



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

Tender No. IHMCL/VIDES/2023/1

13.10.2023

Indian Highways Management Company Limited (IHMCL)

Website: www.ihmcl.co.in

Email ID: tenders@ihmcl.com

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DISCLAIMER

The information contained in this Request for Proposal document (the "RFP") or subsequently provided to prospective Bidder(s), whether verbally or in documentary or any other form by or on behalf of IHMCL or any of its employees or advisors, is provided to Bidder(s) on the terms and conditions set out in this RFP and such other terms and conditions subject to which such information is provided.

This RFP does not constitute an Agreement between IHMCL or prospective Bidders or any other Party and is neither an offer nor invitation by IHMCL to the prospective Bidders or any other person. The purpose of this RFP is to provide interested parties with information that may be useful to them in preparation of Technical and Financial qualification and making their financial offers (the "Bids") pursuant to this RFP. This RFP includes statements, which reflect various assumptions and assessments arrived at by IHMCL in relation to the project.

The assumptions, assessments, statements and information contained in the RFP, may not be complete, accurate, adequate or correct. Each Bidder should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this RFP and obtain independent advice from appropriate sources.

Information provided in this RFP to the Bidder(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. IHMCL accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

IHMCL, its employees and advisors make no representation or warranty and shall have no liability to any person, including any Bidder under any law whether written or otherwise, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way for participation in this Bid.

IHMCL also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this RFP. IHMCL may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this RFP. The issue of this RFP does not imply that IHMCL is bound to select a Bidder or to award the project to the Successful Bidder.

PART-I: NOTICE INVITING TENDER

- 1.1 Bids are invited from IHMCL empaneled System Integrator for the Selection of Service Provider for Providing Video Incident Detection and Enforcement System (VIDES). It is in continuation to RFE (Request for Empanelment) with Tender no. IHMCL/ETC/Empanelment/2021/01 released on 28.10.2021 in IHMCL online portal i.e., <https://rfesi-ihmcl.co.in/RFEFEBID> by Indian Highways Management Company Limited (IHMCL) for eligible Bidders who are empaneled with IHMCL.
- 1.2 The Terms and Conditions or any other information unless specifically mentioned in this Limited RFP ref: - IHMCL/LT-VIDES/2023/1 published on 13-10-2023 shall be considered of previous RFE with ref. no. IHMCL/ETC/Empanelment/2021/01 published on 28-10-2021.
- 1.3 The complete Bidding documents can be viewed / downloaded from e-tender portal i.e., <https://etenders.gov.in>. The Bids shall be liable for summarily rejection unless accompanied by the requisite documents as specified in this RFP. No Bids submitted after the closing date/time shall be considered.
- 1.4 All clarifications/ corrigendum will be published only on the e-procurement portal <https://etenders.gov.in> and IHMCL website www.ihmcl.co.in.
- 1.5 IHMCL reserves the right to accept or reject any or all bids received before signing of Contract Agreement without thereby incurring any financial or other liability to the affected Bidders.

Address for communication:

Indian Highways Management Co. Ltd. (IHMCL)
1st Floor, NHAI Head Quarter (Old Building), G-5 & 6
Sector 10, Dwarka
New Delhi 110 075
Phone: +91-11- 28042710;
Email: tenders@ihmcl.com; Website: www.ihmcl.co.in

PART II: DEFINITIONS

In this document, the following terms shall have respective meanings as indicated:

- i. **“Applicable Law”** means the laws, rules or regulations and any other instruments, having the force of law in Republic of India, as in force from time to time.
 - ii. **“Authorized Representative”** means any person/agency authorized by IHMCL.
 - iii. **“Bidder”** means, a company which participates in the Bid process and submits its proposal pursuant to this RFP.
 - iv. **“Commencement date”** means the date upon which the Service Provider receives the notice to commence the work issued by IHMCL.
 - v. **“Contract”** shall mean & include RFE, RFP, Notice for Inviting Tender (NIT), the tender documents, Letter of award and Letter of acceptance thereof and the formal agreement, to be executed between IHMCL and the Service Provider together with the complete documents referred to therein including the conditions with appendices and any special conditions, the specifications, designs, drawings, bill of quantities with rates and amounts. All these documents taken together shall be deemed to form one Contract and shall be complementary to each other.
 - vi. **“IHMCL”** means Indian Highways Management Company Ltd.
 - vii. **“Law” or “Legislation”** - shall mean any Act, notification, bye law, rules and regulations, directive, ordinance, order or instruction having the force of law enacted or issued by the Government of India or State Government or regulatory authority.
 - viii. **“Letter of Award (LOA)”** means the issue of a signed letter by IHMCL to Successful Bidder conveying its intention to accept the offer of Successful Bidder and awarding the work mentioning the total Contract Value.
 - ix. **“Local Currency”** means the Indian Rupees
 - x. **“MoRTH”** means Ministry of Road Transport and Highways
 - xi. **“NHAI”** means National Highways Authority of India.
 - xii. **“Party”** shall mean IHMCL or Bidder individually and “Parties” shall mean IHMCL and Bidder collectively.
 - xiii. **“Personnel”** means persons hired by the Service Provider as employees and assigned to the performance of the Services or any part thereof.
 - xiv. **“RFP”** shall mean this Request for Proposal dated 13-10-2023, including the written
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clarifications & Corrigendum/Addendum issued by IHMCL in respect of the RFP from time to time.

- xv. **“RFE”** shall mean Request for Empanelment document published by IHMCL dated **28-10-2021** on the website of IHMCL. (<https://rfesi-ihmcl.co.in/RFE BID>)
 - xvi. **“Services”** means requirements defined in this RFP including all additional services associated thereto to be delivered by the Successful Bidder.
 - xvii. **“Successful Bidder”** means the Bidder, who, after the complete evaluation process, has been issued the Letter of Award by IHMCL
 - xviii. **“Service Provider”** means the Successful Bidder who has executed the contract with IHMCL and has complied with other requirements as specified in this RFP to the satisfaction of IHMCL
 - xix. **“Operations and Maintenance (O&M)”** means operations and maintenance typically includes the day-to-day activities necessary for the keeping equipment and its allied systems to perform their intended function.
 - xx. Any other term(s), not defined herein above but defined elsewhere in this RFP shall have the meaning(s) ascribed to such term(s) therein and shall be deemed to have been included in this Section.
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PART-III: SCHEDULE OF THE TENDER (KEY DATES)

S. No.	Event Description	Date
1.	Invitation of RFP	13.10.2023
2.	Pre-bid Meeting ¹	25.10.2023 @11:00 am
3.	Bid Due Date (Online Submission)	10.11.2023 (Up to 17:00 Hrs IST)
4.	Bid Due date for physical submission of following documents at IHMCL office: - <ul style="list-style-type: none"> • 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)
6.	Opening of Financial Bids of responsive bidders	To be intimated later
7.	Submission of Performance Security	Within 07 working days of LoA issuance
8.	Validity of Bid	180 days from Bid Due Date
9.	Signing of Contract Agreement	Within 07 calendar days from date of submission of Performance Security

¹ Pre-bid meeting shall be conducted through Video Conferencing .IHMCL shall share the details of Pre-bid meeting to all empanelled System Integrators. The format to submit the query is as Annexure-6.

PART-IV: INSTRUCTIONS TO BIDDERS

4.1 Eligibility Criteria

The bidder qualifying the following criteria shall be considered eligible to bid for this RFP. The Technical Proposals of the Bidders shall be evaluated for meeting the eligibility criteria as below:

SI #	Requirement Parameter	Eligibility Criteria	Supporting Documents to be provided
1.	Legal Entity	The bidder should have been empaneled by IHMCL as System Integrator for implementation of ETC system at toll plazas, vide RFE Reference – IHMCL/ETC/Empanelment/2021/01, dated 28 October 2021. The empanelment should be valid and not suspended/withdrawn as on the bid due date.	To be verified based on Letter of empanelment issued by IHMCL.
2.	Undertaking of Blacklisting	The Bidder should not have been blacklisted by any State / Central Government Department or Central /State PSUs in India or Abroad as on Bid Due Date.	Undertaking certifying non-blacklisting as per format given in Annexure 2.

4.1.1. Eligible Goods and Services, and Original Equipment Manufacturer (OEM) Criteria – Undertaking to be submitted as per format given in Annexure -7.

- 1) For purposes of this Clause, the term “goods” includes commodities, raw material, machinery, equipment, and industrial plants; and “related services” includes services such as insurance, transportation, supply, installation, integration, testing, commissioning, training, and initial maintenance.
- 2) 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.
- 3) Bidders must comply with the Office Memorandum no. F. No. NH-35014/20/2020-H, Government of India, Ministry of Road Transport & Highways dated 04.08.2020, regarding Department of Expenditure (DoE), Ministry of Finance, Govt. of India O.M. No. 6/18/2019-PPD

dated 23.07.2020, vide which Rule 144 of the general Financial Rules 2017 entitled "Fundamental principles of public buying" has been amended by inserting sub-rule 144 (xi) in the General Financial Rules (GFRs), 2017. As per the new rule "Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority." The Bidder shall furnish the registration status of the supplier with Competent Authority (for the items / goods proposed to be procured from any country which shares a land border with India).

- 4) That the OEM should not be rebranding & reselling products in India through importing/ trading from a country that shares a Land Border with India.
- 5) That the source code of the Software and Firmware being supplied for all the relevant equipment being supplied against this bid does not reside in any Country that shared a Land Border with India.
- 6) 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.
- 7) 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.
- 8) 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.
- 9) The bidder's proposed OEM should not have been blacklisted by any State / Central Government Department or Central /State PSUs as on bid submission date.
- 10) Each of the proposed OEMs should either have existing capability and infrastructure to provide 24x7x365 technical support in India
- 11) Adequate supporting documents pertaining to the above points, along with a summary compliance table, should be submitted in the technical proposal by the Bidder.

4.2 Content of RFP

- a) The RFP should be read in conjunction with any addenda or clarifications issued subsequent to publication of RFP.
- b) Bidders are advised to study the RFP carefully. Submission of the Bid will be deemed to have been done after careful study and examination of all instructions, eligibility norms, terms and requirement specifications in the RFP with full understanding of its implications. Bids not

complying with all the stipulations and requirements as set forth in this RFP are liable to be rejected at the sole discretion of IHMCL. Failure to furnish all information required in the RFP or submission of a bid not substantially responsive to the RFP in all respects will be at the Bidder's risk and may result in the rejection of the bid.

4.3 Cost Of Bidding

The Bidder shall bear all costs associated with the preparation and submission of the Bid and IHMCL will in no case, be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

4.4 Amendment Of RFP

At any time prior to the closure of time for submission of bids, IHMCL, for any reason, whether at its own initiative or in response to the clarifications requested by prospective Bidders may modify the RFP by issuing amendment(s) or Corrigendum.

Any Corrigendum /Addendum issued as aforesaid shall be part of the RFP and shall be displayed /communicated on e-tender portal. No separate information will be passed to any Bidder in this regard.

4.5 Language Of Bid

The Bid prepared by the Bidder, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and IHMCL shall be written in English language only.

4.6 Bid Validity

- a) Bids shall remain valid for a period of 180 days from the last date of Bid due date. Any Bid valid for a shorter period shall be rejected as non-responsive. IHMCL has sole discretion to extend the period beyond 180 days.
- b) In exceptional circumstances, IHMCL may solicit Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing; however, no modification to such bid shall be permitted.

4.7 Bid Security

- a) The Bidder shall furnish, as part of the Bid, Earnest Money Deposit (EMD) /Bid Security for an amount INR 10,00,000/- (Rupees Ten Lakh only). The Successful Bidder's EMD will be returned, without any interest, upon the Successful Bidder signing the Contract and furnishing the Performance Security in accordance with the provisions thereof. IHMCL may, at the

Successful Bidder's option, adjust the amount of EMD in the amount of Performance Security to be provided by him in accordance with the provisions of the Contract.

- b) 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

A/c Holder Name = Indian Highways Management Company Limited

Bank Name = Canara Bank

A/c No. = 8598201006217

IFSC = CNRB0008598

Branch = Delhi NHAI Dwarka Branch New Delhi-110075

- c) Any bid not accompanied by an acceptable Earnest Money Deposit shall be rejected by IHMCL as non-responsive.
- d) The Earnest Money Deposit of unsuccessful bidders will be returned upon written request from the unsuccessful bidder, after expiry of the period of Bid Validity prescribed by IHMCL or Signing of Contract Agreement between IHMCL and successful bidder.
- e) The Bid Security / Earnest Money will be forfeited:
- i. If the Bidder withdraws or modifies the Bid during the period of Bid validity;
 - ii. If the Bidder does not accept the correction of the bid price, pursuant to clause pertaining to imbalance bid;
 - iii. In the case of a Successful Bidder, if the Bidder fails within the specified time limit to -
 - Sign the Contract; and/or
 - Furnish the required Performance Security; or
 - If the Bidder is found to be engaged in corrupt or fraudulent practices.

4.8 No alternative proposals By Bidders

Bidder shall submit only one bid/offer for this RFP that fully complies with the requirement of the RFP including conditions of Contract. Conditional offer or alternate offer will not be considered further in the process of tender evaluation and the same shall be treated as non-responsive.

4.9 Deadline For Submission of Bid

- a) Complete Bid documents as specified in the RFP must be received as specified on or before

the date and time specified under “Key Dates”. In the event of the specified date for the submission of Bids being declared a non-working day for IHMCL, the Bids will be received up to the specified time on the next working day.

- b) IHMCL may, at its discretion, extend the deadline for submission of Bids by issuing an amendment in which case all rights and obligations of IHMCL and the Bidders previously subject to the original deadline will thereafter be subject to the deadline extended.
- c) Offer by fax / e-mail will not be accepted and shall be treated as void ab-initio.

4.10 Late Submission

Bids received after the deadline shall not be considered and shall be rejected summarily. No representation or communication would be entertained in this regard from any Bidder.

4.11 Modification And Withdrawal of Bids

- a) Bidders may modify or withdraw their Bid before the deadline.
- b) The Bidder may modify, substitute or withdraw its e- Bid after submission prior to the Bid Due Date. No Bid can be modified, substituted or withdrawn by the Bidder on or after the Bid Due Date & Time.
- c) For modification of e-Bid, Bidder has to detach its old Bid from e-Tender portal and upload / resubmit digitally signed modified Bid. For withdrawal of Bid, a Bidder has to click on withdrawal icon at e-Tender portal and can withdraw its e-Bid. Before withdrawal of a Bid, it may specifically be noted that after withdrawal of a Bid for any reason, Bidder cannot re-submit e-Bid again.

4.12 Opening and Evaluation of Bids

a) Opening of Bids

- i. The bids shall be opened in 2 states as per Key Timelines mentioned in RFP in the presence of the Applicants who choose to attend.
- ii. In the first stage, responsiveness of the bids received shall be evaluated based on the documents submitted on e-tender portal and in physical form such as Bid Form, PoA (as applicable, in case of re- submission) & Undertaking, Bid Security, Certification, Copy of letter of Empanelment and ETC experience will be opened at G 5 & 6, Ground Floor, NHAI HQ Building, Sector-10, Dwarka, New Delhi-110075 as per schedule defined under “Key Dates”.
- iii. IHMCL will subsequently examine and evaluate the bid documents submitted as in (ii) above in accordance with the provisions set out in this RFP.

- iv. In the second stage, the financial bids of the responsive bids shall be opened at G 5 & 6, Ground Floor, NHAI HQ Building, Sector-10, Dwarka, New Delhi-110075 as per schedule defined under “Key Dates”.
- v. The processes are explained in details in subsequent sections as below.

b) Evaluation of Bids:

i. Stage -1: - Test of responsiveness

The Bidder shall have to submit all the requisite documents as per various formats provided in Annexures of this RFP. These documents will be examined w.r.t completeness in this stage. The following documents are required to be submitted by the bidders.

1. Bid Security as per specified under RFP.
2. Bid form as per Annexure-1 under RFP.
3. Power of Attorney (To be submitted only in case of any change in the one submitted during empanelment vide RFE issued by IHMCL dated 28-10-2021).
4. Copy of letter of Empanelment as per Clause-4.1 (SI# 1) under RFP.
5. Undertaking as per Annexure-2 under RFP.

A bid shall be considered Responsive only if:

- Requisite documents are received as per the format provided under this RFP;
- Bid contains all the information as required (i.e., complete in all respects);
- Bid does not contain any condition or qualification.
- it is not non-responsive in terms hereof

IHMCL reserves the right to reject any bid which is non-responsive and no request for alteration, modification, substitution, or withdrawal shall be entertained by IHMCL in respect thereof. Any non-responsive bid shall not be considered for financial evaluation.

IHMCL reserves the right not to proceed with the Bidding Process at any time without notice or liability and to reject any or all Application(s) without assigning any reasons.

ii. Stage-2:- Financial Bids evaluation

The Financial Bids of only those Bidders who are declared as Responsive in Stage 1

above will be opened and evaluated.

The Financial Bid Evaluation will be based on the “Total Cost, excluding GST” as per Annexure-5 in the RFP quoted by the bidder which would be 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.

If any Bidder quotes **NIL charges / consideration**, the bid shall be treated as unresponsive and will not be considered. The bidder that has quoted the lowest “Total Cost” (In Rs.) (“L1 Bidder”) shall be declared as the Preferred bidder, as per conditions set out in Section 4.15 (Award Criteria).

The Evaluation Committee shall determine if the financial bid is complete and without computational errors.

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.

4.14 Process To Be Confidential

Information relating to the examination, clarification, evaluation, and comparison of Bids and recommendations for the award of a Contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the Successful Bidder has been announced. Any attempt by a Bidder to influence IHMCL's processing of Bids or award decisions may result in the rejection of his Bid.

4.15 Award Criteria

- 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.

- b) If two or more Bidders quote the same lowest Quoted Value, IHMCL may:
 - i. Declare the Bidder who has maximum number of Live NH fee plazas for providing ETC services as on Bid due date.
 - ii. Take any such measure as may be deemed fit at its sole discretion.

4.16 IHMCL 'S Right to Reject Any or All Bids

Notwithstanding anything contained herein, IHMCL reserves the right to reject any Bid, and to annul the bidding process and reject all Bids at any time before signing of Contract Agreement, without thereby incurring any liability to the affected Bidder(s) or any obligation to inform the affected Bidder(s) of the grounds for such decision.

4.17 Notification Of Award of Contract

- a) Prior to the expiration of the Bid validity, IHMCL will notify the Successful Bidder that his Bid has been accepted. IHMCL will mention the contract value in the LOA. IHMCL will issue notice to commence the work after issuance of LOA.
- b) The Contract will incorporate all agreements between IHMCL and the Successful Bidder. It will be signed by IHMCL and the Successful Bidder after the performance security is furnished by the Successful Bidder.
- c) Upon furnishing of the Performance Security by the Successful Bidder, IHMCL will promptly notify the other Bidders that their Bids have been unsuccessful.

4.18 Confidentiality

- a) The Bidder shall keep confidential any information related to this tender with the same degree of care as it would treat its own confidential information. The Bidders shall note that the confidential information will be used only for the purposes of this tender and shall not be disclosed to any third party for any reason whatsoever.
- b) Information relating to the examination, clarification, evaluation and recommendation for the Bidders shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional advisor advising IHMCL in relation to, or matters arising out of, or concerning the bidding process. IHMCL will treat all information, submitted as part of the Bid, in confidence and will require all those who have access to such material to treat the same in confidence. IHMCL may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or as may be required by law or in connection with any legal process or such information which would be available in public domain.
- c) At all times during the performance of the Services, the Bidder shall abide by all applicable

IHMCL, NHAI/ MoRTH's security rules, policies, standards, guidelines, and procedures. The Bidder should note that before any of its employees or assignees is given access to the Confidential Information, each such employee and assignees shall agree to be bound by the term of this tender.

- d) The Successful Bidder should not disclose to any other party and keep confidential the terms and conditions of this Contract, any amendment hereof, and any Attachment or Annexure hereof.
- e) The obligations of confidentiality under this section shall survive termination of the Contract.
- f) Bidders shall not be under a declaration of ineligibility or blacklisting for corrupt and fraudulent practices by the Central Government, the State Government or any public undertaking, autonomous body, authority by whatever name called under the Central or the State Government.

4.19 Signing of Contract

IHMCL shall intimate the Successful Bidder for signing of Contract Agreement upon submission of Performance Security as per schedule defined in RFP.

4.20 Performance Security

- 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.
- 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.
- c) In the case of Contract Period extension after 02 years of Contract Signing, successful bidder shall furnish the extended PBG.

4.21 Bank Guarantee (BG)

- a) The Bank Guarantee in the name of IHMCL issued by the following banks would only be accepted:
 - i. Any Nationalized Bank

- ii. Any Scheduled Commercial Bank approved by RBI having a net worth of not less than Rs. 500 crores as per the latest Audited Balance Sheet of the Bank. In the case of a Foreign Bank (issued by a branch in India), the net worth in respect of the Indian operations shall only be taken into account
 - iii. A Foreign Bank (issued by a branch outside India) with a counter guarantee from any Indian Nationalized Bank.
 - iv. Export Import Bank of India
- b) The acceptance of the Bank Guarantees shall also be subject to the following conditions: -
- i. The capital adequacy of the Bank shall not be less than the norms prescribed by RBI
 - ii. The bank guarantee issued by a Cooperative Bank shall not be accepted.

4.22 Corrupt Or Fraudulent Practices

IHMCL will reject a proposal for award and appropriate the Performance Security, as the case may be, if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.

IHMCL will declare the Bidder ineligible, either indefinitely or for a stated period of time, to be awarded a contract by IHMCL if it at any time determines that the Bidder has engaged in corrupt or fraudulent practices in competing for the contract, or during execution.

“Corrupt practice” means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official or employee of IHMCL in the procurement process or in Contract execution.

“Fraudulent Practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of IHMCL and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid process at artificial non- competitive levels and to deprive IHMCL of the benefits of free and open competition.

4.23 Miscellaneous

- a) The Bidding Process shall be governed by, and construed in accordance with, the laws of India and the Courts at New Delhi shall have exclusive jurisdiction over all disputes arising under, pursuant to and/ or in connection with the Bidding Process.
- b) IHMCL, in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, to
 - i. suspend and/ or cancel the Bidding Process and/ or amend and/ or supplement the Bidding Process or modify the dates or other terms and conditions relating thereto;

- ii. consult with any Bidder in order to receive clarification or further information;
 - iii. retain any information and/ or evidence submitted to IHMCL by, on behalf of, and/ or in relation to any Bidder; and/ or
 - iv. independently verify, disqualify, reject and/ or accept any or all submissions or other information and/ or evidence submitted by or on behalf of any Bidder.
- c) It shall be deemed that by submitting the Bid, the Bidder agrees and releases IHMCL, its employees, agents and advisers, irrevocably, unconditionally, fully and finally from any and all liability for claims, losses, damages, costs, expenses or liabilities in any way related to or arising from the exercise of any rights and/ or performance of any obligations hereunder, pursuant hereto and/ or in connection with the Bidding Process and waives, to the fullest extent permitted by applicable laws, any and all rights and/ or claims it may have in this respect, whether actual or contingent, whether present or in future.
- d) If the Bidder has committed a transgression under this RFP such as to put its reliability or credibility into question, IHMCL shall be entitled to blacklist and debar such Bidder for any future tenders/contract award process in its sole and absolute discretion.

4.24 Site visit and verification of information

- a) Applicants are encouraged to submit their respective Bid/Applications after visiting the Project site and ascertaining for themselves the site/fee plaza conditions, traffic, location, surroundings, climate, availability of power, water and other utilities for construction, access to site, handling and storage of materials, weather data, applicable laws and regulations, and any other matter considered relevant by them. The costs of visiting the site or sites shall be at the Bidder's own expense.
- b) The Bidder shall be deemed to have examined the site or sites and obtain for itself, at its own responsibility and risk, all information that may be necessary for preparing the bid and entering into the Contract.
- c) Any bidder interested in carrying out a site visit may write to IHMCL. On receipt of request, IHMCL shall issue an Authorization letter for site visit to such bidder.

4.25 Number of Applications and costs thereof

- a) No Applicant shall submit more than one Application for the Project. An applicant applying individually or as a member of a Consortium shall not be entitled to submit another application either individually or as a member of any Consortium, as the case may be.
- b) The Applicants shall be responsible for all of the costs associated with the preparation of their Applications and their participation in the Bid Process. IHMCL will not be responsible or in

any way liable for such costs, regardless of the conduct or outcome of the Bidding Process.

PART-V: PREPARATION AND SUBMISSION OF APPLICATION

- 5.1** Bid must be submitted online only at <https://etenders.gov.in> during the validity of registration with the e-Tender Portal being managed by National Informatics Centre (NIC), i.e. <https://etenders.gov.in>. To participate in e-tender, the intending participants shall register themselves in the website of URL.
- 5.2** Bidders/Applicants are advised to go through the FAQs, guidelines, instructions, manuals, policies, system setting procedures etc. as provided in the e-Procurement portal.
- 5.3** Tender form and relevant documents will not be sold /issued manually from offices.
- 5.4** Bidders are required to upload scanned copies of proof of Bid Security submission, Bid Form, Power of Attorney (In case of re-submission), Undertaking (In case of re-submission) and other relevant document on the e-Tender portal.
- 5.5** The date and time for online submission as mentioned in the section RFP document shall be strictly followed in all cases. The bidder/Applicants should ensure that their tender is submitted online before the expiry of the scheduled date and time. No delay on account of any cause will be entertained. Tender(s) not submitted online will not be entertained.
- 5.6** If for any reason, any interested bidder fails to complete any online stages during the complete tender cycle, IHMCL shall not be responsible for that and any grievance regarding that shall not be entertained.

PART VI- TERMS OF REFERENCE

6.1 Background

NHAI jointly with its Concessionaires and Financial Institutions incorporated Indian Highways Management Company Limited (IHMCL) on 26.12.2012 under the Companies Act, 1956 to carry out Electronic Tolling and other ancillary projects of NHAI.

Indian Highways Management Company Limited is inviting empaneled System Integrators to submit proposals for implementation of Video Incident Detection and Enforcement System (VIDES) at Bengaluru – Mysuru section of NH - 275. The purpose of this project is to monitor and enforce speed limits, enhance road safety, and reduce the number of accidents caused by over speeding vehicles.

The Video Incident Detection and Enforcement System (VIDES) shall comprise of system as specified in the RFP through which the vehicles violating the traffic rules may be identified and penalized.

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.

6.3 Brief Scope of Work:

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 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 non-functioning 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.

6.3.1. Detailed Scope of Work

a. Installation of Gantries at the specified locations

- 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.
- b) Service provider shall ensure to supply items as per equipment list provided in RFP and install them at locations provided by IHMCL and get them verified by IHMCL/PIU. Prior to the Site Acceptance Test, the responsibility of providing storage and security for supplied material shall be in the scope of service provider.
- 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.
- d) The foundation and the foundation bolts for Ground mounted enclosures, tilt and fixed poles etc. shall be fabricated using a suitable site specific grade of steel material. The assembly shall be galvanized to a minimum coating thickness of 100 microns. Galvanized Nuts, locknuts, locking pins washers etc. shall be supplied as a part of the foundation. Fixing templates with a

placement accuracy of at least +/- 1mm shall be provided to allow for the correct orientation and installation of the steel foundation on to the concrete base. The strength of the foundation assembly shall be suitable to hold the Enclosure/Pole while withstanding weather conditions of the site for a period of at least 25 years.

- e) Service Provider shall be fully responsible for the safety of equipment which shall be delivered or installed at site before commencing SAT by IHMCL/respective PIU. Prior to SAT, if any equipment/sub-equipment/consumable gets non-functional/damaged due to any reason whatsoever, excluding scenarios covered under force majeure, then service provider will be liable for replacing of damaged item without imposing any extra charges to IHMCL.
- f) The proposed system shall be used by various stakeholders viz. IHMCL, MoRTH, Highway Authority such as NHAI, NHIDCL, or any enforcement agencies to monitor incidents such as over speeding or wrong parking or other incidents. The proposed system shall generate all types of incidents which can be viewed by the stakeholders through a dashboard of the proposed system. The proposed system shall also be integrated with the system of the enforcement agencies so as to have seamless exchange of data/ information automatically between the two systems. All the cost involved in providing electronic information or integration with different systems shall be included in the quoted cost and no additional cost shall be paid to the service provider whatsoever.
- g) Service Provider shall carryout and complete all pre-requisite civil work included but not limited to following:
 - i. Gantry foundation/ cabling chamber etc. pertaining to VIDES.
 - ii. Installation of gantries at the identified location with load and wind calculation.
- h) Service Provider shall be responsible for repair/ replacement of the equipment which gets faulty due to reasons like Short Circuit, Thundering/Lightening, Voltage Fluctuation and equipment damaged by Pest for ensuring SLA parameters. Service Provider shall take all preventive measures to upkeep the equipment from these kinds of incidents.
- 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.

- j) The Service Provider shall arrange for all insurances pertaining to the scope of work and it shall be deemed that any related costs are included in the price bid.
- k) The scope of the service provider will also include providing earthing to all equipments, civil & electrical work, networking works required to complete installation/commissioning of VIDES and associated peripherals on the location.
- l) The Service Provider shall adhere to the maintenance of VIDES Equipment, Periodic Preventive Maintenance of equipment, Timely Corrective Maintenance, Software Maintenance, Remote Software support.
- m) Service Provider shall be responsible for providing Pest Control services at the locations to prevent equipment for getting faulty. Service Provider shall be responsible for repair/ replacement of equipment within the defined SLA which have got faulty due to cable/equipment damaged by Rodent.
- 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:

S. No.	Location of Gantry/Radar & Cameras			Location of Gantry/Radar & Cameras		
	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
2.	39.300	LHS	200	39.300	RHS	200
3.	65.600	LHS	3000	65.600	RHS	3000
4.	88.900	LHS	500	88.900	RHS	500

5.	110.500	LHS	500	110.500	RHS	500
6.	131.150	LHS	3000	131.150	RHS	3000

- o) IHMCL at its sole discretion may increase/decrease the locations.
- p) The distance from the gantry location where raw power is available has been provided in the above table, Service Provider to ensure trenching and ducting of power from source location to gantry location.

b. Installation of Camera based system including Radar and/or other peripheral equipments

- a) The system shall include gantry-mounted cameras connected to a co-located or centralized/cloud video image processing modules that can detect incidents based on video analytics and automatically trigger alarms on detection to specific VMS/Lights/App and Command Centre operator. The below equipment shall be suitably mounted on full gantry. A single unit of VIDES shall consist of the following:
 - a. Video Image processing unit(s)
 - b. Overview Camera (wide-range with 60-100m viewing) with IR or Thermal or other Night Vision Mechanism for 60-100m range.
 - c. ANPR Camera (low-angle) along with IR Illuminator
 - d. Distant Pole/gantry mounted flashing warning lights and/or VMS
 - e. Surge Suppressor
 - f. Audio/Visual Alerts for Operator at Command Centre to Bring Focus to camera feed with violation
 - g. Back-office Software for Validation of Violation data captured and integration with Enforcement Agency (eChallan/Vahaan)
 - h. All other necessary equipment for operation
- 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.

- 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.
- 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:
 - a. Over speeding vehicles
 - b. Vehicles not adhering with lane discipline.
 - c. Slow-moving vehicle/ two/ three-wheeler
 - 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.

- e) Service Provider shall be fully responsible for providing necessary image and video evidence for generation of challan/ penalties. For the purpose of video evidence, a clip of 10 sec needs to be stored for each violating vehicle along with image evidence.
- f) The system shall automatically detect incidents/analysis using video analytics mentioned in relevant section of RFP.
- 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.
- 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.
- 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.

- j) One complete VIDES system will comprise both LHS and RHS. To meaningfully cover a blackspot, it maybe sometimes necessary to separately position the LHS and RHS gantries.
- k) On detection of an incident the system shall activate appropriate flashing lights, and/or display appropriate incident message on nearby VMS to locally to warn road users.
- l) In case of VIDES 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.
- m) Simultaneously the detected incidents shall be communicated to the VIDES Control Centre.
- n) The VIDES Control Centre software will be responsible for immediately and programmatically broadcasting the location and type of incident to the RajMarg Yatra API in the standardized format. This information will be broadcasted to Rajmarg Yatra users in the vicinity of the incident. The VIDES Control Centre shall be responsible for informing the Rajmarg Yatra when the incident is no longer active as well.
- 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.
- p) It shall also be possible to view on-line and record at the VIDES Control Centre, the video images from cameras belonging the VIDS.
- q) Gantry/Pole mounted flashing lights of 300mm diameter with a visibility of at least 500m shall be used for local warning.
- r) There shall be at least two such warning lights each mounted typically at a distance of 200meters and 300meters before the incident monitoring point when seen from the direction of travel. The above distances shall be suitably optimized during detailed engineering.
- 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 (GSM-based).
- t) During periods of poor visibility, as detected by the VIDS, the lights shall go into a flashing mode until visibility improves to a level for adequate incident detection.
- u) The above lights shall stop flashing either on the event of the disappearance of the detected incident(s) or on the occurrence of a reset from the control room.

- v) All VIDS overview feeds shall be displayed on the video-wall at all times and the VIDS software at the Command Centre shall ensure alarms related to detected incidents shall be also be enunciated on the above supervisory computer shall be audio-visual (blinking, alarms, highlighting the video on VIDES GUI etc).
- w) The Video Image Processing Unit shall combine indoor / outdoor traffic flow monitoring and automatic incident detection.
- x) The system offered shall be modular and multi-functional.
- y) The Video Image processing unit coupled to the overview camera shall have the capacity to detect the presence of vehicles in the entire field of view of the camera.
- z) This unit shall have the ability to compensate for camera movements under adverse weather and traffic conditions.
- aa) If the service provider wants to centralize the intelligence for detection of incidents at the command centre or on cloud, they need to ensure the inference times is <2 seconds , and that the centralized software is connected to the local warnings lights/VMS for issuance of warnings for incoming traffic.
- bb) The Service Provider shall be sole responsible for safety of all the VIDES system, sub-system, equipments against theft, vandalism etc. Any equipment stolen/vandalised has to be replaced.
- cc) The Service Provider may use adequate manual safety measures or implement suitable electronic security mechanisms for same.
- dd) All the systems, sub-systems and equipments should be adequately insured to offset loss due to vandalism/theft etc.

c. **Providing VIDES Software**

- a) The VIDES Software shall provide real-time data on traffic plying through the highways along with details of vehicle not adhering to the traffic rules.
- b) The VIDES software shall be accessible through remote location and shall be able to provide different dashboards with various analytics on traffic pattern.
- c) The VIDES software shall be able to provide different reports as per the requirement of NHAI/IHMCL.
- d) Service Provider shall provide and install valid antivirus and operating System licenses, Firewall licenses, Database licenses, same shall be included in the cost of equipment, no additional cost shall be paid by IHMCL/NHAI.
- e) Service Provider shall ensure to make all allocated location live which includes provision of all certificates like SSL, firewall, domain etc.

- f) The Service Provider shall take prior approval from respective PIU/IHMCL before updating any new version of application, for which, a software modification request shall be submitted to PIU/ IHMCL for seeking approval.
- g) The Service Provider shall take adequate measures to protect VIDES system from any Malware/Ransomware attack at locations.
- h) The Service Provider shall ensure to provide hardware firewall device to protect against Malware entering the network.
- i) The VIDS (combination of ANPR and Overview) cameras will work in tandem to cover the incidents and enforcements listed below.
- j) Service Provider shall be required to ensure that the system being provided operates in a secure manner. The solutions offered shall be in accordance with Information Technology (Reasonable security practices and procedures and sensitive personal data or information) Rules, 2011 published vide Government of India Notification No. G.S.R. 313€ dated 11th April, 2011 or any other Government Order issued from time to time regarding security norms of video surveillance system or any other sub-system of ATMS.
- k) The Service provider is expected to have familiarly with ISO 27001 or procure the necessary expertise in developing and delivering solutions in line with information system security best practice.
- l) The Provider of the VIDES system shall ensure that the data collected throughout the contract period is securely kept and usage limited in purpose of that of VIDES. The SI shall be governed by the Digital Personal Data Protection Bill, 2023 and any relevant Government of India rules notified thereon.
- m) The contractor shall carry out an IT security audit of the ATMS application software through STQC/CERT-in empanelled vendors at least once in a year as per directions of NHAI from time to time.
- n) The system shall provide detection of the following incidents:

Incident Name and Description	Proposed Primary Camera	Precision & Recall	Actionable/SLRs
<p>Accident</p> <p>Collisions of vehicles, vehicles ramming into siderails, medians, vehicles with smoke/fire coming etc.</p> <p><i>Real-time Detection & Alert</i>(Day and night)</p>	Overview	97% Recall 90% Precision	<p>RPV & Ambulance Dispatch Automated Message to VMS Automated Flashing</p> <p>Video to be saved.</p>
<p>Opposite Side Traffic.</p> <p>Detection of vehicles coming from the direction opposite to the allowed direction of travel and vehicles traveling in a direction that is across the allowed direction of travel.</p>	ANPR/Overview	90+ Recall 90+ Precision	<p>eChallan VMS Flashing</p> <p>Video to be saved.</p>

<i>Real-time Detection & Alert</i>			
Stalled or Stationary Vehicles Detection of stationary vehicles within 5sec <i>Real-time Detection & Alert</i>	Overview	90% Precision 90% Recall	eChallan (Manual Challan as in Section 3.3.6 and Section 10.3.2) RPV Dispatch Flashing Light VMS Message: Caution: Parked Vehicles Ahead
Detection of fog, low visibility during day time or smoke in the view <i>Real-time Detection & Alert</i>	Overview	90% Precision 90% Recall	Flashing Light VMS Message: Caution: Low Visibility Ahead Rajmarg Yatra
Detection of debris/fall objects of size that can impact traffic or road safety. <i>Real-time Detection & Alert</i>	Overview	90% Precision 90% Recall	RPV Dispatch Flashlight VMS Caution: Drive Slowly Debris on Road
Pedestrian Crossing <i>Real-time Detection & Alert</i>	Overview	90% Precision 90% Recall	Flashing Light VMS: Caution: Drive Slowly Pedestrian Crossing.
Animals on the Carriageway <i>Real-time Detection & Alert</i>	Overview	95% Precision 95% Recall	RPV Dispatch Flashing Lights VMS:Caution: Animals Crossing. Drive Slow
Wrong Lane Driving	ANPR	90% Precision 90% Recall	eChallan

Heavy vehicle moving in the fastlane <i>Real-time Detection & Alert</i>			
Seatbelt Violation <i>Real-time not necessary (back-office processing permitted)</i>	ANPR	80% Precision Day and Night 65% Recall except during direct sun glare on windshield, anti glare coatings etc.	eChallan
No Helmet in Two Wheelers <i>Real-time not necessary (back-office processing permitted)</i>	ANPR	90% Precision 90% Recall	eChallan
Triple Riding in Two Wheelers <i>Real-time not necessary (back-office processing permitted)</i>	ANPR	90% Precision 90% Recall	eChallan
Two Wheeler or other Banned Vehicles on Expressway <i>Real-time Detection & Alert</i>	ANPR	95% Precision 95% Recall	eChallan
Overspeeding <i>Real-time Detection & Alert</i> Detailed in Below	Overview and/or ANPR and/or Any Other Sensors	Minimum speed of 180 kmph with 98% accuracy, Day & Night Conditions	eChallan

Section			
Traffic Flow Detailed in Below Section. <i>Real-time not necessary (back-office processing permitted)</i>	Tandem		Analysis/Messaging

- o) It shall be possible to define an output for each alarm. It shall also be possible to have remote monitoring and the ability to remotely change configurations of the image processing boards. The field electronic modules shall save images in case of alarm and send them to a server in the VIDES Control Centre. Such an image sequence shall consist of number of images with the pre-incident information and number of images with the post – historical incident information. In addition to the above it shall also provide following alarms:
- a) Video quality bad / low
 - b) No video signal
 - c) Communication problem
- p) In the event of communication problem with the central server the alarms shall be saved on the local field electronic module.
- q) The central server shall clean the data on the local module once the details are transferred on to the server.
- r) This Video Image Processor-Incident Monitor shall combine traffic incident detection and traffic flow monitoring in one single field electronic module.
- s) There shall be facility during set-up, for alarms to be enabled or disabled for a specific type of traffic flow (e.g. no stopped vehicle alarms during queue conditions).
- t) Each camera shall be calibrated specifically for the scene (lanes, junctions etc)
- u) The system shall be able to distinguish between minimum 5 types of traffic flows (levels of service) based on flow speed and zone occupancy.
- v) It should be possible to continuously update the cameras with improved models or with newer incidents if required.

- w) VIDES 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 VIDES gantries every 10 km.
- x) Speed Detection
- a. VIDES 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 VIDES gantries every 10 km.
 - b. The speed violation detection technique should be aligned with relevant MORTH and Traffic Police guidelines and notifications.
 - c. The accuracy of the speed detection technique should be 98% and capture up to minimum 180 kmph speeds during day and night for all types of vehicles.
 - d. Solution provider may employ visual speed detection (entry/exit frames) using cameras or through other sensors (radar etc) – choosing whichever is able to meet functional requirements the most economically.
 - e. The system should be able to differentiate/mark between multiple vehicles even if parallel driving, tail-gaiting, crowding etc and measure speeds for more than 90% of the vehicles passing under the Gantry.
 - f. Evidence collected during speed detection should be such that can stand scrutiny of court of law on challenge.
 - g. System shall be responsible of enforcing separate speed limits for vehicle types. The Service Provider shall seek the specific speed limits to be enforced for the stretch from the NHAI PD in writing.
 - h. Section Based Speeding: If Vehicle A is at VIDES Gantry at time-stamp t_0 and reaches VIDES Gantry at time-stamp t_1 , the average speed of the vehicle is distance between the two gantries divided by the time-taken by the vehicle between the two Gantries. This would mean that the ANPR cameras will be capturing the license plates of all vehicles and not just limited to the ones breaking spot-incidents mentioned in RFP. If the average time so calculated is over and above the prescribed speed limit for that vehicle type for this highway, than this shall be considered an enforceable violation for purpose of e-Challan/ penalization.

- i. The speed enforcement mechanisms shall be calibrated to the satisfaction of the local enforcement stakeholders (Traffic Police etc) and conformance to 167A of Motor Vehicle Act.

- y) Automatic Traffic Counter & Classifier (ATCC)
 - a. The ANPR cameras monitoring every lane shall be use for Automatic Traffic Counting and Classification.
 - 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.
 - c. The indicative classification of common vehicles for the ATCC is given below:
 - i. Two Wheelers
 - ii. Three Wheelers (Auto/Tempo)
 - iii. Four Wheelers (Cars, Jeeps, Vans etc)
 - iv. Light Motor Vehicles
 - v. Trucks/Buses
 - vi. Multi-Axle Vehicles
 - d. The ANPR cameras shall be classifying vehicles in any case for speed violation and other incidents.
 - e. The vehicle wise traffic data from each Gantry shall be stored in a relational database in the command centre for a period of 60 days. (Vehicle Type, Number Plate, Date/Time etc). Photo is only saved if any violation has been detected.
 - f. The data shall be passed to PD or representative of NHAI or IHMCL for comparison with data as received from NPCI for toll-collection on that stretch and identify vehicles that were identified using ATCC to be on the stretch but not found on that days transaction data from toll-plaza.
 - 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 futher action.

d. **Integration with other applications**

- a) The VIDES Software shall generate e-challan automatically and integrated with the Vaahan database, NIC ITMS, Police Command and Control Centre and NPCI FASTag mapper for obtaining the vehicle registration and contact details for e-challan and cross-verification of

the vehicle class. The Contractor shall be responsible for 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, TMCC.

- b) The data shall be passed to PD or representative of NHAI or IHMCL for comparison with data as received from NPCI for toll-collection on that stretch and identify vehicles that were identified using ATCC to be on the stretch but not found on that days transaction data from toll-plaza.
- 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.
- d) Where applicable, the VIDES shall be integrated with the Local Traffic Police's Command and Control Centre. This shall include sharing of live feeds of cameras for viewing and/or controls and any additional modular software that allows for the same. If view-only access can be provided through login into VIDES software such that above requirements are met, that may also be considered.

6.3.2. Operations and Maintenance (O&M)

- 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).
- b) Maintenance, repair and replacement of all hardware, software, peripherals and subcomponents of all equipments provided in relevant section of RFP (excluding scenario covers under Force Majeure) shall be the responsibility of Service Provider without any cost to IHMCL/NHAI. Service Provider shall ensure to resolve all faults of equipment/Sub-equipment/consumables which are linked to spare dependency within 24 hours from the time when the fault actual occurs and for this as indicated through equipment downtime system generated report or intimated by IHMCL/NHAI/Toll Operating Agency, adequate spare quantity to be maintained at site level for critical items. If the time for rectification exceeds 24 hours, 1% penalty on daily basis shall be imposed on service provider from the amount which shall be reserved for completion of O&M service.

- c) Corrective of all defective materials and workmanship in the installation will be carried out as required within this period. All de-snagging will be expediently completed within this period.
- d) Service provider shall adhere to the maintenance of Equipments, Periodic Preventive Maintenance of equipment, Timely Corrective Maintenance, Software Maintenance, Remote Software support for the System.
- e) IHMCL/NHAI holds the right to ask Service Provider to replace any staff if found to be unsuitable/ indulged in unwanted activities.
- f) In order to adhere the SLA parameters, Service Provider shall ensure for repair and replacement of hardware, software, peripherals and subcomponents during the O&M period part of Contract Agreement.
- g) Service provider shall intimate PIU/Toll operating agency for any corrective action to be taken on ground to resolve any major issue which takes more than 1 hour of lane closure.
- h) Service Provider shall take prior approval from respective IHMCL/PIU before updating any version of application, for which, a software modification request shall be submitted to PIU for seeking approval.
- i) IHMCL/NHAI holds the right to ask Service Provider to replace any staff if found and proved unsuitable/ indulged in unwanted activities.
- j) Any damage cause due to mishandling of equipment by the service provider employees shall be borne by service provider.

6.3.3. Service Level Requirements (SLA)

- a) The Successful bidder shall ensure Go-Live of VIDES within timelines as specified in the RFP. Any delay in the activities as mentioned in the RFP. shall attract penalty as below:
 - Rs. 10,000/- per week of delay in completion of each activity such as:
 - Implementation of each location
 - UAT of VIDES software and web-portal
 - Go-Live of VIDES software.
- 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.

Overcounting/ false positive instances of reporting of vehicles	
No instances of false recognition of vehicle	Equal to 100 per cent.

Up to 5 instances of false recognition of vehicle	Equal to 99 per cent No deductions.
More than 5 but less than 10 instances of false recognition of vehicle	Equal to 98 per cent 05 per cent deduction
Ten (10) or more instances of false recognition of vehicle	Below 95 per cent 10 per cent deduction

Note: 'Per month' instances are calculated as number of instances reported across all covered locations during one quarter divided by three.

c) Non- Capture of vehicle

The Successful bidder shall ensure to capture 100% traffic passing through the gantry. Any missing vehicles shall attract penalty as below:

- Rs. 20,000/- for each missing vehicle record.

IHMCL may compare the data captured through the gantry with independent data source.

d) The cumulative damages as provided in clauses 6.3.3 point 'a', 'b' & 'c' constitute the 'D' (Deductions) in the quarterly payment.

e) The uptime of VIDES shall be 99.9%, below which payment shall be deducted as provided in AF criteria. AF shall be calculated as follows:

Cumulative Uptime of VIDES System	Adjustment Factor
99.9% - 100%	1
Up to 99.5% - Less than 99.9%	0.95
Up to 99.2% - Less than 99.5%	0.90
Up to 99.0% - Less than 99.2%	0.85
Less than 99.0%	0 (Zero)

e) Capping on penalties

The total penalty imposed in a month shall not exceed **10% of total quarterly payments**. In case of imposition of maximum penalty (10%) for 3 successive months, IHMCL may consider termination of the Contract due to continuous default on the part of vendor.

In case the Service level Requirements are violated repeatedly, IHMCL reserves the right to terminate the whole Contract or descope a particular location by giving a written notice of 30 days to the Service Provider.

6.3.4. Specification

6.3.4.1. Video Camera (Overview)

- 1) The unit shall be a high resolution, 1/3 image format CMOS camera, designed for professional video surveillance systems. Incorporating the latest in technology, the video camera shall provide detailed video without lag, image retention, or geometric distortion.
 - 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 (debris, fog, accidents, pedestrian, animal crossing etc) are automatically detected in night conditions also in the range of 60-100m.
- 2) The IP Camera shall have the following specification:

i.	Rated input voltage	230 VAC, 50 Hertz
ii.	Imager	1/3" format CMOS
iii.	Sync. System	Internal with Crystal External with Mains synchronization
iv.	Active picture elements	2 MP or higher if needed to meet functional requirements.
v.	Signal to noise ratio	>50 dB minimum
vi.	Minimum Illumination	0.15 Lux (F1.2 , AGC On) at 50m IRE
vii.	Electronic Shutter	Manual: 1/50 to 1/10000 sec, 8 selections possible.
viii.	Back Light Compensation	Automatic : AES 1/50 TO 1/100000 Sec. 6 Zones or through better technologies.
ix.	Camera Text in Picture	16 Character title anywhere on screen.
x.	Encoding for integration with the ATMS control Centre	H.264 (MPEG-4 Part 10(AVC)/JPEG
xi.	Night Vision Capabilities	Through IR or Thermal or any other methods as long as Functional

		Requirements are met in the most economic manner.
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Note: The bidder/SI may also offer a CCTV Camera system with a built-in Video analytics feature meeting the requirements.

6.3.4.2. ANPR Camera

Each Lane will have an ANPR camera facing the traffic flow including hard shoulder. If there are camera configuration where less number of cameras can more economically cover all lanes and specified functional requirements, the same may be utilized by prior approval of the Employer.

- 1) ANPR cameras will capture the number plate of every vehicle passing under the gantry irrespective of whether any spot incident has been detected.
- 2) 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.
- 3) The ANPR camera shall be able to capture both retro & non-retro reflective license plates.
- 4) The ANPR camera will identify incidents itself suitable for its viewing angle (seat belt, triple riding, no-helmet etc)
- 5) 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.
- 6) The ANPR camera shall be able to function in adverse weather conditions.
- 7) 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.
- 8) Each challan related number plate recognition will be manually vetted by the command centre staff before handing over to local enforcement agency.

- 9) The software and cameras should be calibrated and tested on a monthly basis by the proposed representative of IHMCL/NHAI.
- 10) 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.
- 11) The IP Camera shall have the following specification:

a) Rated input voltage	230 VAC, 50 Hertz
b) Imager	1/3" format CMOS with Full HD with Global Shutter.
c) Sync. System	Internal with Crystal External with Mains synchronization
d) Active picture elements	2 MP Per Lane or Equivalent
e) Signal to noise ratio	>50 dB minimum
f) Minimum Illumination	0.15 Lux (F1.2 , AGC On) at 50m IRE
g) Electronic Shutter	Manual: 1/50 to 1/10000 sec, 8 selections possible. Automatic : AES 1/50 TO 1/100000 Sec.
h) Back Light Compensation	6 Zones or through better technology
i) Camera Text in Picture	16 Character title anywhere on screen.
j) Encoding for integration with the VIDES control Centre	H.264/JPEG (MPEG-4 Part 10(AVC)

6.3.4.3. Housing

Camera housing should have IP66 rating and following specifications:

- a) Camera mounting Vandal-proof wall/pole/corner/hanging mount as per site requirement
- b) Cable entry IP66 compliant cable pass-through
- c) Finish Off-white semi-gloss
- d) Construction Aluminum or engineering plastic with optically clear UV protected polycarbonate dome.
- e) 24*7 fan assisted thermostatically controlled Heater/defogger/forced air cooler

6.3.4.4. Environmental Requirements

1. Cameras & connected outdoor equipment shall be suitable to work from -10°C to 55°C with RH up to 95% non-condensing. If any additional equipment(s) is/are needed to achieve this range, it shall be supplied along with the outdoor equipment.
2. Equipment housing shall be of IP 66 or better rating.

6.3.4.5 UPS

1. Online UPS shall be capable of maintaining an uninterrupted power supply to the UPS loads for a sustained period of at least 8 hours under full load conditions from a fully charged battery.
2. It shall also be capable of continuously supplying power to the system under an intermittent interruption cycle.
3. The UPS shall be capable of operating at input voltages of 210/380Volts \pm 10% and 50 Hz \pm 2.5 Hz. The Service Provider shall issue a certificate to the IHMCL/NHAI that the equipment has been tested for load capacity and insulation at the applicable rated voltages and loads. The IHMCL/NHAI shall reserve the right to witness such tests or nominate a representative to witness such tests.
4. Specification for UPS (Min 10 KVA or above as per site conditions)

Parameter	Minimum Specification
UPS with Battery	Online
Rating	As per power requirement (125% of connected load)
Backup	8 hours
Input Voltage	155-305 VAC
Input Frequency	50 Hz
Output Voltage	230 VAC
Output Waveform	Sine Wave

6.3.4.6. Radar based VASD System

The VASD system shall include gantry mounted Radar and Speed Display system to warn the road users. These speed displays shall be installed to warn road users of over speeding and thereby acting as a deterrent. They shall also have the capability to collect and relay real time data for subsequent analysis. The speed display shall provide textual or graphical warning to the vehicles exceeding the preset speed limit. The present limits can vary by lane. VASD comprising Display and Radar will be placed at every 20 km subject to minimum 2 in every Project Package. The positioning of this should be such that it is considerably separately from the VIDES Gantries as they are for enforcement while VASD are for warnings only.

a. Functional Requirement

1. The system shall perform during day and night as well as in adverse weather conditions.
2. It shall have built in diagnostic functions to quickly assess the validity of speed calibration.
3. It shall adjust display intensity automatically to suit the ambient light conditions.
4. It shall be modular in construction for ease of maintenance.
5. It shall display numeric speed data as well as graphical (standard IRC road warning sign)(preferably) / textual warning.
6. Measurement:
 - a. Speed range : 1 km/h to 200 km/h
 - b. Maximum Measuring errors: Up to 100 km/h $\rightarrow \pm 3$ km/h, Above 100 km/h $\rightarrow \pm 5$ km/h
 - c. Minimum Monitored section length : 500 m

b. Technical Requirement

1. The speed display shall be formed using individual modules.
2. Speed display must be constructed using corrosion resistant panel with LED pixels in row: column matrix.
3. Scanning/Multiplexing ratio shall be 1/8 or better.
4. The LED Cluster shall consist of individual LED's rated for out-door use.
5. Shall support an industry standard communication interface such as TCP/IP on copper, Wi-Fi, and/or fibre optic to help setting the preset speed and retrieve log data.
6. Shall maintain time stamped record (speed and vehicle image) of each case of over speeding in a log file that can be retrieved over the connected network or using a locally connected laptop.
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 while recording the same.
8. It shall be possible to control the brightness of displays automatically using built-in light

sensors.

9. All PCB's shall be of FR4 material, 1.6mm thick and LED matrix PCB shall be 2.4mm thick. PCBs shall be of the quality suitable for use in environment conditions specified.
10. The equipment shall allow local diagnostics via laptop connected to its communication port.
11. Fault diagnostics shall be provided to include the following as a minimum:
 - a) Camera Failure
 - b) Radar Failure
12. The equipment shall comply with the following Physical and electrical specifications:

Function	Specification
Display size in inches	15 high x 8 width per digit or character
Viewing Angle	15 to 30 degrees
Color and Wavelength (nm)	Red (625), Amber (590), Green(525)
Luminous Intensity	7500 candela per meter square.
Power Feed	230V AC @ 50Hz, with Battery backup and preferably solar chargeable
Mounting	Fixed over existing gantry or a separately erected pole
Humidity	0 to 95% Non-Condensing
Operating Temperature (Ambient)	-10°C to 55°C
Construction	Weatherproof outdoor non sealed ventilated
Communication	Ethernet on Copper, Fibre, Radio (3G/GPRS, blue-tooth and Wi-Fi)
Protocol	TCP/IP, NTCIP, SNMP
Operation	Software for VAS display sign configuration and log file retrieval.

Environmental Specifications

The VAS shall meet the following climatic and environmental requirements:

SN	TEST	REFERENCE
13.	Change of temp test	IS 9000 Part XIV Sect. II
14.	Dry heat test	IEC-571; IS: 9000 Part-III Sect 3
3	Cold test	IS 9000 Part II Sect. III
4.	Damp heat test (Cyclic)	IS9000 Part V Sect. 2 Variant 1
5.	Damp heat test (Steady state storage)	IS9000 Part IV
6.	Salt mist test	IS9000 Part XI procedure 3
7.	Dust test	IS 9000 Part XII
8.	Bump test	IS 9000 Part VII, Sec. 2
9.	Vibration test	TEC (IPT 1001A revised)

6.3.5 Field-Access & On-line remote Access during the Contract period

1. Field-Access: All the equipment of the VIDES system shall provide access for data extraction and control (where applicable) in a secure manner from a local laptop computer. The access shall be either

in the form of a wired connection via a standard interface like TCP/IP (in the form of an Ethernet connection), RS 232, RS 485 or Wireless Lan. It shall be further possible in a secure manner to view and transfer such accessed data on to the appropriate VIDES server database to 'make-good' any data loss that may have occurred during normal operations. Such an operation of data extraction and transfer to the VIDES server database shall be automatically detected and logged into the system as an event for causing a system alert and appropriately included in the event report.

2. The service provider shall use an appropriate GUI supported software (s) for the performing the above data access, control and transfer to the VIDES database.
3. The systems commissioned by the Service Provider shall provide, during the entire period of the Contract, adequate remote on-line access (via-internet) having a dedicated IP for the IHMCL/NHAI and / or NHAI's representative/Local Traffic Agency for on-line evaluation of the functioning of each equipment / sub-system, including all field equipment. The Service Provider shall also provide the IHMCL/NHAI a suitable Modular software for the same. In the case of PTZ CCTV Cameras, this tool shall also support the facility of observing real-time images from each camera by remote operation of the Pan-Tilt-Zoom facility. IHMCL reserves the right to include the results of any such examination by NHAI and / or its representative in the achieved service levels for the period under evaluation.
4. For the purpose of enabling the above on-line access facility, each of the equipment / sub-systems shall be Internet Protocol (IP) based supporting the Simple Network Management Protocol (SNMP).
5. The Service Provider will be required to configure direct online access of video streams for each camera through either RTSP, Port Forwarding, HTTP, WebRTC, Cloud NVR or any protocol supported by IHMCL/NHAI VIDES Cloud at HQ and Local Traffic Agency Command Control Centre.
6. Each camera (VIDS , CCTV or one placed in Command Centre) shall be registered on VIDES Module at HQ. This registration will include but not limited to lat-long, public IP, RTSP url, authentication details if any and web-link to access the stream of individual cameras respectively.
7. The above tool shall also include a feature by which the IHMCL and / or NHAI's representative can generate detailed performance, operation and maintenance reports without the need for any support / intervention from the Service provider's personnel.

6.3.6. Payment Terms & Timelines

- a) Payments will be made in Indian Rupees only.
- b) Capex Payment:
 - i. 100% Capex payment against installation of gantries shall be released based on

satisfactory installation of number of gantries as per provisions of RFP.

c) Operations and Maintenance Payment:

- i. Payment shall be released on a quarterly basis subject to deduction of penalty.
- ii. Total Quarterly Payments

The quarterly payment shall be calculated as below:

$$Q_{\text{Total}} = [Q_A] - D$$

Where

- Q_{Total} = Total payment for the quarter post Go-Live of VIDES. No payments shall be done before Go-Live of VIDES.
- Q_A = Quarterly payments for Operations & Maintenance cost for VIDES for each location Live in the quarter; calculated as under:
 - $\sum Q_A = Q_{L1} * AF_1 + Q_{L2} * AF_2 + \dots + Q_{Ln}$
 - The payments $Q_{L1}, Q_{L2}, \dots, Q_{Ln}$ etc. shall be made pro-rata for the no. of days for which locations were Live in the quarter;
 - Q_{L1}, Q_{L2}, Q_{Ln} – pro-rata payment for a location 1,2.. n for the quarter – {Per location O&M quoted unit price * (no. of days location was live in the quarter/ total no. of days in the quarter)}
 - AF_1, AF_2, \dots, AF_n = Adjustment Factor of different locations as defined in SLA section.
- D = Deductions for penalty as defined in service levels as per sections.

iii. Timeline Implementation phase –

Activity	Timelines
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
Operations & Maintenance	6 months onwards

6.3.7. Data Retention, Back-up and Restore Operations:

a) Data Retention:

- i. Data for each location shall be retained for entire Agreement period in the Server. The backup devices and media as per current industry practice shall also be provided.
- ii. The Service provider shall ensure adequate security measure for safeguarding of Transaction data, by providing, off site Disaster recovery or Data Storage mechanism.
- iii. The service provider shall also be responsible to extract and provide data /information based on requirement of law Enforcement Agencies of Govt. of India/ State based on specific approvals on case-to-case basis.
- iv. However, it will be limited to the data captured in VIDES Systems as per standard operations and the data being retained as per retention schedule.

b) Data Back-up & Restore:

- i. Service provider shall also demonstrate the backup & restore procedure successfully. The Service Provider shall prepare and implement a proper Data Backup & Restore policy with IHMCL's approval, to ensure data safety and avoid data loss, in case of any untoward incidents.
- ii. Such policy shall ensure Back-up & Restore of Transaction data at least once in a week.
- iii. Service Provider shall ensure to maintain the Data backup till Contract Expiry and ensure to submit the data backup with IHMCL and concerned PIU after expiry of Contract Agreement.
- iv. Data shall be backed up onto a removable medium on a regular basis start from plaza live date to end of Contract period.
- v. IHMCL/NHAI as per requirement shall intimate Service Provider to restore the data for a specific period.
- vi. The data generated in the system shall be handed over to IHMCL in readable format after the expiry of Contract Agreement. Following reports shall be submitted with NHAI/IHMCL after expiry of Contract Agreement: -
 - Raw data for transactions
 - Month wise transaction History report or any other report as per requirements of IHMCL

c) Data Redundancy

- i. All transaction and incident data shall be retained duplicated and stored within the various levels of the system such that should any level or component of that level suffer a partial or total failure, the data is not irretrievably lost to the system. In addition, it shall be possible to reconstruct and restore the data for the failed level from the stored data into its original format.
- ii. Data retention times within the various levels shall be at least:

6.3.8. Statutory and Others

IHMCL shall reserve the right to get the security / compliance audit of the VIDES done at any time through any agency appointed for the purpose and the service provide shall extend all support & cooperation for smooth conduct of said Audit.

The Service Provider shall abide by all statutory guidelines and comply with rules/regulations/guidelines framed by NHAI/IHMCL and/or Ministry of Road Transport & Highways from time to time; It shall be responsibility of the service provider to incorporate such changes within the stipulated time frame into the VIDES.

The Service Provider shall comply with the guidelines and/ or Specifications and Standards including the revisions thereof issued from time to time by Ministry of Road Transport & Highways Govt. of India / IRC. In absence of which, the system and equipment provided by the service provider shall meet relevant American or European/ British standards & specifications.

6.3.9. Technical Specifications & Standards

The minimum technical specifications & the standards to be adhered have been prescribed under this document. The Service Provider shall ensure to provide the equipment meeting the prescribed requirements.

6.3.10. Acceptance Test and Approvals

After installation of VIDES equipments at the location in the current scope of work, a Site Acceptance Test (SAT) shall be carried out at these locations to test the system functionality and performance as per the format finalized by IHMCL.

Third Party Check: For Acceptance Testing, IHMCL reserves the right to appoint a third party to carry out Acceptance Testing on behalf of IHMCL. The service provider shall have no objection on the same & will cooperate with such appointed third party/ consultant.

Failure by the Service Provider to complete the Works and to have remedied all reported defects in Site Acceptance Test (SAT), IHMCL shall not release the O&M services amount to the Service Provider till all issues reported issues are resolved.

6.3.11. System Development Progress Reporting

The Service Provider shall note that they are obliged to provide hardware and software progress reports, if any, as the works proceeds. These reports shall be in the English language for project management purposes.

6.3.12. Other Works

a) Design and Drawing Responsibility

The Service Provider shall be required to produce engineering design drawings of all equipments/ system, electrical installation, gantries and computer & data transmission network systems. It shall be the Service Provider's responsibility to adhere to the designs submitted during the implementation of systems. In case of any changes in the systems the service provider shall modify and resubmit the designs. The design should be submitted by the service provider within 7 days of receipt of notification of commencement of work.

b) 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.

c) Cabling to UPS Loads

The Service Provider shall supply, install, terminate and connect all cabling from the power DB to the entire field and control room equipment. The cable shall be suitably sized and earth PVC insulated and steel wire armoured copper cables. Wire armouring may be omitted, if the cables are drawn through a conduit.

d) Cable tray

The Service Provider shall provide adequate perforated cable trays and/or cable support wherever required, for all cabling required in Lanes & Plaza Building.

e) Cable Numbering

All cables installed shall be numbered with ferules, in accordance with the universal cable numbering system, in such a way that any person shall be able to understand & identify cabling for specific equipment.

All cables shall be ISI marked, fire retardant type and shall be terminated with proper lugs & joints as per best industry practices.

PART VII- CONDITIONS OF CONTRACT

6.1 CONDITIONS OF CONTRACT

These Conditions shall supplement or amend the other parts of the Bidding Documents and whenever there is a conflict; provision herein shall prevail over those in the other parts of the Bidding Documents.

6.2 GOVERNING LANGUAGE

All correspondence and other documents to be exchanged by the parties shall be written in the English language. The version written in English language shall govern its interpretation.

6.3 APPLICABLE LAW

Appropriate laws as in force in Republic of India shall apply.

6.4 INTERPRETATION

In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined.

The Bidders are expected to examine all terms and instructions included in the RFP Document. During preparation of the technical proposal, the bidders shall make their own assessment of staff to undertake the assignment.

6.5 CONTRACT PERIOD

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.

6.6 INSURANCE

The Service Provider shall effect and maintain the insurance of VIDES system at its own cost, during the Contract period, such insurances for such maximum sums as may be required under the Applicable Laws, and such insurances as may be necessary or prudent in accordance with Good Industry Practice to cover third party claims, theft, accidental damage, vandalism, fire, flood, and Force Majeure events. The insurance document shall be submitted after the completion of implementation work at each location.

6.7 FORCE MAJEURE

- a) Neither party shall be responsible to the other for any delay or failure in performance of its obligations due to any occurrence of a Force Majeure event which is beyond the control of any of the Parties, including, but without limited to, fire, flood, explosion, acts of God or any

governmental body, public disorder, riots, embargoes, or strikes, acts of military authority, epidemics, strikes, lockouts or other labour disputes, insurrections, civil commotion, war, enemy actions.

- b) If a Force Majeure arises, the Service Provider shall promptly notify IHMCL in writing of such condition and the cause thereof. Unless otherwise directed by IHMCL, the Service Provider shall continue to perform his obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. The Parties shall be excused from performance of their respective obligations in whole or part as long as such Force Majeure event continues to prevent or delay such performance by the Parties. However, in case such Force Majeure event lasts for a continuous period of 60 days, either Party may terminate the Contract.

6.8 INDEMNIFICATION

- a) The Service Provider shall indemnify, defend, save and hold harmless, IHMCL, NHAI and MoRTH and their officers, servants, agents (hereinafter referred to as the "IHMCL Indemnified Persons") against any direct loss, damage, claims, cost and expense of whatever kind and nature (including without limitation, legal fees, claims and expenses incurred in connection with any suit, action or proceeding or any claim asserted, as such fees and expenses are incurred), joint or several, that arise out of or are based upon any order passed by any statutory authority including Courts, tribunals or other judicial/quasi judicial authorities, on account of breach of the Service Provider's obligations under this Contract or any other related agreement or otherwise, any fraud or negligence attributable to the Service Provider or its Agents under contract or tort or on any other ground whatsoever, all eventualities of theft, dacoity, robbery, etc., except to the extent that any such suits, proceedings, actions, demands and claims has arisen due to any breach or default of this Contract on the part of IHMCL Indemnified Persons.
- b) The Service Provider shall indemnify IHMCL Indemnified Persons from all legal obligations in respect of professionals deployed by the Service Provider. IHMCL Indemnified Persons also stand absolved of any liability on account of death or injury sustained by the Service Provider's staff during the performance of their work and also for any damages or compensation due to any dispute between the Service Provider and its staff.
- c) In addition to the aforesaid, the Service Provider shall fully indemnify, hold harmless and defend IHMCL Indemnified Persons from and against any and all direct loss, damage, cost and expense of whatever kind and nature (including, without limitation, legal fees and other expenses incurred in connection with any suit, action or proceeding or any claim asserted,

as such fees and expenses are incurred), joint or several, that arise out of, or are based upon any demands, claims, suits or proceedings arising out of claims of infringement of any domestic or foreign patent rights, copyrights or other intellectual property, proprietary or confidentiality rights with respect to any materials, information, design or process used by the Service Provider or by the Agents in performing the Service Provider's obligations or in any way incorporated in or related to this Contract. If in any such suit, action, claim or proceedings, a temporary restraint order or preliminary injunction is granted, the Service Provider shall make every reasonable effort, by giving a bond (of the type and value as required) or otherwise, to secure the revocation or suspension of the injunction or restraint order and continue to perform its obligations hereunder. If the Service Provider is unable to secure such revocation within a reasonable time, it shall, at its own expense, and without impairing the Specifications and Standards, shall rectify such defaults and shall also be liable for damages to IHMCL for the corresponding loss during the interim period on this account.

- d) The provisions of this Clause shall survive Termination.
- e) The remedies provided under this Clause are not exclusive and shall not limit any rights or remedies that may otherwise be available to IHMCL Indemnified Persons at law or in equity.

6.9 TERMINATION

- a) **ON EXPIRY OF THE CONTRACT:** Subject to the condition mentioned under Clause 6.5, the Agreement shall be deemed to have been automatically terminated on the expiry of the Contract Period unless IHMCL has exercised its option to further renew the Contract Period in accordance with the provisions, if any, of the Contract.
- b) **ON ACCOUNT OF FORCE MAJEURE:** Either party shall have the right to terminate the Contract on account of Force Majeure, as set forth in Clause 6.7.
- c) **ON BREACH OF CONTRACT:** IHMCL may terminate the Contract if the Service Provider causes a fundamental breach of the Contract. Fundamental breach of Contract includes, but shall not be limited to, the following:
 - i. The Service Provider fails to carry out any obligation under the Contract.
 - ii. The Service Provider without reasonable excuse fails to commence the work in accordance with relevant clauses.
 - iii. Has failed to furnish the required securities or extension thereof in terms of the Contract.
 - iv. the Service Provider stops work and the stoppage has not been authorized by IHMCL;
 - v. the Service Provider at any time during the term of the Contract becomes insolvent or

makes a voluntary assignment of its assets for the benefit of creditors or is adjudged bankrupt

- vi. If the Service Provider, in the judgment of the Employer, has engaged in the corrupt or fraudulent practice in competing for or in executing the Contract.
- d) The Service Provider sub-contracts any assignment under this Agreement without approval of IHMCL.
- e) Any other fundamental breaches as specified in the RFP.
- 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.
- g) Upon Termination (except on account of expiry of Term of this Agreement, Force Majeure), IHMCL shall be entitled at the sole discretion to:
 - i. Appropriate the entire Performance Security or part thereof as Damages; and
 - ii. Debar/Blacklist the Service Provider from participating in any other project/assignment/work of IHMCL for a period as determined by IHMCL in its sole discretion.

6.10 ARBITRATION/ RESOLUTION OF DISPUTES

- a) Any dispute, difference or controversy of whatever nature howsoever arising under or out of or in relation to the Contract (including its interpretation) between the Parties, and so notified in writing by either Party to the other Party (the "Dispute") shall, in the first instance, be attempted to be resolved amicably in accordance with the conciliation procedure set forth in Clause 6.10(d).
- b) The Parties agree to use their best efforts for resolving all Disputes arising under or in respect of the Contract promptly, equitably and in good faith, and further agree to provide each other with reasonable access during normal business hours to all non-privileged records, information and data pertaining to any Dispute.
- c) **Mediation**

In the event of any Dispute between the Parties, either Party may call upon the Chairman in case of IHMCL or his nominee and the Managing Director/ /CEO/Director, as the case may be, in case of the Service Provider to mediate in arriving at an amicable settlement thereof. If after expiry of 30 days of receipt of the documents in relation to the Dispute or such extended period as the Parties may agree in writing, the Dispute remains unresolved,

the Parties shall attempt to resolve the dispute through conciliation and/or Arbitration under the Arbitration and Conciliation Act, 1996, in accordance with the procedure specified in Clause 6.10(d) and Clause 6.10(e).

d) Conciliation

The Parties shall attempt to select one of the experts from the list of empaneled arbitrators of the Society for **Affordable** Redressal of Disputes (“SAROD”) as the Conciliator to mediate and assist the Parties in arriving at an amicable settlement thereof. If the Parties fail to agree on nominating a conciliator within 15 (fifteen) days or the Dispute is not resolved as evidenced by the signing of written terms of settlement within 60 (sixty) days of the notice in writing or such longer period as may be mutually agreed by the Parties, either Party may refer the Dispute to arbitration in accordance with the provisions of Clause 6.10(e).

e) Arbitration

Any Dispute which is not resolved amicably by conciliation, as provided in Clause 6.10(d), shall be finally settled by arbitration as set forth below:

- i. The Dispute shall be referred to the SAROD. The dispute shall be dealt with in terms of Rules of SAROD. The detailed procedure for conducting Arbitration shall be governed by the Rules of SAROD and provisions of Page 33 of 53 Arbitration & Conciliation Act, 1996, as amended from time to time.
 - ii. The seat of Arbitration shall be New Delhi and the language for all documents and communications between the parties shall be English.
 - iii. The expenses incurred by each party in connection with the preparation, presentation, etc., of arbitral proceedings shall be borne by each party itself.
- f) The arbitrators shall make a reasoned award (the “Award”).
- g) The Service Provider and IHMCL agree that an Award may be enforced against the Service Provider and/or IHMCL, as the case may be, and their respective assets wherever situated.
- h) This Agreement and the rights and obligations of the Parties shall remain in full force and effect, pending any proceedings hereunder. Further, the Parties unconditionally acknowledge and agree that notwithstanding any Dispute between them, each Party shall proceed with the performance of its respective obligations, pending resolution of Dispute in accordance with this Clause.

6.11 Appropriation of Performance Security

- a) Upon failure of the Service Provider to commence the services, for any reason whatsoever,

within the period set forth in this Contract or the extended period thereunder, IHMCL shall, without prejudice to its other rights and remedies hereunder or in law, be entitled to levy Penalty/Damages as per provision under this RFP.

- b) IHMCL shall, without prejudice to its other rights and remedies hereunder or in law, be entitled to encash and appropriate the relevant amounts from the Performance Security as Damages or any other amounts payable to IHMCL under this Contract as and when such Damages or other amounts become due and payable. Upon such encashment and appropriation from the Performance Security, the Service Provider shall, within 10 days thereof, replenish, in case of partial appropriation, to its original level of the amount guaranteed under the Performance Security, and in case of appropriation of the entire Performance Security, provide a fresh Performance Security, as the case may be failing which IHMCL shall be entitled to terminate this Agreement in accordance with clause 6.9 hereof.

6.12 Project Handover

The Service Provider shall provide proper transfer of technology to IHMCL post Contract Period. The Service Provider shall carry out project hand-over of the system at the end of the contractual period along with all documentation required to operate and maintain the system. Service Provider will supply to the IHMCL the following before the expiry of the contract:

- 1) Information relating to the current services rendered and data relating to the performance of the services; Entire documentation relating to various components of the Project, any other data and confidential information related to the Project.
- 2) All other information (including but not limited to documents, records and agreements) relating to the products & services related to the project to enable IHMCL and its nominated agencies, or its replacing Service Provider to carry out due diligence in order to transition the provision of the Project Services to IHMCL or its nominated agencies, or its replacing Service Provider (as the case may be).
- 3) Physical Gantries installed at identified locations.
- 4) Project Documentation

6.13 MISCELLANEOUS

a) Standard of Performance

The Service Provider shall undertake to perform the services with the highest standards of professional and ethical competence and integrity which are, amongst others, ESSENCE of this assignment. Keeping in view the sensitivity involved in such assignments, the personnel deployed should maintain confidentiality/integrity at all times and should work in a professional manner to protect the interest of IHMCL. The firm shall promptly replace any personnel deployed under this contract that IHMCL considered unsatisfactory.

b) Representations and Warranties of the Parties

The Parties represents and warrants to the each other that:

- i. It is duly organized and validly existing under the applicable laws, and has full power and authority to execute and perform its obligations under this Contract and to carry out the transactions contemplated hereby;
- ii. It has taken all necessary corporate and other actions under applicable laws to authorize the execution and delivery of this Contract and to validly exercise its rights and perform its obligations under this Contract;
- iii. This Contract constitutes its legal, valid and binding obligation, enforceable against it in accordance with the terms hereof, and its obligations under this Contract will be legally valid, binding and enforceable obligations against it in accordance with the terms hereof;
- iv. The information furnished in the Bid and as updated on or before the date of this Contract is true and accurate in all respects as on the date of this Contract;
- v. The execution, delivery and performance of this Contract will not conflict with, result in the breach of, constitute a default under, or accelerate performance required by any of the terms of its Memorandum and Articles of Association [or those of any member of the Consortium] or any Applicable Laws or any covenant, contract, agreement, arrangement, understanding, decree or order to which it is a party or by which it or any of its properties or assets is bound or affected;
- vi. There are no actions, suits, proceedings, or investigations pending or, to its knowledge, threatened against it at law or in equity before any court or before any other judicial, quasi- judicial or other authority, the outcome of which may result in the breach of this Contract or which individually or in the aggregate may result in any material impairment of its ability to perform any of its obligations under this Contract;

c) Waiver of immunity

Each Party unconditionally and irrevocably:

- i. Agrees that the execution, delivery, and performance by it of this Contract constitute commercial acts done and performed for commercial purpose;
- ii. Agrees that, should any proceedings be brought against it or its assets, property or revenues in any jurisdiction in relation to this Contract or any transaction contemplated by this Contract, no immunity (whether by reason of sovereignty or otherwise) from such proceedings shall be claimed by or on behalf of the Party with respect to its assets;)
- iii. Waives any right of immunity which it or its assets, property or revenues now has, may acquire in the future or which may be attributed to it in any jurisdiction; and
- iv. Consents generally in respect of the enforcement of any judgment or award against it in any such proceedings to the giving of any relief or the issue of any process in any jurisdiction in connection with such proceedings (including the making, enforcement or execution against it or in respect of any assets, property or revenues whatsoever irrespective of their use or intended use of any order or judgment that may be made or given in connection therewith).

d) Waiver

- i. Waiver, including partial or conditional waiver, by either Party of any default by the other Party in the observance and performance of any provision of or obligations under this Contract:
 - Shall not operate or be construed as a waiver of any other or subsequent default hereof or of other provisions of or obligations under this Contract;
 - Shall not be effective unless it is in writing and executed by a duly authorized representative of the Party; and
 - Shall not affect the validity or enforceability of this Contract in any manner.
- ii. Neither the failure by either Party to insist on any occasion upon the performance of the terms, conditions and provisions of this Contract or any obligation there under nor time or other indulgence granted by a Party to the other Party shall be treated or deemed as waiver of such breach or acceptance of any variation or the relinquishment of any such right hereunder.

e) Liability for review of Documents

Except to the extent expressly provided in this Contract:

- i. no review, comment or approval by IHMCL, any document submitted by the Service Provider

- ii. nor any observation or inspection of the Services performed by the Contractor nor the failure to review, approve, comment, observe or inspect hereunder shall relieve or absolve the Contractor from its obligations, duties and liabilities under this Contract, the Applicable Laws and applicable permits; and
- iii. IHMCL shall not be liable to the Service Provider by reason of any review, comment, approval, observation or inspection referred to in Sub-clause above.

f) Exclusion of implied warranties etc.

This Contract expressly excludes any warranty, condition or other undertaking implied at law or by custom or otherwise arising out of any other agreement between the Parties or any representation by either Party not contained in a binding legal agreement executed by both Parties.

g) Survival

- i. Termination shall:
 - not relieve the Contractor or IHMCL, as the case may be, of any obligations hereunder which expressly or by implication survive Termination hereof; and
 - except as otherwise provided in any provision of this Contract expressly limiting the liability of either Party, not relieve either Party of any obligations or liabilities for loss or damage to the other Party arising out of or caused by acts or omissions of such Party prior to the effectiveness of such Termination or arising out of such Termination.
- ii. All obligations surviving Termination shall only survive for a period of 3 (three) years following the date of such Termination

h) Entire Agreement

This Contract, the RFP and the Sections hereto together constitute a complete and exclusive statement of the terms of the agreement between the Parties on the subject hereof and no amendment or modification hereto shall be valid and effective unless such modification or amendment is agreed to in writing by the Parties and duly executed by persons especially empowered in this behalf by the respective Parties. All prior written or oral understandings, offers or other communications of every kind pertaining to this Contract are abrogated and withdrawn. For the avoidance of doubt, the Parties hereto agree that any obligations of the Contractor arising from the Request for Proposals shall be deemed to form part of this Contract and treated as such.

i) Severability

If for any reason whatever any provision of this Contract is or becomes invalid, illegal or

unenforceable or is declared by any court of competent jurisdiction or any other instrumentality to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions shall not be affected in any manner, and the Parties will negotiate in good faith with a view to agreeing to one or more provisions which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable to such invalid, illegal or unenforceable provision. Failure to agree upon any such provisions shall not be subject to the Dispute Resolution Procedure set forth under this Contract or otherwise.

j) No partnership

This Contract shall not be interpreted or construed to create an association, joint venture or partnership between the Parties, or to impose any partnership obligation or liability upon either Party and neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

k) Third parties

This Contract is intended solely for the benefit of the Parties and their respective successors and permitted assigns and nothing in this Contract shall be construed to create any duty to, standard of care with reference to, or any liability to, any person not a Party to this Contract.

l) Successors and assigns

This Contract shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns.

m) Notices

Any notice or other communication to be given by any Party to the other Party under or in connection with the matters contemplated by this Contract shall be in writing and shall:

- i. In the case of the Contractor, be given by facsimile or e-mail and by letter delivered by hand to the address given and marked for attention of the person set out below or to such other person as the Contractor may from time to time designate by notice to IHMCL; provided that notices or other communications to be given to an address outside Delhi may, if they are subsequently confirmed by sending a copy thereof by registered acknowledgement due, air mail or by courier, be sent by facsimile or e-mail to the number as the Contractor may from time to time designate by notice to IHMCL;
- ii. In the case of IHMCL, be given by facsimile or e-mail and by letter delivered by hand and be addressed to the [•] of IHMCL with a copy delivered to the Authority Representative

or such other person as IHMCL may from time to time designate by notice to the Contractor; provided that if the Contractor does not have an office in Delhi it may send such notice by facsimile or e-mail and by registered acknowledgement due, air mail or by courier; and

- iii. Any notice or communication by a Party to the other Party given in accordance herewith shall be deemed to have been delivered when in the normal course of post it ought to have been delivered and in all other cases, it shall be deemed to have been delivered on the actual date and time of delivery; provided that in the case of facsimile or e-mail, it shall be deemed to have been delivered on the working day following the date of its delivery.

n) Sub-Contracting

The Service Provider shall not sub-contract any assignment (excluding minimum civil work) to a third party. The Service Provider shall remain solely responsible for all works under this Agreement.

o) Confidentiality of the Assignment/Findings

The agency shall not, during the term of assignment and within two years after its expiration, disclose any propriety or confidential information relating to the services, this assignment or IHMCL's business or operations without prior written consent of IHMCL.

p) Modification

Modification of the terms and conditions of this Contract, including any modification of the scope of the Services, may only be made by written agreement between the Parties as the case may be, has been obtained.

q) Language

All notices required to be given by one Party to the other Party and all other communications, Documentation and proceedings which are in any way relevant to this Contract shall be in writing and in English language.

Part VIII – ANNEXURES AND FORMS

Annexure-1 - BID FORM

(In the Bidder's Letter Head)

Date: _____

From,

To,

(Name & Address of the Bidder)

Chief Operating Officer

Indian Highways Management Co. Ltd. 1st
Floor, NHAI Building, Sector –10,

Dwarka

New Delhi

110 075

Subject: _____

Ref.: Tender No _____ Dear Sir/Madam,

After examining/reviewing the Bidding Documents for _____ etc. the receipt of which is hereby duly acknowledged, we, the undersigned, are pleased to bid to execute the whole of the Job for the item in conformity with, the said RFP Documents, including Corrigendum / Addenda Nos. _____.

We confirm that this bid is valid for a period of 180 days from the date of opening of Bid, and it shall remain binding upon us and may be accepted by any time before the expiration of that period. If our bid is accepted, we will provide the required performance guarantee as per the tender document.

Until a final Contract is prepared and executed between us, the bid together with your written acceptance thereof in your notification of award shall constitute a binding Contract between us.

We undertake that, in competing for (and, if the award is made to us, in executing) the above Contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988" and other applicable law. We understand you are not bound to accept any Proposal you receive.

We as a Bidder further undertake that the Bidder or the bidder's parent / subsidiary /sister concern company is/are not currently engaged by NHA for user fee collection at NH Fee plazas mentioned in this tender document as on RFP release date and we shall not take up activities such as user fee collection at these fee plazas during Contract Period if selected as successful bidder.

Yours sincerely,

(Signature of the Authorized signatory):

Name and Designation of the Authorized signatory: Name and Address of Bidder: Phone, Fax & E-Mail

Annexure-2 – Undertaking for Blacklisting

To,
Chief Operating Officer
Indian Highways Management Company Ltd. (IHMCL)

Subject – Undertaking

Reference – RFP.....

Dear Sir,

I/We, the undersigned, do hereby certify that all the statements made in the required attachments are true and correct.

2. The undersigned also hereby certifies that neither our Company/firm M/s _____ have abandoned any work of National Highways Authority of India/IHMCL nor any contract awarded to us for such works have been rescinded, during last five years prior to the date of this bid.

3. The undersigned hereby authorize(s) and request(s) any bank, person, firm or corporation to furnish pertinent information deemed necessary and requested by IHMCL to verify this statement or regarding my (our) competence and general reputation.

5. The undersigned understands and agrees that IHMCL may ask for further qualifying information, and agrees to furnish any such information at the request of IHMCL.

6. I/We do acknowledge and agree that any misrepresentation or false statement made in the self-certification form on VIDES experience shall be considered a material breach of the terms and conditions of the tender process and the contract, if awarded. I/We further acknowledge and agree that such breach may result in the immediate disqualification of our bid or the termination of the contract, if awarded, without any liability or compensation to us. We also agree to indemnify and hold harmless the IHMCL from any loss, damage, cost, or expense resulting from our misrepresentation or false statement. We acknowledge that the IHMCL may initiate any legal or administrative action against us for such breach.

7. We confirm that we have not been blacklisted /debarred by any central/state Government department/organization or Quasi Government agencies of PSU.

8. We confirm that no criminal proceeding is pending against our company/firm or any of its Directors/ Partners in any court of law.

9. We confirm that we have not been convicted by any court of law for any of the offences under any Indian laws.

(Signed by an Authorized Signatory of the bidder)

Designation of Officer

Name of bidder

DATE

Annexure 3 - POWER OF ATTORNEY

Bidders are required to resubmit the Power of Attorney only if there have been changes in the statements asserted in the RFE No. IHMCL/ETC/Empanelment/2021/01, dated 28-10-2021.

Bidders may refer to the same RFE for the format of the same.

Annexure-4 - FORM OF PERFORMANCE SECURITY (BANK GUARANTEE)
(In the Bidder's Letter Head)

To

Indian Highways Management Co. Ltd.

1st Floor, NHA Building, Sector 10, Dwarka, New Delhi 110 075

WHEREAS _____ (Name and

address of Contractor) (hereinafter called "the Contractor")* has undertaken, in pursuance of Contract No. _____ dated _____ to execute _____ (Name of contract and brief description of works) (hereinafter called the "the Contract").

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee; NOW THEREOF we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor up to a total of _____ (amount of Guarantee)** __ (in words) , such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of _____ (amount of Guarantee) as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

The liability of the Bank under this Guarantee shall not be affected by any change in the

constitution of the contractor or of the Bank.

Notwithstanding anything contained herein before, our liability under this guarantee is restricted to Rs. _____ (Rs. _____) and the guarantee shall remain valid till _____. Unless a claim or a demand in writing is served on us on or before _____ all our liability under this guarantee shall cease.

Signature and seal of the Guarantor _____ In presence of

Name and Designation _____ 1. _____

(Name, signature & Occupation)

Code no. of the officer(s) signing the guarantee(s) Name of the Bank _____

Address _____ 2. _____

(Name, signature & Occupation)

Date _____

Controlling Office of the Bank:

Contact Person: _____

Tel. No : _____

Note:

** An amount is to be inserted by the Guarantor, representing the percentage of the contract price specified in the Contract and denominated in Indian Rupees.

Annexure-5-FORMAT FOR FINANCIAL BID SUBMISSION

(Bidder are required to download the excel format from e-tender portal for on-line submission)

Only cells having yellow color to be filled by bidder	
Name of the RFP: Request for proposal (RFP) for Selection of Vendor for Providing Video Incident Detection and Enforcement System (RFP Reference – IHMCL/VIDES/2023/01)	
Name of Bidder:	
Bid Invitation Date:	

Form 1: FINANCIAL BID FORM

Sl.#	Particulars	Quantity (A)	Unit	Time Period (in quarters) (B)	Unit Rate (in Rs.) Excluding GST (C)	Total Amount (in Rs.) excluding GST
1	Procurement and Installation of 2 x 3 lane gantries covering both the sides (LHS & RHS) at 4 locations provided by IHMCL – Capex Cost	4 unit* (LHS + RHS)	Per unit	--		=A * C
2.	Procurement and Installation of 1 x 3 lane gantry at 2 pair of locations provided by IHMCL – Capex Cost	4 unit (LHS or RHS)	Per unit	--		=A * C
3	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	4 (6 lane) unit	Per unit	12		= A * B * C
4	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	4 (3 lane) unit	Per unit	12		= A * B * C
Total Cost, excluding GST						=Sum (Sl.# 1:4)

Important Notes: -

1. Bidder Need to fill ONLY the yellow cells.
2. Quoted rate by the bidder shall be 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.
3. For additional locations - The quarterly O&M rate for the additional location shall be calculated on pro-rata basis.
5. The above quoted O&M rate shall be applicable for any location allocated to the bidder in the Bengaluru – Mysuru section of NH - 275 as per terms and condition in the RFP.
6. The above Quoted Amount shall include the cost of Insurance of all system during the Contract period as per RFP terms and conditions.
7. The Bidder shall ensure due diligence in estimating the technical manpower support cost at location and bear full responsibility for complying with all minimum wage and labor laws as well as other statutory regulations.

Form 2: Bill of Quantity (BOQ)

S. No.	Indicative List of Equipment	Unit Price
1	Video Image processing unit(s)/Local Processing Unit (LPU)	
2	Overview Camera	
3	ANPR camera with IR flasher	
4	Radar	
5	Vehicle Actuated Speed Display (VASD)	
6	Back-office Software for Validation of Violation data captured and integration with Enforcement Agency	
7	UPS 10 KVA	
8	Industrial Network Switch - Site	
9	Industrial Network Switch - CCC	
10	Central Server	
11	Modules (SFP)	
12	Cabling, Surge Suppressor, Earthing Protection etc.	

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-6 - Pre-bid Query Format
(To be submitted in Excel Format ONLY)

Name of Bidder: _____

SI #	Ref to RFP (Clause, Page no.)	Category of Query (Technical/ Legal/ General/ Others)	Original Clause of RFP	Clarification Sought
		Technical		
		Legal		
		General		
		Others		

Bidders are required to submit their queries in the above format ONLY on tenders@ihmcl.com

Annexure 7 – Undertaking for OEM

Subject:

RFP No:

I/we undertake the following:

- 1) That the OEM(s) is having direct presence in India since **last three years** as on Bid due date and own service and support offices to ensure smooth after sales service support on site.
- 2) That I/we fully comply with the Office Memorandum no. F. No. NH-35014/20/2020-H, Government of India, Ministry of Road Transport & Highways dated 04.08.2020, regarding Department of Expenditure (DoE), Ministry of Finance, Govt. of India O.M. No. 6/18/2019-PPD dated 23.07.2020, vide which Rule 144 of the general Financial Rules 2017 entitled “Fundamental principles of public buying’ has been amended by inserting sub-rule 144 (xi) in the General Financial Rules (GFRs), 2017 which states that:

“Any bidder from a country which shares a land border with India will **be** eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority.” This condition shall also be applicable on sub-contracting of any works / goods / services, etc. The Bidder shall furnish the registration status of the sub-contractor/ supplier with Competent Authority (for the items / goods proposed to be procured from any country which shares a land border with India).
- 3) That the OEM(s) should not be rebranding & reselling products in India through importing/trading from a country that shares a Land Border with India.
- 4) That the source code of the Software and Firmware being supplied for all the relevant equipment being supplied against this bid does not reside in any Country that shared a Land Border with India
- 5) The OEM(s) 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.
- 6) The bidder’s proposed OEM should not have been blacklisted by any State / Central Government Department or Central /State PSUs as on bid submission date.
- 7) Each of the proposed OEM(s) should either have existing capability and infrastructure to provide 24x7x365 technical support in India.
- 8) Adequate supporting documents pertaining to the above points, along with a summary compliance table, should be submitted in the technical proposal by the Bidder.

(Signature of the Power of Attorney Holder)