

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

**Clarifications to Queries during Pre-bid Meeting dated 04.07.2016 & 19.07.2016**

**Ref: RFP No 13043/01/2016/HAM-Vol I Chennai Bypass and Tambaram – Tindivanam dated 20.06.2016 on above subject.**

S. No	Page no. of RFP	Clause	RFP Statement	Query	Clarifications / comments of NHAI
1	8	Volume 1 1.2	Bid Security of ₹20,00,000/- for Chennai bypass RFP and Rs 50 lakh for Tambaram-Tindivanam. RFP is provisioned to be adjusted against common bid security furnished with empanelment application.	The bid security amount for One tender is ₹20 lakhs and the other one is ₹50 lakhs; and the bid security taken at the time of empanelment is ₹50 lakhs and while applying for both tender, the Security amount is exceeding the submitted security amount (i.e. ₹50 lakhs+₹20 lakhs=₹70 lakhs). We assume this will not impact the eligibility conditions. Please confirm.	The common bid security of ₹.50 lakh will suffice. No impact on eligibility conditions.
2	15	Volume 1 6.1	The Performance Security shall be valid for period of contract, which may be extended appropriately such that it remains valid until one year beyond completion of the contract	As the project is on SLR basis, the current project value will be reducing every year, as required PBG should be 10% of the current project value. So kindly allow us to submit PBG initially for one year which shall be renewed every year based on current project value.	No change is envisaged
3	22	Volume 1 2.5	It is proposed that the ATMS Control Centre facility be established in a building on the highway approximately midway of the corridor within the ROW where feasible.	We assume SI /SP shall not pay any charges to NHAI or to any concerned authority for using that space.	SI/ SP shall not pay any charges to NHAI or to any concerned authority for using that space of land. However, control center in portable/ container office cabin is at the cost of Service Provider.

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4	25	Volume 1 2.12.2	The Service Provider shall commence the Services, in respect of deploying the manpower for auxiliary works & starting delivery of equipment on sites, within Thirty (30) days of date of LOA.	Generally, it will take 30 days to design and submit the system design and other related documents, therefore it is requested to provide a total of 3 months for delivery of equipment on site.	The Service Provider shall commence auxiliary works at site and submit the system design and other stipulated documents within four weeks of LOA. Kindly refer Clause 2.9.1 of Revised RFP Document Vol. I.
5	26	Volume 1 4.6	NHAI may prescribe Electronic Data Interchange (EDI) Protocol for real time access to ATMS data and Service Provider will be bound to follow such EDI protocol.	We assume the responsibility of SI /SP would be software integration for data sharing and the communication charges for transferring data from ATMS control to NHAI central control would lie with NHAI	The responsibility of the service provider shall also include the provision of data link from ATMS Control Center to the NHAI Cloud and the Master Control Center. Kindly refer Clause 13.8 Revised RFP document Vol-II.
6	27	Volume 1 4.9	The Service Provider shall suitably interface their ATMS system with the 24x7 National Highways Helpline (1033) to meet the service level requirements.	Please confirm the communication between the 1033 control Centre and ATMS control Centre would be automatic or manual.	Kindly refer provisions under, Clause 14.3.7 and Appendix C of revised RFP document Vol-II.
7	42	Volume 1, Form F1, Table 7	Way Side telephone - Nos - 0	Why is Way side telephone in the BOQ mentioned as 0	These telephones are not envisaged for this project as adequate mobile connectivity from at least one service provider was found available.
8	59	Volume 1 21	For convenience by giving 90 days' prior notice without assigning any reason	Kindly remove this clause	No Change is envisaged.

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9	70	Volume 1 VIDS location explanatory sketch	Typical VIDS Deployment at Highway Junction	As per the industrial standards the proposed sketches camera mounting and its viewing angle is not based on the industrial standards. Please confirm that can we change the mounting sketch as per our system design.	The explanatory sketch included in Vol-I of RFP document provide only the concept of video incident detection in and around an intersection. The bidder shall provide an appropriate solution to meet the RFP requirement.

**Ref: RFP No 13043/01/2016/HAM-Vol II Chennai Bypass and Tambaram – Tindivanam dated 20.06.2016 on above subject.**

<b>S. No</b>	<b>Page no. of RFP</b>	<b>Clause</b>	<b>RFP Statement</b>	<b>Query</b>	<b>Clarifications / comments of NHA I</b>
1	31-32	Volume 2 3.4.11,12,13 Fixed and PTZ CCTV	Scanning Format - PAL TV Line resolution	The specification Mentioned for CCTV systems looks like specifications for analog cameras. Request you to please re-check and revise the specifications with IP based CCTV cameras	Kindly refer revised RFP document Vol-II.
2	16	Volume 2 2.3.1	The ATMS 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.	What will be provision for Power Supplies for field equipment and control room equipment. Who will bear the cost of monthly power consumption for field and control room equipment.	Service Provider is responsible for arranging power supply to all equipment (Primary source / UPS/ DG Set) and bearing cost for the same.
3	16	Volume 2 2.3.1	The ATMS 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.	What will be the hourly power availability at field and control room location	The bidder to ascertain the power availability at concerned locations.
4	16	Volume 2 2.3.1	The ATMS 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.	How much back up consideration need to be maintained for backup power.	Keeping in view the SLA commitments, the bidder to ascertain the power requirement and design the entire project accordingly.
5	16	Volume 2 2.3.1	The ATMS 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.	what will be provision for backup power through generator and its fuel consumption	Service Provider is responsible for arranging power supply to all equipment (Primary source / UPS/ DG Set) and bearing cost for the same.

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6	18	Volume 2 2.3.4	The field equipment shall be connected to the ATMS Control Centre via an optic fiber network using suitable interfaces.	Can we propose communication systems based on Wireless/ 4g and GSM in place of Optic fiber	<p>Reliability of wireless connections for data and video transmission and meet SLA requirements is the key issue.</p> <p>The use of microwave trunk links along the highway at adequate number of locations to ensure full connectivity (supporting vides from PTZ, Fixed and VIDS cameras) may have issues like the need for large strong towers etc. depending on the terrain in addition to maintenance issues like constant tuning of the links etc.</p> <p>Keeping in view the request, a combination of Optical fiber cable and wireless links may be considered for an optimal solution to be proposed by the successful bidder supported with justifications and validated to NHAI in the form of proof-of-concept trials, before implementation.</p> <p>However, the entire responsibility for efficiency and effectiveness as well as meeting the SLA parameters lies with the bidder (service provider).</p> <p>Reference clause 13.3 of Revised RFP document Vol. II.</p>

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7	21	Volume 2 2.4.3 1	Where required, the ground mounted enclosure shall include an air conditioning system. The air conditioning system can be either passive or active. The design shall be submitted to the NHAI or NHAI's representative for approval.	Requirement of Air conditioning system for Ground mounting enclosure is mandatory or not?	The requirement is based on the bidder's equipment design
8	27	Volume 2 2.5.7	Training shall be provided for the operation and maintenance of all the ATMS equipment and ancillary components.	Do we need to provide training for NHAI personnel's and existing concessionaire of a respective stretch? If yes, please confirm the number of personnel's.	Operational issues to be ascertained as per site requirement.
9	35	Volume 2 4.3.1.5	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.	What does it mean by 100 detection zones in an image? Please clarify.	It means the system design shall support the presence of up to 100 areas in the image for video analytics.
10	37	Volume 2 4.3.3 VIDS Flow monitoring	a) Define up to 8 speed zones per video image.	8 lanes cannot be covered with a single camera so in order to cover 8 lanes so we suggest two cameras for four lanes and thus implementing it in such a way that two cameras will be installed on RHS and LHS each	The service provider shall provide a solution with suitable number of required cameras to meet the RFP requirements.
11	40	Volume 2 5.2	The speed display shall provide textual or graphical warning to the vehicles exceeding the preset speed limit. It shall further capture an image of the over-speeding (i.e. the speed exceeding the preset limit) vehicle	Image capturing of over-speeding vehicle is a must?	Yes

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12	41	Volume 2 5.4.12	Color and Wavelength (nm) Red (625), Amber (590), Green (525)	What does the color Red, Amber and Green stands for?	LED lamps in the display with exact wavelength and colour.
13	61	Volume 2 11.2 MRCS	Ability of the system to operate in mixed (analog and Digital) mode, though not mandatory shall be desirable for reasons of additional flexibility.	As digital mode is much advanced than analog mode, we request to change it to digital mode	No Change is envisaged.
14	69	Volume 2 13.2	All the aforementioned sub-systems shall preferably reside in a dedicated permanent structure with adequate floor area to house the required man power and equipment. Where ever such a permanent floor/building/structure cannot be made available, the ATMS Control Centre shall be housed in temporary portable cabins.	What will be provision for Civil work & furnishing such as furniture, lighting for control room	Only the open space (road-side) be made available to the successful bidder / service provider by NHAH depending on the area requirements. Entire responsibility for civil and electrical work, & furnishing, air conditioning, etc. shall rest with the service provider.
15	81	Volume 2 13.3.6	Interface with Mobile Phone Apps	As per our understanding, there are three mobile apps. One for road user, one for enforcement agencies and third for route patrol agencies. Please confirm whether this has to be developed by service provider or need to integrate data with an existing App. If App has to be developed by the service provider, kindly mention the specification.	The App for enforcement agencies and for highway traffic / route patrol agencies has to be developed by the Service Provider.  The road user App will be developed by NHAH for which the ATMS system shall provide site specific information in line with clause 14.3.6.1 of revised RFP document Volume II.

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16	85	Volume 2, 13.4	On Board Memory - 8GB RAM	Backup NAS storage should always be Dual Controller Storage and total can have 12 GB Memory or 6 GB each. To provide better reliability. Kindly change it to 6 GB each controller (Dual Controller NAS). Dual Controller gives more availability & reliability of the data on the disaster situation.	Acceptable. However the solution proposed by the bidder shall meet the storage and Service level requirements in the RFP.
17	85	Volume 2, 13.4	HD Drive	Kindly specify the usable capacity or Capacity similar to the NVR system i.e. 32 TB usable. Kindly mention the Capacity as 32 TB usable.	The bidder shall select a suitable size to meet the storage and Service level requirements.
18	85	Volume 2, 13.4	Host Interface -2x 4Gbps Fiber, 2x 1Gbps Copper and 2x 6Gbps SAS Ports	For any NAS storage always the host interface is Ethernet and the 8 Gbps FC Not with SAS interface, Kindly Remove the SAS interface for NAS storage .8Gb FC ports: two for disk array and 1Gb/ 10Gb for NAS share. Hence requesting to please change it to - Host Interface - 2x 8Gbps Fiber, 2x 1Gbps Copper	The bidder shall provide a suitable justification to the choice of specifications for the NAS configuration offered. Further the offered solution shall meet all Service level Requirements.
19	85	Volume 2, 13.4	Network File Protocols - CIFS, NFS, HTTP/HTTPS, FTP, NTP, SNMP, SMTP, DHCP and DNS	Requesting to please add the SMB in the Protocol as well and make it as CIFS / NFS v3 / SMB/ HTTP/HTTPS / FTP /NTP/ SNMP/ SMTP/ DHCP /DNS. This will allow the NAS provider to use their as per the solution and requirement.	CIFS (included in the specifications) is a particular implementation of the SMB protocol proposed by the bidder.



**Additional Queries (General)**

<b>S. N.</b>	<b>Query</b>	<b>Clarifications / comments of NHAI</b>
1	Will the service provider get the customs duty exemptions for import?	Eligibility towards Custom Duty Exemptions (if available) under subject project to be verified and confirmed by the bidder on its own before bid submission. Based on authenticated documents made available to it, NHAI will issue letters addressed to appropriate authorities to facilitate custom duty exemptions as applicable. Entire responsibility in this regard rests with the bidder / Service Provider and no claim shall be entertained by NHAI in this regard.
2	Can the Performance Bank Guarantee be allowed to renew annually with prorata basis for the remaining project value?	No change is envisaged.
3	Will NHAI help to apply the licenses for MRCS?	NHAI will provide supporting letters. However the process of applying and obtaining the licenses is in the contractor's scope.
4	Is it possible to extend the project period to 12 months instead of 6 months?	No change is envisaged
5	In relation to releasing of payment, instead of NHAI taking 30 days to release the payment, Can NHAI releases it within 1 Week?	No Change is envisaged.
6	As for price quoted, will NHAI take cost variation in to consideration if the contract is extended for 2 more years? As it will be very hard to judge a price of equipment for 7 years.	No Change is envisaged.

S. N.	Query	Clarifications / comments of NHAI
7	<p><b>Payment terms:</b> We understand that the project is on service model and the payment is in deferred mode which is every quarter after the SAT for 5 years. As the capital is quite high and all products are outright purchase which further means that there is a huge investments and also risks, I would like to request in case there could be some arrangements of reducing the risk for both parties: 70% outright purchase and 30% in deferred payments). In this manner we as a vendor can also finance the project at a certain level on our own. This will also reduce the finance cost of the project and reduce the overall project value. The first 70% can be given as below:</p> <ol style="list-style-type: none"> <li>a. Advance against ABG: 20%</li> <li>b. Against delivery: 40%</li> <li>c. Against Installation and commissioning: 10%</li> <li>d. Rest 30% + Maintenance charges of 5 years on quarterly basis.</li> </ol>	<p><b><u>Revised payment terms shall be as under:</u></b></p> <ol style="list-style-type: none"> <li>1. On signing the Contract with NHAI the service provider shall provide an irrevocable performance bank guarantee for an amount equivalent to 10 % of the total contract value. The bank guarantee shall remain valid until a period of one year beyond the contract period.</li> <li>2. Service Provider shall be entitled for an advance payment equivalent to 20% of total value of contract after issue of Commercial operations notice from NHAI. This advance payment shall be against a bank guarantee of equivalent amount valid for the entire contract period. Advance payment shall be adjusted in 20 equal instalments against each quarterly invoice during 5 years contract period.</li> <li>3. Regular payments shall be made by NHAI to the Service provider only after the start of commercial operation after the system commissioning milestone.</li> </ol> <p>Kindly refer modified payment terms under Schedule-A to Draft Contract Agreement (Part-IV) of revised RFP Document Vol.-I.</p>
8	<p><b>Project period:</b> Please clarify from when will this 5 years term starts. Is this 5 years should start from date of SAT.</p>	<p>The 5 year period of service delivery shall start after the successful commissioning of the system and acceptance thereof by NHAI.</p>
9	<p><b>SAT procedure:</b> As you are aware that the investments as well as risks are quite high, We request you to kindly share the SAT procedure and also at what level the punch list can be considered.</p>	<p>SAT procedures will be in line with the project requirements and industry standards which will be communicated to the successful bidder.</p>
10	<p><b>Project Insurance:</b> Please clarify the timeline for project insurance. Will it be till 5 years of only till SAT.</p>	<p>Provision adequately explained under Clause 16 of Schedule A to Draft Contract Agreement (Part-IV) of revised RFP document Vol.-I.</p>