

CORRIGENDUM -1

Dated: 09.11.2023

RFP For Selection of Service Provider for Providing VIDES at Bengaluru to Mysuru section of NH - 275

RFP Reference No.: IHMCL/VIDES/2023/1 published on dated 13.10.2023.

Sl. No.	Section	Original Clause	Updated Clause
1.	RFP Clause 6.2 Objective	To cater to the above requirement, IHMCL intends to engage a Service Provider to undertake the supply, installation, integration, testing, commissioning and configuration of all required hardware & software systems & sub-systems required for Video Incident Detection and Enforcement System (VIDES) at the identified locations in a time bound manner. The service provider is also expected to provide operation & maintenance for the same during the entire period of contract such that the required services are available at the locations as per service level requirements.	To cater to the above requirement, IHMCL intends to engage a Service Provider to undertake the supply, installation, integration, testing, commissioning and configuration of all required hardware & software systems & sub-systems required for Video Incident Detection and Enforcement System (VIDES) and Vehicle Actuated Speed Display (VASD) at the identified locations in a time bound manner. The service provider is also expected to provide operation & maintenance for the same during the entire period of contract such that the required services are available at the locations as per service level requirements.
2.	RFP Clause 6.3.12, point b) Electricity Requirements	Electricity Requirements: The raw power shall be provided by NHAI/IHMCL. The Service Provider shall be required to submit the design of the electricity load requirement for the Equipment, which shall include the cabling, distribution boards, and clean earthing system, in regard to its suitability for Systems. VIDES Systems equipment earthing shall be separated from the toll plaza utility power earthing. Earthing for all equipment shall be the responsibility of the Service Provider.	The updated clause is provided at Annexure 1 of this Corrigendum -1
3.	RFP Clause 6.3.4.5., UPS	UPS	Stands Deleted Refer Annexure 1 of this Corrigendum – 1 for updated requirement.
4.	RFP Clause 6.3.1., Detailed Scope of Work point (a)	a) The service provider shall supply, install, integrate, test, commission and configure gantries including all required hardware & software systems & sub-systems for VIDES at the designated locations upon instructions from IHMCL. c) Service Provider shall submit detailed design drawing and structural calculations along with BOQ's for each type of gantry structure (including foundations) used to mount VIDES equipment to the IHMCL/NHAI and/or the NHAI's nominated representative for approval after due certification by a Licensed Structural Engineer using state of the art software's. The design calculations shall be carried out in accordance with relevant MoRTH/IRC standards where applicable.	a) The service provider shall supply, install, integrate, test, commission and configure gantries including all required hardware & software systems & sub-systems for VIDES/VASD at the designated locations upon instructions from IHMCL. c) Service Provider shall submit detailed design drawing and structural calculations along with BOQ's for each type of gantry structure (including foundations) used to mount VIDES/VASD equipment to the IHMCL/NHAI and/or the NHAI's nominated representative for approval after due certification by a Licensed Structural Engineer using state of the art software's. The design calculations shall be carried out in accordance with relevant MoRTH/IRC standards where applicable.

Sl. No.	Section	Original Clause	Updated Clause
		<p>g) Service Provider shall carryout and complete all pre-requisite civil work included but not limited to following:</p> <p>i. Gantry foundation/ cabling chamber etc. pertaining to VIDES.</p> <p>ii. Installation of gantries at the identified location with load and wind calculation.</p> <p>i) An Optical Fiber Cable is laid over the Bangalore – Mysuru Highway. The Optical Fiber laid is with 24 core. The Service Provider may make use of this Optical Fiber to have digital transmission of data between the various devices installed on gantries to the central location. However, the Service Provider shall make necessary arrangements such as splicing, etc. to make use of it or arrange a backup digital transmission system so as to have uninterrupted communication between the installed devices. In addition to this, the information captured through the proposed system shall be accessible through the Internet for which required connectivity such as broadband/ Internet Leased Line or Dongle shall be arranged by the Bidder at its own cost. IHMCL shall not pay any additional cost, whatsoever, for connectivity or digital transmission.</p>	<p>g) Service Provider shall carryout and complete all pre-requisite civil work included but not limited to following:</p> <p>i. Gantry foundation/ cabling chamber etc. pertaining to VIDES/VASD.</p> <p>ii. Installation of gantries at the identified location with load and wind calculation.</p> <p>i) An Optical Fiber Cable is laid over the Bangalore – Mysuru Highway. The Optical Fiber laid is with has 24 cores. The Service Provider may make use of this Optical Fiber to have digital transmission of data between the various devices installed on gantries to the central location. However, the Service Provider shall make necessary arrangements such as splicing, installation of required manhole, handhole etc. along with managing OFC loop to make use of it or arrange a backup digital transmission system so as to have uninterrupted communication between the installed devices. OFC loop needs to be managed by Successful bidder with same OFC protocol for every manhole to be constructed as per size specified in RFP.</p> <p>In addition to this, the information captured through the proposed system shall be accessible through the Internet for which required connectivity such as broadband/ Internet Leased Line or Dongle of not less than 30 Mbps shall be arranged by the Bidder at its own cost. IHMCL shall not pay any additional cost, whatsoever, for connectivity or digital transmission.</p>
5.	RFP Clause 4.1.1. point (6) Eligible Goods and Services, and Original Equipment Manufacturer (OEM) Criteria	The Bidder shall mention not more than three OEMs, for each of the equipment. Make model shall be specific and any equivalent is not allowed. All goods quoted by the Bidder must be associated with item code and names and with printed literature describing configuration and functionality.	The Bidder shall mention not more than three Four OEMs, for each of the equipment. Make model shall be specific and any equivalent is not allowed. All goods quoted by the Bidder must be associated with item code and names and with printed literature describing configuration and functionality.
6.	RFP Clause 4.7 sub-clause (b), Bid Security	<p>The Earnest Money shall be in the form of a Demand Draft OR Bankers Cheque or NEFT/RTGS mode. The Demand Draft shall be drawn in favor of “Indian Highways Management Company Limited” whereas NEFT/RTGS shall be done in below mentioned IHMCL Bank Account</p> <ul style="list-style-type: none"> • A/c Holder Name = Indian Highways Management Company Limited • Bank Name = Canara Bank • A/c No. = 8598201006217 • IFSC = CNRB0008598 <p>Branch = Delhi NHAI Dwarka Branch New Delhi-110075</p>	<p>The Earnest Money shall be in the form of a Demand Draft OR Bankers Cheque or NEFT/RTGS mode or in the form of Bank Guarantee (Format provided in Annexure 2 of this Corrigendum 1). The Demand Draft shall be drawn in favor of “Indian Highways Management Company Limited” whereas NEFT/RTGS shall be done in below mentioned IHMCL Bank Account</p> <ul style="list-style-type: none"> • A/c Holder Name = Indian Highways Management Company Limited • Bank Name = Canara Bank • A/c No. = 8598201006217 • IFSC = CNRB0008598 <p>Branch = Delhi NHAI Dwarka Branch New Delhi-110075</p>

Sl. No.	Section	Original Clause	Updated Clause
7.	RFP Clause 6.3.2. Operations and Maintenance (O&M) SI#(a)	O&M will commence from the date of Site Acceptance Test (SAT) request received from the Service Provider and will run for a period of two years (36 months). If any material deviation/specification deviation is found with any equipment during SAT process, then O&M for such equipment will commence from actual delivery, installation, commissioning and verification by IHMCL or concerned PIU for a period of two years (36 month).	O&M will commence from the date of Site Acceptance Test (SAT) request received from the Service Provider and will run for a period of two three years (38 months). If any material deviation/specification deviation is found with any equipment during SAT process, then O&M for such equipment will commence from actual delivery, installation, commissioning and verification by IHMCL or concerned PIU for a period of two years 38 months.
8.	RFP Clause 6.3.6, Payment Terms and Timeline, iii. Implementation Timeline RFP Clause 6.3.2. Operations and Maintenance (O&M)	<p>Implementation Timeline:</p> <ul style="list-style-type: none"> • Date of Signing of Contract Agreement – T • System Requirement and design document – T+3 days • Installation of on-ground equipments – T+21 days • UAT of VIDES software and web-portal - T + 28 days. • Go-Live at one location - 1 month. • Go-Live at two additional locations (Total 3 locations) - 3 months.\ • Go-Live at three additional locations (Total 6 locations)- 6 months. <p>Operations & Maintenance - 6 months onwards</p>	<p>Implementation Timeline:</p> <ul style="list-style-type: none"> • Date of Signing of Contract Agreement – T • System Requirement and design document – T+3 7 days • Installation of gantry and all on-ground equipments at all 6 locations – T+21 days 3 months = M • UAT/SAT of VIDES software and web-portal - T+28 days M + 15 days. • Go-Live at one all 6 locations - 4 month. M+ 1 month = T+4 months • Go-Live at two additional locations (Total 3 locations) - 3 months.\ • Go-Live at three additional locations (Total 6 locations)- 6 months. • Operations & Maintenance – 4 months onwards till 38 months. <p>The same shall be applicable wherever mentioned in the RFP</p>
9.	RFP Clause 6.9, Termination, sub-clause (f)	Notwithstanding the above, IHMCL at its sole discretion may terminate the Contract Agreement any time by giving 30 days prior notice without assigning any reason. No compensation shall be provided for unused O&M services.	<p>Notwithstanding the above, IHMCL at its sole discretion may terminate the Contract Agreement any time by giving 30 days prior notice without assigning any reason. No compensation shall be provided for unused O&M services.</p> <p>Upon Termination of Contract Agreement by IHMCL with no fault of Service Provider, IHMCL shall compensate the depreciated value of equipment as elaborated in Form 2 Bill of Quantity (BOQ) of Financial Bid.</p> <p>The Service Provider shall be required to maintain Asset Management portal to maintain the records and inventory of VIDES equipments deployed at site, as per requirement of IHMCL.</p>
10.	RFP Clause 4.20, Performance Security, sub-clause 1	Within 07 (Seven) days of the receipt of the Letter of Award, the Successful Bidder shall submit a Performance Security amount in form of Demand Draft or an irrevocable and unconditional Bank guarantee issued in the name of IHMCL for an amount equal to INR 30,00,000/- (Rupees Thirty Lakh only), issued by a Bank described under this RFP	Upon issue of a Letter of Award (LoA) by IHMCL, the Successful Bidder shall be required to furnish an unconditional and irrevocable Performance Security in the form of a Performance Bank Guarantee (PBG) in the prescribed format within a period of 15 days. The PBG shall be for an amount of 3% of its Total Bid Value quoted

Sl. No.	Section	Original Clause	Updated Clause
		which shall be verified at any branch located in the National Capital territory of Delhi and through SFMS mode as performance security for the due performance of its obligations under the Contract. The format for Performance Security is as per Annexure-4.	in the financial bid and should be in favour of "Indian Highways Management Company Limited", New Delhi as per format provided at Annexure 4 of RFP. The Performance Security shall be valid for a period of four years. In case the contract is extended, the Contractor shall extend the validity of PBG appropriately such that it remains valid until one year beyond completion of the contract.
11.	Annexure 5, FORMAT FOR FINANCIAL BID SUBMISSION	FORMAT FOR FINANCIAL BID SUBMISSION	Updated FORMAT FOR FINANCIAL BID SUBMISSION is provided at Annexure 3 of this Corrigendum 1
12.	RFP Clause 6.3.1. sub-clause b. Installation of Camera based system including Radar and/or other peripheral equipments, point (o)	Notwithstanding other provisions, a small video recording of select types of incidents (minimum 10 seconds before and after) will be recorded and kept at the VIDES software for at least 90 days. In case of Accidents they will be kept for the entire period of the contract and for enforceable challans they will be kept till the data has been transferred to relevant local authority	Notwithstanding other provisions, a small video recording of select types of incidents (minimum 10 seconds before and after) will be recorded and kept at the VIDES software for at least 90 180 days. In case of Accidents, they will be kept for the entire period of the contract and for enforceable challans they will be kept till the data has been transferred to relevant local authority.
13.	RFP Clause 6.3.1. sub-clause b. Installation of Camera based system including Radar and/or other peripheral equipments, p	<p>b) The Successful bidder shall install the camera-based solution for over speed detection and enforcement, and radar sensor-based speed detection system for speed display on LED panel. The ANPR system should correctly link the vehicle number plate with the vehicle speed. The lane -wise display of speed should be provided in each lane with different colours, viz. vehicles under speed should be displayed in green, vehicles above defined speed should be displayed in red. System should have capability for setting different speed limits for different lanes.</p> <p>c) The ANPR and VIDES cameras shall be mounted permanently to monitor a single lane of a highway. Multiple cameras shall be placed on an overhead gantry to get the complete picture of traffic flow for each lane including hard & earthen shoulder in the location.</p> <p>d) The ANPR system shall be responsible detection both spot over speeding as well as section based over speeding. Some of the analytics required to be provided through the proposed system are as mentioned below:</p> <ol style="list-style-type: none"> Over speeding vehicles Vehicles not adhering with lane discipline. Slow-moving vehicle/ two/ three-wheeler 	<p>b) The Successful bidder shall install VIDES and VASD.</p> <p>c) Removed</p> <p>d) The ANPR VIDES system shall be responsible detection both spot over speeding as well as section based over speeding. Some of the analytics required to be provided through the proposed system are as mentioned below:</p> <ol style="list-style-type: none"> Over speeding vehicles Vehicles not adhering with lane discipline. Slow-moving vehicle/ two/ three-wheeler Vehicle stopped on main carriageway. Any object fallen on main carriageway. Accidents/ Damage to Highway Assets Vehicle running in opposite direction. <p>Details of each is 6.3.1 c. (n). IHMCL reserves the right to increase number of incidence as per requirements</p> <p>g) Removed.</p> <p>h) A typical setup will include one ANPR camera for every lane and overview camera(s) suitably placed to cover all lanes in direction facing the traffic including hard shoulders. The setup maybe suitably modified depending on the situation as long as each lane is adequately covered to meet</p>

Sl. No.	Section	Original Clause	Updated Clause
		<p>d. Vehicle stopped on main carriageway. e. Any object fallen on main carriageway. f. Accidents g. Vehicle running in opposite direction. IHMCL reserves the right to increase number of incidence as per requirements</p> <p>g) A typical setup for a particular direction will have ANPR cameras facing the traffic covering all lanes and overview cameras which enable viewing 60-100m in each direction covering all lanes.</p> <p>h) A typical setup will include one ANPR camera for every lane and overview camera(s) suitably placed to cover all lanes in each direction. The setup maybe suitably modified depending on the situation as long as each lane is adequately covered to meet the functional requirements as per the performance standards specified in this section. The equipment setup should be designed to minimize total number of cameras/sensors/LPUs etc while maximizing the utilization of camera/sensor feeds/computation, enabling multiple functionalities without the need for separate cameras for each purpose.</p>	<p>the functional requirements as per the performance standards specified in this section. The equipment setup should be designed to minimize total number of cameras/sensors/LPUs etc while maximizing the utilization of camera/sensor feeds/computation, enabling multiple functionalities without the need for separate cameras for each purpose. For eg. If bidder is able to do number plate recognition across all lanes with lesser number of cameras without dip in performance and more economically, the same shall be deployed by bidder as long as SLR is met and at bidder's risk. The design has to be described by the bidder in its bid.</p>
14.	RFP Clause 6.3.1. sub-clause c. Providing VIDES Software, point (c)	The VIDES software shall be able to provide different reports as per the requirement of NHAI/IHMCL.	<p>The VIDES software shall be able to provide different reports as per the requirement of NHAI/IHMCL. Few Reports are mentioned as below:</p> <ul style="list-style-type: none"> • Travel time estimation / Time distance travel • Class-wise Traffic report • Traffic volume (No of vehicles detected during the time interval); • Occupancy (Lane occupancy measure in percentage of time); • Vehicle classification, Flow rate (vehicle per hour per lane); • Headway (Average time interval between two vehicles); • Speed, Level of Service; • Space occupancy <p>VIDES Software should have future scalability for tolling purposes.</p>
15.	RFP Clause 6.3.1. sub-clause c. Providing VIDES Software, point (k)	New Clause	<p>New Clause</p> <p>The Video-wall should automatically highlight the camera feed where incident has occurred requiring immediate intervention from authorities such as accidents, animals, stalled vehicles etc. The list of incidents requiring RPV intervention can be seen from 6.3.1 c. (n) of RFP.</p>
16.	RFP Clause	The Contractor shall be responsible for	The Contractor shall be responsible for

Sl. No.	Section	Original Clause	Updated Clause
	6.3.1. sub-clause d. Integration with other applications, point (a)	integration of VIDES software with the Vaahan Database, NIC ITMS, Police Command and Control Centre and NPCI FASTag Mapper as part of this Contract. The proposed system may also be required to be integrated with different Apps of NHAI/IHMCL viz. Rajmarg Yatra, TMCC	integration of VIDES software with the Vaahan Database, NIC ITMS, Police Command and Control Centre and NPCI FASTag Mapper as part of this Contract. The proposed system may also be required to be integrated with different Apps of NHAI/IHMCL such as Rajmarg Yatra, TMCC, Datalake, Central Aided Dispatch System, integration with Insurance regulators IRDAI etc. The Contract shall also ensure integration with any existing system/ network topology for migration of the historical information available at the stretch. OFC laying and chamber details are provided at Annexure 9 of this Corrigendum 1
17.	RFP Clause 6.3.1. sub-clause a. Installation of Gantries at the specified locations, point (n)	The indicative list of locations for implementation of Gantry based system is provided. The proposed system will be deployed at any 6 locations out of list of locations provided below:	The indicative list of locations for implementation of Gantry based system is provided. The proposed system will be deployed at any 6 locations out of list of locations provided below: Updated location for implementation provided at Annexure 4 of this Corrigendum 1
18.	RFP Clause 6.3.3. Service Level Requirements (SLA)	Service Level Requirements (SLA)	Updated SLAs are provided at Annexure 5 of this Corrigendum 1. The SLAs mentioned in RFP stands deleted.
19.	RFP Clause 4.13, Imbalanced Bid	If the Bid of the Successful Bidder is seriously imbalanced in relation to IHMCL's estimate of the cost of work to be performed under the Contract, IHMCL may require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of the proposed System. After evaluation of the price analyses, IHMCL may require that the amount of the Performance Security set forth in the RFP be increased and an additional Performance Security may be obtained at the expense of the Successful Bidder to a level sufficient to protect IHMCL against financial loss in the event of default of the Successful Bidder under the Contract. The amount of the additional increased Performance Security shall be equal to the seriously imbalanced amount, which shall be final, binding and conclusive on the Bidder.	In case where the bid of the successful bidder is less than 85% of the average of all bids received, the successful bidder shall have to submit an Additional Performance Security (APS) in the form of a Bank Guarantee for 3% of the contract amount. The other requirements of APS are same as those of Performance Security. IHMCL may also require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of the proposed System.
20.	RFP Clause 6.3.4.6 a. Functional Requirements. Point 1	1. The system shall perform during day and night as well as in adverse weather conditions.	1. The system shall perform during day and night as well as in adverse weather conditions. The lane -wise display of speed should be provided in each lane with different colours, viz. vehicles under speed should be displayed in green, vehicles above defined speed should be displayed in red. System should have capability for setting different speed limits for different lanes.
21.	RFP Clause 6.3.4.6 b. Technical Requirements.	7. It shall optionally be possible to configure the display to send real time violation event record (speed, vehicle image and time stamp) over the connected network	7. It shall optionally be possible to configure the display to send real time violation event record (speed, vehicle image and time stamp) over the connected network

Sl. No.	Section	Original Clause	Updated Clause																		
	Point 7	while recording the same.	while recording the same.																		
22.	RFP Clause 6.3.4.7	New Clause on Video Wall	Refer to Annexure 6 of this Corrigendum 1																		
23.	RFP Clause 6.3.4.8	New Clause on Manpower	Refer to Annexure 7 of this Corrigendum 1																		
24.	RFP Clause 6.3.4.9	New Clause on specification of NAS Storage, Workstation and Database Server	Refer Annexure 8 of this Corrigendum 1																		
25.	Part II, Definitions	New Definition	“VIDS” Video Incident Detection System wherever mentioned in RFP shall be read as “VIDES” Video Incident Detection & Enforcement System”																		
26.	New RFP Clause 4.26, Exemption for MSME Firms in submission of EMD	New Clause	<p>a. Micro and Small Enterprises if registered with any government bodies specified by Ministry of Micro, Small & Medium Enterprises (M/o MSME) with valid certificate duly issued by GOI are exempted for submitting the Earnest Money Deposit (EMD). It will be applicable for those bidders who shall produce their own goods or provide their own services, and not applicable for trading purpose. No entrepreneur or memorandum of application form is acceptable.</p> <p>b. Only Firms registered with MSME / NSIC with valid certificate duly issued by GOI are exempted from submitting EMD. No other type of certificate is acceptable.</p> <p>c. The firms registered under MSME shall be required to submit the Bid Securing Declaration Form as provided in Annexure-10 of this Corrigendum 1. This should be part of physical document submission and shall be applicable wherever mentioned in the RFP.</p>																		
27.	Part III, Schedule of Tender (Key Dates)	<table border="1"> <thead> <tr> <th>S. No.</th> <th>Event Description</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>Bid Due date for physical submission of following documents at IHMCL office: - • EMD/Bid Security • Power of Attorney (refer Clause 8.3)</td> <td>10.11.2023 (Up to 17:30 Hrs IST)</td> </tr> <tr> <td>5</td> <td>Technical Bid Opening</td> <td>13.11.2023 (at 17:00 Hrs IST)</td> </tr> </tbody> </table>	S. No.	Event Description	Date	4	Bid Due date for physical submission of following documents at IHMCL office: - • EMD/Bid Security • Power of Attorney (refer Clause 8.3)	10.11.2023 (Up to 17:30 Hrs IST)	5	Technical Bid Opening	13.11.2023 (at 17:00 Hrs IST)	<table border="1"> <thead> <tr> <th>S. No.</th> <th>Event Description</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>Bid Due date for physical submission of following documents at IHMCL office: - • EMD/Bid Security/Annexure 10 of this Corrigendum1 along with supporting document as applicable • Power of Attorney (refer Clause 8.3)</td> <td>23.11.2023 (Up to 17:00 Hrs IST)</td> </tr> <tr> <td>5</td> <td>Technical Bid Opening</td> <td>24.11.2023 (at 17:00 Hrs IST)</td> </tr> </tbody> </table>	S. No.	Event Description	Date	4	Bid Due date for physical submission of following documents at IHMCL office: - • EMD/Bid Security/Annexure 10 of this Corrigendum1 along with supporting document as applicable • Power of Attorney (refer Clause 8.3)	23.11.2023 (Up to 17:00 Hrs IST)	5	Technical Bid Opening	24.11.2023 (at 17:00 Hrs IST)
S. No.	Event Description	Date																			
4	Bid Due date for physical submission of following documents at IHMCL office: - • EMD/Bid Security • Power of Attorney (refer Clause 8.3)	10.11.2023 (Up to 17:30 Hrs IST)																			
5	Technical Bid Opening	13.11.2023 (at 17:00 Hrs IST)																			
S. No.	Event Description	Date																			
4	Bid Due date for physical submission of following documents at IHMCL office: - • EMD/Bid Security/Annexure 10 of this Corrigendum1 along with supporting document as applicable • Power of Attorney (refer Clause 8.3)	23.11.2023 (Up to 17:00 Hrs IST)																			
5	Technical Bid Opening	24.11.2023 (at 17:00 Hrs IST)																			

Annexure -1 – Updated RFP Clause 6.3.12, point b) Electricity Requirements

1. POWER SUPPLY

1. The field equipment shall have the locally available mains power supply (from the electricity utility through Regulated source) as the primary source and supported with a relevant Renewable energy - based power supply for back up and / or generator back up to ensure 24 x7 operation.
2. The VIDES Control Centre shall have the locally available mains power supply (from the electricity utility) as the primary source and supported with a UPS and generator back up to ensure 24 x 7 operation.
3. Except where detailed in specific sections below, all VIDES equipment shall be powered from either:
 - a) A single phase 230Vac 50Hz supply.
 - b) A three phase 440Vac 50Hz supply.
4. ATMS enclosures shall include a power distribution subsystem for supplying power supply to each component within the enclosure and related / inter- connected VIDES equipment. The circuit breakers shall be properly sized according to the expected loads of the VIDES equipment and to meet relevant electrical code requirements.
5. All electrical equipment and cabling shall be provided in accordance with relevant BIS standards. In case there no relevant BIS standard exists the BS 7671 standard shall be applicable.
6. The power distribution panel shall be directly fed by the main circuit breaker at the electrical point of service. The power distribution assembly shall include an interface and connection to the UPS (where provided). The power assembly shall be connected to the earthing system.
7. The enclosure shall be earthed in accordance with the relevant BIS regulations.
8. The enclosure shall include a 230Vac 15 Amps 3-pin dual socket power outlet conforming to BIS standard.
9. The power sockets shall be installed in accordance with relevant BIS standard.
10. A Multi-stage Transient Voltage Surge Suppressor (TVSS) shall be provided for each external cable (related to power supply, signal, data or any other), connection which is terminated at any item of exposed external equipment or routed through an outdoor area. The TVSS shall be rated in accordance with BIS requirements.
11. The TVSS shall be capable of handling minimum 30KA fault current. Provision shall be made for protection of earthing and the shield/armour of coaxial cables and TVSS for each signal conductor.
12. The TVSS shall not only clamp the voltage, it shall also divert the fault currents to ground. If a TVSS is destructively tripped, there shall be a clear visual indication that the VIDES equipment is no longer protected and the TVSS needs a reset or replacement.
13. VIDES equipment shall automatically regain full operational functionality when related electrical power supply is restored, without the need for manual intervention.

2. Uninterruptible Power Supply (UPS) Subsystems

1. The worst-case power-load data shall be used to design the electrical conductor sizes. These shall be submitted to the IHMCL and/or the IHMCL's representative for approval.
2. A UPS shall be provided wherever required. The UPS shall meet the requirements of relevant standards of BIS.
3. Unless otherwise stated in the design drawings and/or specifications, UPS with a minimum of Six (6) hour backup shall be provided for all VIDES field equipment and telecommunications device locations. The Batteries of UPS system should be regularly replaced so as to ensure the specified back-up.
4. An Automatic Power Transfer Switch (APTS) shall be provided inside the VIDES ground

mounted enclosure which transfers power from one of the external sources to the electrical distribution system. The APTS shall monitor the status of the primary power source and transfer the power connection to the secondary power source when primary power source fails or suffers degradation. The APTS shall be provided with means to operate in manual mode.

5. The APTS must be able to transfer the connection with the internal power system, from the primary power source, to the secondary power source, within 1 mains power cycle (less than 20ms).
6. Additional equipment necessary to eliminate the delay in the transfer of power sources which may cause the VIDES equipment to reboot shall be provided.
7. Each external power supply line shall be terminated at the APTS.

Annexure -2 Bank Guarantee for EMD/Bid Security

B.G. No. Dated:

1. In consideration of you, ****, having its office at **** (hereinafter referred to as the "Authority", which expression shall, unless it be repugnant to the subject or context thereof, include its successors and assigns), having agreed to receive the BID of and having its registered office at (and acting on behalf of its JV) (hereinafter referred to as the "Bidder", which expression shall, unless it be repugnant to the subject or context thereof, include its/their executors, administrators, successors, and assigns), for [Name of the Project] (hereinafter referred to as "the Project") pursuant to the RFP Document dated issued in respect of the Project and other related documents, including without limitation the draft contract Agreement (hereinafter collectively referred to as "Bidding Documents"), we (Name of the Bank) having our registered office at and one of its branches at (hereinafter referred to as the "Bank"), at the request of the Bidder, do hereby, in terms of Clause 4.7 (b) read with Clause 4.7 (e) of the RFP Document, irrevocably, unconditionally, and without reservation guarantee the due and faithful fulfilment and compliance of the terms and conditions of the Bidding Documents (including the RFP Document) by the said Bidder and unconditionally and irrevocably undertake to pay forthwith to the Authority an amount of Rs. *****(Rupees *****) only (hereinafter referred to as the "Guarantee") as our primary obligation without any demur, reservation, recourse, contest, or protest and without reference to the Bidder if the Bidder shall fail to fulfil or comply with all or any of the terms and conditions contained in the said Bidding Documents.
2. Any such written demand made by the Authority stating that the Bidder is in default of the due and faithful fulfilment and compliance with the terms and conditions contained in the Bidding Documents shall be final, conclusive, and binding on the Bank.
3. We, the Bank, do hereby unconditionally undertake to pay the amounts due and payable under this Guarantee without any demur, reservation, recourse, contest, or protest and without any reference to the Bidder or any other person and irrespective of whether the claim of the Authority is disputed by the Bidder or not, merely on the first demand from the Authority stating that the amount claimed is due to the Authority by reason of the failure of the Bidder to fulfil and comply with the terms and conditions contained in the Bidding Documents, including failure of the said Bidder to keep its BID open during the BID validity period set forth in the said Bidding Documents for any reason whatsoever. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this Guarantee shall be restricted to an amount not exceeding Rs. *** ** (Rupees *** ** only).
4. This Guarantee shall be irrevocable and remain in full force for a period of 180 (one hundred and eighty) days from the BID Due Date inclusive of a claim period of 60 (sixty) days or for such extended period as may be mutually agreed between the Authority and the Bidder, and agreed to by the Bank, and shall continue to be enforceable till all amounts under this Guarantee have been paid.
5. We, the Bank, further agree that the Authority shall be the sole judge to decide as to whether the Bidder is in default of due and faithful fulfilment and compliance with the terms and conditions contained in the Bidding Documents, including, inter alia, the failure of the Bidder to keep its BID open during the BID validity period set forth in the said Bidding Documents, and the decision of the Authority that the Bidder is in default as aforesaid shall be final and binding on us, notwithstanding any differences between the Authority and the Bidder or any dispute pending before any Court, Tribunal, Arbitrator, or any other Authority.
6. The Guarantee shall not be affected by any change in the constitution or winding up of the Bidder or the Bank or any absorption, merger, or amalgamation of the Bidder or the Bank with any other person.
7. In order to give full effect to this Guarantee, the Authority shall be entitled to treat the Bank as the principal debtor. The Authority shall have the fullest liberty, without affecting in any way the liability of the Bank under this Guarantee, from time to time to vary any of the terms and conditions contained in the said Bidding Documents or to extend the time for the submission of the BIDs or the BID validity period or the period for conveying acceptance of the Letter of Award by the Bidder or the period for fulfilment and compliance with all or any of the terms and conditions contained in the said Bidding Documents by the said Bidder or to postpone for any time and from time to time any of the powers exercisable by it against the said Bidder and either to enforce or forbear from enforcing any of the terms and conditions contained in the said Bidding Documents or

the securities available to the Authority, and the Bank shall not be released from its liability under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the said Bidder or any other forbearance, act or omission on the part of the Authority or any indulgence by the Authority to the said Bidder or by any change in the constitution of the Authority or its absorption, merger, or amalgamation with any other person or any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of releasing the Bank from its such liability.

8. Any notice by way of request, demand, or otherwise hereunder shall be sufficiently given or made if addressed to the Bank and sent by courier or by registered mail to the Bank at the address set forth herein.
9. We undertake to make the payment on receipt of your notice of claim on us addressed to [name of Bank along with branch address] and delivered at our above branch, which shall be deemed to have been duly authorized to receive the said notice of claim.
10. It shall not be necessary for the Authority to proceed against the said Bidder before proceeding against the Bank, and the guarantee herein contained shall be enforceable against the Bank, notwithstanding any other security which the Authority may have obtained from the said Bidder or any other person and which shall, at the time when proceedings are taken against the Bank hereunder, be outstanding or unrealized.
11. We, the Bank, further undertake not to revoke this Guarantee during its currency except with the previous express consent of the Authority in writing.
12. The Bank declares that it has power to issue this Guarantee and discharge the obligations contemplated herein; the undersigned is duly authorized and has full power to execute this Guarantee for and on behalf of the Bank.
13. For the avoidance of doubt, the Bank's liability under this Guarantee shall be restricted to Rs. *** crore (Rupees ***** crore only). The Bank shall be liable to pay the said amount or any part thereof only if the Authority serves a written claim on the Bank in accordance with paragraph 9 hereof, or before [*** (indicated date falling 180 days after the BID Due Date)].
14. This guarantee shall also be operatable at our Branch, New Delhi from whom, confirmation regarding the issue of this guarantee or extension / renewal thereof shall be made available on demand. In the contingency of this guarantee being invoked and payment thereunder claimed, the said branch shall accept such invocation letter and make payment of amounts so demanded under the said invocation.
15. The guarantor/bank hereby confirms that it is on the SFMS (Structural Finance Messaging System) platform & shall invariably send an advice of this Bank Guarantee to the designated bank of IHMCL, details of which is as under:

S. No	Particulars	Details
1.	Name of Beneficiary	Indian Highways Management Company Limited
2.	Name of Bank	Canara Bank
3.	Account No.	8598201006217
4.	IFSC	CNRB0008598

Signed and Delivered by Bank

By the hand of Mr. /Ms.....,itsand authorised official.

(Signature of the Authorised Signatory)

(Official-Seal)

Annexure 3 – Financial Bid Form

	Only cells having yellow color to be filled by bidder, Bidders need to fill ONLY the yellow cells
Name of RFP	
Name of Bidder	
Bid Invitation Date	

Form F-1: Format for Financial Bid Submission

<p>Dear Sir, I/We, the undersigned having examined the above referred RFP including addendums thereof and, hereby offer to submit our bid to undertake the subject assignment with total bid value as per milestone and break-up furnished below.</p>

Form F-1: Format for Financial Bid Submission

Work Description	Qty	Unit Rate (in Rs.) Excluding GST (C)	Total Amount (In Rupees)
Procurement and Installation of 2 x 3 lane gantries including civil and mechanical work covering both the sides (LHS & RHS) at 4 locations provided by IHMCL – Capex Cost	4 unit* (LHS + RHS)		
Procurement and Installation of 1 x 3 lane gantry including civil and mechanical work at 2 pair of locations provided by IHMCL – Capex Cost	4 unit (LHS or RHS)		
Installation, Commissioning and Operations & Maintenance of VIDES System comprising of different equipments as required in RFP at Bengaluru – Mysuru section of NH – 275 (6 Lane) – O&M Cost for 38 months			=Grand Total (Form F-2)
Total Cost Excluding GST			

1. I/We do hereby confirm that my/ our bid price includes all statutory taxes/ levies but excluding service tax/ GST (as applicable). I/ We also declare that any tax, surcharge on tax and / or any other levies, if altered in future and payable under the law, the same shall be borne by me/ us.
2. The Bidder is also required to furnish the detailed break up of Items considered in VIDES Works with Quantity and Rates of the equipment/work to arrive at the above quoted Lump Sum cost in the Form F-2
3. Financial Bids will be summarily rejected and will not be considered in evaluation if it is submitted without submitting duly filled Form F-2
4. This bid is valid for a period of 180 calendar days from the bid due date. However, IHMCL reserves the right to increase the validity period before the expiry of the validity period of 180 days.
5. I/ We, understand that the
 - (a) applicable service tax/ GST (as applicable on services) shall be reimbursed by IHMCL separately on production of proof of payment and CA certificate; and
 - (b) TDS will be deducted against payments as per Applicable Law.

Only cells having yellow color to be filled by bidder, Bidders need to fill ONLY the yellow cells

Form F-2 - Cost Breakup

Sl. No.	Item Description	Unit	Quantity	Unit Rate (Rs.)	Total Amount (Rs.)
A	VIDES				=sum(A1:A9)
1	Overview Camera (including nightvision)	Nos			0
2	ANPR Camera with IR Flasher	Nos			0
3	Blinker				0
4	LPU with all network equipment	Nos			0
5	Video Analytics for VIDES Module	LS			0
6	Radar (Leave empty if visual speed detection being used)**	Nos			0
7	Any other item TO BE SPECIFIED here for completing the VIDES as per standard and specification mentioned in RFP (Leave blank if nill)				
8					
9					0
B	VASD				=sum(B1:B3)
1	Radar	LS			0
2	Display	LS			0
3	Any other item TO BE SPECIFIED here for completing the Control Centre as per standard and specification mentioned RFP (Leave blank if nill)				0
C	Control Centre				=sum(C1:C3)
1	Server	LS			0
2	VIDES Software including 3 party software, Map, GIS, GUI, CC, Module Controller, Central AI, Integration with VAHAN, Rajmarg Yatra app etc all complete as per the Standards & Specifications mentioned in the RFP	LS			0
3	Any other item TO BE SPECIFIED here for completing the Control Centre as per standard and specification mentioned RFP (Leave blank if nill)				0
D	Power Connection & UPS	LS			0

E	Installation, Testing & Commissioning	LS			0
Grand Total					=sum (A+B+C+D+E)

Note

- 1 **Bidder shall fill up the quantities and rate of the equipment/services/software etc. as mentioned above to meet the scope of work for the desired functional requirement and as per standards and specifications mentioned in RFP. Any variation in quantities/missed out item(s) shall not attract any additional payment/ change of scope.**
- 2 ****The Contractor shall mention the Quantities and Rates of Radar if Speed Detection is proposed through Radar System**
- 3 **Important Point:**

The depreciation value of the indicated equipment shall be reduced by 30% every year for the rate mentioned for the respective items. For illustration:

If the unit cost of any equipment is Rs. 100/- after 1 year depreciated cost of equipment remains Rs. 70/-. Similarly, after the 2nd year, the cost of equipment remains Rs. 40/- and after the 3rd year, the cost of equipment remains Rs. 10/-

Bidder not submitting information in this sheet shall be declared non-responsive.

Annexure 4 – Indicative Location for Implementation

S. No.	Location of Gantry/Radar & Cameras			Location of Gantry/Radar & Cameras			Gantry to be used for the purpose
	Bengaluru to Mysuru NH - 275			Mysuru to Bengaluru NH - 275			
	Chainage	Side	Approximate Electrical cable length required at the location in meter	Chainage	Side	Approximate Electrical cable length required at the location in meter	
1.	18.430	LHS	300	18.430	RHS	300	VASD
2.	39.300	LHS	200	39.300	RHS	200	VIDES
3.	65.600	LHS	200	65.600	RHS	200	VASD
4.	88.900	LHS	500	88.900	RHS	500	VIDES
5.	110.500	LHS	500	110.500	RHS	500	VASD
6.	131.150	LHS	1000	131.150	RHS	1000	VIDES

The Successful bidder needs to install VASD system in 3 gantry locations and VIDES system at another 3 gantry locations.

Annexure 5 – RFP Clause 6.3.3. Service Level Requirements (SLA)

- a) It will be the responsibility of the SI to supply software/automated tools to monitor all the SLAs mentioned below. Unless otherwise specified, calculation of SLAs should be automated through system generated reports.
- b) Note: Penalties shall not be levied on the SI in the following cases:
 - i. There is a Force Majeure event effecting the SLA which is beyond the control of the SI including natural disasters, adverse weather conditions or network issues attributable to the ISP (to be determined through investigation by the concerned authority).
 - ii. The non-compliance to the SLA has been due to reasons “beyond the control of the SI”. Theft cases by default would not be considered as “beyond the control of SI” and will be decided on a case-to-case basis. Damages due to any accident/mishap shall be considered as “beyond the control of SI”. However, Power shutdown or deliberate damage to field devices such as Cameras, Audio Systems etc., would not be considered as “beyond the control of SI”.
 - iii. If there is power-outage in the main grid beyond the necessary backup time, the same may be considered as “beyond the control of SI” after due case and intimation has been made to IHMCL regarding the same.
- c) The purpose of this Service Level Agreement (hereinafter referred to as SLA) is to clearly define the levels of service which shall be provided by the SI to the Employer for the duration of this Agreement.
- d) Payment Terms: The SLA metrics provided specifies performance parameters as scoring method, termination trigger and measurement mechanism. Irrespective of payment duration, all SLA calculations, breach conditions and deductions thereon will be done considering quarterly time period. The SLA also specifies the liquidated damages for lower performance and breach conditions. Payment during the O&M phase is linked to the compliance with the SLA metrics. The matrix specifies three levels of performance, namely,
- e) The contractor will get 100% of the Contracted value due for the period (as per the ‘Payment Schedule’ section of the Terms of Reference) if all the baseline performance metrics are complied with and the cumulative credit points are 100
- f) The contractor will get lesser payment in case of lower performance. (For e.g. if SLA point score is 80 then the SI will get 20% less on the periodic O&M payment – The formula calculating the deductions is “(100 – SLA Point Score)%”).
- g) Post Go-Live of complete system within 3 months from the date of signing of Contract Agreement, Service Provider shall be provided with 1 month time for training the AI proposed in the RFP during this period deductions related with performance of the system shall not be calculated.
- h) In case the overall performance is less than 50% in the quarter, no amount will be paid for the entire quarter.
- i) In case the score falls below 50 for two consecutive quarters, the Authority can invoke the termination clause.
- j) If the performance of the Agency in respect of any parameter falls below the prescribed termination trigger (in terms of performance metric for a specified time period), the concerned authority will have the right to invoke the termination clause. The periodic payment during O&M phase shall be made after deducting for lower performance as mentioned above. The aforementioned SLA parameters shall be measured as per the individual SLA parameter requirements and measurement methods, through appropriate SLA Measurement tools to be provided by the Contractor and audited by IHMCL or nominated representative for accuracy and reliability.
- k) IHMCL shall also have the right to conduct, either itself or through any other agency as it may deem fit, an audit / revision of the SLA parameters. The definition of SLAs, shall be reviewed by IHMCL on an annual basis after consulting the SI, Project Manager and other experts.

Performance Area	Scoring	Termination Trigger	Measurement Mechanism
<p>VIDES Automatic detection of all incidents (categorized as real-time in 4.3.2) in areas under camera surveillance</p>	<p>20 points for 0-5 missed incidents</p> <p>10 points if >5-10 missed incidents</p> <p>0 points if more than 10 missed incidents</p>	<p>If 0 points in any two quarters in a 12 month period.</p>	<p>Manual detection of select incident categories on the stretch which is not logged by the Command Centre software automatically through VIDS or TMCS software.</p> <p>IHMCL may randomly audit videos collected under VIDS cameras to check this SLA.</p>
<p>VIDES Incident Detection Precision below acceptable limits</p>	<p>20 points if all Incident Types meet their required Precision Criteria</p> <p>10 points if only 2 or less incident types are not meeting required Precision Criteria</p> <p>0 points if more than 2 Incident Types are not meeting Required Precision Criteria</p>	<p>If 0 points in any two quarters in a 12 month period.</p>	<p>By randomly assessing automatically detected incidents and manually assessing through video whether they were correctly flagged or not (<i>Eg. VIDS says wrong-lane driving but on manually checking video it is correct lane</i>).</p>
<p>VIDES Uptime Hours</p> <p>All cameras in a VIDS unit have to be functioning for the VIDS unit to be considered up. (irrespective issues with power, network etc)</p>	<p>15 points if $\geq 95\%$</p> <p>7.5 points if $>90\%$ and $<95\%$</p> <p>0 points for $<90\%$</p>	<p>If 0 points in any two quarters in a 12 month period.</p>	<p>Network Management System with real-time access provided to IHMCL or nominated representative.</p>
<p>ANPR Accuracy of ANPR cameras</p>	<p>20 points if $\geq 95\%$</p> <p>10 points if 90-95%</p> <p>0 points if $<90\%$</p>	<p>If 0 points in any two quarters in a 12 month period.</p>	<p>SI will auto-generate reports on number of number plates that were wrongly read and/or missed completely from reading.</p> <p>Further, IHMCL or nominated representative can conduct random audits on the recorded footages from any ANPR cameras</p>

Performance Area	Scoring	Termination Trigger	Measurement Mechanism
eChallan Validating and Uploading evidence on Government's eChallan software for processing in less than 48 hours of Violation Occurring	5 points if zero offences have been missed in uploading 2.5 points if >0 and =<5 offences have been missed in uploading 0 points if more than 5 offences have been missed in uploading	If 0 points in any two quarters in a 12 monthperiod.	By auditing the incident generation time on the VIDS software with the eChallan upload receipts/time.
Incident Response Dispatch of Ambulance/RPV in less than 90 seconds of occurrence of accident/incident	10 points if zero instances of dispatches took more than 90 seconds. 5 points if 1-3 instances of dispatches took more than 90 seconds minute 0 points if >3 instance of dispatches took more than 90 seconds	If 0 points in any two quarters in a 12 monthperiod.	By auditing the incident generation time on the VIDS software the time in which the RPV/Ambulance was notified about the incident through call/radio any other accepted mechanism as logged. IHMCL may conduct mock-drills as well to check this SLA
Video Wall 99% uptime in the billing period	5 points if >= 99% 2.5 points if >=95% and <99% 0 points for <95%	If 0 points in any two quarters in a 12 monthperiod.	Network Management System with real-time access provided to IHMCL or Nominated Representative.
Vehicle Actuated Speed Display Target Uptime = Number of VASD x Number of Hours in Billing Period)	5 points if >= 95% 2.5 points if >-90% and <95% 0 points for <90%	If 0 points in any two quarters in a 12 month period.	Network Management System with real-time access provided to IHMCL or Nominated Representative.

m) Instance Based Deductions: These deductions are to be levied for each violation that occurs. These deductions are applied to the periodic O&M bill over and above the SLA based payment calculation above. Instance based deductions are incremental and cumulatively add up.

Instance	Criteria	Penalty
API based Data Sharing with NHAI ERP/MIS System	API or Upload based sharing of reports from ATMS software to NHAI ERP as prescribed in the contract and any notification/circulars issued from time to time.	5000/- per instance of data sharing missed by SI at prescribed schedules.

Instance	Criteria	Penalty
Remote Video Check IHMCL should be able to access any Remote TMCS or Overview camera through IP and authentication details provided by Command Centre at all times.	If for any reasons (wrong IP/password, network downtime etc) the footage is not visible then it will be considered a violation. Simple screenshot with datetime visible shall be enough to prove violation by IHMCL. If SI has not uploaded/registered camera details on ATMS Module on NHA ERP/MIS it shall also be considered violation as part of this.	5000/- per cameraper day. Same camera will not be checked again in the same day if violation found and recorded.
Non-availability of video recording of accident occurred in surveillance zone of TMCS or VIDS	Self-explanatory	Rs 25,000/- per instance

- n) Any downtime for maintenance should be within the SLA periods and with written intimation to IHMCL. Only in special circumstances and in written consideration of the PD that the downtime may extend SLA period.
- o) All SLAs (instance based on percentage based) are mutually exclusive. For eg. If 2 incidents go unnoticed during unplanned downtime of the VIDS cameras, it will still be considered a breach of SLA regarding incident detection.
- p) Non Compliance to Safety Standards at Site: Failure by the System Integrator's personnel in maintaining the safety standards at the site at any time shall attract penalty on every instance noticed by IHMCL (or its representatives).
- I. Staff working without safety gears – penalty of INR 10,000 per instance. In case of repeated instance by the same staff member of the System Integrator, the penalty shall be doubled per instance. The System Integrator shall have to replace the repeated offenders / sub-System Integrator (safety lapses more than 3 times) with immediate effect.
 - II. Staff working without safety gears – penalty of INR 10,000 per instance. In case of repeated instance by the same staff member of the System Integrator, the penalty shall be doubled per instance. The System Integrator shall have to replace the repeated offenders / sub-System Integrator (safety lapses more than 3 times) with immediate effect.
- q) Penalty for Delay in Staff Mobilization and/or Absence Post Mobilization: Delay in submission of detailed written statements and/or mobilization of Key Personnel in O&M period (Refer Annexure 7 of this Corrigendum 1) shall attract penalty @ INR 5000/- (Rupees Five Thousand) per day per Personnel. In case the delay is more than 3 weeks, IHMCL reserves the right to invoke the Bid Securing Declaration and PBG towards the aforesaid penalty and may proceed with the revocation of LOA or termination of the project, as the case may be. In case of post-mobilization mobilization, the same penalty will be applicable for each day of absenteeism. Service Provider has to have replacements at all times and ensure 100% staff availability. Replacements have to be informed to IHMCL in writing beforehand and to be well trained and meeting qualification requirements. Attendance of all staff and replacements is to be monitored through biometric system.
- r) Penalty for Data Manipulation, Fudging or Other Fraudulent Practices: If the System Integrator is found manipulating any data that it reports or stores (including SLA reports but not limited to), a penalty of Rs 10,00,000 will be imposed with an warning and the if the fudging was related to SLAs the entire due amount for that quarter will be deducted. For any repeat instance of data fudging or manipulation, IHMCL may consider termination of the contract and forfeiture of

performance bank guarantee.

- s) Penalty for Data Breach or Mis-use of Data: As per provisions of Digital Personal Data Protection Bill, 2023 or any other relevant acts or rule notified by the Government. The Service provider will be governed as a Data Fiduciary and the principles so prescribed under the DPDPB'23 Act.

Annexure - 6 – RFP Clause 6.3.4.7 Video Wall

1. Video Wall shall be provided for VIDES with minimum 75" smart TV.
2. The video wall shall typically be a matrix of 3x3 but the controller shall be capable and flexible enough to accommodate varied different monitor matrix geometries as dictated by space availability or constraints.
3. Video wall controller shall be capable of capturing and displaying video information from different sources such as DVI, DisplayPort, VGA, IP streaming etc.
4. The video wall shall be an integrated package of control room display management and configuration software. It should be possible to switch between VIDES feeds easily with remote or adjoining software, zoom in, maximize a specific feed or see multiple feeds at the same time.
5. Video wall controller shall support auto calibration and auto colour balancing.
6. The manufacturer of the Video wall shall be
 - a) A well-known and established company worldwide.
 - b) Have an established and appointed representative or authorized agency in project location.
 - c) Capable of providing after-sales service and support on 24X7 basis adequately.
7. The target image on the Video wall shall be freely resizable and re-positionable on any part of the Screen.

Annexure - 7 – RFP Clause 6.3.4.8 Manpower

1	Incident Operations Staff	2 Nos per Shift (3 Shifts a day)	Graduate	5 years of experience
---	---------------------------	----------------------------------	----------	-----------------------

1. The Contractor will provide two on-site staff of “Incident Operations” Staff (3 shifts in a day, two staff per shift).
2. The Incident Operation Staff shall be responsible for:
 - a. Monitoring the VIDES for Incidents and coordinating with local incident response teams, traffic enforcement and/or any representative nominated by the employer.
 - b. Manual verification of challan evidence generated from VIDES, processing data and ensuring sending to NIC
 - c. Operating Video-Wall, VIDES Software and any other paraphernalia necessary for operations and usage of VIDES.
 - d. Coordinating between the Employer or its representatives and the off-site staff of the bidder in ensuring maintenance, uptime etc.
 - e. Reporting longer incidents as detected from VIDES to Rajmargyatra if not done automatically through API. Data uploading and reporting for SLAs, Datalake etc.
 - f. Any other work required by Employer regarding ATMS.
3. Both of the Incident Operator staff will be provided Workstation as per specifications mentioned in Annexure 8 of Corrigendum.

It should be noted the requirement for the Incident Operation Staff is slightly expanded compared to latest ATMS policy circular (specifically years of experience) to accommodate the nature of deployment in this project.

Any additional staff will be deployed as needed by the Contractor meeting the SLR and functional requirements viz maintenance, operations etc but may not necessarily full-time and on-site.

Annexure 8 – RFP Clause 6.3.4.9 Specifications of NAS Storage and Database Server

1. NAS Storage

CPU	Latest Intel or equivalent AMD Processor with fastest speed available in the market
On-board Memory	8 GB RAM or more as per requirement
Number of HDDs Supported	12x 2.5" or 3.5" SATA 6Gb/s, 3Gb/s hot swappable
HD Drive	As per system requirement
Host Interface	2x 4Gbps Fibre, 2x 1Gbps Copper and 2x 6Gbps SAS Ports
RAID Support	RAID levels 0, 1, 5, 5+, 6, 6+
Network Adapter	Dual-port 10GbE network expansion card
Network Transport Protocols	TCP/IP
Network File Protocols	CIFS, NFS, HTTP/HTTPS, FTP, NTP, SNMP, SMTP, DHCP and DNS
Drive Status /Space Monitoring	Supported
OS	MS Windows or Linux with on-site support
Power supply	Hot pluggable Redundant Power Supply

2. Workstation

CPU	Latest Intel Processor or AMD with fastest speed available in the market (i7 or above or equivalent in AMD)
Mother Board	Intel Original Mother Board
Memory	16 GB DDR RAM or more as per requirement
Hard Drives	1 TB SSD or more as per requirement
Video Card	2 Nos hardware accelerated for connecting 2 monitors
RAID	Supported
Network Adapter	Integrated 10/100/1000 Base -T
Sound Card	Built-in
Disk writer	CD, DVD and Blu Ray
Monitor/Keyboard/Mouse	21" LED TFT/Multimedia/Optical
OS	MS Windows OS Latest version at the time of tender
Anti-Virus Software	Latest software at the time of tender

3. Camera/File/Database Server

On Board CPU	Latest Intel Processor or equivalent AMD with fastest speed available in the market
Memory	32 GB RAM or more as per requirement
Hard Drives	4 TB SSD or higher as required by design of VIDES with RAID 5 Support (As per requirement in case of camera server)
Disk writer	CD, DVD and Blu Ray
Network Adapter	Dual port 10GbE network expansion card
Video Card	Hardware accelerated (CUDA based GPU or equivalent in case AI models are centralized)

Screen	21" LED TFT/Multimedia/Optical
OS	MS Windows or Linux Latest version at the time of tender
Anti-Virus Software	Latest software at the time of tender
Power Supply	Hot pluggable Redundant Power Supply

Annexure 9 – OFC laying and Chamber Installation Status

1. OFC laying status:

Sr.no	Existing ATMS Infra	Device chainage	Total (IN MTR)	Work Status
1	PTZ	19.350	50	Median
2	PTZ	20.650	50	Median
3	VIDS	21.480	50	Median
4	VIDS	28.500	50	Median
5	VMS	28.550	50	Median
6	VMS	36.350	50	Median
7	VMS	43.100	50	Median
8	ECB	44.400	50	LHS
9	ECB	44.400	50	RHS
10	PTZ	47.500	20	Median
11	ECB	48.500	50	LHS
12	ECB	49.550	50	RHS
13	ECB	50.800	50	LHS
14	ECB	51.550	50	RHS
15	ECB	53.500	50	LHS
16	ECB	54.550	50	RHS
17	ECB	55.850	50	LHS
18	ECB	56.900	50	RHS
19	ECB	58.350	50	LHS
20	ECB	58.500	50	RHS
21	ECB	60.250	50	LHS
22	ECB	60.350	50	RHS
23	PTZ	66.350	20	Median
24	VMS	66.400	50	Median
25	VIDS	66.800	20	Median
26	ECB	70.600	50	LHS
27	ECB	71.250	50	RHS
28	ECB	73.000	50	LHS
29	ECB	73.500	50	RHS

2. Chamber Availability

S. No.	Ch. No.	Precast Chamber	No. Off Chamber	Existing ATMS Infra
1	18.000	Loop Chamber	1	
2	18.650	Joint Chamber	1	
3	19.350	Device chamber	Nil	PTZ
4	20.650	Device chamber	Nil	PTZ
5	21.650	Device chamber	Nil	VIDS
6	23.350	Device/Joint Chamber	1	
7	23.580	Device chamber	1	
8	24.130	Loop Chamber	1	
9	25.586	Joint Chamber	1	
10	26.700	Loop Chamber	1	
11	27.250	Joint Chamber	1	
12	28.240	Loop chamber	1	

13	28.500	Device chamber	1	VIDS
14	28.550	Device chamber	1	VMS
15	29.100	Joint Chamber	1	
16	29.850	Joint Chamber	1	
17	30.850	Loop chamber	1	
18	31.845	Joint Chamber	1	
19	31.110	Joint Chamber	1	
20	34.100	Loop chamber	1	
21	35.071	Joint Chamber	1	
22	36.180	Loop chamber	1	
23	36.350	Device chamber	1	VMS
24	36.965	Joint Chamber	1	
25	38.035	Loop chamber	1	
26	38.935	Joint Chamber	1	
27	39.940	Loop chamber	1	
28	40.950	Joint Chamber	1	
29	41.020	Joint Chamber	1	
30	42.000	Loop chamber	1	
31	42.940	Joint Chamber	1	
32	43.150	Device chamber	1	VMS
33	43.940	Loop chamber	1	
34	44.400	Device chamber	3	2 ECB
35	44.900	Joint Chamber	1	
36	45.900	Loop chamber	1	
37	46.780	Joint Chamber	1	
38	47.500	Device chamber	1	PTZ
39	47.780	Loop chamber	1	
40	48.500	Device chamber	2	ECB
41	48.700	Joint Chamber	1	
42	49.550	Device chamber	2	ECB
43	50.650	Joint Chamber	1	
44	50.800	Device chamber	1	ECB
45	51.500	Loop chamber	2	ECB
46	52.500	Joint Chamber	1	
47	53.500	Device/Loop chamber	2	ECB
48	54.500	Joint Chamber	1	
49	54.550	Device/Loop chamber	2	ECB
50	55.400	Joint Chamber	1	
51	55.850	Device chamber	1	ECB
52	56.100	Loop chamber	1	
53	56.900	Device chamber	1	ECB
54	57.331	Joint Chamber	1	
55	57.518	Joint/Loop Chamber	1	
56	58.350	Device chamber	2	ECB
57	58.500	Device chamber	2	ECB
58	59.460	Joint chamber	1	
59	60.250	Device chamber	2	ECB
60	60.350	Device/Loop chamber	2	ECB
61	61.240	Joint chamber	1	
62	62.120	Loop Chamber	1	
63	63.196	Joint chamber	1	
64	64.160	Loop Chamber	1	

65	65.120	Joint chamber	1	
66	66.135	Loop Chamber	1	
67	66.350	Device chamber	1	
68	66.400	Device chamber	1	VMS
69	66.800	Device chamber	1	VIDS
70	67.085	Joint Chamber	1	
71	68.010	Loop Chamber	1	
72	68.970	Joint chamber	1	
73	69.950	Loop Chamber	1	
74	70.600	Device chamber	2	ECB
75	70.825	Joint chamber	1	
76	71.250	Device chamber	2	ECB
77	71.800	Loop Chamber	1	
78	72.790	Joint chamber	1	
79	73.000	Device chamber	2	ECB
80	73.500	Device/Loop chamber	2	ECB
81	74.200	Loop Chamber	1	

Annexure 10 - Bid Securing Declaration Form

(To be submitted by Bidder on the Letter head)

Date: _____

RFP Ref.

To,

COO,

IHMCL

I/We. The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

- a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or
- b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity
 - i. fail or reuse to execute the contract, if required, or
 - ii. fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.
- c) I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of
 - i. the receipt of your notification of the name of the successful Bidder; or
 - ii. thirty days after the expiration of the validity of my/our Bid.

Signed: _____ (insert signature of person whose name and capacity are shown) in the capacity of _____ (insert legal capacity of person signing the Bid Securing Declaration)

Name: _____ (insert complete name of person signing the Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of _____ (insert complete name of Bidder)

Dated on _____ day of _____ (insert date of signing)