hertz plus or minus 3 percent. All field equipment shall operate normally under instantaneous power supply interruption of 20 mille-second or shorter. The power supply voltage available in the field will be 240V AC. Unless specified otherwise or with the approval of the Authority's Engineer, all field equipment shall be designed to operate directly on 240 V AC. The Contractor shall be responsible for arranging the terminal devices necessary to receive the power supply	We understand that 230V AC Power supply will be provided by employer during execution and operation period. We presume that the recurring charges of Power supply, if any shall be borne by the Employer - Kindly confirm	Please refer Addendum 1
20	TECHNICAL SPECIFICATION FOR MOBILE RADIO COMMUNICATION SYSTEM - SUPPLY AND INSTALLATION 2.0 Functional And Technical Requirements	2.1.2 The system shall use VHF channels for communications as approved by WPC. The system shall comprise of at least one automatic repeater at a suitable location within the expressway concession right-of-way. Additional automatic repeaters, distributed antennas and any	WPC approval is a lengthy process of approximately 4 to 6 months and contractor does not have any control on the same hence we request employer to provide sufficient extension of time for the delay due to WPC approval.	As per RFP

	2.1 GENERAL REQUIREMENTS Page No. 138 of 339	other equipment required to provide complete radio coverage and a functioning system shall be provided to ensure complete coverage of the expressway concession.		
21	Section 8 - Special Conditions of Contract 26. Completion Time Guarantee Page No. 8-5 (315 of 339)	30. Limitation of Liability 30.1 (b) The multiplier of the Contract Price is: 1.5 times	We kindly request you to amend the multiplier of Limitation of liability to 1.0 times of contract price.	Not tenable
22	Section 3- Evaluation and Qualification criteria 2.1.3.1- Eligibility criteria Page No. 3-3 (32 of 339)	A subsidiary Company registered in India of a Foreign Company having requisite experience may also participate, however, for considering the experience of the Parent Company, the subsidiary Company registered in India should provide an undertaking from their Parent Company	Please confirm that the parent company can bid for considering the experience of the subsidiary company where the parent company has more than 90% Stakes. We request you to kindly accept the credentials of the subsidiary company also if the Parent company has major stakes in the subsidiary company.	The provisions of the RFP are clear on this matter.
23	Section 2 - Bid data sheet & Scope of work ITB 16.1 (b) & 3 Page No. 2-3 (27 & 86 of 339)	ITB 16.1 (b) : The period following completion of plant and services in accordance with provisions of the contract shall be Implementation Period of 180 days and Operations & Maintenance Period of 5 Years from Commissioning 3 : Schedule of Works Table	We presume that the duration of System Design is 1 month + Completion and Operation is 6 months. We request you to kindly extend the project execution schedule to 12 months from the date of contract signing.	Not tenable
24	Scope of Work 3.2.2 : Conduction of FAT Page no. 87 of 339	The FAT shall be conducted within 4 weeks following award of Contract.	FAT shall be done before the dispatch of the equipments as the time mentioned (4 weeks from contract signing) in the RFP will not be sufficient to conduct the FAT, Please clarify.	Not tenable
25	Scope of Work 2 : Components of ATMS Page No. 85 of 339	Main Control Centre (MCC) is planned to be located at Lucknow and Agra and Sub Control Centre at Wayside Amenities (RHS) of package-2.	Please provide the details of Wayside Amenities (RHS) of package-2 and the equipments to be installed there.	The location of the Wayside Amenity (RHS) is Chainage 101+600. The equipment to be installed at the sub-control centre shall be as per the provisions of the RFP.
26	Technical specifications VMS 3.12 Controller - VMS Page no. 125 of 339	As indicated in the Schedule of Prices, a Controller is required for the development site in Toronto, Canada.	We observe that there is no mention of controller in the Schedule of Prices and also please clarify regarding Toronto, Canada mentioned here.	Deleted
27	Section 4- Bidding Forms Price Schedule Page no. 4-14 (47 of 339)	M2: Earthing cables	We observe that the quantity of Earthing cable (89 Mtr) is very less for the three traffic control centres & other equipments/components	The Cable is to be laid for 350 Kms and it will be a 4 core Cable that would be earthened at the Main LT panel and Feeder Panel. An Earthing aluminium Strip

				(3mm*5mm)and copper wire of 8mm at the Main LT panel or Feeder Panel would be installed at 16 Mtrs below the ground with salt (1.5 Kg) and Charcoal (4 Kg) with water drain pipe. So 3 Control Centres would require 3*14 mts of the Aluminium Strips (42 Mts) and Copper wire (42 Mts).Thus the given quantity suffices the requirements.
28	Section 4- Bidding Forms Price Schedule Page no. 4-14 (47 of 339)	M1 : Power cables required for all the equipment	We find that the quantity of power cables is very high, we request you to kindly clarify the basis of 350 Km of power cable requirement for this project.	The conditions of the RFP are self explanatory.
29	Section 4- Bidding Forms Price Schedule Page no. 4-13 (46 of 339)	L : Power Conditioning Equipment	We understand that the given quantity of UPS is only for command and control center. Kindly clarify.	As per RFP
30	Technical specification ATCC Clause 1.2 Page no. 115 of 339	The following equipment are needed for the design of ATCC:a) Controller;b) Controller Cabinet;c) Two inductive loops per lane; andd) Two piezoelectric sensors per lane.	We wish to inform you that the Camera based ATCC solution is the prevalent one presently. Hence we request you to change the same to camera based instead of inductive loops and sensor based.	As per RFP
31	General	General	Kindly provide the Technical specification of the Layer 3 and Layer 2 Switches.	The Switches to be used for Layer 2 and Layer 3 would depend upon the systems design hence has to be taken into regards as per the design of the solution proposed.
32	General	General	We request you to add various other sub system such as Speed detection, Weigh in motion, Mobile app and Internet dissemination to the scope of work.	No change envisaged
33	General	General	We request you to kindly give us the location details of the Traffic Control Centre @ Agra, Lucknow, Way side amenities (RHS). Also please inform us the lactation of VMS, CCTV, ATCC etc	Agra: ~ Chainage 18+575 of Expressway Lucknow: ~ Chainage 288+700 of Expressway Way side Amenity (RHS): ~Chainage 101+600 of Expressway

34	General	Vandalism & Theft	While the bidder can offer the components/solution which can withstand the vandalism to some extent, the bidder shall be absolved of any liability on account of the same, if the components/solutions are subject to continuous theft & vandalism attempts .	As per RFP
35	Specification of O&M, Cl 2.7, page 198 of 339	O&M Manpower	The list of manpower is not available in the RFP, we request you to kindly let us know the year wise minimum manpower required along with their qualification during the O&M period	As per RFP
36	Scope of work, Clause 3.10, page 96 of 339	Spares during O&M	We request you to kindly specify the minimum spares to be maintained by the bidder during O&M	As per RFP, The contractor shall keep the required spare part in order to meet the SLA
37	Technical Specification for CCTV, Clause 1.0 page 109 of 339	CCTV Camera for Lane wise monitoring	We presume that the quantity of CCTV cameras were arrived keeping in mind the number of lanes of lanes in the Expressway	As per RFP
38	Technical Specification for Transmission System, Clause 2.0, Cable System, page 144 of 339	Cable Trenching & Laying	We request you to share the survey report to assess the type & number of crossings in the expressway in order to decide the type of trenchless crossings & other installation requirements.	As per RFP, However the contractor are encouraged to conduct a site visit in order to determine the viable design before submission of bid
39	SLA, page 214 of 339	Penalty for breach in SLA	The penalty for breach in SLA is on the higher side, we request you to kindly relax the same. We also request you to keep the cap on the SLA to a maximum of 5% on the QBV	Not tenable
40	Page 165 Clause 3.1.1	The Installer Shall Install the 48V DC power equipment including the Batteries, in the area designated.	Since the ECB will be powered through Solar Panels, it could be a 12 V DC instead of 48 V DC. Please clarify.	230V to 24V or 12V adaptor can be used;
41	ECB Technical Pg: 106	Voice Logger Software shall be provided by others to handle and log all calls from the network.		The provision for handling is already provided in the technical specifications for ATMS. To elaborate, the ATMS Contractor shall be responsible for handling as well as logging all calls from the network.
42	Pg: 106	Braille Messages: -	What type of messages?	Although the provision in the RFP is clear, for elaboration purposes please note the following:

				Following message will be printed below push button, "Press the Button once release, Wait for reply, Speak clearly in Microphone
43	Pg: 106	2.1.4 The LED indicators shall be provided for hearing impaired users. -	What must be the message content in it and what size display to be provided? Is it mandatory to provide this?	Single LED will be enough for indication, No specific size, Yes it is mandatory
44	Pg: 106	2.1.5 There shall be up to four programmable auto-dial numbers associated with the push button.	Does this mean four different push buttons? This facility can be provided at control room.	No, single push button is enough. Yes this facility of four programmable auto dial number has to be in control room software in round-robin structure.
45	Pls Clarify Pg: 107	2.5.1 f) Use signalling which is inaudible to the user;		Wiring signal used at master and slave ECB side should not generate any noise.
46		3.1.2 Each ECB shall have two Ethernet ports. The ECB shall be connected to the communications node via one Ethernet port.	Why not gprs? Pg: 108	The ECB shall use Voice over Internet Protocol (VOIP) of communication through fibre optics which is mandatory
47	PTZ Technical Pg: 109	2.1.1d) Lowering system;	Pls Clarify the requirement.	The lowering system shall consist of a suspension contact unit, divided support arm, and a pole adapter for attachment to a pole-top tenon, pole-top junction box, and camera connection box
48		2.1.3 The CCTV camera shall meet the following electrical requirements:		
49		a) The power consumption shall be 230V, 50 Hz \pm 5%. b) The power consumption shall be 12V \pm 10%.	It should be power rating	230V to 24V or 12V adaptor can be used;
50	Pg: 113	3.1.1 The following NTCIP interface is preferred. Alternatively, a proprietary RS-422 communication protocol may be provided as long as the Supplier provides details of the protocol to ATMS:	Pls Clarify	TCP/IP or RS-422/485 protocol is to be used for Camera control

51	VMS Technical Pg: 123	3.5.3 The gantry design will be completed by others. The Supplier shall co-ordinate with the gantry designer to finalize mounting hardware and mounting arrangement details (i.e. hardware spacing).	Who will be making the gantries?	The gantry will be provided by the ATMS contractor and the design shall be approved by the Authority's Engineer.
52	Pg: 124	3.6.8 The sign shall be supplied with a minimum of two lifting eyes capable of lifting the sign without damage.	Pls Clarify term lifting eyes.	Way to pull the VMS on gantry
53	Pg: 125	3.12.2 As indicated in the Schedule of Prices, a Controller is required for the development site in Toronto, Canada.	Pls clarify	Deleted
54	Pg: 129	4.1.4 Each VMS will have an RS232 communications link to an optical and preferably a network interface to allow Ethernet communication from the Controller to the Central System.	GPRS communication mode is acceptable or not?	As per RFP
55	Workstation Pg: 154	2.1.1b) Memory: 16 GB;	Is this requirement mandatory?	As per RFP
56	Operation and Maintenance, Pg: 199	The Employer will conduct from time to time the evaluation of the ATMS Operation Services and Maintenance services provided by the Contractor under the Contract based on the performance of service level parameters specified in Service level Table.	It is mentioned Incident Detection Camera. What type of detection it will be automatic or manual?	As per RFP, the detection can be combination of automatic or manual or both in order to keep the traffic regulation on the Expressway
57	4.3 Pg: 203	Operation of CCTV System b) Incident detection	Is this part of tender?	Yes, it is part of the scope of the tender.
58	Page -32 Clause 2.1.4	Consortium Member Eligibility the eligibility criteria for all the members of consortium should be in accordance with this clause 2.1. Further, Lead Member shall meet at least 60% requirement of the eligibility criteria and each of other consortium members shall meet at least 20% requirement of eligibility criteria. For avoidance of doubt it is further clarified that the consortium must collectively satisfy the complete eligibility criteria.	Request this clause to be removed. As specialty technology companies may not have 20% ATMS experience. Suggest 75KM ATMS experience to be kept for primary member only. Secondary member to have technology experience so as members compliment each other	Not tenable
59	2.1.2	The bidder should have an average annual turnover of Indian Rs. 25 Cr. for the last three financial years.	Considering importance & criticality of project on serious contractors to be selected. Suggest Turnover criteria to be increased to 100 crore so as serious & financially able companies participate. Proportionately consortium members to have turnover criteria	Please refer Addendum 1

60	Page -122, Clause 3.2	Technical Specifications: Display	Please provide LED Pitch details for Display For Highway Applications 16mm or 20mm is recommended. Pitch decides LED density it has direct impact on Pricing .Need Pitch Details as part for tender specifications for fair comparison	As per RFP
61	ITB 21.1/Pg no. 27	Bidder need to submit bid security of INR 1 cr. along with tender document	Pls allow to submit bid security(In form of BG) with respect to stake in JV/consortium of each member	Not tenable
62	Clause no. 3.4.3/Pg no. 88	Co-ordinate with other Contractors, Cladding Contractors, and civil and electrical Contractors with regards to site access, availability of civil and electrical provisions, testing and any other co-ordination required to complete the work.	All the respective civil, statutory approvals from Govt. Authority , electrical supply , respective power provision is under client scope.	All approvals are under the scope of the ATMS Contractor. The Employer will provide necessary support required for obtaining these approvals. The electrical supply shall be provided by the Employer up to certain specific nodes on the Expressway. The ATMS Contractor shall have the responsibility to draw electricity from these nodes for their requirement. The cost of same will be reimbursed from the Employer during O&M period only.
63	Appendix 1/ Pg no. 321	Terms of Payment...	Pls consider following (A) Terms of Payment Ten percent (10%) of the total bid price as an advance payment against receipt of invoice and an irrevocable advance payment security for the equivalent amount made out in favor of the Employer. Twenty percent (20%) of the total bid price upon submission and acceptance of design of the ATMS System. forty percent (40%) of the total bid price upon issuance of Operational Acceptance Certificate. Thirty percent (30%) of the total bid price in 20 equal quarterly instalment for the operations and maintenance period after the start of commercial operations subject to deduction of penalties on account of.	Already responded at S No. 15

64	ITBP 16.1b/Pg no. 27	The period following completion of plant and services in accordance with provisions of the contract shall be Implementation Period of 180 days and Operations & Maintenance Period of 5 Years from Commissioning	Pls extend the project completion timelines to 12 months/ 365 days	Already responded at S No. 23
65	ITBP 18.6/Pg no. 27	(a) The bidder shall quote the prices in Indian Rupees only (b) Prices quoted by bidder shall be fixed for the entire Contract period. Bids submitted with adjustable price quotation shall be summarily rejected.	Pls clarify - Project is "Custom and Service Tax exempted - Tax as per actual if GST prevails during project execution	The Bidder has to assess the applicability of the Customs duty exemption as well as applicability of Service Tax. The Employer will provide any certificate required by the ATMS Contractor after providing details of customs duty exemption applicability. To further clarify, the Bidder has to submit its bid with all taxes and duties included as per current rules and regulations. If there is change in any statute with respect to taxation i.e. applicability of GST at a future date, the either party will reimburse the difference between current Service Tax and the applicable GST, as applicable.
66	Eligibility Criteria 2.1.3	The bidder shall have the experience of successfully commissioning a minimum of 75 Kms of ATMS / HTMS for at-least 4-Lane Highway / Expressway in India or abroad during past 5 years	Total Stretch is of 325 kms hence we request to modify this clause and keep minimum length of Highway to 100+ Kms in place of 75 kms	Not tenable
67	Work Programme - Optical Fiber Communication Network 3.12	The Contractor shall install optical fiber cable along the medians of the main carriageway of Expressway and establish a communication network	Please describe the methodology and scope for connecting both end of Median opening locations. Also for Plaza connectivity fiber route needs to be confirm. Can we use existing culvert for plaza connectivity OR HDD is required.	The both end of the median has to be trenched at ECB Locations. Thus the quantity of OFC is 350 KMs
68	TECHNICAL SPECIFICATION FOR SUPPLY OF EMERGENCY CALL BOX - PERFORMANCE REQUIREMENTS 4	The ECB shall have 99% availability	Do we have to use both GSM and Fiber optic connectivity. Recommended for redundancy and	As per RFP

69	Work Programme 3	Completion, passing the Tests on Completion and Operational Acceptance Certificate by the Authority's Engineer	Six months will be challenging. We request to reconsider the completion time lines.	Not tenable
70	Software Manual 3.6.6.1 & 2	The software manual shall therefore include the application programs and database. The manual shall describe the overall software structure with particular attention to the points at which further user programs can be interfaced. It is essential that the relationship of program modules, their priority, and their calling sequences are explained in such a manner	We can explain the software functionality. Do we have to provide detail software structure, database information and logic.	Yes
71	Spares During Operation And Maintenance 3.10	a. The Contractor shall provide a detailed list of spare parts (at the component level) required to support the equipment maintenance during operation & maintenance for five years.b. The quoted unit prices for spares and spare parts shall remain valid for the duration of the Operation and Maintenance period.	In Section 4 - Schedule 6 Bidding Form we have to mention spare Parts. Do we have to mention the spare price also in this form. Will it be part of Bid Price.	Yes
72	TECHNICAL SPECIFICATION FOR MOBILE RADIO COMMUNICATION SYSTEM - SUPPLY AND INSTALLATION	WPC License	We assume WPC License will be under Authority's scope. We can assist for documentation.	WPC License is to be procured by the ATMS Contractor.
73	Cable Burying 3.24.4	The tapes shall give identification by color and legend, as appropriate, e.g. Yellow - "Power cable below" and Green - "Communications cable below" etc. Cables shall be laid at a minimum depth of 600 mm.	We assume that separate conduit needs to be use for laying power and OFC cables on entire stretch Please confirm. Also confirm if both Power can OFC will be laid in median.	The OFC and Power cable has to be laid in the median/shoulder. Both the cable should be laid in different conduits with at least 1 mtr. distance apart from each other.
74	Cable Burying (Power)	The tapes shall give identification by color and legend, as appropriate, e.g. Yellow - "Power cable below" and Green - "Communications cable below" etc. Cables shall be laid at a minimum depth of 600 mm.	Kindly confirm if the power cable shall be laid in the median or on right of way (ROW)	In the median/shoulder
75	General	Power	Please confirm if Raw power shall be provided by the authority at desired locations and the scope of recurring charges	Please refer Addendum 1
76	General Point	Operations	We assume route patrolling and Ambulance is not under contractor's scope under operations.	Yes

77	Terms and Procedures of Payment Appendix 1	Payment terms 10% advance , 20% design approval , 20% OAT and 50% on quarterly installment.	We request you to please consider 45% on OAT	Not tenable
78	TECHNICAL SPECIFICATION FOR SUPPLY OF PTZ CLOSED CIRCUIT (CCTV) CAMERA 1.1.3	The CCTV cameras for the ATMS subsystem shall provide spot coverage of the motorway and adjacent approaches for the purposes of incident detection, confirmation and management	We assume CCTV should be capable of incident detection automatically like vehicle stopped, Accident etc. Please confirm.	Already responded at S No. 6
79	TECHNICAL SPECIFICATION FOR SUPPLY OF AUTOMATIC TRAFFIC COUNTER CLASSIFIER (ATCC)	Accuracy (ATCC measured values vs. real values)	In RPP pizo / loop based technology is mentioned. Can we use alternative if require.	No. The conditions of the RFP prevail
80	Limitation of Liability 30	b) The multiplier of the Contract Price is: 1.5 times	Request to re-consider the Limitation of Liability and restrict it to Contract Price	No change envisaged
81	Insurance	Insurance during contract period	Please confirm if Insurance needs to be taken after DLP period also.	As per RFP
82	General Point	ATCC Equipment Location	Please confirm if ATCC is required at both LHS and RHS at each signal Location.	Yes
83	Control Room Functionality		Please confirm if software functionality will be same in all control room including CC.	As per RFP
84	CCTV		Can we consider IP CCTV PTZ camera as per RFP analog camera specs is mentioned	As per RFP
85	Chainage of equipments		We request you to share the equipment location with chainage details	Already responded at S No. 4
86	Custom Duty Exemption and desired documentation		Since custom Duty (BCD) is exempted on construction and Traffic Control Equipment for highways, will the desired documents be provided by Authority to claim custom exemption	Already responded at S No. 65
87	The Employer's evaluation of a Bid will be on the basis of fixed Lump Sum Price quoted by the Bidder and shall include all components including taxes and duties 39.2-II		Kindly clarify the scope in the event of future changes/modification in any Taxes	Already responded at S No. 65
88	MET Stations		It is recommended to install the MET station at every 60 Kms and there are 3 MET stations asked in the document thus we request for increase in the number of MET stations	No change envisaged

89	General	Network	Kindly provide clarity whether the network connectivity is required on MPLS cloud or on NLD backbone? If any dual last mile solution is required?	The network connectivity is to be provided as per the design to be approved by the Authority's Engineer. To further elaborate, Multiprotocol Label Switching however would be required at places where the number of users are large in number and dynamic in nature. As the Length of the Stretch is 305 Kms NLD Backbone would be preferable to provide consistent High Quality data transfer though out the stretch.
90	General	Network	Bandwidth has not been mentioned for connectivity. Kindly specify how much bandwidth to be provisioned for each camera / Junction.	As per design to be developed by the ATMS Contractor.
91	Page 215, Point 6	Network Connectivity between main CC and Sub CC to ATMS road side equipments SLA 99.7%	The asked SLA is very high kindly change to 99.5%	No change envisaged
92	General	Network	Kindly share the details of the locations at which the cameras to be installed on the Highway in order to get the feasibility done. Also, please clarify if the department has considered any Geo-codes of the locations to install the cameras	Already responded at S No. 4
			As the asked Network Uptime is 99.7%. Kindly clarify if the Last Mile is to be delivered on Fiber? We suggest to clearly mention that in order to get 99.7% uptime the LM delivery should be on underground fiber connectivity	As per RFP
94	General	Acceptance Criteria	Acceptance Criteria for delivering of the link should be defined clearly. Ping test till customer router, testing criteria etc should be clearly defined. The acceptance of the links should be given by the department as and when the links are delivered at the sites i.e. link with acceptance to be provided. Billing will start at the time of acceptance of the link	As per RFP

95	General	Network	In case the links are to be delivered on optical fiber the department will provide the ROW permissions for delivery of links on fiber. Also department will waive off the cost of ROW permission as it is a Govt. project.	As per RFP
96	213	SLA	For Bandwidth piece, we need to have clear SLA : 99% on fiber, 98.5% on Copper/RF	As per RFP
97	315	Limitation of liability	Request you to change the multiplier to 1 of the contract value corresponding to the TCV of the service provider	No change envisaged
98	321	Appendix 1	For Bandwidth piece, we need to have clear payment terms as : OTC - 100% on installation, ARC: Quarterly advance	No change envisaged
99			Please confirm that telecom service provider will be a part of Tripartite Agreement and not consortium	As per RFP
100	2.1.2 Eligibility Criteria	The bidder should have an average annual turnover of Indian Rs. 25 Cr. for the last three financial years.	We request to kindly modify this criterion as: "The bidder should have an average annual turnover of Rs. 500 Cr. for the last three financial years"	Please refer Addendum 1
101	2.1.3 Eligibility Criteria	The bidder shall have the experience of successfully commissioning a minimum of 75 Kms of ATMS / HTMS for at-least 4-Lane Highway / Expressway in India or abroad during past 5 years (till the year ending March 2016). In the case of a consortium this experience can be the combined experience of the members of the consortium. (The documentary proof in support of the experience[in the form of copy of work order/ completion certificate from its clients or a self-declaration indicating the names of projects undertaken, scope of work of each project, name of client, start date, date of completion, value of the project etc.] shall be submitted as part of the eligibility documents. 1)	We request to kindly modify this criterion as: The bidder shall have the experience of successfully commissioning a minimum of 75 500 Kms of integrated ATMS / HTMS for a 4-Lane Highway / Expressway in India or abroad during past 5 years (till the year ending March 2016). In the case of a consortium this experience can be the combined experience of the members of the consortium. The ATMS/HTMS should have at least 4 out of the following sub-systems integrated: a. Variable Message Signs b. Metrological Data Stations c. ATCC / Vehicle Detector Stations d. CCTV e. Video Incident Detection System f. Emergency Call Boxes g. Lane Use Signs h. SCADA system (The documentary proof in support of the experience [in the form of copy of completion certificate from its clients]shall be submitted as the part of eligibility documents.	Not tenable

102	2.1.4 Eligibility Criteria	the eligibility criteria for all the members of consortium should be in accordance with this clause 2.1. Further, Lead Member shall meet at least 60% requirement of the eligibility criteria and each of other consortium members shall meet at least 20% requirement of eligibility criteria. For avoidance of doubt it is further clarified that the consortium must collectively satisfy the complete eligibility criteria.	We request to please delete this criteria & allow the consortium to collectively meet the overall criterion.	Not tenable
103	3.2 Display	VMS shall use Light Emitting Diodes (LED) technology. The sign shall be designed to meet the requirement of EN12966-1: a) Luminance level: min. L3; b) Color: RGAmbler C2; c) Luminance ratio: R3; and d) Beam Width: B2.	Please clarify is the VMS required is of Full Color (RGB) or Amber color only.	As per RFP i.e RGB
104	3.1.1 Functional requirements	Each full matrix VMS shall be comprised of a minimum of 45 pixels high by 170 pixels wide. Each VMS shall display multiple lines of nominal 450-650mm alphanumeric characters using Hindi and English character fonts where 11 pixels high equates to 450mm.	The 11 Pixel height equates to 450 mm which comes out to approx. 41mm pixel pitch. Globally for VMS the pixel pitch being used is 20mm or 25mm. Kindly confirm the pixel pitch required along with overall VMS size and display area size.	As per RFP
105	3.2.5 Display, Page 121	Failure of operation of a single display element (pixel) shall not require on-site replacement of more than one module of maximum size 11 x 11.	Module size varies from supplier to supplier and cannot be considered same for all OEMs. We request to remove this requirement or else remove size of 11x11 as mentioned in RFP.	As per RFP
106	3.2.10 Display, Page 122	Each pixel shall contain sufficient LEDs so that the entire sign with the polycarbonate sheet in front of the pixels shall fulfil the optical output, contrast, viewing angle, legibility and reliability requirements.	Use of polycarbonate sheets on VMS facia is outdated. These days VMS with LEDs directly exposed are preferred due to fading and glare issues associated with polycarbonate sheet.	As per RFP
107	3.6.3 Signcase, Page 123	Maintenance walkway access door(s) shall be located on the rear of the VMS signcase. The access door(s) shall be rain-tight and dust-tight. The access door(s) shall be design to contain a mechanism to securely retain the door in a fully open position under the design wind conditions. Each door shall be furnished with a keyed lock and all doors on all VMS supplied shall be keyed alike. Two keys for each signcase shall be given to Employer upon completion of the project.	The maintenance walkway should be of wire mesh type as per IRC guidelines. We request to kindly modify this requirement accordingly.	As per RFP

108	2.1 ATCC, Page 170	<p>As part of the vehicle detection system, the ATCC controller shall process loop detector signals and piezo electric sensors into meaningful individual vehicle measurements. Specifically, the ATCC shall collect and calculate the following measurements for each discrete lane of the expressway:</p> <p>a) Vehicle lengths in meters (m); b) Vehicle speed in kilometers per hour (km/h); c) Vehicle volume as number of vehicles; d) Number of axels; e) Inter-axle spacing in meters (m); f) Vehicle classification; and g) Loop detector occupancy as a percentage of one second. h) Solar panel for power</p>	Piezo based sensing technologies are quite old and is prone to damages as it is intrusive and has limited life span. We request you to kindly specify vehicle category detection requirements and make technology selection open to the bidders as multiple solutions are available in industry which are both intrusive and non-intrusive.	As per RFP
109	1.0 Service Level Requirements, Page 213	General Observation	The penalties as per SLA are very high and are also being calculated on individual equipment basis. In some cases the penalty on downtime is even exceeding cost of the equipment. We request to kindly modify the SLA and it should be structured in a way to impose penalty on overall sub-system and system up-time rather than each equipment level availability.	Not tenable
110	8. Change Request – Software, Page 219	Total penalty shall not exceed 20% of QBV in each quarter, if three consecutive quarterly deduction exceed more than 20% of respective QBV, will be considered as an event of default or termination. The contractor has to obtain certification from the Authority’s Engineer latest by the end of third quarter.	We request to limit penalty to maximum of 10% of quarter instead of 20%.	Not tenable
111	CCTV2.4 Poles for CCTV Camera Equipment2.4.1 Poles shall be designed to accommodate and ensure that the camera lowering system is fully functional and to support other CCTV camera equipment. The pole and the camera lowering system shall be considered an integral system designed	If the pole height can be reduced to 8 meters as per surveillance norms, then the Camera lowering mechanism can be completely eliminated, thereby reducing the cost of the pole.	Poles shall be designed to accommodate installation of CCTV cameras only. The pole considered shall withstand wind load and dead load.	No change envisaged

	considering application of wind load and dead load.			
112	2.4.3 A minimum 15 m pole (above ground) shall be provided.	<p>a. Normally for any surveillance usage, an 8 mtr Pole is recommended.</p> <p>b. Camera at 15 meters is too high & the incident visibility will be compromised.</p> <p>c. There by reducing the height of the pole to the norm recommended will reduce the cost of the pole & foundation & there by advantage to the department.</p> <p>e. The Ingress Protection (IP) standard mentioned in the tender is IP-65. Which will not be suitable for outdoor highway surveillance. Hence the same can be modified as IP-66 compliance.</p> <p>f. 2.2.1 - The resolution of the camera is mentioned as 752 (H) x 582 (V) which is only 0.4 MP. Now the video technology has moved to Full HD resolution that is 1920 * 1080 which is 2 MP. We request you to amend the resolution to 1920*1080 (2 MP).</p>	A minimum 8 m pole (above ground) shall be provided.	No change envisaged
113	2.5 Camera Lowering System	<p>The camera lowering system shall meet the following requirements: a) All electrical and video coaxial connections between the fixed and lowerable portion of the contact block shall be protected from exposure to the weather by a waterproof seal to prevent degradation of the electrical contacts; b) The camera lowering system shall be designed to support and lower a dome type camera, cabling, connectors and other supporting field components without damage or causing degradation of camera operations; c) The lowering system shall consist of a suspension contact unit, divided support arm, and a pole adapter for attachment to a pole-top tenon, pole-top junction box, and camera connection box; d) The divided support arm and receiver brackets shall be designed to self-align the contact unit with the pole centre line during installation and insure the contact unit cannot twist under high wind conditions. Round support</p>	Request you to kindly remove this clause.	As per RFP

	<p>arms are not acceptable; e) The suspension contact unit shall have a load capacity of 91 kg with a 4 to 1 safety factor; f) There shall be a locking mechanism between the fixed and moveable components of the lowering device; g) The movable assembly shall have a minimum of two latches. This latching mechanism shall securely hold the device and its mounted equipment. The latching mechanism shall operate by alternately raising and lowering the assembly using the winch and lowering cable. When latched, all weight shall be removed from the lowering cable; h) The fixed unit shall have a heavy duty cast tracking guide and means to allow latching in the same position each time. The contact unit housing shall be weatherproof with a gasket provided to seal the interior from dust and moisture; i) The prefabricated components of the lift unit support system shall be designed to preclude the lifting cable from contacting the power or video cabling; j) The Supplier shall supply internal conduits in the pole for the power, communications, and video cabling; k) The only cable permitted to move within the pole or lowering system during lowering or raising shall be the lowering cable. All other cables must remain stable and secure during lowering and raising operations; l) The camera lowering system shall be operated by use of a portable lowering tool. The tool shall consist of a lightweight metal frame and winch assembly with cable as described herein, a quick release cable connector, and an adjustable safety clutch. The tool shall be designed to operate with either a hand crank supplied with the tool or a variable speed industrial duty electric drill. This tool shall be compatible with, seat properly on the supplied pole and provide easy access to the support cable through the handhole of the pole; m) The lowering tool shall attach to the pole with one single bolt. The</p>		
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	<p>bolt receptor shall accommodate a 19 mm (¾ inch) stainless steel bolt. The tool shall support itself and the load assuring lowering operations and provide a means to prevent freewheeling when loaded. The lowering tool shall be delivered to the designated ATMS representative upon project completion. Two stainless steel through bolts and wing nuts shall be supplied with this item;</p> <p>n) The lowering tool shall have a reduction gear to reduce the manual effort required to operate the lifting handle to raise and lower a capacity load;</p> <p>o) The lowering tool shall be equipped with a positive breaking mechanism to secure the cable reel during raising and lowering operations and prevent freewheeling;</p> <p>p) The Supplier shall provide a variable speed, heavy-duty reversible drill motor and a minimum of one lowering tool;</p> <p>q) The Supplier shall provide weights and/or counterweights as necessary to allow easy alignment of the guide pin and connectors when the camera is being raised into position.</p> <p>r) The female and male socket contact halves of the connector block shall be made of thermosetting synthetic rubber known as Hypalon. The female brass socket contacts and the male high conductivity brass pin contacts shall be permanently moulded into the Hypalon body;</p> <p>s) The current carrying male contacts shall be 3 mm (1/8 inch) in diameter. There shall be two male contacts that are longer than the rest which will make first and break last providing optimum grounding performance;</p> <p>t) The number of contacts shall be 14 and the camera mounted thereto, shall be capable of performing all of its necessary functions on 14 contacts or less;</p> <p>u) The current carrying female contacts shall be 3 mm (1/8 inch) in diameter. All of the contacts shall be recessed 3 mm (1/8 inch) from the face of the connector. Cored holes in the rubber measuring 6 mm (1/4 inch) in diameter and 3 mm (1/8 inch) deep moulded</p>		
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		<p>into the connector body are centred on each contact on the face of the connector to create rain-tight seals when mated with the male connector; v) The wire leads from both the male and female contacts shall be permanently and integrally moulded in the Hypalon body. The current carrying and signal wires shall be constructed of #18/1 AWG Hypalon jacketed wire; w) The contacts shall be self-wiping with a shoulder at the base of each male contact so that it will recess into the female block, thereby giving a rain-tight seal when mated. The Supplier of the electrical contact connector must be ISO 9001 certified. The connector must be identified by the Supplier for outdoor use;. x) The Supplier shall provide the power and signal connectors for attachment to the bare leads in the pole top and camera junction boxes. These connectors shall come with 1 metre lead wires. y) All pulleys for the camera lowering device and portable lowering tool shall have sealed, self lubricated bearings, oil tight bronze bearings, or sintered bronze bushings; z) The lowering cable shall be a minimum 3 mm (1/8 inch) diameter stainless steel aircraft cable with a minimum breaking strength of 790 kg (1740 pounds) with seven strands of # 19AWG wire each; aa) The interface and locking components shall be made of stainless steel and or aluminium; and bb) All external components of the lowering device shall be made of corrosion resistant materials, powder coated, galvanized, or otherwise protected from the environment by industry-accepted coatings to withstand exposure to a corrosive environment.</p>		
114	<p>2.1 General requirements 2.1.1 The CCTV camera shall include the following components: a) Camera, lens, integrated pan/tilt/zoom drive,</p>	<p>The specifications given in the tender is analog camera which is already phased out 4 years back. Hence we request you to amend to the latest Norms which are --- -----</p>	<p>We request you to kindly include the following specifications</p>	<p>As per RFP</p>

	<p>and dome enclosure; b) Solar panels with 72 hrs back up c) Poles; d) Lowering system; and e) Mounting arm and enclosure. 2.1.2 Suppliers shall take all necessary precautions and design their equipment to meet the technical requirements in light of the frequent power loss and supply variations that occur with the power supply in India. 2.1.3 The CCTV camera shall meet the following electrical requirements: a) The power consumption shall be 230V, 50 Hz $\pm 5\%$. b) The power consumption shall be 12V $\pm 10\%$. 2.1.4 The CCTV camera shall be IP65 compliant. 2.1.5 The CCTV camera shall withstand wind loading of 240 km/h when properly installed and mounted.</p>			
115	<p>2. 2 Camera, lens, PTZ drive and Dome enclosure 2.2.1 The camera shall meet the following functional requirements: a) Each camera shall incorporate an integrated camera pan/tilt/zoom unit, lens, and dome enclosure; b) The camera shall make use of a 1/4" colour, inter-line transfer, solid state CCD image sensor with a minimum of 752 (H) x 582 (V) active pixels; c) The camera shall automatically close the shutter when the power to the CCTV is</p>	<p>The specifications given in the tender is analog camera which is already phased out 4 years back. Hence we request you to amend to the latest Norms which are --- -----</p>	<p>We request you to kindly include the following specifications</p>	<p>As per RFP</p>

<p>lost; d) The camera shall be designed for use at low light levels and shall have a wide dynamic range with minimal blooming and transfer smear characteristics; e) The camera focus shall be automatic with both manual override/preset facility; f) The camera sensitivity shall be 0.02 lux at 1/1.5 second shutter speed; g) The camera shall provide a minimum of 470 lines horizontal resolution; h) The camera shall incorporate automatic with manual override AGC circuitry to provide for compensation at low light levels; i) The camera shall include an integral receiver driver. The receiver/driver shall be capable of controlling pan-tilt, zoom and focus and shall be have the interface as described in section 4.1; j) The camera shall allow vertical phase adjustment; k) The camera shall have output impedance of 75 ohms and shall provide a standard colour PAL composite video signal output via a quick disconnect BNC connector on the rear panel of the camera; and l) The weighted signal to noise ratio shall be greater than 50 dB at 1.0 V p-p (AGC off).</p> <p>2.2.2 The lens shall meet the following functional requirements:</p> <p>a) The lens shall be a</p>			
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<p>“CS” mount, zoom lens with automatic iris and spot filter; b) The lens shall support ‘33 optical zoom, ‘10 digital zoom; c) The lens shall provide a minimum focal length range of 3.6 - 82.8 mm; d) The automatic iris shall include a neutral density spot filter providing a minimum aperture of f/1.4; e) The lens shall be held closed by a delay circuit for a minimum of five seconds when power start-up occurs; f) The lens shall include zoom/focus pre-set position potentiometers; g) Power interruption protection shall be provided to close the lens iris in case of power loss; and h) The lens shall be designed to prevent bright light “flare” caused by indirect sunlight outside the angle of view of the lens affecting the viewed scene. 2.2.3 The PTZ drive shall meet the following functional requirements: a) Pan range (horizontal rotation) shall be 360° continuous; b) Vertical auto tilt shall be 180° continuous; c) Pan/tilt accuracy ±-.5°, zoom accuracy ±-.5%; d) Manual tilting speed: adjustable from 0.1°/s to 120°/s; and e) Manual panning speed: adjustable from 0.1°/s to 120°/s. 2.2.4 The dome enclosure shall meet the following</p>			
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	<p>functional requirements: a) It shall be made of light grey painted aluminium with clear bubble for camera view. The bubble shall be constructed from high quality clear, optically graded thermoformed acrylic or equivalent; b) Tamper-proof hardware and safety strap shall be provided to attach the bubble to the dome housing. A gasket seal, or other waterproofing method, shall be provided; c) All external connections shall be environmentally sealed; d) The weight, without housing shall be 1.8 kg; and e) The weight of the environmental enclosure including camera, lens and all accessories shall not exceed 4.0 kg.</p>			
116	<p>2.3 Solar Panel 2.3.1 Some of the CCTV require solar panel for power supply. Quantities are included on the quantity sheet. 2.3.2 The Supplier shall provide a solar panel, storage cells and all necessary hardware and mounting brackets to allow the CCTV to remain operational, under normal operating conditions, for a minimum of 72 hours following main power loss.</p>	<p>Department asked the bidder to lay power supply cable for 350 Kms. (Item no K6). We would like to mention that power supply can not be established for entire 350 Kms on any cable with out transformers & other electrical accessories to take care of voltage drop.</p>	<p>We request you to kindly clarify this point or mention the nearest points from where the electricity can be tapped for powering the equipments for the entire length of 350 kms. Since the power source would be made available from nearest points , we would suggest that 72 hours of solar back would not be required. Hence the same can be amended to 8 hours.</p>	<p>The Authority would be responsible to provide the Power Node at different Locations. However after the Node the Feeder Pillars and Suitable size of cable(4 C 185 Sqmm Aluminium Armoured Cable,4 C 35 Sqmm Aluminium Armoured Cable,4 C 16 Sqmm Aluminium Armored Cable) as per the design has to be taken in to regards to prevent Voltage Drops.</p>
117	<p>Power Supply General Requirements 3.19 The power supply made available at</p>	<p>Since Toll Plaza is not in the scope of the tender. We request you to delete this clause.</p>		<p>Please refer Addendum 1</p>

	<p>control center building will be 415 volt three phase 4 wire 60 Hz. The Contractor shall supply an interruptible power supply at each toll plaza building of suitable capacity with the output of 230 volt single phase. All equipment shall be provided with a clearly visible label indicating the input power supply type (AC or DC) and voltage. All equipment shall operate with the power supply of 230V plus or minus 10 percent, and 50 hertz plus or minus 3 percent. All field equipment shall operate normally</p>			
118	<p>VMS 3.2.3 The display shall have a maximum dimension (H x W) of 2.5 m x 8 m.</p>	<p>Presently on the Access controlled Expressway & Highways across India the size of the VMS board installed is around (Height*Width) of 1.8 m * 3 m. Hence we request you to amend as per the norms</p>	<p>The display shall have a maximum dimension (H x W) of 1.8 m x 3 m.</p>	<p>As per RFP</p>
119	<p>1.4 Suppliers must be careful with power supply's inconsistency and fluctuation. The solar power shall be given with 12 hrs backup for each VMS</p>	<p>As the power consumption of the VMS board is very high, providing solar power will consume huge area in each location</p>	<p>As the option is not viable,</p>	<p>To overcome this problem the AC power through power cables would be put in use</p>
120	<p>ECB 1.5 An ECB shall be installed every 2 km along both sides of the expressway with one unit across the road from the other.</p>			<p>AS per RFP</p>
121	<p>3.1.1 The ECB shall use Voice over Internet Protocol (VOIP) of standard IEEE802.3af communication through fibre optics.</p>			<p>Already responded at S No. 46</p>
122	<p>ATCC2.1.1 b. There shall be a minimum of 20 configurable classification groups where classification</p>	<p>There shall be a minimum of 10 configurable classification groups where classification is based on the number of axles and spacing between axles 1</p>	<p>b. There shall be a minimum of 10 configurable classification groups where classification is based on the number of axles and spacing between axles 1 and</p>	<p>As per RFP</p>

	is based on the number of axles and spacing between axles 1 and 2. The classification groups shall initially be configured by the Supplier to match what is delivered in the toll system;	and 2.	2. The classification groups shall initially be configured by the Supplier to match what is delivered in the toll system;	
123	POWER 1. Payment of monthly power Bills during the entire project both at field & at different control room level is in whose scope.	Provide clarity on who scope it is		Please refer Addendum 1
124	2. Permissions approval for power tapping from different places in whose scope.	Provide clarity on who scope it is		Power tapping from the Node is the responsibility of the ATMS Contractor.
125	3. DG running costs who is taking care of the diesel costs every month.	Provide clarity on who scope it is		The recurring cost of DG running is to be borne by the ATMS Contractor
126	4. Number of earthing locations have to be increased.			Already responded at S No. 27
127	CONTROL ROOM 1. Video wall in control Room 2. There are 3 control Rooms 3. Different licenses have been used for OS & Storage 4. Number of viewing control rooms are 3.	1. Can we go with 55 inch monitors rather than Video wall. 2. Three control Rooms needs to be used as Redundant Locations. 3. Are both of them needed. 4. Number of viewing control rooms be reduced from 3 control Rooms to 1 control room.		As per RFP
128	Eligibility Criteria – Clause No. 2.1.2	average annual turnover	Relaxation in turnover criteria for more competitive bidding who have technical qualification to deliver project .	Please refer Addendum 1
129	General	Implementation of SSWIM	Implementation of SSWIM	Not relevant to the current contract
130	General		Are the design and supply of poles for CCTV mounting and the structures for the VMS signs part of the contractors scope of supply or is it part of the civil contractor? Please clarify	Design and supply of poles and structures for VMS signs is the responsibility of ATMS Contractor
131	General		How far away are the power supply available to our systems ? Is there a schematic showing the layout of the equipment on the highway? Please clarify	Already responded at S No. 4
132	Clause 18.6		In the BDS, mentions it's a Fixed Lump Sum contract. The Price schedule has quantities mentioned in it such as the	Any variation in quantities shall be entertained as per conditions of the

			length of Fiber and other cables etc. If we require more cables or network switches than indicated in the Price schedule, will the Authority consider this as a Variation and pay additional amounts for it? Please clarify	RFP
133	Clause 3.12.1:		How many interchange offices are there along the highway? Please clarify	Already responded at S No. 33
134	Clause 3.12.1		: "Time for Completion of the Fiber network for use by others"? Clause 3 states overall project to be completed in 6 months. Is there any separate milestone date for completion of the Fiber network? Please clarify	No
135	Clause 3.15.2		states 100% System availability. Normally such systems only require four 9's . Please clarify.	As per RFP
136			There is no detailed specifications for Power cable in the tender specs. Please clarify.	As per RFP
137			There is no detailed specifications for the Fiber cable in the tender specs. Are Armored fiber cables required for outdoor use? Please clarify	As per RFP
138			Emergency Call Box Specs: Clause 1.7 states that Voice Logger system will be supplied by others. Whose responsibility is the interface compatibility between ECB and Voice logger? Please clarify	Please refer Addendum 1
139			At what intervals are the cameras installed on the highway? 500m? 1000m? , please clarify	As per RFP. The design is to be finalized in consultation with the Authority's Engineer and the Employer.
140			Camera specs: Clause 2.2 (k) states composite PAL video at the rear, so are you expecting analog cameras? Please clarify whether IP cameras can be proposed?	As per RFP
141			VMS Specs: Clause 3.2.7 - , what is the required Pixel pitch?, Please clarify	As per RFP
142			VMS Specs: Clause 3.5: VMS gantry structure by others. Will the gantry structure have ladder & catwalk for maintenance personnel?, Please clarify	Please refer Addendum 1
143			Transmission Network: Clause 2.1: Is the H.T (11 KV) cable under our contract scope?, Please clarify	Power supply from transformer to Feeder Pillars would be under ATMS Contractor's

				scope
144			Considering the time required to conduct a detailed assessment and prepare a comprehensive proposal we request that the tender submission date be extended by atleast 6 weeks, please consider	Not tenable
145			Considering the scope of work, 6 months of completion time is insufficient, we request that this be extended to 12 months, please consider	Not tenable
146			We request that the payment terms be revised to keep not more than 20% to be paid quarterly after installation, please consider Please clarify the type of connectivity desired.	Not tenable
147			Please provide locations of the control centres along with the layout drawings of equipment and other facilities on the expressway.	Already responded at S No. 33
148			Please provide clarity on taxes to be considered	Already responded at S No. 65
149	1. Evaluation, Technical evaluation Page no 31	Technical Evaluation	We request UPEIDA to kindly propose a technical evaluation matrix to allow the qualified bidders for commercial opening. For example, bidders who score more than '70 marks' will be eligible for commercial bid. This evaluation gate will help UPEIDA authority to weigh the potential bidders based on the technical parameters and will ensure the quality	Not tenable
150	Eligibility Criteria, 2.1.2 Page no 32	The bidder should have an average annual turnover of Indian Rs. 25 Cr. for the last three financial years.	Considering the size and contract value of this opportunity, we request authority to increase the Annual turnover to at least INR 100 Cr. Bidders with INR 25Cr turnover will not be a right choice for such vast project size and will hamper the project plan.	Please refer Addendum 1
151	Eligibility Criteria, 2.1.3 Page no 32	The bidder shall have the experience of successfully commissioning a minimum of 75 Kms of ATMS / HTMS for atleast 4-Lane Highway / Expressway in India or abroad during past 5 years (till the year ending March 2016). In the case of a consortium this experience can be the combined experience of the members of the consortium.	The Advanced Traffic/Highway Management System is a vast system and for qualification, request UPEIDA to consider the following clauses: The bidder should have implemented at least 2 of the ATMS sub-systems as mentioned below in India or abroad: Emergency Call Box (ECB) System 2. Automatic Traffic Counter cum	Not tenable

			<p>Classifier (ATCC) System</p> <p>3. CCTV Camera System</p> <p>4. Meteorological Monitoring (MET) System</p> <p>5. Variable Message Sign (VMS) System</p> <p>6. Mobile Radio Communication system</p> <p>It is mandatory that bidder should have implemented the Control Centre System in India or abroad during past 5 years.</p>	
152	1. General Requirements Scope of Supply of Plant and Services Page no 86	Completion, passing the Tests on Completion and Operational Acceptance Certificate by the Authority's Engineer – 6 months	The completion and operation acceptance by 6 months of ATMS implementation is not feasible considering the total scope of the Hardware/Software and system integration required. The System Study and requirement gathering itself will take 2-3 months. Once the requirement and plan is approved by authority, the implementation itself will take another 6 months followed by Factory Acceptance Test, System Integration Test and System Acceptance Test. Hence we hereby request UPEIDA to kindly extend the implementation time period to 12 months.	Not tenable
153	Appendix 1 - Terms and Procedures of Payment Page no 321	Ten percent (10%) of the total bid price as an advance payment against receipt of invoice and an irrevocable advance payment security for the equivalent amount made out in favor of the Employer.	We hereby request authority to propose the Capex-Opex model for the entire contract.	Not tenable
154		Twenty percent (20%) of the total bid price upon submission and acceptance of design of the ATMS System.	Capex Payment:	As above
155		Twenty percent (20%) of the total bid price upon issuance of Operational Acceptance Certificate.	Ten percent (10%) of the total bid price as an advance payment against receipt of invoice and an irrevocable advance payment security for the equivalent amount made out in favor of the Employer. Twenty percent (30%) of the total bid price upon submission and acceptance of design of the ATMS System. Twenty percent (30%) of the total bid price upon issuance of Operational Acceptance Certificate. Twenty percent (30%) of the total bid price after 3 months of the Operation Acceptance Certificate. Operation & Maintenance (Opex) Payment: 20 equal quarterly installment for the operations and	As above

			maintenance period.	
156		Fifty percent (50%) of the total bid price in 20 equal quarterly installment for the operations and maintenance		As above
157	2 Components of ATMS Page no 85	Main Control Centre (MCC) is planned to be located at Lucknow and Agra and Sub Control Centre at Wayside Amenities (RHS) of package-2. The CCS of this project will be accommodated in the administrative building of the expressway at Lucknow. ATMS Centre system shall be established in CC and shall manage whole ATMS to achieve its overall objectives. CC system includes servers, Web, Large Display Panel(LDP), Operator Console, Data Analyzer, network equipment, network router, communication equipment, related equipment, roadside equipment and all required/related software etc.,	We understand that the Control Centre(CC) will be equipped all necessary hardware, servers, network equipments etc. and monitoring will be done from CC. Request authority to please describe the activities to be performed at the following places:	As per RFP
158	General	General Query	Request UPEIDA Authority to please confirm whether Disaster Recovery (DR) is in scope of this tender.	As per RFP
159	General	General Query	Request authority to please confirm the retention time requirement to calculate the sufficient storage required.	As per RFP
160	General	General Query	We hope that all furniture, electricity, water etc. at Control Centre, Main Control Centre & Sub-Control Centre will be provided by UPEIDA Authority. Also please confirm the recurring charges will be paid by authority.	Except power consumption, all other recurring / capital cost is to be borne by the ATMS Contractor
161	1. General Requirements Scope of Supply of Plant and Services Page 85	1 Scope of work	Request authority to please confirm the number of junctions, details of locations covered in this project.	Already responded at S No. 33
162	General	General Query	Is there any scope of integration to be done with existing or third party system/applications?	None
163	Specifications: Operations & Maintenance	Operation and Maintenance (O&M) Period is the time period from the date stated in the Operational Acceptance Certificate until the date stated in the Performance Certificate. The Operation and Maintenance Period runs in parallel with the Defects Liability Period for the first 2 years and thereafter continues for 3 years until issuance of the Performance	Request you to please confirm whether the Defect Liability Period/Warranty period is 2 years.	As per RFP

		Certificate.		
164	Section 4 Bidding form Item No.1, Page 45	Soal panel	For Such Large VMS with a higher power consumption, It is not recommended to run the power with Solar as this is required huge solar panel. This is also a challenge to install the Panel on the VMS Gantry. It is recommended to run the VMS on raw power only, Kindly clarify	As the Power Cable would be laid in the median /shoulder so alternative power source would also be available for the VMS ad other components.
165	Page NO- 46 Section 4- Bidding form, item No L3	Digital Generator 15 KVA	It is understood from the tender that Employer will take the responsibility of the recurring cost of Fuels in the DG set, kindly clarify.	Already responded at S No.126
166	Page no. 97 Clause no- 3.12	Optical Fiber Communication Network	As per the tender OFC will be laid in the median. It should be sole responsibility of employer to provide bidder a readily available median for laying OFC as per the requirement of the proposed project milestones. Kindly clarify.	As per RFP
167	Page no 111 Clause no- 2.3	Solar Panel	Kindly clarify that all the field equipments will run on Solar Power or Dual Power supply i.e (Solar + Raw power).	Solar and raw power
168	Page no 138, Clause no- 1.0	TECHNICAL SPECIFICATION FOR MOBILE RADIO COMMUNICATION SYSTEM – SUPPLY AND INSTALLATION	Kindly clarify who will provide the civil infra (space) to keep the equipments at the site.	The space for storage of Supplied material within the available ROW shall be provided free of cost.
169	Page no 138, Clause no- 1.0	TECHNICAL SPECIFICATION FOR MOBILE RADIO COMMUNICATION SYSTEM – SUPPLY AND INSTALLATION	Kindly clarify who will provide the Power supply for equipments at the site.	Already responded at S No. 3
170	Page no 138, Clause no- 1.0	TECHNICAL SPECIFICATION FOR MOBILE RADIO COMMUNICATION SYSTEM – SUPPLY AND INSTALLATION	Who will take care the approval and permission while taking license for the Mobile Radio system	ATMS Contractor
171	Page no 144, Clause no 3.0	H. T. CABLE	Kindly elaborate more about the purpose of H.T cable and the need for laying both HT and LT cables.	HT cables would be required where the power had to be drawn from Transformer to feeder Location. LT Cables would be required to draw power from Feeder Pillars to Sub Feeder Pillars.
172	Page no 44, clause no M1	Power cables required for all the equipment	In view of clause number 3.0 HT cable, please provide a break up between HT and LT cables in quantities in BoQ table	The requirement of HT Cables would generally depend on the Architecture of the Solution proposed by the Bidder

173	Page no 170, Clause no- 1.0	TECHNICAL SPECIFICATION FOR INSTALLATION OF AUTOMATIC TRAFFIC COUNTER CLASSIFIER (ATCC)	Necessary approval and support is required with the concerned authority for laying the ATCC, kindly elaborate who will provide the necessary approval and road blockage permission	UPEIDA would grant the necessary approvals regarding road blockage
174	Page no 213, Clause no- 1	SERVICE LEVEL AGREEMENT (SLA)	If the system goes down in case of unnatural condition like theft, accident, etc. than who will take the responsibility and in that case how will be SLA condition applicable, kindly clarify	As per the RFP
175	RFP	General	Employer are requested to provide the warehouse facility near the Toll Plaza to keep the required material, kindly clarify	Already responded at S No. 170
176	Page no 253 Section 7 C	Payment	Payment term is missing. Please clarify that Payment term is 80% on delivery & 20 % after go-live or what?	As per RFP
177	Page No 32, 2.1.1 , i.	A company registered in India involved in the Design, Engineering, Supply, Installation, System Integration, Testing, and Commissioning & Maintenance of Advanced / Highway Traffic Management System (ATMS / HTMS).	Please clarify the supporting document required to prove that he bidding company is engaged in the business of ATMS / HTMS. We are engaged in the business of Traffic management solutions and is implementing a City Surveillance & Traffic management solution (ANPR, Speed Detection, RLVD, lane violation detection etc). Will this suffice as pre-qualification?	As per RFP
178	ii	A Company of foreign origin involved in the Design, Engineering, Supply, Installation, System Integration, Testing, Commissioning & Maintenance of ATMS / HTMS with an office in India.	What type of documents required? Please clarify	As per RFP
179	iii	A consortium between a Company registered in India involved in the Design, Engineering, Supply, Installation, System integration, Testing, Commissioning & Maintenance ATMS/HTMS solution provider of local or foreign origin	Please clarify whose documents (Lead bidder or the consortium partners) would be considered in for pre-qualification. Also please clarify the supporting document required to prove that he bidding company is engaged in the business of ATMS / HTMS. We are engaged in the business of Traffic management solutions and is implementing a City Surveillance & Traffic management solution (ANPR, Speed Detection, RLVD, lane violation detection etc). Will this suffice as pre-qualification?	As per RFP
180		Documentary proof shall be submitted as part of the eligibility documents	What type of documents required? Please clarify	As per RFP
181	2.1.2	The bidder should have an average annual turnover of Indian Rs. 25 Cr. for the last three financial years	Please clarify whose turnover would be considered for qualification i.e. collective turnover of all the consortium partners including the prime	Please refer Addendum 1

			bidder or the individual turnover of all the bidders. Also the turnover requirements have been kept very low to 25 crores. Since the project is large in nature it requested to increase the turnover requirements to at least 500 crores and include the Net worth requirement of the bidders to at least 250 crores. This will ensure that the bidders with sound financial status will be able to participate to execute a project worth 100-150 crores.	
182	2.1.3	The bidder shall have the experience of successfully commissioning a minimum of 75 Kms of ATMS / HTMS for at-least 4-Lane Highway / Expressway in India or abroad during past 5 years (till the year ending March 2016). In the case of a consortium this experience can be the combined experience of the members of the consortium.	(The documentary proof in support of the experience[in the form of copy of work order/ completion certificate from its clients or a self-declaration indicating the names of projects undertaken, scope of work of each project, name of client, start date, date of completion, value of the project etc.] shall be submitted as part of the eligibility documents. 1)	As per RFP
183		A subsidiary Company registered in India of a Foreign Company having requisite experience may also participate, however, for considering the experience of the Parent Company, the subsidiary Company registered in India should provide an undertaking from their Parent Company confirming thereby:	It is requested to clarify and add the following clause: "if the lead bidder (Indian or Foreign) which is engaged in the similar business (IT / ITES / Telecom Infra / CCTV Surveillance/ Traffic Management) has another company (in India) which is not taking part in this consortium but is a subsidiary of the lead bidder with the lead bidder having more than 76% stake, then the experience of subsidiary company can be considered as lead bidder's experience. We have a subsidiary which is in the similar lines in the similar line of business in which we have 94% shareholding and whose turnover is being consolidated into our parent company turnover which intends to bid for this project.	Not tenable
184	2.1.3.1		i. that the Parent Company shall have the full responsibility of delivering the Project, in case the subsidiary company fails to undertake the Project; ii. perpetual and unconditional access to expertise, personnel and facilities of the Parent Company to the Indian Company; iii. sharing of risks and profits of the Indian	As above

			Company by the Parent Company; and iv. That the Parent Company has sufficient representation in the management of Indian Company to control the activities of the subsidiary. In such case, only the experience and the details of the Parent Company will be considered, otherwise the details/ experience of Indian Company only will be considered.	
185	2.1.4	The Applicant may be a Consortium subject to fulfilling following conditions: i. the eligibility criteria for all the members of consortium should be in accordance with this clause 2.1. Further, Lead Member shall meet at least 60% requirement of the eligibility criteria and each of other consortium members shall meet at least 20% requirement of eligibility criteria. For avoidance of doubt it is further clarified that the consortium must collectively satisfy the complete eligibility criteria.	It is requested to change this clause in line with our suggestions above for point no. 2.1.3 above and is repeated here for your reference: "The Prime bidder or any consortium partner shall have the experience of successfully commissioning a minimum of 25 Kms of Traffic Management / ATMS / HTMS for at-least 4-Lane Highway / Expressway in India or abroad during past 5 years (till the year ending March 2016). In the case of a consortium this experience can be the combined experience of the members of the consortium." If our suggestions as per clause 2.1.3 above are accepted then this clause can be removed altogether.	Not tenable
186	2.1.4.1	The documentary proof in support of fulfilling the eligibility criteria by the Consortium, along-with a copy of a MoU as per requirements under Para 2.1.4 above shall be submitted as part of the eligibility documents.	It is requested to share the MoU format for consortium partners	Please refer Addendum 1
187	Page 28, ITB 24.1	Bid Submission Date	As the bid is complex & large in nature and requires forming consortium agreements & working with Technology solution providers, it is requested to give at least 21 working days post UPEIDA response to the pre-bid queries for bid submission and therefore the bid submission timelines should accordingly be changed. Hence we request you to accept our request for extension of bid submission date at least by 2 weeks along with few clarifications/changes and oblige.	Not tenable

Implementation of Advanced Traffic Management System ("ATMS") for Agra- Lucknow Access Controlled Expressway (Green field) Project in the State of Uttar Pradesh

Addendum-I to the RFQ-cum-RFP document

Sl. No.	Clause No.	Clause	Revised Clause
1	Section 3: Evaluation and Qualification Criteria 2.1.2	The bidder should have an average annual turnover of Indian Rs. 25 Cr. for the last three financial years.	The bidder should have an average annual turnover of Indian <u>Rs. 40 Cr.</u> for the last three financial years.
2	Section 6, General Requirements Scope of Supply of Plant and Services Specifications : Operation & Maintenance clause 4.3.2(b): Incident detection,	If the CCTV system detects an incident such as a vehicle moving in reverse direction, CCTV workstation issues an alarm and incident image will be displayed on the CCTV workstation monitor and video wall	If the CCTV system detects an incident such as a vehicle moving in reverse direction, <u>stalled vehicles on the Expressway, vehicle travelling in counter/opposite direction,</u> CCTV workstation issues an alarm and incident image will be displayed on the CCTV workstation monitor and video wall.
3	Section 6, General Requirements Scope of Supply of Plant and Services TECHNICAL SPECIFICATION FOR SUPPLY OF VARIABLE MESSAGE SIGN (VMS), Clause 3.12.2	As indicated in the Schedule of Prices, a Controller is required for the development site in Toronto, Canada. This Controller will be supplied without a VMS but otherwise the Controller shall be fully functional. This Controller will be used to ensure integration of the Controller with the ATMS software	<u>Deleted</u>
4	Section 6: General Requirements Scope of Supply of Plant and Services TECHNICAL SPECIFICATION FOR SUPPLY OF VARIABLE MESSAGE SIGN (VMS) 3.5.3	The gantry design will be completed by others. The Supplier shall co-ordinate with the gantry designer to finalize mounting hardware and mounting arrangement details (i.e. hardware spacing).	The gantry design will be completed by <u>the Contractor.</u>
5	Section 6: General Requirements Scope of Supply of Plant and Services 3.19 Power Supply	The Contractor shall supply an interruptible power supply at each toll plaza building of suitable capacity with the output of 230 volt single phase. All equipment shall be provided with a clearly visible label indicating the input power supply type (AC or DC) and voltage. All equipment shall operate with the power supply of 230V plus or minus 10 percent, and 50 hertz plus or minus 3 percent. All field equipment shall	<ol style="list-style-type: none"> 1. Power connectivity shall be provided by the Employer at certain nodes at the Expressway. The Contractor shall be responsible to draw the electricity from such nodes. The Employer shall reimburse the recurring charges of power consumption as per actual during the O&M Period only. 2. VMS & Control centre will have the AC power supply as primary source of

Sl. No.	Clause No.	Clause	Revised Clause
		operate normally under instantaneous power supply interruption of 20 millisecond or shorter. The power supply voltage available in the field will be 240V AC. Unless specified otherwise or with the approval of the Authority's Engineer, all field equipment shall be designed to operate directly on 240 V AC. The Contractor shall be responsible for arranging the terminal devices necessary to receive the power supply	Energy. 3. Rest of the outdoor equipments will be on Solar panel as primary source of power; however AC Power shall be available as secondary power source. For which all the necessary arrangements will be made by the ATMS contractor
6	Section 6: General Requirements Scope of Supply of Plant and Services TECHNICAL SPECIFICATION FOR SUPPLY OF PTZ CLOSED CIRCUIT (CCTV) CAMERA Clause 2.1.3	The CCTV camera shall meet the following electrical requirements: a) The power consumption shall be 230V, 50 Hz \pm 5%. b) The power consumption shall be 12V \pm 10%.	The CCTV camera shall meet the following electrical requirements: a) The power consumption shall be 230V, 50 Hz \pm 5%. b) The power consumption shall be 12V or 24 V \pm 10%.
7	Section 6: General Requirements Scope of Supply of Plant and Services TECHNICAL SPECIFICATION FOR SUPPLY OF Emergency call box Clause 1.7	Voice Logger Software shall be provided by others to handle and log all calls from the network.	Voice Logger Software shall be provided to handle and log all calls from the network.
8	Section 3 - Evaluation and Qualification Criteria Qualification, Clause 2.1.4	The documentary proof in support of fulfilling the eligibility criteria by the Consortium, along-with a copy of a MoU as per requirements under Para 2.1.4 above shall be submitted as part of the eligibility documents.	Attached as Annexure 1
9	Section 6: General Requirements Scope of Supply of Plant and Services Cable System Clause 2.3	Excavation of cable trench shall be done in all kinds of soil to a minimum depth of 1.65 m from the ground below the central median of the highway and to a width of not less than 0.3m and also provide proper protection as required by expressway while crossing power cables, pipe lines etc.	Excavation of cable trench shall be done in all kinds of soil to a minimum depth of 1.65 m from the ground below the central median / shoulder of the highway and to a width of not less than 0.3m and also provide proper protection as required by expressway while crossing power cables, pipe lines etc.

The effect of the modification of the above mentioned clauses shall be applicable mutatis mutandis in the entire bidding document.

Memorandum of Understanding

(To be executed on Stamp paper of appropriate value)

THIS MEMORANDUM OF UNDERSTANDING is entered into on this the day of 20...

AMONGST

1. {..... Limited, a company incorporated under the Companies Act, 2013 or its substitute thereof} and having its registered office at (hereinafter referred to as the “**First Part**” which expression shall, unless repugnant to the context include its successors and permitted assigns)

AND

2. {..... Limited, a company incorporated under the Companies Act, 1956 or its substitute thereof} and having its registered office at (hereinafter referred to as the “**Second Part**” which expression shall, unless repugnant to the context include its successors and permitted assigns)

AND

3. {..... Limited, a company incorporated under the Companies Act, 1956 or its substitute thereof and having its registered office at (hereinafter referred to as the “**Third Part**” which expression shall, unless repugnant to the context include its successors and permitted assigns)}^{\$}

The above mentioned parties of the FIRST, SECOND, {THIRD and FOURTH} PART are collectively referred to as the “**Parties**” and each is individually referred to as a “**Party**”

WHEREAS,

(A) THE UTTAR PRADESH EXPRESSWAYS INDUSTRIAL DEVELOPMENT AUTHORITY OF UTTAR PRADESH, established under UP Industrial Area Development Act 1976 (hereinafter referred to as the “**Employer**” which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) has invited bids (the “**Bids**”) for Implementation of Advanced Traffic Management System (“ATMS”) for Agra-Lucknow Access Controlled Expressway (Green field) Project in the State of Uttar Pradesh (the “**Project**”).

(B) The Parties are interested in jointly bidding for the Project as members of a Consortium 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 desired under the RFP document that the members of the Consortium shall enter into a Memorandum of Understanding and furnish a copy thereof with the Bid.

NOW IT IS HEREBY AGREED as follows:

1. Definitions and Interpretations

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

2. Consortium

2.1 The Parties do hereby irrevocably constitute a consortium (the “**Consortium**”) 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 Consortium and not individually and/ or through any other consortium constituted for this Project, either directly or indirectly or through any of their Associates.

3. Role of the Parties

^{\$} The number of Parties will be shown here, as applicable, subject however to a maximum of 3 (three).

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 Consortium and shall have the power of attorney from all Parties for conducting all business for and on behalf of the Consortium during the Bidding Process and until the signing of the Contract Agreement of the Project.
- (b) Party of the Second Part shall be {the Technical Member of the Consortium;
- (c) {(c) Party of the Third Part shall be the Financial Member of the Consortium; and}

4. 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 Contract Agreement, till such time as the completion of the Project is achieved under and in accordance with the Contract Agreement.

5. Shareholding in the SPV

5.1 The Parties agree that the proportion of shareholding among the Parties in the Consortium shall be as follows:

First Party:

Second Party:

{Third Party:}

5.2 The Parties undertake that they shall comply with all the requirements set forth in the Contract Agreement.

6. 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 authorised 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 Consortium Member is annexed to this Agreement, and will not, to the best of its knowledge:
 - a. require any consent or approval not already obtained;
 - b. violate any Applicable Law presently in effect and having applicability to it;
 - c. violate the memorandum and articles of association, by-laws or other applicable organisational documents thereof;
 - d. violate any clearance, permit, concession, grant, license or other governmental authorisation, 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
 - e. 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

(d) 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.

7. Termination

This Agreement shall be effective from the date hereof and shall continue in full force and effect until the completion of the Project is achieved under and in accordance with the Contract Agreement, in case the Project is awarded to the Consortium. However, in case the Consortium does not get selected for award of the Project, the Agreement will stand terminated upon return of the Bid Security by the Employer to the Bidder.

8. Miscellaneous

8.1 This Memorandum of Understanding shall be governed by laws of India.

8.2 The Parties acknowledge and accept that this Agreement shall not be amended by the Parties without the prior written consent of the Employer.

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

SIGNED, SEALED AND DELIVERED

SIGNED, SEALED AND DELIVERED

For and on behalf of

LEAD MEMBER by:

SECOND PART

(Signature)

(Signature)

(Name)

(Name)

(Designation)

(Designation)

(Address)

(Address)

SIGNED, SEALED AND DELIVERED

For and on behalf of

THIRD PART

(Signature)

(Name)

(Designation)

(Address)

In the presence of:

1.

2.