Re	Response to Prebid Queries dated 09th Nov 2023 Request for Proposal (RFP) for Selection of Service Provider for Providing Video Incident Detection and Enforcement System (VIDES) at Bengaluru to Mysuru section of NH - 275 published on dated 13.10.2023 Prebid Meeting date 25.10.2023							
Sno	RFP Clause	Type of query		Clarification Sought	Reply IHMCL			
1	Page 23, Clause 6.3.1. Detailed Scope of Work >> 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	Please indicate the number of lanes to be covered at these locations. We assume that both sides of the road to be covered under the solution. Kindly confirm.	The solution proposed by bidder should cover 6 lanes highway including paved and earthen shoulder.			
2	o)	al/General/Ot hers	o) IHMCL at its sole discretion may increase/decrease the locations.	Kindly indicate approximate variation in quantities so that the provision can be considered while designing the system, server sizing and storage requirements.	The maximum number of 6 locations may be increased based on requirement of NHAI/IHMCL.			
3	Page 24, Clause b. Installation of Camera based system including Radar and/or other peripheral equipments	al/General/Ot hers	a. Video Image processing unit(s)	Point a mentions the flexibility of "The system shall include gantry-mounted cameras connected to a co- located or centralized/cloud video image processing modules". We understand that the location of the video image processing units can be at the location or at central control room. Please confirm	As per RFP			
4	Page 24, Clause b. Installation of Camera based system including Radar and/or other peripheral equipments	al/General/Ot hers	g. Back-office Software for Validation of Violation data captured and integration with Enforcement Agency (eChallan/Vahaan)	As we understand, the eChallan system would be of NIC as part of One Nation One eChallan initiative of Govt. of India. Please confirm	Yes confirmed			
5	Page 25, Point C		c) The ANPR and VIDS 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.	Please indicate the number of lanes to be covered at each location.	The solution proposed by bidder should cover 6 lanes highway including paved and earthen shoulder.			

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6	Page 25, Point D		d) The ANPR system shall be responsible detection both spot over speeding as well as section based over speeding.	calculation.	Minimum 8 sections for average speed calculation shall be provisioned. The actual number shall be informed based on requirement.
7	Page 26, Point o)	Technical/Leg al/General/Ot hers	o) Not withstanding 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	number of incidents so that everyone considers the same parameters while sizing the system. In absence of this, the evaluation of bids would be subjective. The number of incidents could be in percentage of the total number of vehicles plying in each lane every day. We also request the authorities to give the number of vehicles plying on the highway.	below:
8	Page 26, Point o)		o) Not withstanding 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		Yes confirmed
9	Page 27, c. Providing VIDES Software	Technical/Leg al/General/Ot hers	Additional Point	We request authorities to consider the deployment of system in failover modes where the system will be deployed at two locations providing continuous two- way synchronization of data and also provide the business continuity in case the infrastructure in any location is compromised.	As per RFP
10	Page 29 , c. Providing VIDES Software	Technical/Leg al/General/Ot hers	Additional Point	We request addition of ONVIF profile S, G , T & M compliant VIDES software to ensure compatibilty with any ONVIF compliant cameras.	As per RFP

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11	Page 34, c. The indicative classification of common vehicles for the ATCC is given below	Technical/Leg	v. Trucks/Buses vi. Multi-Axle Vehicles		As per RFP
12	Page 35, Point C		c) The VIDES software shall also identify vehicles whose Class as identified by the camera visually don't match the Class returned from the NPCI FASTag mapper API. These violations shall be passed on PD or IHMCL for further action	Performing this check for each vehicle passing through the gantry could generate a continuous flow if information request to FASTag API server. We assume the server would be capable of handling this load.	Query not clear
13	Page 36, Point b)		b) The accuracy of the proposal solution should be 99%. In case the system wrongly identifies the vehicles for deduction of e-challan/penalty, the following service levels will be deemed to have been achieved, and the according deductions shall be made from payments.	Table on Page 29 defines accuracy for each incident detection. Whereas Page 36 point b) mentions the flat accuracy of 99%. We request you to kindly consider the accuracy levels mentioned on Page 29. Also, the envisaged systems will make use of Deep Learning technology which will require training the algorithm with local datasets before the accuracy levels can be achieved. We request the authorities to give time to the application to achieve the accuracy in the period ranging from 90 days to 180 days.	Refer Corrigendum 1
14	Page 37, Point c)		<ul> <li>c) Non- Capture of vehicle</li> <li>The Successful bidder shall ensure to capture 100% traffic passing through the gantry. Any missing vehicles shall attract penalty as below:</li> <li>Rs. 20,000/- for each missing vehicle record.</li> </ul>	The penalties are huge for a new technology and also the non standardization of the vehicles, appearance, license plates and environmental conditions. We request you to kindly remove this clause or change the accuracy level to 95% or better.	
15	Page 38, 6.3.4.1. Video Camera (Overview)		The camera shall have great low light sensitivity, electronic shutter, automatic gain control and back –light compensation to enable camera to operate in wide range of lighting conditions. Apart from visual sensors, the camera shall accompany infrared illuminators or thermal sensors to ensure Overview Camera related incidents (debri, fog, accidents, pedestrian, animal crossing etc) are automatically detected in night conditions also in the range of 60- 100m.	We request you to kindly amend the clause for a detection range of up to 60 meters for detection of debri/object, animal and human detection. Large sized objects such as parked vehicles can be detected for up to 80 to 100 meters.	As per RFP
16	Page 40, 11) The IP Camera shall have the following specification:	al/General/Ot	Additional Point	We request addition of frames per second parameter. To capture vehicles plying at 180 KMPH, the camera shall have 50 FPS frame rate.	As per RFP

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17	RFP Clause No. 6.3.2.a, Page No. 35		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).	Kindly clarify the O&M period as Numeric value and word value are different in the mentioned clause. Also kindly clarify & confirm the total contract pereiod.	Refer Corrigendum 1
18	RFP Clause No. 6.5, page No. 50		The initial period of engagement shall be 42 months from date of signing of Contract Agreement. The period of engagement may be further extendable by additional 2 year at the sole discretion of NHAI/IHMCL.		
19	RFP Clause No. 6.3.6.iii, page No. 45 &4650	Technical/Leg al/General/Ot hers	Timeline Implementation phase – Go-Live at three additional locations (Total 6 locations): 6 Months Operations & Maintenance: 6 months onwards		
20	PART-IV: INSTRUCTIONS TO BIDDERS Page 8	General	OEM of each component/ equipment shall be preferably Indian OEM/ Manufacturers or preferably Class-I Local supplier (as defined in DPIIT Order no. P-45021/2/2017-PP (BE-II) dated 04.06.2020 (revised "Public Procurement (Preference to Make in India) Order 2017") having direct presence in India and own service and support offices to ensure smooth after sales service support on site	OEM of preferably Indian Origin /Manufacture class 1 Local Supplier will be a restrictive clause shall prevent the superior Technology /Companies to participate in the BID - We request the authorities consider removing preferably India OEM clause	As per RFP
21	PART-IV: INSTRUCTIONS TO BIDDERS Page 8	General	The OEM for all active components should give a declaration that products or technology quoted are neither end of- sale nor end-of-life as on the date of installation and commissioning and are not end-of-support till the successful completion of O&M period of the project	In View of the Penalities and Deductions against the Operations & maintenance the requirement of obtaining a Declaration must optional as the Project is OPEX mode and has provision for SLA & Penalities	As per RFP

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22	PART-IV: INSTRUCTIONS TO BIDDERS Page 8	General	Each of the proposed OEMs should either have existing capability and infrastructure to provide 24x7x365 technical support in India	As most of the OEM have service arrangements through their service partners keeping 24*7*365 Support will be restrictive for participation as the BID is already invoking SLA for downtime .This clause should be optional	As per RFP
23	PART-IV: INSTRUCTIONS TO BIDDERS Page 8	General	<ul> <li>4.20 Performance Security</li> <li>a) 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 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.</li> <li>b) The aforesaid Bank Guarantee shall be as per the format given in format provided in this RFP and will be valid for a period of 180 days after the expiry of Contract period and shall also have a minimum claim period of 1 year.</li> </ul>	In View of the Penalities and Deductions against the Operations & maintenance period Performance Security of 30 Lakhs should be reduced to allow fair participation from all businesses	Refer Corrigendum 1
24	PART-IV: INSTRUCTIONS TO BIDDERS Page 9	General	The OEM for each products or technology quoted should be in the business of that product or solution or technology for at least 3 years as on the date of release of the RFP.	The mentioned clause is restrictive for participation as it shall prevents new & advance technology companies to participate in the BID	As per RFP
25	PART-IV: INSTRUCTIONS TO BIDDERS Page 10	General	The OEM for all active components should give a declaration that products or technology quoted are neither end of- sale nor end-of-life as on the date of installation and commissioning and are not end-of-support till the successful completion of O&M period of the project	Since Authority is already mentioned SLA for downtime deductions corresponding to it the requirement of obtaining a Declaration from the OEM must be kept optional	No Change, as per RFP

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26	4.1.1. Eligible Goods and Services, and Original Equipment Manufacturer (OEM) Criteria – Undertaking to be submitted as per format given in Annexure -7. Page No. 8	Technical	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.		Refer Corrigendum 1
27	Form 2: Bill of Quantity (BOQ)	Technical	Request for Addition	missing in the BOQ.	Refer Corrigendum 1
	Page No.70			Hence, We request that you kindly incorporate VIDS & ANPR Camera License & base license in the BOQ.	
28	4.12 Opening and Evaluation of Bids Page No.11	Technical	Request for Addition	functional / technical compliance through a demonstration/POC process during the technical evaluation of bids. This will ensure a technically qualified product/solution for supply and implementation by successful bidders. Hence, We request that you kindly incorporate proof- Of-Concept (PoC) for technically qualified product or	No Change, as per RFP
29	6.3.4.6. Radar based VASD System Page No. 42	Technical	c. Minimum Monitored section length : 500 m	solution participation. Every solution provider has unique hardware compliance requirements to ensure the necessary functionality. We are concerned that the current hardware restrictions in the tender may inadvertently create a monopolistic approach. We kindly request a review of the hardware compliance clause to ensure a fair and competitive environment for all OEMs participating in the tender. Hence, We request that you kindly amend the clasue as mentioned below for fair participation c. Minimum Monitored section length : 300 m	Refer Corrigendum 1

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	b. Installation of Camera based system including Radar and/or other peripheral equipments Page No. 25		<ul> <li>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:</li> <li>a. Over speeding vehicles</li> <li>b. Vehicles not adhering with lane discipline.</li> <li>c. Slow-moving vehicle/ two/ three-wheeler</li> <li>d. Vehicle stopped on main carriageway.</li> <li>e. Any object fallen on main carriageway.</li> <li>f. Accidents</li> <li>g. Vehicle running in opposite direction</li> </ul>	As per Industry standard target detection like, 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, Vehicle running in opposite direction should a part of VIDS System. Hence, We request that you kindly remove this clause from ANPR System and shift this clause to VIDS technical specification.	Refer Corrigendum 1
	c. Providing VIDES Software, n) The system shall provide detection of the following incidents: Page No. 50	Technical	Seatbelt Violation Real-time not necessary (back- office processing permitted) ANPR 80% Precision Day and Night 65% Recall except during direct sun glare on windshield, anti glare coatings etc.	Detecting no seatbelt violations in both day and night scenarios with an 80% accuracy rate can indeed be challenging. Here are some challenges that you might face when deploying a no seatbelt violation detection system in a real-time scenario: Varying Lighting Conditions: Day and night lighting conditions can significantly affect the accuracy of the system. Sunlight, shadows, artificial lighting, and low light conditions at night can make it challenging to detect seatbelt use accurately. Quality of Data: If the data is noisy, poorly labeled, or unrepresentative of real-time scenarios, it can negatively impact accuracy. Image Quality: The quality of the images or video feeds can vary, impacting the system's ability to recognize seatbelt usage. Blurred or pixelated images, lens glare, and other image issues can hinder detection. Obstructions: Passengers and objects inside the vehicle can partially or fully obstruct the view of the seatbelt, making it difficult to determine if it's fastened or not. Maintenance and Calibration: Over time, cameras may become misaligned, dirty, or degrade in quality, which can impact the system's accuracy. Regular maintenance and calibration are necessary. Hence, We request that you kindly amend the clasue as mentioned below for fair participation. Seatbelt Violation Real-time not necessary (back- office processing permitted) ANPR 50% Precision Day 40% Recall except during direct sun glare on windshield, anti glare coatings etc.	As per RFP
	b. Installation of Camera based system including Radar and/or other peripheral equipments, Page No. 25	Technical		As per Industry standards, Overview/VIDS cameras is typically designed to provide effective coverage for 3-4 lanes and extending up to a range of 25 to 30 meters. Hence, We request that you kindly amend the clasue as mentioned below for fair participation. "A typical setup for a particular direction will have ANPR cameras facing the traffic covering all lanes and overview cameras which enable viewing 25- 30m in each direction covering all lanes".	As per RFP
	Clause - 6.3.6, Payment Terms & Timelines, Page No - 44-46	Other - Commercial	<ul> <li>b) Capex Payment:</li> <li>i. 100% Capex payment against installation of gantries shall be released based on satisfactory installation of number of gantries as per provisions of RFP.</li> </ul>	As per our understanding 100% Capex value shall be received on prorata basis on completion of each gantry. Kindly confirm whether our understanding is correct?	Yes confirmed

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34	Clause - 6.3, Brief Scope of Work, Page No - 20-21	General	The subsequent sections capture details regarding potential work that may be awarded to Service Provider by IHMCL. IHMCL reserves the right to reduce/add details to the scope to better satisfy the requirements. The key activities of the VIDES are as mentioned below: a. Installation of Gantries at the specified locations b. Installation of Gantries at the specified locations b. Installation of Camera based system including Radar and/or other peripheral equipments c. Providing VIDES Software d. Integration with other applications This is to clarify that through this RFP, IHMCL do not intend to procure any equipment, the project is on Service Model. Ownership of the complete system including but not limited to safety, insurance and all other incidental damages shall be handled by Service Provider. Non-availability of information due to nonfunctioning of any or all devices will warrant penalties as per provisions set out in the RFP. Therefore, the Service Provider shall maintain adequate spares/stock to provide the deliverables as per RFP. Post completion of the Contract Period the Service Provider shall take back all the equipments deployed at site, however, the gantries installed at the location shall not be dismantled or taken back, for future purposes.	The RFP mentions that the projects shall be on service model. We understand that this is typo error. The price bid format at Annexure-5-FORMAT FOR FINANCIAL BID SUBMISSION (page no - 68 of RFP) or payment terms at 6.3.6. Payment Terms & Timelines (Page No - 46 of RFP) does not seem that this project is on service model. In fact, Project Handover clause at 6.12 Project Handover (Page No - 56 of RFP) says, Service provider to handover the systems post completion of contract period. We request you to kindly clarify the above	Refer Corrigendum 1
35	Clause - 6.3.2, Operations and Maintenance (O&M), Page No - 35	General	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).	There seems to be a typo error the O&M period is mentioned as "two years (36 month)". we request you to kindly confirm whether O&M period is two years or three years?	Refer Corrigendum 1
36	Clause - 6.9 - TERMINATION, (f), Page No - 52- 53	Legal	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.	As per our understanding termination for convenience clause shall not be applied during build phase and is applicable only during O&M Phase. Further we also understand, If in case the termination takes place during the build phase, the bidder shall be entitled to be paid the Contract Price attributable to the portion of the System satisfactorily executed as on the date of termination and the costs, if any, incurred in relation to capex value of the contract, in protecting the System and in leaving the site in a clean and safe condition. Kindly confirm whether our understanding is correct ?	Refer Corrigendum 1

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37	Clause - 4.15, Award Criteria, Page 13-14	General	a) IHMCL will award the Contract to the Bidder whose Bid has been determined to be responsive in terms of this RFP and the Bid price has been found to be lowest inclusive of all levies and taxes like Excise Duty, Custom Duty, packing, forwarding, freight and insurance, Octroi/Entry Tax, etc. or as applicable taxes, but exclusive of GST.	Considering the incident monitoring, accident avoiding and life saving features of ATMS we suggest that QCBS mode of evaluation be adopted. IHMCL would want the best solution which can reduce accidents, provide good travel experience to commuters and L1 may not be the best way to get it.	No Change, as per RFP
38	Clause - 6.3.1, Detailed scope of Work, (b) - Installation of Camera based system including Radar and/or other peripheral equipments, d ), b., Page No - 25	Technical	<ul> <li>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:</li> <li>a. Over speeding vehicles</li> <li>b. Vehicles not adhering with lane discipline.</li> <li>c. Slow-moving vehicle/ two/ three-wheeler</li> <li>d. Vehicle stopped on main carriageway.</li> <li>e. Any object fallen on main carriageway.</li> <li>f. Accidents</li> <li>g. Vehicle running in opposite direction.</li> <li>IHMCL reserves the right to increase number of incidence as per requirements.</li> </ul>	With gantries placed approximately 20 kms apart this may not be practically possible. We suggest that this aspect be removed.	No Change, as per RFP
39	Clause - 6.3.1, Detailed scope of Work, (b) - Installation of Camera based system including Radar and/or other peripheral equipments, d )., Page N0 -25	Technical	<ul> <li>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:</li> <li>a. Over speeding vehicles</li> <li>b. Vehicles not adhering with lane discipline.</li> <li>c. Slow-moving vehicle/ two/ three-wheeler</li> <li>d. Vehicle stopped on main carriageway.</li> <li>e. Any object fallen on main carriageway.</li> <li>f. Accidents</li> <li>g. Vehicle running in opposite direction.</li> </ul>	We suggest that the overview camera should be provided to cover both the views form a gantry i.e the front view of vehicles and rear view of vehicles. This way same infra can be used to monitor a larger stretch.	No Change, as per RFP
40	Clause - 6.3.1, Detailed scope of Work, (c) - Providing VIDES Software's, y ) ATCC, Page N0 - 34	Technical	b. Each Vehicle Passing from under the Gantry shall be recorded by the ANPR camera. The same will be used to classify the vehicle that is passing.	As per our understanding, we have to get the vehicle class from Vahan based on the ANPR. Please confirm. Further, if the classification has to be done by the system itself, then the 6 classes are possible but not more.	As per RFP

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41	Clause - 6.3.1, Detailed scope of Work, (c) - Providing VIDES Software's, y ) ATCC, Page N0 - 34	Technical	g. The ATMS software shall also identify vehicles whose Class as identified by the camera visually don't match the Class returned from the NPCI FASTag mapper API. These violations shall be passed on PD or IHMCL for further action.	Classes in the NPCI FasTAG are 20 while the ATCC in this RFP will be classifying vehicles into 6 classes. So the match may not be workable. We request IHMCL to kindly relook the requirement	No Change, as per RFP
42	Clause 6.3.3 Service Level Requirements (SLA), e) Capping of penalties, Page no - 37	Others			Refer Corrigendum 1
43	Clause - 6.3.4.6. Radar based VASD System, Page 42 0f 72	Technical	Minimum Monitored section length : 500 m	The range 500 m is not possible to achieve via radar and also not required for the VASD. The driver can see the display only 50 - 90 m before approaching. 500m distance will confuse the drivers as some other vehicle's speed will be displayed. Request to kindly reduce it to 90 m	Refer Corrigendum 1
44	Clause-6.3.12 -b , page no .48	Others	The raw power shall be provided by NHAI/IHMCL.	Commited availibilty of electricity from NHAI/IHMCL	Refer Corrigendum 1
45	Clause-6.3.12 -b , page no .48	Others	The raw power shall be provided by NHAI/IHMCL.	O&M of electrical supply responsibility	Refer Corrigendum 1
46	Clause 6.3.3-e, page no.37	Technical	The uptime of VIDES shall be 99.9%,	In case of raw power failur and absence of battery backup after 8 hrs, is there any penalty clause on SI.	Refer Corrigendum 1
47	Clause 6.3.1b- bb, page no.27	General	The Service Provider shall be sole responsible for safety of all the VIDES system	Theft & Vedalism can't be covered as we are not having our petroling system on highways.	No Change, as per RFP
48	Clause 6.3.3- e , page no.36	General	The total penalty imposed in a month shall not exceed 10% of total quarterly payments.	30% montly penalty capping need to be reduce to 10% per month	Refer SLA provided in Corrigendum-1 - Incase the overall performance is less than 50% in the quarter, no amount will be paid for the entire quarter. Also, In case the score falls below 50 for two consecutive quarters, the Authority can invoke the termination clause.
49	Clause 6.3.6-b page no.44	General	100% Capex payment against installation of gantries	Capex payment includes the cost of Hardware i.e. camera, UPS, LPU etc or not	No Change, as per RFP
50	Clause-6.3.12 -b , page no .48	Others	The raw power shall be provided by NHAI/IHMCL.	Power connectivty from available supply point to Gnatry is in SI scope or not	Refer Corrigendum 1
51			ANPR cameras will capture the number plate of every vehicle passing under the gantry irrespective of whether any spot incident has been detected.		Yes confirmed

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52			The ANPR camera should correctly link the vehicle number plate with the any incident (speed etc) as detected by the overview camera. They shall be operating in tandem where required.	In the event of heavy traffic or an incident, two vehicles may become closely spaced, rendering the number plate obscured from the camera's view.	Necessary measures should be incorporated to meet the SLAs.
53			The ANPR camera shall be able to capture both retro & non-retro reflective license plates		Necessary measures should be incorporated to meet the SLAs.
54			The ANPR camera will identify incidents itself suitable for its viewing angle (seat belt, triple riding, no-helmet etc)	Seat belt: The accuracy of seat belt detection may be compromised due to various factors, including low contrast between the belt and the driver's attire, camera angle, light reflections and distortion caused by glass surfaces, and potential obstructions like hands or hair, all of which can hinder precise detection. Triple riding : sitting detection on a two-wheeler using a front-facing camera angle is differentiating between the positions of the riders, especially in cases where they are closely positioned	As per RFP
55			Success rate of ANPR shall be more than 90% during day/night time and capture speeds up to 180 KMPH for standard number plates. The solution provider will improve the model through the operation period to satisfactory levels and changing number plate designs.	At high speeds, the rapid motion may result in image blurriness, impeding our ability to effectively process detection. The accuracy of various number plate designs will increase over time as our system continually refines its recognition capabilities	As per RFP
56			In case ANPR is unable to recognize the plate for a vehicle, the image will be captured by the software for manual number plate recognition. No predictions or low confidence recognitions will be manually annotated by staff at the command centre and fed back to improve the model. The software at the command centre will allow operator to zoom in, correct number plate recognized from the snapshot.		As per RFP
57			Each challan related number plate recognition will be manually vetted by the command centre staff before handing over to local enforcement agency.		As per RFP
58			The software and cameras should be calibrated and tested on a monthly basis by the proposed representative of IHMCL/NHAI.		As per RFP
59			The associated command centre software should have provision for being loaded with number plates alarms for stolen vehicles, hotlist etc and immediately notify traffic operator such that the operator can communicate the same the police/enforcement agency.		As per RFP

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60	RFP clause 6.3.1,a,i; page no.22	Technical	<ul> <li>i) An Optical Fiber Cable is laid over the Bangalore – Mysuru Highway. The</li> <li>Optical Fiber laid is with 24 core. The Service</li> <li>Provider may make use of</li> <li>this Optical Fiber to have digital transmission of data</li> <li>between the various devices installed on gantries to</li> <li>the central location. However, the Service</li> <li>Provider shall make necessary arrangements such as splicing, etc. to make</li> <li>use of it or arrange a backup digital transmission</li> <li>system so as to have</li> <li>uninterrupted communication between the installed</li> <li>devices. In addition to</li> <li>this, the information captured through the proposed</li> <li>system shall be</li> <li>accessible through the Internet for which required</li> <li>connectivity such as</li> <li>broadband/ Internet Leased Line or Dongle shall be</li> </ul>	It will be more helpful if we get existing network drawing so that we can incorporate in our detailed design engineering drawing.	Refer Corrigendum 1
61	RFP clause 6.3.1,b,b; page no.24		b) The Successful bidder shall install the camera- based solution for over speed detectionand 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.	Kindly clarify the color in which vehicles running at equal to defined speed	Green color
62	RFP clause 6.3.1,b,i; page no.25		i) The number of cameras & positioning of each in this system should be such that incidents are detected in both direction across all lanes and the number plate is captured for all vehicles passing under the Gantry.	Need clarity on BOQ of Overview cameras.	Refer Corrigendum 1
63	RFP clause 6.3.1,b,s; page no.26		s) The lights shall be powered by a local solar PV based power supply and shall be interconnected with the incident detection system either by cable or by wireless (GSMbased).	Can we use any other wireless technology instead of GSM?	Yes, however the technology should meet the required SLAs
64	RFP clause 6.3.1,b,k and l; page no.26		<ul> <li>k) On detection of an incident the system shall activate appropriate flashing lights, and/or display appropriate incident message on <b>nearby VMS to</b> <b>locally to warn road users</b>.</li> <li>l) In case of VIDS placed to cover MORTH Blackspot or an emerging high-risk accident spot identified by NHAI PD, VMS will be used to issue alarms and warnings in place of flashing lights.</li> </ul>	VMS is mentioned here but not provided specification of the VMS, do we have use existing VMS or provide new VMS if yes, it should be part of BOQ.	System shall be capable enough to transfer the information to nearby VMS. Installation of VMS is not in the scope of bidder.

Sno	RFP Clause	Type of query	RFP Clause	Clarification Sought	Reply IHMCL
65	RFP clause 6.3.1,c,w; page no.33		w) VIDS shall be able to do both spot speeding and section based speeding during the day andnight. Spot based speeding means estimating the speed of the vehicle in the immediate area the Gantry is looking at and section based speeding will be calculating the average speed of the vehicle based on the time it takes to travel between two VIDS gantries every 10 km.	Need clarity about the VIDS gantry placement distance for section speed finding.	As per RFP
66	RFP clause 6.3.1,c,x,a; page no.33		a. VIDS shall be able to do both spot speeding and section based speeding during the day and night. Spot based speeding means estimating the speed of the vehicle in the immediate area the Gantry is looking at and section based speeding will be calculating the average speed of the vehicle based on the time it takes to travel between two VIDS gantries every 10 km.	Need clarity about the VIDS gantry placement distance for section speed finding.	As per RFP
67	RFP clause 6.3.4,6,6,c; page no.42		<ul> <li>6. Measurement:</li> <li>a. Speed range : 1 km/h to 200 km/h</li> <li>b. Maximum Measuring errors: Up to 100 km/h □ ± 3 km/h, Above 100 km/h</li> <li>□± 5 km/h</li> <li>c. Minimum Monitored section length : 500 m</li> </ul>	Minimum monitored section length is 500 mtr fro VASD, it should be monitored through Overview camera or through Radar only for tracking of vehicles? kindly elaborate.	Refer Corrigendum 1
68	Detailed Scope of V	Technical	Approximate Electrical cable length required at the location in meter	There is no specification given for the Electrical Cable, Laying of the cable for 3000m can cause energy drop. So it is important to know the power factor and The cable size, which should be chosen to ensure that the voltage drop does not exceed acceptable levels. The size is typically specified in square millimeters (mm <sup>2</sup> ). Requesting you to please provide the details.	Refer Corrigendum 1
69	Eligibility Criteria (C	Legal	The Bidder shall mention not more than three OEMs, for each of the equipment.	We should concentrate exclusively on the land border declaration, highlighting the strong interest of top-tier global OEMs in bringing their exceptional services and solutions to India. We kindly request you to revise this clause and refrain from limiting us to just three OEMs.	
70	Bid Security (Claus	General	The Earnest Money shall be in the form of a Demand Draft OR Bankers Cheque or NEFT/RTGS mode.	As this project operates on an Operational Expenditure (OPEX) model with payments scheduled on a quarterly basis, managing fund allocation becomes a challenging endeavor for the System Integrator. In light of these circumstances, we kindly request your consideration to accept the Earnest Money Deposit (EMD) in the form of a Bank Guarantee (BG).	Refer Corrigendum 1

Sno	RFP Clause	Type of query		Clarification Sought	Reply IHMCL
71	Operations and Maintenance (O&M) (Clause No. 6.3.2. Page No. 32)	General	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).	The Clause Mentions 2 Years of O&M Period and also mentions 36 months.,Kindly confirm the period of project. As per pre-bid meeting held on 25th of October, it was discussed to extend the period of project to 5 Years. Requesting you to extend the Project Period to 5 Years.	Refer Corrigendum 1
2	4.13 Imbalanced Bid, 13	General	If the Bid of the Successful Bidder is seriously imbalanced in relation to IHMCL's <u>estimate of the</u> <u>cost of work</u> to be performed under the Contract	An estimate of the project to be given for preparing commercial offer.	Refer Corrigendum 1
73	4.20 Performance Security , 15	General	Within 07 (Seven) Bidder shall submit a Performance Security <u>an amount equal to INR</u> <u>30,00,000/- (Rupees Thirty Lakh only)</u> , issued by a Bank	Performance Security amount is much demanded as it will be on hold till the time of completion of the project. As per Standard practice in NHAI/mOrth RFP 2 to 3 % is Considered. Kindly refer NHAI/MORTH RFP for same.	Refer Corrigendum 1
'4		General	Command Centre	Please specify the Command Control centre Location.	Plaza Location at Chainage Km 16+500
'5		General	Command Centre	kindly clarify where all data will be stored and secure.	Refer Corrigendum 1
6	Bid Extension	General		To enable us to bidding in the best competitive proposal we request an extension 7-10 days.	Refer Corrigendum 1
7	4.7 Bid Security, 9	General	The Bidder shall furnish, as part of the Bid, Earnest Money Deposit (EMD) /Bid <u>Security for an amount</u> INR 10,00,000/- (Rupees Ten Lakh only).	Exemption of EMD for MSME should be considered. Reference can be taken from The Government of India Gazette notification vide S.O.581 (E) for Mico,	Refer Corrigendum 1
78	4.13 Imbalanced Bid, 13	General	If the Bid of the Successful Bidder is seriously imbalanced in relation to IHMCL's <u>estimate of the</u> <u>cost of work</u> to be performed under the Contract	Small and Medium enterprises which notifies the Exemption of Earnest money.	
9	4.20 Performance Security , 15	General	Within 07 (Seven) Bidder shall submit a Performance Security <u>an amount equal to INR</u> <u>30,00,000/- (Rupees Thirty Lakh only)</u> , issued by a Bank	The quantities & locations are not specified.	Query not clear
80	6.3.12. Other Works	General	a) Design and Drawing Responsibility	Performance Security amount is much demanded as it will be on hold till the time of completion of the project. As per Standard practice in NHAI/MoRTH RFP 2 to 3 % . Reference can be taken from The Government of India Gazette notification vide No. F9/4/2020-PPD which notifies the reduction of % for Performance Bank Guarantee	Refer Corrigendum 1
31			b) Electricity Requirements	with existing drawings & design of the civil work &	Refer Corrigendum 1
2		General	Command Centre	installed equipment and other information realted to this project in the line of preparing our proposal for the	
33		General	Command Centre	if it already exists.	Plaza Location at Chainage Km 16+500
34	Bid Extension	General	Page	kindly clarify where all data will be stored and secure difidzalready exists.	Refer Corrigendum 1

Sno	RFP Clause	Type of query	RFP Clause	Clarification Sought	Reply IHMCL
85	Format for financial bid submission	General	Procurement and Installation of 2 x 3 lane gantries covering both the sides (LHS & RHS) at 4 locations provided by IHMCL – Capex Cost	To enable us to bidding in the best competitive proposal we request an extension 15 days.	Refer Corrigendum 1
86			Procurement and Installation of 1 x 3 lane gantry at 2 pair of locations provided by IHMCL – Capex Cost.	Every Physical equipments have a Capex Value however all ANPR camera ,LPU, VASD etc. Radar are overlooked & categorised in OPEX.	As per RFP
87	Format for financial bid submission	General	Installation, Commissioning and Operations & Maintenance of <u>VIDES</u> <u>System comprising of</u> <u>different equipments</u> as required in RFP at Bengaluru – Mysuru section of NH – 275 (6 Lane) – O&M Cost		
88	Page 23, Clause 6.3.1. Detailed Scope of Work >> n)	Technical	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	O&M (OPEX) should be vested towards performance & services and not capital inbound products.	Query not clear
89	Page 24, Clause 6.3.1. Detailed Scope of Work >> o)	Technical	o) IHMCL at its sole discretion may increase/decrease the locations.	Kindly indicate approximate variation in quantities so that the provision can be considered while designing the system, server sizing and storage requirements.	The maximum number of 6 locations may be increased based on requirement of NHAI/IHMCL.
90	Page 24, Clause b. Installation of Camera based system including Radar and/or other peripheral equipments	Technical	a. Video Image processing unit(s)	Point a mentions the flexibility of "The system shall include gantry-mounted cameras connected to a co- located or centralized/cloud video image processing modules". We understand that the location of the video image processing units can be at the location or at central control room. Please confirm	As per RFP
91	Page 24, Clause b. Installation of Camera based system including Radar and/or other peripheral equipments	Technical	g. Back-office Software for Validation of Violation data captured and integration with Enforcement Agency (eChallan/Vahaan)	As we understand, the eChallan system would be of NIC as part of One Nation One eChallan initiative of Govt. of India. Please confirm.	Yes confirmed
92	Page 25, Point C	Technical	c) The ANPR and VIDS 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.	Please indicate the number of lanes to be covered at each location.	The solution proposed by bidder should cover 6 lanes highway including paved and earthen shoulder.

Sno	RFP Clause	Type of query	RFP Clause	Clarification Sought	Reply IHMCL
93	Page 25, Point D	Technical	d) The ANPR system shall be responsible detection both spot over speeding as well as section based over speeding.	Kindly indicate number of sections for average speed calculation.	Minimum 8 sections for average speed calculation shall be provisioned. The actual number shall be informed based on requirement.
94	Page 26, Point o)	Technical		We request you to kindly indicate an approximate number of incidents so that everyone considers the same parameters while sizing the system. In absence of this, the evaluation of bids would be subjective. The number of incidents could be in percentage of the total number of vehicles plying in each lane every day. We also request the authorities to give the number of vehicles plying on the highway.	
95	Page 26, Point o)	Technical	o) Not withstanding 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		Refer Corrigendum 1
96	Page 27, c. Providing VIDES Software	Technical	Additional Point	We request authorities to consider the deployment of system in failover modes where the system will be deployed at two locations providing continuous two- way synchronization of data and also provide the business continuity in case the infrastructure in any location is compromised.	As per RFP
97	Page 29 , c. Providing VIDES Software	Technical	Additional Point	We request addition of ONVIF profile S, G , T & M compliant VIDES software to ensure compatibility with any ONVIF compliant cameras.	As per RFP
98	Page 34, c. The indicative classification of common vehicles for the ATCC is given below	Technical	v. Trucks/Buses vi. Multi-Axle Vehicles	ANPR camera can't differentiate multi-axle vehicles due to its position. We request authorities to allow classification of large vehicle's under trucks or buses.	As per RFP

Sno	RFP Clause	Type of query			Reply IHMCL
99	Page 35, Point C	Technical	c) The VIDES software shall also identify vehicles whose Class as identified by the camera visually don't match the Class returned from the NPCI FASTag mapper API. These violations shall be passed on PD or IHMCL for further action	Performing this check for each vehicle passing through the gantry could generate a continuous flow if information request to FASTag API server. We assume the server would be capable of handling this load.	Query not clear
100	Page 36, Point b)	Technical	b) The accuracy of the proposal solution should be 99%. In case the system wrongly identifies the vehicles for deduction of e-challan/penalty, the following service levels will be deemed to have been achieved, and the according deductions shall be made from payments.	Table on Page 29 defines accuracy for each incident detection. Whereas Page 36 point b) mentions the flat accuracy of 99%. We request you to kindly consider the accuracy levels mentioned on Page 29. Also, the envisaged systems will make use of Deep Learning technology which will require training the algorithm with local datasets before the accuracy levels can be achieved. We request the authorities to give time to the application to achieve the accuracy in the period ranging from 90 days to 180 days.	Refer Corrigendum 1
101	Page 37, Point c)	Technical	<ul> <li>c) Non- Capture of vehicle</li> <li>The Successful bidder shall ensure to capture 100% traffic passing through the gantry. Any</li> <li>missing vehicles shall attract penalty as below:</li> <li>Rs. 20,000/- for each missing vehicle record.</li> </ul>	The penalties are huge for a new technology and also the non-standardization of the vehicles, appearance, license plates and environmental conditions. We request you to kindly remove this clause or change the accuracy level to 95% or better.	Refer Corrigendum 1
102	Page 38, 6.3.4.1. Video Camera (Overview)	Technical	The camera shall have great low light sensitivity, electronic shutter, automatic gain control and back –light compensation to enable camera to operate in wide range of lighting conditions. Apart from visual sensors, the camera shall accompany infrared illuminators or thermal sensors to ensure Overview Camera related incidents (debri, fog, accidents, pedestrian, animal crossing etc) are automatically detected in night conditions also in the range of 60- 100m.	We request you to kindly amend the clause for a detection range of up to 60 meters for detection of debri/object, animal and human detection. Large sized objects such as parked vehicles can be detected for up to 80 to 100 meters.	As per RFP
103	Page 40, 11) The IP Camera shall have the following specification:	Technical	Additional Point	We request addition of frames per second parameter. To capture vehicles plying at 180 KMPH, the camera shall have 50 FPS frame rate.	As per RFP