

Sub.: Design, Supply Installation, Testing, Commissioning, Configuration, System Integration, Operations and Maintenance of comprehensive Advanced Traffic Management System (ATMS) on National Highways.

Clarifications to additional queries received from the Empanelled Agencies.

Sr.No	Page No of RFP	Clause	RFP Statement	Query	Clarifications Remarks of NHA
A	VIDS				
1.	Page No-42	4.3	The system shall be able to detect both approaching and receding traffic in multiple traffic lanes. A single camera shall be capable of detecting a maximum of 8 lanes.	1)So as to insure the appropriate system is commissioned, would request the maximum width of the road including 8 lanes and divider to be shared.	The bidder may arrive at the required width of the road based on dimensions (of individual lane, median and hard shoulder etc) 1. provided in the relevant Indian Roads Congress (IRC) document e.g. a) the Manual of specifications and standards for six laning of highways through Public Private partnership IRC:SP:87-2013 & b) the Manual of specifications and standards for four laning of highways through Public Private partnership IRC:SP:84-2014 AND 2. Actual Site conditions
2	Page No-42	4.3.1	The Video Image Processing Unit shall combine indoor / outdoor traffic flow monitoring and automatic incident detection all in one single board	1) By indoor traffic flow monitoring are you referring the traffic inside the tunnels. 2) If YES please provide the specs for lightning.	While the specifications have been framed, in general, for Indian highways of NHA considering

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					both Indoor (Tunnel, underpass etc.) and outdoor traffic, the bidder shall appropriately interpret this clause based on the individual project. Further the system shall be designed to perform during all hours of a 24 hour day.
3	Page No-42	4.3.1	The boards shall fit directly into racks without an interface box. The boards shall have input ports to monitor a minimum of four (4) separate cameras.	Kindly clarify on the maximum no of input cameras that one would need to be monitor by board so that an appropriate solution can be design/procured.	The choice of the number of cameras is left to the bidder to design for a particular location.
4	Page No-43	4.3.2	Automatic detection of five types of traffic flow: normal, dense, delayed, congested and stop & go.	Exact definitions of “normal, dense, delayed, congested and stops & go traffic flow” would be required to make things lucid.	The bidder to please note that these are terms for normally experienced traffic flow situations on highways on account of the interaction between the available physical capacity of the road and the Demand volume. The bidder may perform a suitable site-study of the same to provide a solution for detection of such situations using variable parameters that can be optimized to effectively detect the above flow situations.

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					These parameters shall be optimized during the engineering and system commissioning phase of the project.
6.	Page No-43	4.3.2	The Video Image processing unit coupled to the camera shall have the capacity to detect the presence of vehicles in at least 100 detection zones within the field of view of the image sensor.	1)What would be the maximum stretch of highway used for making at least 100 detection zones. 2) When 100 zones are being considered from the feed of a single camera, is it possible that the detection zones overlap on each other.	1) Typically 300 m. 2) The detection zones may overlap
9.	Page No-42	4.3.11	There shall be at least two such warning lights each mounted typically at a distance of 100meters and 200meters before the incidence monitoring point when seen from the direction of travel.	As per the reference sketch layout drawing two warning lights are shown at a distance of 50 and 100 Kms. Please clarify exact quantity and location from the detection zone.	The site-specific exact locations of warning lights from the incidence monitoring point, to warn the arriving traffic on the main carriageway, will be finalized during the engineering phase and is expected to be positioned around 100 m AND 200 m from the incidence monitoring point. The warning lights shall be installed at the above two locations for the arriving traffic in each direction. The number of warning lights at any location shall be such

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					that they can be clearly seen by vehicles traveling at high speed on ALL the lanes pertaining to a specific traffic direction.
B.	WIM				
1	Page No-60	8.2	The system shall use portable weigh-pads to log, monitor and enforce vehicle load criteria to prevent damage to road and bridge assets. There shall be a suitable camera to capture the image of offending vehicle and its registration number so as to transfer this image information along with the weight information to the enforcement agency.	<p>1) Who would be issuing the challan. Kindly elaborate the process of challan.</p> <p>2) In order to forecast the diesel consumption for the portable WIM, kindly elaborate on the average distance travelled by the diesel trolley.</p> <p>3) Similarly average distance travelled for VMS vehicles would also be required.</p>	<p>1) Issuing the challan is not in the scope of the bidder. However the offered system shall have the facility to transfer weight information along with the associated image to an enforcement agency. For this purpose the offered system shall support the communication options provided in the specifications (Clause 8.3.8 of the RFP document "Functional & Technical Specifications of ATMS Components / Sub-Components")</p> <p>2) Bidder may estimate the same considering 'on-the-spot' WIM-based weight checking and enforcement drive anywhere along the highway stretch with a frequency of at least once a</p>

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					month. However the actual cost of fuel incurred shall be borne by the bidder. 3) Bidder to estimate the same based on typical O&M experience on Indian Highways. The actual cost of fuel incurred shall be borne by the bidder.
C.	TTES				
1.	NA		Congestion Estimation	Kindly note, congestion estimation wouldn't be possible for vehicles without RFID tags.	Noted. The TTES can utilize the FASTags and the OEM tags affixed on vehicles.
D.	Disaster Management				
1.	NA		Connectivity	Kindly confirm if the connectivity between control room ATMS system and NHA I RO& PIU is in the scope of NHA I..	The bidder is requested to refer to clause 13.8 of the document "Functional & Technical Specifications of ATMS Components / Sub-Components"
E.	BOQ				
1.	NA		<p>1) There are miss match in the given BOQ sheet of Panipat- Ambala with in Bid Submission Format the quantity -</p> <p>a. PTZ Camera is 33Nos in BOQ sheet but in Bid Submission Format it is written 32Nos.</p> <p>b. Fixed CCTV Camera with Video Analytics the quantity in BOQ sheet is 15Nos but in submission format it is written 14Nos.</p> <p>2) Total Nos. of fixed CCTV camera required is 15 sets. Does one set mean 4 camera). This detail is not mentioned in BOQ sheet.</p>		1a) & 1b)) The bidder shall consider 33 Nos of PTZ cameras and 15 Nos of Fixed CCTV cameras with Video Analytics. 2) Each fixed Camera set includes 4 cameras.
F.	SIT				
1.	Page No- 31	2.5.4	When possible, the SIT shall be conducted during the harshest environment	Would further request maximum time period be defined for initiation of SIT	It is the intention of the NHA I to ensure

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			<p>period deemed for that particular equipment. The duration of the SIT will be agreed with the NHA1 or the NHA1s nominated representative prior to starting.</p>	<p>from the date of handover by the bidder. Waiting for the harshest environment period can delay the project.</p>	<p>that the system is commissioned as per the time plan and thus an appropriate agreement will be reached with the contractor during the early phase of the Project execution stage.</p>