RFP for Selection of Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at 09 Fee Plazas in the State of Rajasthan (Bundle-RJ 02) on Fixed Transaction Fee Model

RFP No. IHMCL/MLFF-RJ-02/2026
Date: 10/03/2026

Issued by
Indian Highways Management Company Limited
G-5&6, Sector-10, Dwarka,
New Delhi- 110075

RFP No. IHMCL/MLFF-RJ-02/2026

NOTICE INVITING RFP

RFP No. IHMCL/MLFF-RJ-02/2026   Dated: 10/03/2026

i.   Indian Highways Management Company Limited (Hereinafter referred to as "Authority" or "IHMCL") intends to engage the Acquirer Bank (also referred as "Bank" and "Bidder" in the RFP for Selection of Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at 09 Fee Plazas in the State of Rajasthan (Bundle-RJ 02) on Fixed Transaction Fee Model

ii. The Project shall be a complete turnkey solution with provision of requisite infrastructure and implementation & skilled resources at location for operation and maintenance. The period of engagement shall be Five (05) years post Go-Live. The bidding firm shall be required to implement the solution within 06 Months from the date of signing of the Contract Agreement.

iii. The prospective bidders are hereby invited to submit their bids comprising Technical and Financial bids through e-tendering mode only. The bid shall be valid for 120 days w.e.f. bid due date. The bids should be submitted online only on e-tender portal (https://etenders.gov.in) of Government of India and in the prescribed formats. No change in the formats and / or other mode of bid submission is permissible.

iv. Bidder should pay Tender Application Fee (non-refundable) of INR 25,000/- (Rupees Twenty-Five Thousand Only) inclusive of GST through online mode to IHMCL's Bank account as mentioned in the RFP. The bidder shall also upload the online payment receipt.

v.   The Indian Highways Management Company Limited now invites bids from eligible bidders for the following project:

State/Region	RFP Ref No.	Name of Work
Rajasthan	RFP No. IHMCL/MLFF-RJ-02/2026	RFP for Selection of Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at 09 Fee Plazas in the State of Rajasthan (Bundle-RJ 02) on Fixed Transaction Fee Model

vi. The complete BID document can be viewed / downloaded from official portal of IHMCL http://www.ihmcl.co.in or e-procurement portal https://etenders.gov.in from 10/03/2026 to 07/04/2026. Bidder must submit online its technical and financial bid at https://etenders.gov.in on or before 07/04/2026 up to 05:00 PM IST. Bids received online shall be opened on 08/04/2026 at 5:30 PM IST

vii. Biding through any other mode shall not be entertained. Please note that the Authority reserves the right to accept or reject the bids without assigning any reason whatsoever.

Officer In-charge:
COO - IHMCL,
Indian Highways Management Company Limited
G-5&6, Sector-10, Dwarka, New Delhi- 110075
Phone – 011- 25074100 Extn – 1804, e-mail: tenders@ihmcl.com

Disclaimer

The information contained in this RFP document (the "RFP document") or subsequently provided to 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 document and such other terms and conditions subject to which such information is provided.

This RFP document is not an agreement and is neither an offer nor an invitation by IHMCL to the prospective bidders or any other person. The purpose of this RFP document is to provide interested parties with information that may be useful to them in making their technical/ financial offers ("Bid(s)") pursuant to this RFP document. This RFP document includes statements, which reflect various assumptions and assessments arrived at by IHMCL in relation to the Project. Such assumptions, assessments, and statements do not purport to contain all the information that each Bidder may require. This RFP document may not be appropriate for all persons, and it is not possible for IHMCL, its employees, or advisors to consider the investment objectives, financial situation, and particular needs of each party who reads or uses this RFP document.

The assumptions, assessments, statements, and information contained in this RFP document 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 document and obtain independent advice from appropriate sources. Bidders acknowledge that they are responsible for conducting their own independent assessments, analyses, and due diligence to determine the suitability of their proposals and the requirements of the project.

The information provided in this RFP document to the Bidder(s) is on a wide range of matters, some of which may depend upon interpretation of the 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 the law. IHMCL accepts no responsibility for the accuracy or otherwise of any interpretation or opinion of the law expressed herein. All information, specifications, requirements, and terms contained in this RFP are subject to change, modification, or withdrawal at the discretion of IHMCL without prior notice.

IHMCL, its officers, employees and its advisors make no representation or warranty and shall have no liability to any person, including any applicant or bidder under any law, 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 document or otherwise, including the accuracy, adequacy, correctness, completeness, or reliability of the RFP document and any assessment, assumption, statement, or information contained therein or deemed to form part of this RFP document 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 the reliance of any bidder upon the statements contained in this RFP document. 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 document.

The issue of this RFP document does not imply that IHMCL is bound to select a bidder or to appoint the successful bidder for the Project and IHMCL reserves the right to reject all or any of the bidders or bids without assigning any reason whatsoever. Further, IHMCL reserves the right to cancel the bidding

process, or pursue alternative procurement methods at any stage without incurring any liability to bidders. Bidders agree to indemnify and hold harmless IHMCL, its officers, employees, and agents from any claims, damages, liabilities, or expenses arising out of or related to their participation in the bidding process, submission of proposals, or performance under the contract.

The bidder shall bear all costs associated with or relating to the preparation and submission of their bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations that may be required by IHMCL or any other costs incurred in connection with or relating to bid. All such costs and expenses will remain with the bidder and IHMCL shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a bidder in preparation or submission of the bid, regardless of the conduct or outcome of the bidding process.

DOCUMENT COMPOSITION

This RFP Documents comprise the following parts:

Part-I	Instructions to Bidders
Part-II	Formats for Bid Submission
Part-III	Draft Format of Contract Agreement
Section 1.1	Draft Contract Agreement
Section 1.2	General Conditions of Contract
Schedule A	Details of Site

Schedule B	• Detailed Scope of Work
	
	    o Design & Development of the MLFF System.
	
	    o Operation & Maintenance of MLFF System.
	
	• Service Level Agreements (SLA)

Schedule C	• Functional & Technical Specifications • Indicative Minimum Bill of Quantities (BoQ)

Table of Contents

DEFINITIONS

S.No	Term	Definition
1.	Acquirer Bank	The member bank certified by NPCI as an Acquirer Bank under NETC program.
2.	Applicable Law	Are the laws applicable in India
3.	Authority	Indian Highways Management Company Limited (IHMCL)/National Highway Authority of India (NHAI)
4.	Authorized Representative	Authorised Representative of bidder
5.	CCH	Central Clearing House (Currently managed by NPCI)
6.	Clean Transactions	Clean ETC Transaction shall refer to any toll transaction processed via FASTag and successfully settled through the NETC system of NPCI.
7.	Commencement Date or Effective Date	The date on which the Successful Bidder signs the Contract Agreement.
8.	Communication network	A wired or wireless facility used to send and receive data between the centralized component and the MLFF Component.
9.	Control Centre (CC)	A dedicated control center for monitoring and management of the entire projects' operations and to undertake manual validations to generate e-Notice
10.	Decision support	Reports, Graphs, Dashboard and Alerts, etc. which shall help in supporting decisions for Multi- Lane Free Flow project
11.	Detector	A device that detects a vehicle passing through a gantry system.
12.	Downtime	**"Downtime"** refers to the period during which MLFF equipment or system is either non-functional or not actively operating to execute its intended tasks effectively, thus failing to meet the operational characteristics outlined in the RFP document due to significant interruptions or failures.
13.	FASTag	Passive RFID tag issued by bank for a specific vehicle for toll collection
14.	Good Industry Practice	**"Good Industry Practice"** means the practices, methods, techniques, designs, standards, skills, diligence, efficiency, reliability and prudence which are generally and reasonably expected from a reasonably skilled

S.No	Term	Definition
		and experienced contractor engaged in the same type of undertaking as envisaged under this Agreement and which would be expected to result in the performance of its obligations by the Contractor in accordance with this Agreement, Applicable Laws and Applicable Permits in reliable, safe, economical and efficient manner.
15.	Issuer Bank	The bank who has issued the FASTag
16.	Lane	A lane is part of a roadway (carriageway) that is designated for use by a single file of vehicles, to control and guide drivers
17.	MLFF	A **Multi-Lane Free Flow (MLFF)** Tolling System is an advanced electronic toll collection solution designed to accurately identify, classify and charge toll/user fee from vehicles traveling across multiple highway lanes at permissible traffic speeds, generally without requiring vehicles to slow down, stop, or use dedicated toll lanes. MLFF tolling system uses modern technologies such as RFID/ANPR/DSRC/GNSS etc. to facilitate smooth, barrier-free tolling operations across multiple lanes, enabling seamless traffic flow and reducing congestion at toll plazas.
18.	MLFF Components	The components used to implement the MLFF Solution
19.	MoRTH	Ministry of Road Transport and Highways
20.	Network Control Software	Application software that generates, monitors, and manages the transaction for all intersections under the MLFF.
21.	NPCI	National Payments Corporation of India (NPCI), an umbrella organisation for operating retail payments and settlement systems in India, is an initiative of Reserve Bank of India (RBI) and Indian Banks' Association (IBA) under the provisions of the Payment and Settlement Systems Act, 2007
22.	Remittance	**"Remittance"** refers to the payment due for deposit into the NHAI account, after adjusting for the Fixed Per Transaction Cost and any penalties imposed for breaches of the Service Level Agreement (SLA).
23.	Sub-Contractor/ SI	The document uses "Sub-Contractor", "System Integrator" and ""SI" interchangeably. They refer to the Agency engaged by Acquirer Bank for implementation and maintenance of MLFF solution.

S.No	Term	Definition
24.	Successful Bidder	The "bidder", "Bank" and "Acquirer Bank" interchangeably, after the complete evaluation process, has been issued the letter of award by IHMCL.
25.	Successful Pairing	Transactions that are successfully paired for calculation of applicable user fee.
26.	Toll Monitoring and Control Centre (TMCC)	"**TMCC**" refers to the Toll Monitoring and Control Centre established at IHMCL/NHAI headquarters in New Delhi for monitoring and maintaining the MLFF/ETC equipment health status, as well as the traffic and revenue data of all National Highway fee plazas.
27.	Tollable traffic	Tollable traffic refers to all M & N category vehicles as defined under the Central Motor Vehicle Rules, 1989.
28.	Turnkey	End to End from the initial design and planning to the final implementation and commissioning.
29.	Un-settled Transactions	Failed transactions owing to blacklisting / low- balance / in-sufficient balance/ non-functional tag/ close tag/ unregistered tag/ hot listed tag and any transaction posted beyond defined TAT is called as Unsettled Transactions as per Procedural Guidelines under the NETC programme (amended time to time)
30.	Uptime	**Uptime**" refers to the duration during which an MLFF equipment or system is actively functioning, operating, and ready to execute its intended tasks effectively, meeting the operational characteristics as defined in the RFP document, without encountering significant interruptions or failures.
31.	Vehicle Classification	Shall mean vehicle classification under different vehicle types/categories/classes as per NH Fee (Determination of rates and Collection) Rules 2008 (and its amendment from time to time) and NHAI/MoRTH/IHMCL/NETC guidelines.
32.	Violation	"**Violation**" refers to the passage of any vehicle through the MLFF system without FASTag or with Invalid FASTag, non-functional FASTag such as cases involving blacklisted FASTag, hotlisted FASTag etc. in accordance with the Programme Guidelines (PG) issued by IHMCL/NPCI, as amended from time to time.
33.	Working Days	Working days refer to the days of the week when businesses and organizations operate, and employees are expected to work. Typically,

S.No	Term	Definition
		these days are Monday through Friday, excluding weekends (Saturday and Sunday) and public holidays as per GOI.
34.	Plaza-Specific Discount Pass	The discount passes which are activated on a FASTag and are valid only at a designated User Fee Plaza or a specific pair of plazas (in the case of access-controlled highways). These include Discount Pass issued under sub-rule 2, sub-rule 3 and sub-rule 3(A) of Rule 9 of the National Highways Fee (Determination of Rates and Collection) Rules, 2008, as amended from time to time. These passes are issued at the respective toll plaza by the Bank upon payment of the applicable charges by the FASTag user.
35.	Global Pass	i. The pass which are activated on FASTag and are valid across all User Fee Plazas on the National Highway network. These include Exemption Pass issued under Rule 11 of the National Highways Fee (Determination of Rates and Collection) Rules, 2008, as amended from time to time. ii. This also include the (Annual) Pass provisioned under sub-rule 3(B) of Rule 9 of the National Highways Fee (Determination of Rates and Collection) Rules, 2008, as amended from time to time, applicable for non-commercial vehicles. iii. Global Pass are issued centrally by IHMCL, NHAI or Agencies authorized by NHAI/IHMCL, based on eligibility and applicable guidelines.
36.	Toll fee	"Toll fee" mentioned in the RFP shall mean "User Fee" as defined in the NH Fee Rule National Highways Fee (Determination of Rates and Collection) Rules, 2008, as amended from time to time

ABBREVIATIONS

#	Abbreviations	Full Form
1.	ANPR	Automatic Number Plate Recognition
2.	BoQ	Bill of Quantities
3.	CCH	Central Clearing House
4.	CMOS	Complementary Metal Oxide Semiconductor
5.	DSRC	Dedicated Short Range Communication
6.	FAT	Factory Acceptance Test
7.	FS	Functional Specification
8.	GoI	Govt. of India
9.	GNSS	Global Navigation Satellite System
10.	IHMCL	Indian Highways Management Company Limited
11.	ITMS	Intelligent Traffic Management System
12.	ITS	Intelligent Transportation System
13.	MLFF	Multi Lane Free Flow
14.	MoRTH	Ministry of Road Transport and Highways
15.	NHAI	National Highways Authority of India
16.	NPCI	National Payment Corporation of India
17.	PG	Procedural Guidelines
18.	RBI	Reserve Bank of India
19.	RFID	Radio Frequency Identification
20.	SAT	Site Acceptance Test
21.	SI	System Integrator
22.	STQC	Standardization Testing and Quality Certification

#	Abbreviations	Full Form
23.	TS	Technical Specifications
24.	UAT	User Acceptance Test
25.	VRN	Vehicle Registration Number
26.	VIN	Vehicle Identification Number (Chassis Number of the Vehicle)
27.	LHS & RHS	Left Hand Side(LHS) & Right Hand Side(RHS) road

PART - I
INTRODUCTION

1. INTRODUCTION

1.1. BACKGROUND

a) Indian Highways Management Company Limited (Hereinafter referred to as "Authority" or "IHMCL") intends to engage Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at Fee Plazas provided in Schedule-A in the State of Rajasthan on Fixed Transaction Fee Model.

b) The Project shall include implementation of a comprehensive Integrated MLFF based tolling system and its Operation and Maintenance at Fee Plazas provided in Schedule-A in the State of Rajasthan. Brief particulars of the Project are as follows:

State/Region	RFP Ref No.	Name of Assignment	Type of Tolling	EMD	Implementation Period	Period
Rajasthan	RFP No. IHMCL/MLFF-RJ-02/2026	RFP for Selection of Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at 09 Fee Plazas in the State of Rajasthan (Bundle-RJ 02) on Fixed Transaction Fee Model	Point Based Tolling (Point-based)	INR 30 Lakh	06 Months	06 Months (Design, Development and Implementation period) and 60 Months as O&M period (After successful completion/commissioning of the MLFF based tolling System)

c) The Successful Bidder shall be responsible for Implementation of Multi Lane Free Flow (MLFF) based Tolling System at Fee Plazas provided in Schedule-A in the State of Rajasthan in accordance with the provisions of a contract (the "Contract") to be entered into between the Bank and the Authority in the form provided by the Authority as part of the Bidding Documents pursuant hereto.

d) The Agreement sets forth the detailed terms and conditions for award of the project to the Bank, including the scope of the Bank's services and obligations enclosed as part of this document.

e) The Authority shall receive bids pursuant to this RFP in accordance with the terms set forth in this RFP, and all bids shall be prepared and submitted in accordance with such terms on or before the bid due date specified in Clause-1.2 for submission of bids (the "BID Due Date").

1.2. KEY DATES

#	EVENT(S)	DATE (Unless otherwise notified separately)
1.	Invitation of RFP (NIT)	10/03/2026
2.	Last date of receiving queries	19/03/2026 Upto 05:00 PM IST
3.	Pre-Bid meeting at specified venue	20/03/2026 at 11:00 AM IST
4.	Last date/ time for online submission of bids (i.e., **Bid due date**)	07/04/2026 Upto 05:00 PM IST
4.	Opening of *Technical bids*	08/04/2026 at 05:30 PM IST
5.	Opening of Financial bids	To be intimated to shortlisted/ technically qualified bidders separately.
6.	Validity of Bids	120 Days

2. GENERAL TERMS OF BIDDING

2.1. TENDER FEE

The bidder should pay Tender Application Fee (non-refundable) INR 25,000/- (Rupees Twenty-Five Thousand only) inclusive of GST through online mode. The Bidder shall also upload the payment receipt in e-tender portal as proof of submission.

Details of designated bank account are as under:

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

2.2. BID SECURITY

a) The bidder shall furnish as part of its Bid, a Bid Security amounting to Rs 30,00,000/- (Rs Thirty Lakhs Only). The Bid Security shall be in the form of Bank Guarantee (in format mentioned in this RFP) in favor of Indian Highways Management Company Limited, New Delhi from any of the following banks: -

   i. State Bank of India or its subsidiaries,

   ii. Any Indian Nationalised Bank

   iii. Any Scheduled Commercial Bank approved by RBI having a net worth of not less than Rs. 500 Cr as per the latest Annual Report 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 considered.

b) Any bid not accompanied by a Bid Security and Tender Application Fee in the prescribed manner shall be summarily rejected.

c) The Bid Security of the Successful bidder shall be retained till it has provided Performance Security under the Contract Agreement.

d) The Bid Security of the unsuccessful bidders will be returned after signing of the Contract Agreement with Successful bidder.

e) The EMD can also be submitted in the form of NEFT/ RTGS in the IHMCL bank account details provided in RFP Clause 2.1.

2.3. INVOCATION OF BID SECURITY

a) The Bid Security shall be forfeited by IHMCL as damages payable to IHMCL for, *inter-alia*, time, cost and effort of IHMCL without prejudice to any other right or remedy that may be available to IHMCL under the provisions in the RFP and/or under the Contract Agreement, or otherwise, under the following circumstances:

    i. If a Bidder engages in a corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice; or

    ii. If the Bid is withdrawn during the intervening period between the bid due date and the expiration of the Bid Validity; or

    iii. If the bidder tries to influence the evaluation process; or

    iv. If a Bidder having been notified Successful Bidder by IHMCL with the issuance of Letter of Award (LOA) during the bid validity period:

        a) Fails or refuses to furnish the Performance Security, in accordance with the conditions of RFP; or

        b) Fails or refuses to execute/sign the Contract within the stipulated time frame.

b) No Bidder shall submit more than one Bid for the Project. **<u>JV/Consortium are not allowed to bid.</u>**

c) Any condition or qualification or any other stipulation contained in the Bid shall render the Bid liable to rejection as a non-responsive Bid.

d) The Bidding documents including this RFP and all attached documents, provided by the Authority are and shall remain or become the property of the Authority and are transmitted to the Bidders solely for the purpose of preparation and submission of a Bid in accordance herewith. Bidders are to treat all information as strictly confidential and shall not use it for any purpose other than for preparation and submission of their Bid. The provisions of this Clause shall also apply mutatis mutandis to Bids and all other documents submitted by the Bidders, and the Authority will not return to the Bidders any Bid, document or any information provided along therewith.

e) Notwithstanding anything to the contrary contained herein, if the Bid Due Date falls within three months of the closing of the latest financial year of a Bidder, it may ignore such financial year for the purposes of its Bid and furnish all its information and certification with reference to the 3 (three) years, preceding its latest financial year. For the avoidance of doubt, the financial year shall, for the purposes of this Bid hereunder, mean the accounting year followed by the Bidder during its normal business.

3. ELIGIBILITY AND PRE-QUALIFICATION CRITERIA

3.1. PRE-QUALIFICATION CRITERIA

The Bidders are required to fulfil the following Pre-Qualification Criteria:

SI no.	Eligibility Conditions/Conditions	Supporting Documents to be provided
PQ 1 –Entity	The bidder must be either: i. A Scheduled Commercial Bank in the list of Agency Banks as notified by RBI as on Bid due date. OR, ii. A Payments Bank as notified by RBI as on Bid due date. OR, iii. A Scheduled Commercial Bank which is already doing Acquiring Services under NETC FASTag Programme as on Bid due date.	**For Bidder** **For (i) and (ii):** a) Power of Attorney as per Form T-3 of the RFP. b) Valid document supporting Agency Banks or Payments Bank as issued by RBI. c) Copy of valid Acquiring services certification by NPCI. OR, Undertaking on Acquirer Bank certification signed by Authorized Signatory of the Bidder on its letterhead as per Format provided at Form T-4 of the RFP. **For (iii):** a) Power of Attorney as per Form T-3 of the RFP. b) Copy of valid Acquiring services certification by NPCI.
PQ- 2 – Eligibility of Sub-Contractor (SI)	The bidder shall get the MLFF system work done through a reputed Sub-Contractor (hereinafter also referred to as System Integrator, or SI), subject to the following conditions: i. The Sub-Contractor should be incorporated in India under the Companies Act, 1956/2013 or the Limited Liability Partnerships Act, 2008 or any equivalent foreign act. ii. If the Sub-Contractor/SI is any entity from a country which	**For Bidder & Sub-Contractor** a) MOU Agreement signed between Bidder and Sub-Contractor (SI) specifying roles and responsibilities of both parties to be included along with technical bid as per format provided in Form T-10. **For Sub-Contractor/SI** a) Copy of Certificate of Incorporation / Registration under Companies Act, 1956/2013 or any

SI no.	Eligibility Conditions/Conditions	Supporting Documents to be provided
	shares a land border with India, it 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 entity is registered with the Competent Authority. iii. The Bidder shall ensure that the Sub-Contractor/SI engaged by them is under an exclusive MOU with the acquirer bank and is not associated as Sub-Contractor/SI with any other Bidder participating in the same tender. For avoidance of doubt, if two or more bids is received having same Sub-Contractor/SI, all such bids shall be treated as non-responsive. iv. In case the Sub-Contractor is a firm incorporated abroad, it may associate with firm(s) incorporated in India for assistance in implementation, operations and other allied works required for MLFF Tolling. Note: The Sub-Contractor shall only help the Bidder in successful discharge of its obligations under the Contract. For avoidance of doubt, the Bidder shall be sole responsible for all the deliverables, SLAs, obligations and performance under the Contract.	equivalent foreign act, or as applicable. b) Power of Attorney/Letter of Authorization as per Form T-3 of the RFP.
PQ-3 - Undertaking	The **bidder and Sub-Contractor** (SI) should not be blacklisted or	**For Bidder and MLFF Sub-Contractor /SI**

SI no.	Eligibility Conditions/Conditions	Supporting Documents to be provided
for non-blacklisting	debarred by any government department/ agency/PSU for material non-performance or contractual non-compliance in India or abroad as on bid due date.	a) Undertaking signed by Authorized Signatory of the Bidder on its letterhead. b) Undertaking signed by Authorized Signatory of the Sub-contractor on its letterhead.

Note: For any incomplete document provided by the Bidder, IHMCL reserves the right to disqualify the bidder as non-responsive, without asking for any clarification.

3.1.1. ELIGIBLE ORIGINAL EQUIPMENT MANUFACTURER (OEM) CRITERIA

a) 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.

b) 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).

c) OEM should not be rebranding & reselling products in India through importing/ trading from a country that shares a Land Border with India.

d) 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.

e) OEM for each product 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.

f) 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.

g) Bidder's proposed OEM should not have been blacklisted by any State / Central Government Department or Central /State PSUs in India or abroad as on bid submission date.

h) Each of the proposed OEM should have capability and infrastructure to provide 24x7x365 technical support in India.

i) OEM of all equipments should be compliant as per provisions given in Schedule-C.

j) All CCTV Cameras OEMs proposed under this project must fully comply with all applicable regulatory guidelines, standards, and certifications as prescribed by the Government of India. Documentary evidence of such compliance must be submitted prior to commencement of System Acceptance Testing (SAT). Failure to comply with this requirement shall constitute a material breach of the Contract, entitling the Purchaser to take appropriate remedial action, including but not limited to replacement of non-compliant cameras, termination of the Contract and forfeiture of performance security.

3.2. CONFLICT OF INTEREST

a) A Bidder shall not have a conflict of interest that may affect the bidding process (the "Conflict of Interest"). Any Bidder found to have a Conflict of Interest shall be disqualified. In the event of disqualification, IHMCL shall invoke the bid securing declaration as mutually agreed genuine pre-estimated loss and damage likely to be suffered and/ or incurred by the IHMCL and not by way of penalty for, inter alia, the time, cost, and effort of IHMCL including consideration of such Bidder's Bids, without prejudice to any other right or remedy that may be available to IHMCL hereunder or otherwise.

b) IHMCL requires that the successful bidder provides professional, objective, and impartial advice and always holds IHMCL's interest's paramount, avoiding conflicts with other assignments or its own interests. The successful bidder shall not accept or engage in any assignment that would conflict with its prior or current obligations to other clients, or that may place it in a position of not being able to carry out the assignment in the best interests of IHMCL.

c) A Bidder shall be deemed to have a Conflict of Interest affecting the bidding process, if:

1. A constituent [1] of Bidder is also a constituent of another Bidder; or

2. Such Bidder, its member or its associate receives or has received any direct or indirect subsidy or grant from any other Bidder, its member, or its Associate; or

3. Such Bidder has the same legal representative for purposes of this Bid as any other Bidder; or

4. Such Bidder, its member or its associates has a relationship with another Bidder, its member or its associates, directly or through common third parties, that puts them in a position to have access to each other's information about the bids, or ifthey share or access each other's information regarding the bids or to influence the bid of either or

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[1] For this clause the word *"constituent"* shall include Promoter, Director, Shareholder, Partner, Agent, representative etc.

each of the other Bidder; or

5. There is a conflict among this, and other assignments of the Bidder (including its member, associates, personnel, agents and subordinates) and any subsidiaries or entities controlled by such Bidder or having common controlling shareholders or Key Managerial Personnel; or

6. While providing services to IHMCL for this assignment, the Bidder shall not take up any assignment that by its nature will result in conflict with the present assignment; or

7. A company/firm that has been engaged by the Authority to provide goods and/or works, and/or services for a project, and its associates, will be disqualified from providing consulting services for the same project and/or associated services. or

d) Bidders should be deemed to be in a conflict-of-interest situation if it can be reasonably concluded that their position in a business or their personal interest could improperly influence their judgment in the exercise of their duties. The process for selection of Bidders should avoid both actual and perceived conflict of interest; or

e) The normal way to identify conflicts of interest is through self-declaration by the Bidder. Where a conflict exists, which has not been declared, competing companies are likely to bring this to the notice of IHMCL. All conflicts must be declared as and when the Bidder becomes aware of them.

4. DISCLAIMER AND CLARIFICATION REGARDING RFP DOCUMENT

4.1. SITE VISIT

a) Before the pre-bid meeting date, bidders are strongly advised and encouraged to conduct site visits, including visits to the toll plaza/location(s), to assess the existing situation and gather information relevant to their bid proposal. The Authority strongly advises and encourages bidders to address any questions they may have about the site conditions through a pre-bid inquiry. Failing which, it shall be deemed that the bidder has fully satisfied itself about the site conditions as outlined in the Contract Agreement.

b) The bidder shall not hold the Authority responsible or liable for any inconsistencies, inaccuracies, mismatches, or errors that may arise between the Contract Agreement and the actual site conditions.

c) Bidders must adhere to all safety and security protocols during site visits. The Authority reserves the right to limit or restrict access to certain areas of the site, or to impose conditions on site visits as deemed necessary for safety, security, or operational reasons.

d) The Authority makes no representations or warranties regarding the accuracy, completeness, or suitability of the information gathered by bidders during site visits, and bidders undertake their own risk assessment and due diligence based on such information.

e) Bidders agree that their proposals are based on their independent analysis and expertise, and they shall not hold the Authority liable for any discrepancies, omissions, or inaccuracies in the information gathered by the bidders during site visits.

f) Bidders agree to indemnify and hold harmless the Authority, its officers, employees, and agents against any claims, damages, liabilities, or expenses that may arise because of or in connection with their site visit activities.

4.2. PRE-BID MEETING

a) A prospective Bidder requiring any clarification regarding the RFP may notify IHMCL in writing or e-mail at IHMCL's address indicated in the invitation to Bid. IHMCL will respond to any request for clarification which is received before the pre-bid meeting.

b) The Bidder or his authorized representative is invited to attend a pre-bid meeting which will take Place at IHMCL, Asia Bhawan, Sector-9, Dwarka, New Delhi-110077, as mentioned in the RFP as "KEY DATES" in Part-I Instructions to Bidders of the RFP.

c) The Bidder who is interested in attaining the pre-bid meeting should confirm IHMCL about the participation (maximum three authorised persons) one day prior to the schedule. The confirmation can be sent to tenders@ihmcl.com.

d) The purpose of the meeting will be to clarify issues and to answer questions on any matter pertaining to this RFP document.

e) All Bidders are requested to go through the RFP document carefully and submit any queries/ clarifications addressed to the COO, IHMCL in the format prescribed in Part III. If

no query is raised, then it shall be assumed that such a Bidder has fully satisfied itself regarding the sufficiency of information contained in the RFP. The Bidder is requested to submit any questions / queries in writing or by email in editable format to tenders@ihmcl.com to reach at IHMCL well before the scheduled meeting.

f) Clarifications to the queries will be hosted on IHMCL's website/ e-tender portal only.

g) Any modification in the RFP document which may become necessary because of the deliberations in the pre-Bid meeting shall be made by IHMCL separately through issue of an Addendum/ Amendment and the same will be hosted on IHMCL's website/ e-tender portal.

5. ACCESSING BID DOCUMENTS, PREPARATION AND SUBMISSION OF BID

Website for accessing RFP is https://etenders.gov.in. The Bidders shall submit the proposal strictly as per criteria laid down in the RFP. The tender process timelines are mentioned in the RFP as "Key Dates" in Part-I Instructions to Bidders of the RFP. The same can also be viewed / downloaded from IHMCL e-tender portal.

5.1. PREPARATION & SUBMISSION OF BIDS

a) Detailed RFP may be downloaded from the e-tender portal and bid shall be submitted online following the instruction appearing on the screen.

b) The scanned copies of the following documents shall be submitted as part of a bid to IHMCL before the prescribed date & time for submission of Bids.

c) Tender Application Fee in the manner prescribed.

d) Original Power of Attorney in Favor of Authorized Signatory in the Format prescribed in this document.

e) Signed copy of MOU between Acquirer Bank and Sub-contractor.

f) The Technical and Financial bid should be submitted online separately only in the prescribed format given on the e-tender portal. No other mode of submission is allowed.

g) No physical document shall be accepted unless and until the same is specifically stated in the RFP or it is a legal requirement.

h) All pages of the RFP and all the subsequent corrigendum shall be signed by authorised signatory and stamped confirming that bidder is complying to all the functional and technical terms and conditions of the RFP (and subsequent corrigendum).

5.2. BID VALIDITY

The bid should remain **valid for a period of 120 calendar days from the bid due date**. IHMCL will make its best efforts to complete the evaluation process and work award within the bid validity period. Under exceptional circumstances, prior to the expiration of the bid validity, IHMCL may request bidder to extend the bid validity for a specified additional

period. Such request by IHMCL and replies / responses from bidders shall be in writing. The bidder(s) not agreeing to such an extension will be allowed to withdraw their bidswithout invocation of their bid securing declaration.

5.3. BID COMPOSITION

The Bid shall comprise the following:

(A) PART 1: Technical Bid

To be uploaded on E-tender portal only. Physical submission of bids is not allowed.

a) Tender Fee (proof of deposition in given account number)

b) Bid Security (Scan copy of Bank Guarantee).

c) Scanned copy of Power of Attorney of bidder and Sub-Contractor in prescribed format.

d) Technical Bid comprising of various formats prescribed in RFP (T1 to T14 as applicable).

e) Stipulated documentary evidence attested by the authorized signatory in support of their claim for fulfilling the prescribed eligibility criteria and an undertaking on the bidder's letter heads to the fairness of these documents in support of their claim while submitting the Bids.

f) Undertaking that the bidder and sub-contractor should not have been blacklisted or debarred by any government department/ agency/PSU for material non-performance or contractual non-compliance in India or abroad as on bid due date.

g) Self-declaration concerning any 'Conflict of Interest' prescribed under Para -3.2 of eligibility criteria.

h) All credentials of sub-contractor (SI) as per PQ criteria **countersigned by bidder** shall be part of technical bid.

i) Other documents:

  a. Valid Certificate from NPCI for acquiring services or Undertaking as per format T4.

  b. MoU between Acquirer Bank and Sub-Contractor.

  c. Copy of Certificate of Incorporation of Company or LLP.

  d. Signed copy of Integrity Pact in the prescribed format; and

  Any other document providing additional information in respect of technical / financial strength as well as technical experience etc.

j) Technical Proposal

  a. The Bidder shall describe the proposed works in sufficient detail in his Technical Proposal as per format given in T-6 to enable the IHMCL to evaluate the technical adequacy of the proposed system. Authority may ask clarification, and if not found satisfactory response, the technical bid shall be declared non-responsive.

  b. Detailed Project Plan

  c. Risk and mitigation Plan

(B) PART 2: Financial Bid

(In the prescribed format on E-Tender portal)

a) Financial bid shall be submitted online on e-tender portal on the prescribed format which may be downloaded well before the bid due date from e-tender portal.

b) The bid must encompass all costs/charges/expenditure payable in complete adherence/conformity/compliance to the Scope of Work, including all necessary works, ancillary or incidental in nature, regardless of whether they are explicitly stated or not, as well as other terms indicated in the RFP document. No additional/further payments shall be made in this regard.

c) The bid should include all statutory taxes/ levies / surcharge on tax etc., as applicable. Prices quoted by the bidder shall be inclusive of Taxes/GST, as applicable.

d) Bidder should note that Income tax payable by the Bidder is not reimbursable by IHMCL.

5.4. COST OF BIDDING

The Bidder shall be solely responsible for all the costs associated with the preparation and submission of their Bids including subsequent negotiation, visits to IHMCL, project site etc. IHMCL shall not be responsible in any way liable for such costs, regardless of the conduct or outcome of the bidding process.

5.5. LANGUAGE OF THE BIDS

The Bid and all communications in relation to or concerning the RFP shall be in **English language**. No supporting document or printed literature shall be submitted with the Bid unless specifically asked for and in case any of the documents are in another language, it must be accompanied by an accurate translation of the relevant passages in English, in which case, for all purposes of interpretations of the Bid, the original documents attached with the bid or the information incorporated in the bid shall be final and binding.

5.6. MODIFICATION /SUBSTITUTION/ WITHDRAWAL OF BIDS

1. The Bidder may modify, substitute, or withdraw its e-bid after submission prior to the Bid Due Date. No Bid shall be modified, substituted, or withdrawn by the Bidder on or after the Bid Due Date.

2. In case, if the bid is withdrawn by bidder after due date, IHMCL shall forfeit the EMD submitted by bidder.

5.7. OPENING & EVALUATION OF BIDS

1. Opening and evaluation of bids will be done through online process.

2. The bids will be opened online on the due date and time prescribed in the RFP document in the presence of the bidders who choose to attend. The Authority will subsequently examine and evaluate the bids in accordance with the provisions set out.

3. The Authority shall determine whether each Bid is responsive to the requirements of this RFP.

4. 'Financial Bid' of non-responsive bidders shall not be opened.

5. To assist in the examination, evaluation, and comparison of Bids, IHMCL may, at its discretion, ask any Bidder for clarification of its Bid. The request for clarification and the response shall be in writing or by e-mail, but no change in the price or substance of the Bid shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by IHMCL in the evaluation of the Bids.

6. Except in case any clarification is asked by IHMCL, no Bidder shall contact IHMCL on any matter relating to its Bid from the time of the Bid opening to the time the Contract is awarded. If any Bidder wishes to bring additional information to the notice of IHMCL, it should do so in writing at the address prescribed in the Notice Inviting Tender

7. All information and discussions related to the bid evaluation process shall be treated as confidential. Bidders and any other involved parties must maintain strict confidentiality and refrain from disclosing any details regarding the evaluation process or deliberations.

8. The Evaluation Committee's deliberations and discussions on bid proposals, shall be considered confidential and privileged information. The Committee shall refrain from discussing or sharing details of their deliberations with bidders or any unauthorized individuals.

6. BID EVALUATION CRITERIA AND SELECTION PROCEDURE

6.1. EVALUATION PROCESS

1. The bids shall be opened online by the Evaluation Committee on the date and time prescribed. Prior to evaluation of the bids, IHMCL shall determine as to whether each bid is responsive to the requirements of this RFP document. A bid will be declared non-responsive in case:

   a) If a bidder does not fulfil pre-qualification criteria mentioned in the RFP including the pre-qualification criteria of sub-contractor (SI).

   b) If a bidder submits more than one bid against this RFP.

   c) Bid is submitted without Tender Fee.

   d) Bid is submitted without Bid Security.

   e) If the Authorized Signatory holding Power of Attorney (POA)/Letter of Authorization or the personexecuting/delegating such POA/ Letter of Authorization

and Digital Signatory for uploading the bid on e-tender portal are not the same.

f) If a bidder submits a conditional bid or makes changes in the terms and conditions   given in this RFP document.

g) Failure to comply with all the requirements of RFP document by a bidder.

h) If the bid is not submitted in the formats prescribed in the RFP document.

i) If any requisite document/certificate is not in the prescribed format the same shall notbe considered while evaluating the bids and the same may lead to bid being declared as non-responsive.

j) A bid valid for a period shorter than prescribed in the RFP document.

k) No commercial information shall be part of the technical proposal.

l) If two or more bids is received having same Sub-Contractor, all such bids shall be treated as non-responsive.

2. A two-stage procedure shall be adopted for evaluation of the bids. The stages of bid evaluation are mentioned as below:

(i)   First Stage: Pre-Qualification/ Eligibility Stage:

a) The Evaluation Committee shall carry out initial screening of technical bids by examining the statement of qualification, furnished by the Bidder in support of their fulfilment of eligibility against the criteria prescribed in this RFP.

b) The Evaluation Committee may, at its discretion, call for additional information from the bidder(s) through email/fax/telephone/meeting or any other mode of communication. Such information must be supplied within the set-out time frame as provided by the Evaluation Committee; otherwise, Evaluation Committee shall make its own reasonable assumptions at the total risk and cost of the bidders and the proposal is liable to be rejected. Seeking clarification cannot be treated as acceptance of the proposal. For verification of information submitted by the bidders, the committee may visit the bidder's offices at its own cost. The bidders shall provide all the necessary documents, samples, and reference information as desired by the Committee. The bidders shall also assist the committee in obtaining relevant information from their references.

The bidder shall have to submit all the required documents as per the various formats provided in the Appendices. These documents will be scrutinized in this phase of evaluation. Those bidders who do not fulfil the terms and conditions of Eligibility Criteria as specified in this tender will not be eligible for further evaluation i.e. Second Stage: Financial Bid Evaluation.

c) The shortfall information/ documents shall be sought only in case of historical documents which pre-existed at the time of the bid opening, and which have not undergone change since then.

(ii)   Second Stage: Financial Bid Evaluation

a) The Financial Bids of technically qualified bidders as declared in First Stage will be opened on the prescribed date on e-tender portal.

b) The Financial Bid Evaluation will be based on the lowest Fixed Per Transaction Cost demanded by the bidder in the Financial Bid Form F-1.

c) If two bidders have the same bid financial transaction percentage value (upto 2 values of decimal places as per Arithmetic Convention defined in clause-1.2.4 of General Conditions of Contract), preference may be given to the bidder who is providing Acquiring Services at more number of NH fee plazas as on bid due date.

d) At any point of tender process, IHMCL reserves the right to cancel the bid, without providing any reasons thereof.

6.2.   **DELETED.**

6.3.   **SELECTION AND AWARD CRITERIA**

a) IHMCL will award the Contract to the bidder whose bid has been determined to be responsive as per criteria defined above and who has quoted the lowest Fixed Per Transaction Cost in the Financial Bid form F-1.

b) The Successful bidder shall be intimated by IHMCL through a Letter of Award (LoA). Upon issue of the LoA the successful bidder shall be required to furnish the Letter of Acceptance and Performance Security and other guarantees as prescribed in the RFP document. IHMCL shall have the right to get bank guarantees verified from the respective issuing bank. Upon receipt of verification, the successful bidder shall be invited to sign the contract with IHMCL. The format of Contract Agreement is prescribed in the RFP Document.

c) 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 of such bids.

6.4.   **WARRANTY AND GUARANTEE**

a) Successful bidder shall be fully responsible for the warranty of all items throughout Contract duration which shall be deployed by them. Successful bidder shall ensure to repair/replace all faults of equipment/Sub-equipment/consumables to meet the SLA parameters.

b) Bidder is solely responsible for functioning and maintenance of MLFF System equipment/components provided by bidder should have five years of warranty.

6.5. PERFORMANCE SECURITY

a) The Successful bidder shall furnish a Performance Security cumulative total of Rs 32,50,00,000/- (Rs Thirty-Two Crore Fifty Lakh only) for all tendered fee plazas for a period of 6 years from the Date of LOA within 15 days of issuance of LOA in following instruments:

(i) a crossed account payee demand draft/pay order amounting to Rs. 16,25,00,000/- (Rupees Sixteen Crore Twenty-Five Lakh Only) (an amount equal to 50% of the total PBG value) and

(ii) a bank guarantee amounting to Rs. 16,25,00,000/- (Rupees Sixteen Crore Twenty-Five Lakh Only) (an amount equal to 50% of the total PBG value) as per the format prescribed by IHMCL for a period of 6 years from the Date of LOA

b) The Bidder shall have the liberty to submit a crossed account payee demand draft/pay order issued by a Scheduled Bank in India in lieu of the bank guarantee.

c) The Bidder shall be required to furnish additional Performance Security equivalent to 50% of the amount specified under Clause 6.5(a) for every 50% increase in toll revenue, as compared to the revenue collected during the first full financial year of operations.

> **Illustration:**
> Assume the Performance Security specified under Clause 6.5(a) is ₹1 crore for all the plazas.
> a. The toll revenue collected during the **first full financial year of operations (say, FY 2025–26)** is ₹10 crore.
>
> b. In the **third financial year (FY 2027–28)**, the toll revenue increases to ₹15 crore, representing a **50% increase** over the base year (₹10 crore). Accordingly, the Bidder shall be required to furnish **additional Performance Security of ₹0.5 crore** (i.e., 50% of ₹1 crore).
>
> c. If the toll revenue further increases to ₹20 crore in **FY 2030-31** (i.e., a 100% increase over the base year), the total additional Performance Security required would be ₹1 crore.
>
> The additional Performance Security shall be calculated in increments of 50% increase in toll revenue over the first full financial year of operations.

d) In case the contract is extended, the bidder shall extend the validity of PBG appropriately such that it remains valid until one year beyond completion of the contract.

e) The PBG from the following scheduled banks shall only be accepted:

i. State Bank of India or its subsidiaries.

ii. Any Indian Nationalized Bank.

iii. Any Scheduled Commercial Bank approved by RBI having a net worth of not less than 500 Crores as per the latest Annual Report of the Bank. In the case of a Foreign Bank (issued by the branch of India) the net worth in respect of the Indian operations shall only be considered.

6.6. MISCELLANEOUS

1. 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.

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 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.

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.

e) **Arbitration**

   a. Any Dispute which is not resolved amicably by conciliation, shall be finally settled by arbitration as set forth below:

   b. The Dispute shall be referred to Society For Affordable Redressal of Disputes (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 Arbitration & Conciliation Act, 1996, as amended from time to time.

   c. The seat of Arbitration shall be New Delhi and the language for all documents and communications between the parties shall be English.

   d. The expenses incurred by each party in connection with the preparation, presentation, etc., of arbitral proceedings shall be borne by each party itself.

   e. The arbitrators shall make a reasoned award (the "Award").

   f. The Service Provider and IHMCL agree that an Award may be enforced against the Service Provider and/or IHMCL and their respective assets wherever situated.

   g. 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.

2. The bidding process shall be governed by, and construed in accordance with, the laws of India and courts at New Delhi shall have exclusive jurisdiction over all disputes arising under, pursuant to and/or in connection with the bidding process.

3. IHMCL, in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, too.

   (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 there to.

   (ii)   Consult with any bidder 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 all submissions or other information and/or evidence submitted by or on behalf of any bidder.

4. IHMCL is not bound to reply/ respond to any representation/ letter or request for Change in Scope of work, eligibility criteria or any relaxation in respect of the tender conditions.

5. 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 Law, any and all rights and/ or claims it may have in this respect, whether actual or contingent, whether present or in future.

6. Verification and Dis-qualification: IHMCL reserves the right to verify all statements, information, and documents submitted by the bidder in response to this RFP, and the bidders shall, when so required by IHMCL, make available all such information, evidence, and documents as may be necessary for such verification. Any such verification or lacks such verification, by IHMCL shall not relieve the bidders of its obligations or liabilities hereunder, nor will it affect any rights of IHMCL thereunder.

7. IHMCL reserves the right to reject any Bid and/ or declare it non-responsive, if:

   i. At any time, a material misrepresentation is made or uncovered, or

   ii. The bidder does not provide, within the time specified by IHMCL, the supplementalinformation sought by IHMCL for evaluation of the Bid.

8. Such misrepresentation/ improper response shall lead to the disqualification of the bidder. If such disqualification/ rejection occurs after the bids have been opened and the lowest bidder gets disqualified/ rejected, then IHMCL reserves the right to take any such measure as may be deemed fit in the sole discretion of IHMCL, including annulment of the Bidding

process.

6.7. AMENDMENT TO RFP

a) Any modification in the RFP document shall be made by IHMCL separately through issue of an Addendum/ Amendment.

b) At any time prior to the bid due date, IHMCL may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the conditions specified in the RFP document by an amendment. Any amendment/ addendum thus issued shall be part of the RFP document and shall be communicated by hosting the same on IHMCL website only and should be taken into consideration by the prospective bidders while preparing their bids.

c) To give prospective bidders reasonable time to take the amendment into accounting preparing their bid, IHMCL may, at its discretion, extend the bid due date.

d) The bidder must read all the instructions in the RFP and abide by the same accordingly.

6.8. INDEMNITY

The bidder shall, subject to the provisions of the Contract, indemnify IHMCL for any loss or damage caused on account of any act/ omission attributable to the bidder.

6.9. PROPRIETARY DATA

All documents and other information provided by IHMCL or submitted by a bidder to IHMCL shall remain or become the property of IHMCL. Bidders are to treat all information as strictly confidential. IHMCL will not return any bid, or any information related thereto. All information collected, analyzed, processed, or in whatever manner provided by the successful bidder to IHMCL in relation to the services shall be the property of IHMCL.

6.10. CORRUPT OR FRAUDULENT PRACTICES

IHMCL requires bidder to observe the highest standard of ethics during the procurement andexecution of the Contract. In pursuance of this policy, IHMCL:

a. Defines, for the purposes of this provision, the terms set forth below as follows:

1. "Corrupt Practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in Contract execution.

2. "Fraudulent Practice" means a misrepresentation of facts 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 prices at artificially non-competitive levels and to deprive IHMCL of the benefits of free and open competition.

3. "Coercive Practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any person or property to influence any person's participation or action in the bidding process.

4. "Undesirable Practice" means (i) Establishing contact with any person connected with or employed or engaged by IHMCL with the objective of canvassing, lobbying or in any manner influencing, or attempting to influence the bidding process; or (ii)having a Conflict of Interest; and

5. "Restrictive Practice" means forming a cartel or arriving at any understanding or arrangement among bidders with the objective of restricting or manipulating a fulland fair competition in the bidding process.

b. IHMCL will reject a bid if it determines that the bidder has engaged in Corrupt Practice or Fraudulent Practice or Coercive Practice or Undesirable Practice or Restrictive Practice in competing for the Contract in question.

c. IHMCL will backlist/ declare a bidder ineligible, either indefinitely or for a stated period, to be awarded any contract by IHMCL if it at any time determines that the bidder has engaged in Corrupt Practice/ Fraudulent Practice/Coercive Practice/Undesirable Practice/Restrictive Practice in competing for or in executing IHMCL Contract.

6.11. INTEGRITY PACT

Bidder shall comply with the provisions of the Office Memorandum No. 13030/09/2008-Vig. Dated 28.01.2013 issued by NHAI (Copy enclosed) at **Appendix-I**.

a) **Appendix-I**

Appendix -1 attached below.

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

National Highways Authority of India
(Ministry of Road Transport and Highways)
जी-5 एवं 6, सेक्टर 10, द्वारका, नई दिल्ली-110075
G-5 & 6, Sector-10, Dwarka, New Delhi-110075

फोन / Phone: 91-11-25074100/250-1200
फैक्स / Fax: 91-11-25093507 / 25093514

No.13050/05/2008-Vig.

Dated : 28ᵗʰ January, 2013

Office Memorandum

Sub: Adoption of Integrity Pact (IP) for NHAI Projects-reg.

In suppression of OM No. NHAI/CMC/IP/IEM/2011-12 dated 13.08.2012 and OM of NHAI/CMC/IP/IEM/2011-12 dated 14.08.2012, it has been decided to implement the concept of Integrity Pact in NHAI projects. The Integrity Pact (IP) envisages an agreement between the prospective bidder and the buyers committing the persons/officials of both the parties, not to exercise any corrupt influence on any aspect of the contract. The IP also envisages empanelment of Independent External Monitors (IEM). The IEM may review independently and objectively whether and to what extent parties have complied with their obligations under the pact.

2.   NHAI is going to appoint IEM shortly for implementation of the IP in NHAI. MoRT&H vide its letter no. C-13019/8/2009-Vig. dated 18.11.2011 has approved applicability of adoption of IP in NHAI works as mentioned below:

(i)   Civil Works above Rs.100.00 crore
(ii)   Services such as consultancy, engineering etc. above Rs.5.00 crore

3.   In this connection, all the officers of NHAI are hereby requested to implement and follow the concept of IP and adopt the same in all future projects of NHAI as scrupulously in works included in para.2 above as per Model Agreements (copy enclosed) for each category. This Model Agreement would be provided to the bidders at NIT/ Pre-bid /Technical bid stage, whichever applicable, with instruction to submit the same after signing it. Contractor/ concessionaire / consultant / bidder would be required to submit this duly signed agreement (signed by the same signatory competent/authorized to sign the relevant contract agreement) along with their Technical Bid/Tender Documents. The representative authorized to sign contract agreement, on behalf of NHAI, would sign the same while signing the contract so that this may be made a part of the contract document and binding for both the parties signing the contract.

4.   It is clarified that IP should cover all phases of the contract, i.e. from the stage of Notice Inviting Tender (NIT) / pre-bid stage till the conclusion of the contract, i.e. the final payment or the duration of warranty / guarantee / defect liability / concession period, whichever applicable. The IEM would be, invariably, cited in the NIT. Further, information relating to tender in progress and under finalization would need to be shared with IEM on monthly basis.

contd.2.

..2..

5.   After implementation of Integrity Pact, NHAI has to send progress/status in the implementation of IP enabling CVC to include the same in their annual report as prescribed in the CVC circular no. 10/5/09 dated 18.05.2009 and subsequent circular no.31/08/10 dated 13.08.2010 (copies enclosed). Further, an internal assessment of the impact of IP shall be carried out periodically by the CVO and reported to the CVC through their report or special report, wherever necessary. In view of this, status of implementation of IP would be reported by all divisions to CVO on monthly basis.

6.   All the Divisions engaged in purchase/procurement shall ensure strict compliance of this.

This issues with the approval of Chairman, NHAI.

Encl: (1) Model Agreement for category (i) works
        (2) Model Agreement for category (ii) works
        (3) CVC's Circular no. 10/5/09 dt. 18.05.09
        (4) CVC's Circular no.31/08/10 dt.13.08.10

(B.N.Sahay)
General Manager (CMC)

To

1. All PIUs/CMUs
2. All ROs
3. All CGMs at HQ
4. All GMs at HQ
5. CVO, NHAI

Copy for information to:

1. PS to Chairman
2. All PS to Members

b) INTEGRITY PACT FORMAT

(To be executed on plain paper and submitted along with Technical Bid. To be signed by the bidder and same signatory competent/ authorized to sign the relevant contract on behalf of IHMCL)

RFP No. <…………….> dated <…………….>

This Integrity Pact is made at_____on this_____day   of___202_. between

Indian Highways Management Company Limited (IHMCL), incorporated under Companied Act 1956, having its office at G-5 & 6, Sector – 10, Dwarka, New Delhi, hereinafter referred to as "**The Principal**", which expression shall unless repugnant to the meaning or contract thereof include its successors and permitted assigns.

And

_____, hereinafter referred to as "**The Bidder**" and which expression shall unless repugnant to be meaning or context thereof include its successors and permitted assigns.

Preamble

Whereas, the Principal intends to award, under laid down organizational procedure's contract/s for ………………………………. The principal values full Compliance with all relevant laws of the land, rules of land, regulations, economic use of resources and of fairness/ transparency in its relations with its Bidder(s)/ Bidder(s).

And whereas to meet the purpose aforesaid, both the parties have agreed to enter this Integrity Pact (hereafter referred to as Integrity Pact) the terms and conditions of which shall also be read as integral part and parcel of the Tender documents and contract between the parties. Now, therefore, in consideration of mutual covenants stipulated in this pact, the parties hereby agree as follows and this pact witnessed as under:

Article 1- Commitments of the Principal

(1)   The principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:

(a)   No employee of the principal, personally or through family members, will in connection with the tender for or the execution of a contract, demand, take a promisefor or except for self or third person any material or immaterial benefit which the person is not legally entitled to.

(b)   The principal will during the tender process treat all bidder(s) with equity and reason. The principal will in particular before and during the tender process provide to all bidder(s) the same information and will not provide to any bidder(s) confidential/

additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

(c) The principal will exclude all known prejudiced persons from the process, whose conduct in the past has been of biased nature.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act or any other Statutory Acts or if there be a substantive suspicion in this regard, the principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions as per its internal laid down Rules/ Regulations.

Article 2- Commitments of the Bidder(s)

The bidder(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

(a) The bidder(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

(b) The bidder(s) will not enter with other bidders into any undisclosed agreement or understanding, whether formal or informal. This applies to prices, specifications, certifications, subsidiary contracts, submission or non-submission or bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

(c) The bidder(s)/ will not commit any offence under the relevant IPC/ PC Act and other Statutory Acts; further the bidder(s)/ Contractor(s) will not use improperly, for purposes of completion or personal gain, or pass on to others, any information or document provided by the principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

(d) The bidder(s) of foreign origin shall disclose the name and address of the Agents/ representatives in India, if any. Similarly, the Bidder(s) of Indian Nationality shall furnish the name and address ofthe foreign principle, if any.

(e) The bidder(s) will, when presenting his bid, disclose all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract. He shall also disclose the details of services agreed upon for such payments.

(f) The bidder(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

(g) The bidder(s) will not bring any outside influence through any Govt. bodies/ quarters

directly or indirectly on the bidding process in furtherance of his bid.

Article 3- Disqualification from tender process and exclusion from future contracts

a) If the bidder(s) before award or during execution has committed a transgression through a violation of any provision of Article-2, above or in any other form such as to put his reliability or credibility in question, the principal is entitled to disqualify the Bidder(s) from the tender process.

b) If the bidder(s) have committed a transgression through a violation of Article-2 such as to put his reliability or credibility into question, the principal shall be entitled to exclude including blacklist and put on holiday the bidder(s) for any future tender/ contract award process. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the principal taking into consideration the full facts and circumstances of each case particularly considering the number of transgressions, the position of the transgressors within the company hierarchy of the bidder(s) and the amount of the damage. The exclusion will be imposed for a minimum of 1 year.

c) A transgression is considered to have occurred if the principal after due consideration of the available evidence concludes that "On the basis of facts available there are no material doubts".

d) The bidder(s) with its free consent and without any influence agrees and undertakes to respect and uphold the principal's absolute rights to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.

e) The decision of the principal to the effect that a breach of the provisions of this Integrity Pact has been committed by the bidder shall be final and binding on the bidder.

f) On concurrence of any sanctions/ disqualification etc. arising out from violation of integrity pact the Bidder shall not be entitled for any compensation on this account.

g) Subject to full satisfaction of the principal, the exclusion of the bidder could be revoked by the principal if the bidder can prove that he has restored/ recouped the damage caused by him and has installed a suitable corruption prevention system in his organization.

Article 4- Compensation for Damages

a) If the Principal has disqualified the bidder(s) from the tender process prior to the award according to Article 3, the principal shall be entitled to invoke the bid securing declaration apart from any other legal right that may have accrued to the principal.

b) In addition to 1 above, the principal shall be entitled to take recourse to the relevant provisions of the contract related to Termination of Contract. In such case, the principal shall be entitled to forfeit the Performance Bank Guarantee of the bidder and/or demand and recover liquidated and all damages as per the provisions of the Contract Agreement against Termination.

Article 5 - Previous Transgressions

a) The bidder declares that no previous transgressions occurred in the last 3 years immediately before signing of this Integrity Pact with any other Company in any country conforming to the anti-corruption/ Transparency International (TI) approach or with any other Public Sector Enterprise/ Undertaking in India or any Government Department in India that could justify his exclusion from the tender process.

b) If the bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action for his exclusion can be taken as mentioned under Article-3 above for transgressions of Article-2 and shall be liable for compensation for damages as per Article-4 above.

Article 6 - Equal treatment of all Biden(s)

a) The Bidder(s) undertake(s) to demand from all sub- contractor(s) a commitment in conformity with this Integrity Pact, and to submit it to the principal before contract signing.

b) The principal will enter into agreements with identical conditions as this one with all Bidder(s).

The principal will disqualify from the tender process all Bidders who do not sign this Pact or violate its provisions.

Article 7 - Criminal charges against violating Bidder (s)

If the Principal obtains knowledge of conduct of a Bidder or Sub-contractor (SI),or of an employee or a representative or an associate of a Bidder or Sub-contractor (SI), which constitutes corruption, or if the principal has substantive suspicion in this regard, the principal will inform the same to the Chief Vigilance Officer.

Article 8 - Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Bidder 12 months after his Defect Liability Period is over or 12 months after his last payment under the contract whichever is later and for all other *unsuccessful* Bidders 6 months after the Contract has been awarded.

If any claim is made/ lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/ determined by Chairman of IHMCL.

Article 9 - Other Provisions

a) This Pact is subject to Indian Law Place of performance and jurisdiction is the Registered Office of the Principal i.e., New Delhi.

b) Changes and supplements as well as termination notices need to be made in writing.

c) Should one or several provisions of this Agreement turn out to be invalid, the remainder of this Agreement remains valid.   In this case, the parties will strive to come to an

agreement to their original intentions.

d) Any disputes/ differences arising between the parties about term of this Pact, any action taken by the principal in accordance with this Pact or any relation thereof shall not be subject to any Arbitration.

e) The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

In witness whereof the parties have signed and executed this Pact at the place and date first done mentioned in the presence of following witnesses:

_____   _____

[For & On behalf of the (Principal)]   [For & On behalf of the Bidder/

                                              Concessionaire/ Consultant]

(Office Seal)

Place:_____

Date: _____

Witness 1:

(Name & Address)   _____

Witness 2:   _____

(Name & Address)   _____

                     _____

                     _____

PART-II
FORMAT FOR BID SUBMISSION

Form T-1 Technical Bid Covering Letter

(To be prepared on letterhead of the Bidder)

To,
Chief Operating Officer,
Indian Highways Management Company Limited,
G 5&6, Sector-10, Dwarka,
New Delhi – 110075

Sub.: RFP for Selection of Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at 09 Fee Plazas in the State of Rajasthan (Bundle-RJ 02) on Fixed Transaction Fee Model

Ref: RFP No………………….……….. on above subject.

Dear Sir,

1. I/We, the undersigned, have carefully examined the contents of the above referred RFP document including amendments/addendums (if any) thereof and we undertake to fully comply and abide by the terms and conditions specified therein and hereby submit our Bid for the aforesaid service. Our bid for the subject RFP is unconditional and unqualified.

2. I/We hereby undertake that we are a [Scheduled Bank included in the list of Agency Banks / Payments Bank] duly notified by the Reserve Bank of India as on the bid due date.

3. I/We offer to execute the work in accordance with the Scope of work and the Conditions of Contract of this RFP both explicit and implied.

4. I/We undertake that, in competing for (and, if the award is made to us), for executing the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

5. I/We understand that:

   i. This bid, if found incomplete in any respect and/ or if found with conditional compliance or not accompanied by the requisite Bid Security, shall be summarily rejected.

   ii. If at any time, any averments made or information furnished as part of this bid is found incorrect, then the bid will be rejected and the contract if awarded based on such information shall be cancelled.

   iii. IHMCL is not bound to accept any/ all Bid(s) it will receive.

   iv. Until a contract is executed, this bids together with RFP Document as well as the subsequent corrigendum, notification of the Letter of Award issued by IHMCL shall constitute a binding Contract between us.

6. I/We declare that:

   i. I/we have no proceeding for insolvency/bankruptcy in NCLT / Court as on Bid Due Date.

   ii. I/We have not been blacklisted/ *declared ineligible* by IHMCL or National Highways Authority of India (NHAI) or Ministry of Road Transport & Highways, Government of India or any other agency as on Bid Due date. I/We also confirm that I/We have not been *declared as non- performing or debarred* by IHMCL or NHAI or Ministry of Road Transport & Highways, Government of India as on bid due date.

   iii. I/We *haven't been blacklisted* by a Central/ State Government Institution/ Public Sector Undertaking/ Autonomous body and there has been *no litigation* with any Government Department/ PSU/ Autonomous body on account of similar services as on Bid Due Date.

   iv. I/We have *not* directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as defined in the Contract Agreement,in respect of any tender or request for proposal issued by or any Contract entered into with IHMCL or any other public sector enterprise or any government, Central or State; and I/We hereby certify that we have taken steps toensure that in conformity with the provisions of the RFP document, no person acting for us or on our behalf has engaged or will engage in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.

7. I/We have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as defined in the RFP.

8. In the event of my / our bid being declared as successful bid, I/we agree to enter into a Contract Agreement in accordance with the format of the Contract Agreement. I/We agree not to seek any change in the aforesaid format of the Contract Agreement and agree to abide by the same.

9. I/We certify that:

   i. I/We have not been convicted by a Court of Law or indicted or adverse orders passed by a regulatory authority which could cast a doubt on our ability to undertake the subject work or which relates to a grave offence that outrages the moral sense of the community.

   ii. Neither the bidder nor any of its directors are the subject of criminal or civil proceedings that could be expectedto adversely affect its business or its ability to bid in the present tender.

   iii. No investigation by a regulatory authority is pending either against us or against our CEO or any of our directors/ managers/ employees.

   iv. I / We don't have any conflict of interest in terms of Clause 3.1 of eligibility criteria defined in this RFP document.

v. The information provided in this technical bid (including the attachments) as well as the financial bid is true, accurate and complete to the best of my knowledge and belief. Nothing has been omitted which renders such information misleading; and all documents accompanying my/our bid are true copies of their respective originals. I/We shall be liable for disqualification or termination of contract at any stage, if any information/ declaration is found to be incorrect or false. I/We will intimate IHMCL promptly in case of any change in the information submitted as part of this technical bid.

vi. I/We offer the cost of the RFP document and bid Security in accordance with the RFP document as per the details furnished below:

#	Reference No.	Date	Amount (Rs.)	Issuing Bank / Branch
Tender Fee				
Bid Security				

10. I am the Director / Authorized Signatory of the aforesaid company / firm, and I am authorized to sign this bid on behalf of the firm / company. I submit this bid after carefully reading all the terms and conditions contained in the RFP document and its addendum/ amendment, if any, and undertake to abide by the same. It is also certified that the bid is being submitted in the prescribed formats without any addition / deviation / alteration and our bid is unconditional.

Yours Sincerely,

Name ……………….

Designation/ Title of the Authorized Signatory…………………….

Form T-2: Brief Information about the Bidder(s)

(To be prepared on letterhead of the Bidder)

To,

Chief Operating Officer,

Indian Highways Management Company Limited,

G 5&6, Sector-10, Dwarka, New Delhi – 110075

Sub.: RFP for Selection of Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at 09 Fee Plazas in the State of Rajasthan (Bundle-RJ 02) on Fixed Transaction Fee Model

Ref: RFP No. …………………………………………. on above subject.

1)

    a) Name of Bidder   :

    b) Year of establishment   :

    c) Constitution of the bidder entity e.g., Government enterprise, private limited company, limited company, proprietorship / partnership firm etc.

    d) In case of a government enterprise, please indicate as to whether legally and financially autonomous and operate under commercial law.

    e) Name(s) of Directors/ Proprietors/ Partners: Yes/ No/ Not applicable

2) Address for correspondence with Telephone/ Fax numbers/ e-mail address:

    (a) Complete postal address   :

    (b) Fixed telephone number   :

    (c) Mobile telephone number   :

    (d) E-mail address   :

3) Name & Address of the Acquirer bank**:**

    (a) Bank A/c Number   :

    (b) Branch Address   :

    (c) IFSC /MICR Code   :

    (d) GSTIN (as applicable)   :

4) Name of the Statutory Auditor/ Company Secretary/ Chartered Accountant certifying the documents along with his/ her Membership number, if applicable:

    Name

    Designation of the Authorized Signatory

Form T-3 Power of Attorney/Letter of Authorization (as relevant)

(On non-judicial Stamp Paper of appropriate denomination)

Know all men by these presents, we, ... (Name of Company and address of the registered

office) do hereby constitute, nominate, appoint and authorize Mr. / Ms. .... son/daughter/wife

of…………………………….. and presently residing at.. , who is presently employed with us and holding the position of .... as our true and lawful attorney (hereinafter referred to as the"Authorized Signatory or Attorney") to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our Bid for selection as the Bidder for "**RFP for Selection of Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at 09 Fee Plazas in the State of Rajasthan (Bundle-RJ 02) on Fixed Transaction Fee Model**" proposed by Indian Highways Management Company Limited, including but not limited to signing and submission of all applications, bid(s) and other documents and writings, and providing information/ responses to IHMCL, representingus in all matters before IHMCL, signing and execution of all contracts and undertakings consequent to acceptance ofour bid and generally dealing with IHMCL in all matters in connection with or relating to or arising out of our Bid for the said Tender and/or upon award thereof to us.

AND, we do hereby agree to ratify and confirm all acts, deeds and things lawfully done or caused to be done byour said Authorized Signatory or Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Authorized Representative/ Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.IN WITNESS WHEREOF WE, ...THE ABOVE-NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS .... DAY OF .... , 202_

For ....

(Signature, name, designation, and address)

Witnesses:

1.

2.

Notarised

Accepted

....

(Signature, name, designation, and address of the Attorney)

Notes:

a. The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure. **The Power of Attorney should be executed on a non-judicial stamp paper of appropriate denomination and should be duly notarised by a notary public.**

b. Wherever required, the bidder should submit for verification the extract of the charter documents and other documents such as a resolution/power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the bidder.

c. For a Power of Attorney executed and issued overseas, the document will also have to be legalised by the Indian Embassy and notarised in the jurisdiction where the Power of Attorney is being issued. However, bidders from countries that have signed the Hague Legislation Convention 1961 need not get their Power of Attorney legalised by the Indian Embassy if it carries a conforming Apostles certificate.

Form T-4 Undertaking on Acquirer Bank Certification by NPCI

(To be prepared on letterhead of the Bidder)

(To be submitted in case the Bidder is not currently a certified Acquirer Bank by NPCI under NETC Programme)

To,

Chief Operating Officer,
Indian Highways Management Company Limited,
G 5&6, Sector-10, Dwarka,
New Delhi – 110075

Sub.: RFP for Selection of Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at 09 Fee Plazas in the State of Rajasthan (Bundle-RJ 02) on Fixed Transaction Fee Model

Ref: RFP No. …………………………………. on above subject.

Dear Sir,

We, [**Insert Name of the Bidder**], having our registered office at [**Insert Registered Address**], do hereby undertake that, in the event of award of the Contract Agreement pursuant to this said RFP, we shall obtain the Acquirer Bank certification under the FASTag NETC Programme from the National Payments Corporation of India (NPCI) within 90 (ninety) days from the date of issuance of the Letter of Award (LOA).

We further acknowledge and agree that failure to obtain and submit a valid Acquirer Bank certification from NPCI within the stipulated timeframe shall be deemed a material breach of the Contract Agreement, and may result in appropriate remedial action as per the terms and conditions laid down in the RFP and Contract Agreement.

Thanking you.

Yours faithfully,
For [Insert Name of the Bidder]

[Signature]
[Name of the Authorized Signatory]

[Designation]
[Contact Details]

Form T-5 Undertaking by the Bidder

To,

Chief Operating Officer,

Indian Highways Management Company Limited,

G 5&6, Sector-10, Dwarka,

New Delhi – 110075

Sub.: RFP for Selection of Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at 09 Fee Plazas in the State of Rajasthan (Bundle-RJ 02) on Fixed Transaction Fee Model

Ref: RFP No. ………………………………….. on above subject.

Dear Sir,

I/we undertake the following:

1) That the proposed OEM(s) 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:

    a. 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 (SI)/ supplier with Competent Authority (for the items / goods proposed to be procured from any country which shares a land border with India)

2) That the OEM(s) shall not be rebranding & reselling products in India through importing/ trading from a country that shares a Land Border with India.

3) 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 shares a Land Border with India.

4) That the OEM(s) for all active components will 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.

5) That the proposed OEM is not blacklisted by any State / Central Government Department or Central /State PSUs as on bid submission date.

6) That each of the proposed OEM(s) has capability and infrastructure to provide 24x7x365 technical support in India.

7) Adequate supporting documents pertaining to the above points, along with a summary compliance table, should be submitted in the technical proposal (Form T-6) by the Bidder.

(Name and Signature of the Power of Attorney Holder)

Form T-6 Submission of Detailed Methodology and Work Plan

To,

Chief Operating Officer,

Indian Highways Management Company Limited,

G 5&6, Sector-10, Dwarka,

New Delhi – 110075

Sub.: RFP for Selection of Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at 09 Fee Plazas in the State of Rajasthan (Bundle-RJ 02) on Fixed Transaction Fee Model

Ref: RFP No. …………………………………. on above subject.

NOTE:

  i. **Submission under this item is subject to evaluation under technical bid, while giving information, the bidders are advised to strictly focus and address the topic/sub-topic as asked for in a structured manner. Any superfluous submission shall be at bidders' risk.**

  ii. **IHMCL/IHMCL's Representative may seek clarification on any of the submission made by the bidder in form T-6. Any superfluous submission or inconsistent clarification with respect to site condition, is liable to make the bid non-responsive.**

Dated: …. /….

i. System design document for implementation of MLFF system with a list of items with quantity and location of equipment:

………………………………………………………………………………………………………
……………………

S.No.	Equipment	Location[2] (Gantry)	LHS/RHS	Quantity
1.				
2.				
3.				
Total Quantity				

---

[2] Refer Schedule B (1)(c)

ii.   Control Center Hardware design document with a list of items with quantity Software architecture & components

……
……
……………………..

iii.   Methodology of implementation:

……………………………………………………………………………………………………
…………
……………………………………………………………………………………………………
…………

iv.   Equipment Delivery Schedule and Time schedule to complete the entire work supported with bar chart, including the civil works for MLFF:

……
……
……………………….

v.   Make, model, specs, and Brochure of all major components (hardware & software) *:

……
……
……………………..

vi.   Any other aspects the Bidder may wish to add:

……
…………
……
…………

vii.   System Design (Hardware and Software) proposed.

……
…………

viii.   Design of MLFF System.

……

ix.   Total manpower being proposed as per design by designation.

……

*Any equipment/hardware not conforming to OEM criteria given in RFP shall make the bid liable to be rejected.

(Name and Signature of the Bidder)

Form T-7 Proforma for submitting written queries.

(To be submitted in doc/editable format only at the given email address)

To,

Chief Operating Officer,

Indian Highways Management Company Limited,

G 5&6, Sector-10, Dwarka,

New Delhi – 110075

Sub.: RFP for Selection of Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at 09 Fee Plazas in the State of Rajasthan (Bundle-RJ 02) on Fixed Transaction Fee Model

Ref: RFP No. …………………………………. on above subject.

Dated: …. /….

Name of Company:_____,
Name of Person_____

Contact No._____,

Email Id: _____

Sr.No.	Page no. of RFP	Clause	RFP Statement	Query	Remarks

Form T-8 Bank Guarantee for Bid Security

(Refer Clauses 2.2 of General Terms of Bidding in Section -I of RFP)

B.G. No.   Dated:

1. In consideration of you, ****, having its office at **** (hereinafter referred to as the "Authority", which expression shall, unless it be repugnant to the subject or context thereof, include its successors and assigns), having agreed to receive the BID of …………… and having its registered office at (and acting on behalf of its JV) (hereinafter referred to as the "Bidder", which expression shall, unless it be repugnant to the subject or context thereof, include its/their executors, administrators, successors, and assigns), for RFP for Selection of Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at 09 Fee Plazas in the State of Rajasthan (Bundle-RJ 02) on Fixed Transaction Fee Model (hereinafter referred to as "the Project") pursuant to the RFP Document dated …………… issued in respect of the Project and other related documents, including without limitation the draft contract Agreement (hereinafter collectively referred to as "Bidding Documents"), we (Name of the Bank) having our registered office at …………… and one of its branches at …………………….. (hereinafter referred to as the "Bank"), at the request of the Bidder, do hereby, in terms of Clause 2.2 read with Clause 2.3 of the RFP Document, irrevocably, unconditionally, and without reservation guarantee the due and faith ful fulfilment and compliance of the terms and conditions of the Bidding Documents (including the RFP Document) by the said Bidder and unconditionally and irrevocably undertake to pay forthwith to the Authority an amount of Rs. *****(Rupees ***** only) (hereinafter referred to as the "Guarantee") as our primary obligation without any demur, reservation, recourse, contest, or protest and without reference to the Bidder if the Bidder shall fail to fulfil or comply with all or any of the terms and conditions contained in the said Bidding Documents.

2. Any such written demand made by the Authority stating that the Bidder is in default of the due and faithful fulfilment and compliance with the terms and conditions contained in the Bidding Documents shall be final, conclusive, and binding on the Bank.

3. We, the Bank, do hereby unconditionally undertake to pay the amounts due and payable under this Guarantee without any demur, reservation, recourse, contest, or protest and without any reference to the Bidder or any other person and irrespective of whether the claim of the Authority is disputed by the Bidder or not, merely on the first demand from the Authority stating that the amount claimed is due to the Authority by reason of the failure of the Bidder to fulfil and comply with the terms and conditions contained in the Bidding Documents, including failure of the said Bidder to keep its BID open during the BID validity period set forth in the said Bidding Documents for any reason whatsoever. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However,

our liability under this Guarantee shall be restricted to an amount not exceeding Rs. *** ** (Rupees *** ** only).

4. This Guarantee shall be irrevocable and remain in full force for a period of 180 (one hundred and eighty) days from the BID Due Date inclusive of a claim period of 60 (sixty) days or for such extended period as may be mutually agreed between the Authority and the Bidder, and agreed to by the Bank, and shall continue to be enforceable till all amounts under this Guarantee have been paid.

5. We, the Bank, further agree that the Authority shall be the sole judge to decide as to whether the Bidder is in default of due and faithful fulfilment and compliance with the terms and conditions contained in the Bidding Documents, including, inter alia, the failure of the Bidder to keep its BID open during the BID validity period set forth in the said Bidding Documents, and the decision of the Authority that the Bidder is in default as aforesaid shall be final and binding on us, notwithstanding any differences between the Authority and the Bidder or any dispute pending before any Court, Tribunal, Arbitrator, or any other Authority.

6. The Guarantee shall not be affected by any change in the constitution or winding up of the Bidder or the Bank or any absorption, merger, or amalgamation of the Bidder or the Bank with any other person.

7. To give full effect to this Guarantee, the Authority shall be entitled to treat the Bank as the principal debtor. The Authority shall have the fullest liberty, without affecting in any way the liability of the Bank under this Guarantee, from time to time to vary any of the terms and conditions contained in the said Bidding Documents or to extend the time for the submission of the BIDs or the BID validity period or the period for conveying acceptance of the Letter of Award by the Bidder or the period for fulfilment and compliance with all or any of the terms and conditions contained in the said Bidding Documents by the said Bidder or to postpone for any time and from time to time any of the powers exercisable by it against the said Bidder and either to enforce or forbear from enforcing any of the terms and conditions contained in the said Bidding Documents or the securities available to the Authority, and the Bank shall not be released from its liability under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the said Bidder or any other forbearance, act or omission on the part of the Authority or any indulgence by the Authority to the said Bidder or by any change in the constitution of the Authority or its absorption, merger, or amalgamation with any other person or any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of releasing the Bank from its such liability.

8. Any notice by way of request, demand, or otherwise hereunder shall be sufficiently given or made if addressed to the Bank and sent by courier or by registered mail to the Bank at the address set forth herein.

9. We undertake to make the payment on receipt of your notice of claim on us addressed to [name of Bank along with branch address] and delivered at our above branch, which shall be deemed to have been duly authorized to receive the said

notice of claim.

10. It shall not be necessary for the Authority to proceed against the said Bidder before proceeding against the Bank, and the guarantee herein contained shall be enforceable against the Bank, notwithstanding any other security which the Authority may have obtained from the said Bidder or any other person and which shall, at the time when proceedings are taken against the Bank hereunder, be outstanding or unrealized.

11. We, the Bank, further undertake not to revoke this Guarantee during its currency except with the previous express consent of the Authority in writing.

12. The Bank declares that it has power to issue this Guarantee and discharge the obligations contemplated herein; the undersigned is duly authorized and has full power to execute this Guarantee for and on behalf of the Bank.

13. For the avoidance of doubt, the Bank's liability under this Guarantee shall be restricted to Rs. *** crore (Rupees ***** crore only). The Bank shall be liable to pay the said amount or any part thereof only if the Authority serves a written claim on the Bank in accordance with paragraph 9 hereof, or before [*** (indicated date falling 180 days after the BID Due Date)]

14. This guarantee shall also be operatable at our …..... Branch, New Delhi from whom, confirmation regarding the issue of this guarantee or extension / renewal thereof shall be made available on demand. In the contingency of this guarantee being invoked and payment thereunder claimed, the said branch shall accept such invocation letter and make payment of amounts so demanded under the said invocation.

15. The guarantor/bank hereby confirms that it is on the SFMS (Structural Finance Messaging System) platform & shall invariably send an advice of this Bank Guarantee to the designated bank of [Ministry/IHMCL/NHIDCL/State PWD/BRO], details of which is as under:

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

Signed and Delivered by.........................Bank

By the hand of Mr. /Ms.……………………., its............................. and authorized official.

(Signature of the Authorized Signatory)

(Official-Seal)

Form T-9 Format of Bank Guarantee

Performance Security/Additional Performance Security]

To,

Chief Operating Officer,

Indian Highways Management Company Limited,

G 5&6, Sector-10, Dwarka,

New Delhi – 110075

Sub.: **RFP for Selection of Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at 09 Fee Plazas in the State of Rajasthan (Bundle-RJ 02) on Fixed Transaction Fee Model**

Ref: RFP No. …………………………………. on above subject.

WHEREAS:

(A)   _____[name and address of Bidder] (hereinafter called the "**Bidder**") and Indian Highways Management Company Limited, G-5 & 6, Sector 10, Dwarka, New Delhi - 110075, (hereinafter called the **"Authority"**) have entered into an agreement (hereinafter called the "**Agreement**") for "**RFP for Selection of Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at 09 Fee Plazas in the State of Rajasthan (Bundle-RJ 02) on Fixed Transaction Fee Model**" subject to and in accordance with the provisions of the Agreement

(B)   The Agreement requires the Bidder to furnish a Performance Security for due and faithful performance of its obligations, under and in accordance with the Agreement, during the {Implementation Period/ Defects Liability Period and Maintenance Period} (as defined in the Agreement) in a sum of Rs…. cr. (Rupees ………. ….. crore) (the "**Guarantee Amount**").

(C)   We, ………………… through our branch at …………………. (the "**Bank**") have agreed to furnish this bank guarantee (*hereinafter called the "***Guarantee**") by way of Performance Security.

NOW, THEREFORE, the Bank hereby, unconditionally, and irrevocably, guarantees and affirms as follows:

1.   The Bank hereby unconditionally and irrevocably guarantees the due and faithful performance of the Bidder's obligations during the {Implementation Period/ Defects Liability Period and Maintenance Period} under and in accordance with the Agreement, and agrees and undertakes to pay to the Authority, upon its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Bidder, such sum or sums up to an aggregate sum of the Guarantee Amount as the Authority shall claim, without the Authority being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.

2. A letter from the Authority, under the hand of an officer not below the rank of General Manager in the Indian Highways Management Company Limited, that the Bidder has committed default in the due and faithful performance of all or any of its obligations under and in accordance with the Agreement shall be conclusive, final, and binding on the Bank. The Bank further agrees that the Authority shall be the sole judge as to whether the Bidder is in default in due and faithful performance of its obligations during and under the Agreement and its decision that the Bidder is in default shall be final and binding on the Bank, notwithstanding any differences between the Authority and the Bidder, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Bidder for any reason whatsoever.

3. To give effect to this Guarantee, the Authority shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Bidder and/or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.

4. It shall not be necessary, and the Bank hereby waives any necessity, for the Authority to proceed against the Bidder before presenting to the Bank its demand under this Guarantee.

5. The Authority shall have the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Agreement or to extend the time or period for the compliance with, fulfilment and/ or performance of all or any of the obligations of the Bidder contained in the Agreement or to postpone for any time, and from time to time, any of the rights and powers exercisable by the Authority against the Bidder, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to the Authority, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the Bidder or any other forbearance, indulgence, act or omission on the part of the Authority or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Bank from its liability and obligation under this Guarantee and the Bank hereby waives all of its rights under any such law.

6. This Guarantee is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by the Authority in respect of or relating to the Agreement or for the fulfilment, compliance and/or performance of all or any of the obligations of the Bidder under the Agreement.

7. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Guarantee is restricted to the Guarantee Amount and this Guarantee will remain in force for the period specified in paragraph 8 below and unless a demand or claim in writing is made by the Authority on the Bank under this Guarantee all rights of the Authority under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.

8. The Guarantee shall cease to be in force and effect on ****. Unless a demand or claim under this Guarantee is made in writing before expiry of the Guarantee, the Bank shall be

discharged from its liabilities hereunder.

9. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Authority in writing and declares and warrants that it has the power to issue this Guarantee and the undersigned has full powers to do so on behalf of the Bank.

10. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred branch, which shall be deemed to have been duly authorised to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of the Authority that the envelope was so posted shall be conclusive.

11. This Guarantee shall come into force with immediate effect and shall remain in force and effect for up to the date specified in paragraph 8 above or until it is released earlier by the Authority pursuant to the provisions of the Agreement.

12. This guarantee shall also be operatable at our…… ………….. Branch at New Delhi, from whom, confirmation regarding the issue of this guarantee or extension / renewal thereof shall be made available on demand. In the contingency of this guarantee being invoked and payment thereunder claimed, the said branch shall accept such invocation letter and make payment of amounts so demanded under the said invocation.

13. The guarantor/bank hereby confirms that it is on the SFMS (Structural Finance Messaging System) platform & shall invariably send an advice of this Bank Guarantee to the designated bank of IHMCL, details of which is as under:

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

Signed and sealed this ……….. day of ……….., 20……… at ……….

SIGNED, SEALED AND DELIVERED

For and on behalf of the Bank by:
(Signature)

(Name)

(Designation)

(Code Number)

(Address)

NOTES:

(i)   The bank guarantee should contain the name, designation and code number of the officer(s) signing the guarantee.

(ii)   The address, telephone number and other details of the head office of the Bank as well as of issuing branch should be mentioned on the covering letter of issuing branch.

Form T-10 Indicative MOU Agreement Format

<div align="center">

MEMORANDUM OF UNDERSTANDING

</div>

(To be executed on Non-Judicial Stamp Paper of INR 100 and duly notarized)

This **Memorandum of Understanding (MoU)** is made and entered into on this ___ day of _____, 2025 at [Place],

BY AND BETWEEN

[Name of the Bidder], a Bank incorporated under_____, having its registered office at [Address], hereinafter referred to as the **"Bidder"** (which expression shall, unless repugnant to the context or meaning thereof, mean and include its successors and assigns) of the **First Part**,

AND

[Name of the Sub-Contractor / System Integrator], a company/LLP incorporated under the [Companies Act, 1956/2013 or LLP Act, 2008 or equivalent foreign law], having its registered office at [Address], hereinafter referred to as the **"System Integrator"** or **"SI"** (which expression shall, unless repugnant to the context or meaning thereof, mean and include its successors and permitted assigns) of the **Second Part**.

The Bidder and the SI are individually referred to as a "Party" and collectively as the "Parties."

WHEREAS:

1. **Indian Highways Management Company Limited (IHMCL)** has issued a RFP for Selection of Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at 09 Fee Plazas in the State of Rajasthan (Bundle-RJ 02) on Fixed Transaction Fee Model

2. The Bidder intends to submit a proposal in response to the said RFP and is required to execute the MLFF System through a reputed Sub-Contractor (System Integrator).

3. The SI is a reputed System Integrator with proven experience in deploying MLFF or similar Intelligent Transportation Systems (ITS), and is eligible as per RFP conditions.

4. The Parties now wish to record their mutual understanding and agreement in this MoU regarding their collaboration for the purpose of the RFP and potential award of work.

AS MUTUAL UNDERSTANDING OF THE PARTIES, IT IS HEREBY AGREED AND DECLARED AS FOLLOWS:

1. **Purpose of MoU**

   The purpose of this MoU is to confirm the mutual understanding between the Parties, wherein the SI shall act as the exclusive System Integrator for the Bidder in the subject RFP.

2. **Exclusivity**

   The SI agrees that it shall exclusively associate with the Bidder for this specific RFP and shall not participate, directly or indirectly, with any other bidder in the same tender process. In case the SI is found to be associated with multiple bids, both or all such bids shall be liable to be declared non-responsive, as per the RFP.

3. **Roles and Responsibilities of Bidder**

   ○ _____

4. **Roles and Responsibilities of Sub-Contractor**

   ○ _____

5. **Incorporation and Eligibility**

   The SI confirms that it is incorporated under the applicable law (as mentioned above) and, if an entity from a country sharing land border with India, is duly registered with the Competent Authority as per Government of India guidelines (if applicable).

6. **Duration and Termination**

   This MoU shall remain valid from the date of signing until the completion of the tender process, and in case the contract is awarded to the Bidder, until the end of the contractual obligations unless terminated earlier by mutual written consent.

7. **Governing Law and Jurisdiction**

   This MoU shall be governed by and construed in accordance with the laws of India. Any disputes arising out of or in connection with this MoU shall be subject to the exclusive jurisdiction of courts at New Delhi.

IN WITNESS WHEREOF, the Parties hereto have caused this MoU to be executed by their duly authorized representatives on the date and place first above written.

Signed for and on behalf of

[Bidder Name]

(Signature)

Name:

Designation:

Seal:

Signed for and on behalf of

[System Integrator Name]

(Signature)

Name:

Designation:

Seal:

Witnesses:

    1. _____

    2. _____

Form T-11 Undertaking for Compliance

To,

Chief Operating Officer,

Indian Highways Management Company Limited,

G 5&6, Sector-10, Dwarka,

New Delhi – 110075

Sub.: **RFP for Selection of Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at 09 Fee Plazas in the State of Rajasthan (Bundle-RJ 02) on Fixed Transaction Fee Model**

Ref: RFP No. ……………………………….. on above subject.

Name of the Bidder: ……………………………

S. No.	Equipment Name	OEM Name(s)* Proposed by Bidder
1.	ANPR Cameras	
2.	RFID Reader & Antenna	
3.	Detector-Lidar	
4.	Detector-Radar	
5.	Audit Surveillance Camera	
6.	And other Equipment (As per Indicative BoQ)	

* The Bidder shall mention the name of all the OEM(s) being proposed for the concerned equipment.

We undertake that the minimum specifications of the equipment mentioned in the RFP shall be provided by the above OEM(s) proposed by us in our MLFF solution to meet the functional requirements mentioned in the RFP.

Bidder Name: ……………………

Name of Person Holding Power of Attorney: ……………………

Signature:

Date: …

Form-T:12 Format for the declaration of non-Blacklisting

DECLARATION – non-blacklisting

(By Authorized signatory on company letter head)

To,

Chief Operating Officer,

Indian Highways Management Company Limited,

G 5&6, Sector-10, Dwarka,

New Delhi – 110075

Sub.: RFP for Selection of Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at 09 Fee Plazas in the State of Rajasthan (Bundle-RJ 02) on Fixed Transaction Fee Model

Ref: RFP No. ………………………………. on above subject.

I /We hereby declare that _____, as on the date of bid submission, has not been blacklisted or debarred in the last three years for the work performed by it and is not under blacklisting period /active debarred list by _____or any of the Central or State Government Organization / Public Sector Undertaking / Autonomous Body in India or abroad.

Signed: (insert signature of person whose name and capacity are shown)

Name: (insert complete name of person signing the Bid Securing Declaration having the Power of Attorney)

Duly authorized to sign the bid for an on behalf of (insert complete name of Bidder/Sub-Contractor)

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

Form-T:13 – Manufacturer's Authorization Form (MAF)

(In the letterhead of the OEM)

[NOTE: The Bidder must submit a Manufacturer's Authorization Form (MAF) for the proposed equipment, duly filled and signed by the Manufacturer/OEM. The form must be signed by an authorized representative of the Manufacturer. The Bidder is required to submit the MAF for at least the following components:

    i.   RFID Reader & Antenna

    ii.   ANPR Cameras

    iii.   Audit Surveillance Camera

    iv.   Detector-Lidar

    v.   Detector-Radar

Dear Sir,

We, **[Insert Full Legal Name of Manufacturer/OEM]**, a company duly organized and existing under the laws of [Insert Country], having our principal manufacturing facilities at **[Insert Complete Address of Manufacturer's Factories]**, do hereby authorize **[Insert Full Legal Name of the Bidder]**, having its registered office at **[Insert Bidder's Full Address]**, to submit a Bid and conclude the Contract with you against the above-mentioned RFP for the supply of the following goods manufactured by us:

We confirm that we continue to meet all eligibility and technical compliance criteria as outlined in the RFP, and in particular, we hereby declare and confirm the following:

    i.   We comply with the Office Memorandum No. F. No. NH-35014/20/2020-H, Ministry of Road Transport & Highways, Government of India, dated 04.08.2020, which refers to the Department of Expenditure (DoE), Ministry of Finance, O.M. No. 6/18/2019-PPD dated 23.07.2020. We understand and comply with the amended Rule 144 of the General Financial Rules (GFR), 2017, specifically sub-rule 144 (xi). Accordingly, for any goods proposed to be procured from a country sharing a land border with India, the required registration with the Competent Authority has been duly obtained and the details are enclosed.

    ii.   We undertake that we shall not rebrand or resell products in India by importing or trading from countries sharing a land border with India.

    iii.   We confirm that the source code of the software and firmware supplied for all equipment under this bid does not reside in any country sharing a land border with India.

    iv.   We confirm that we have been in the business of the said product or solution or technology for at least three (3) years as on the date of issue of the RFP.

    v.   We confirm that the products or technology quoted are not end-of-sale, end-of-life, or end-of-support as on the date of installation and commissioning and will remain supported through the full O&M period of the project.

vi. We confirm that we have the capability and infrastructure to provide 24x7x365 technical support in India.

vii. We will comply with all applicable regulatory guidelines, standards, and certifications as prescribed by the Government of India. Documentary evidence of such compliance will be submitted prior to commencement of the System Acceptance Testing (SAT). We understand that failure to do so will constitute a material breach of contract, which may result in replacement, contract termination, and/or forfeiture of performance security.

Further, we hereby extend our full guarantee and warranty for the goods offered by the above-mentioned Bidder as per the terms and conditions of the RFP and the resulting contract.

This Authorization shall be valid throughout the duration of the Contract, including any extensions thereof.

Sincerely,

[Signature of Authorized Signatory]
Name: [Insert Full Name]
Designation: [Insert Designation]
Company: [Insert Manufacturer's Company Name]
Email: [Insert Official Email Address]
Phone: [Insert Contact Number]
Seal: [Affix Company Seal]

Form -T:14 – Checklist to be submitted by the bidder

S. No.	Form/ Document required	To be signed by	Submission Status (Yes/ No)
1.	Proof of submission of Document Fee	Bidder/Bank	
2.	Form T-1 Technical Bid Covering Letter	Bidder/Bank	
3.	Form T-2: Brief Information about the Bidder(s)	Bidder/Bank	
4.	Form T-3 Power of Attorney/Letter of Authorization (as relevant)	Bidder/Bank & Sub-Contractor*	
5.	Form T-4 Undertaking on Acquirer Bank Certification by NPCI	Bidder/Bank	
6.	Form T-5 Undertaking by the Bidder	Bidder/Bank	
7.	Form T-6 Submission of Detailed Methodology and Work Plan	Bidder/Bank	
8.	Form T-8 Bank Guarantee for Bid Security	Bidder/Bank	
9.	Form T-10 Indicative MOU Agreement Format	Bidder/Bank & Sub-Contractor*	
10.	Form T-11 Undertaking for Compliance In case proposed OEM is different from Preferred OEMs, supporting documents to be provided confirming the product has been deployed in a Multilane Free Flow Tolling (MLFF) System, either in India or internationally, and has been operational for a minimum of one (1) year as of the bid submission date.	Bidder/Bank	
11.	Form-T:12 Format for the declaration of non-Blacklisting	Bidder/Bank & Sub-Contractor*	
12.	Form-T:13 – Manufacturer's Authorization Form (MAF)	In the letterhead of the OEM	

S. No.	Form/ Document required	To be signed by	Submission Status (Yes/ No)
13.	Copy of Certificate of Incorporation / Registration under Companies Act, 1956/2013 or any equivalent foreign act, or as applicable.	Sub-Contractor*	

*All credentials of Sub-Contractor (SI) and OEM are required to be countersigned by bidder/bank.

(Signature of the Authorized Signatory)

Appendix A-Form F-1: Format for Financial Bid Submission

(For sample only, actual Format to be downloaded from e-tender portal for on-line submission)

To,

Chief Operating Officer,

Indian Highways Management Company Limited,

G 5&6, Sector-10, Dwarka,

New Delhi – 110075

Sub.: **RFP for Selection of Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at 09 Fee Plazas in the State of Rajasthan (Bundle-RJ 02) on Fixed Transaction Fee Model**

Ref: RFP No. ……………………………….. on above subject.

Bidder's Name:	
Address:	
Email:	

#	Fee Plaza Name	Fixed Per Transaction Fee for each fee plaza (in Rs.) (upto max 2 decimal places)
1	Fee Plazas provided in Schedule-A in the State of Rajasthan	

Note:

i. The Fixed Per Transaction Fee quoted by the bank shall be inclusive of PMF (Program Management Fee) for Acquiring services under NETC program.

ii. The above Per Transaction Cost (in Rs.) shall be inclusive of Taxes/GST, as applicable.

**No financials should be a part of technical bid. If any form of financial bid/indication is mentioned in the technical bid, IHMCL shall summarily reject the bid.

Form F-2: Format for Equipment Cost break up

Bidder's Name:	
Address:	
Email:	

#	Minimum BoQ	Unit Rate
A	Lane Equipment	
1.	RFID Antenna	
2.	RFID Reader	
3.	Detector -Radar	
4.	Detector – LiDAR	
5.	ANPR Camera	
6.	Audit Surveillance Camera	
7.	IR Illuminator	
8.	Edge Level switch	
9.	Switch (Layer 3) – 24 Port	
10.	Any additional Component	
11	MLFF Gantry	
B	Control Center Equipment	
1.	MLFF Local Server	
2.	Workstation with Display 27"	
3.	Storage (minimum 125 TB)	
4.	Server Rack (27U)	
D	Software	
1.	Multi Lane Free Flow Software for per lanes and central web-portal	
2.	ANPR Application Per Channel	
3.	Video Management Software/AI Based License	
4.	Detector -Radar applications	
5.	Detector -LiDAR applications	
6.	RFID Reader and Antenna Application	
7.	Enterprise Management Software (EMS)	
8.	Any Additional	

Note:

1. Bidders must fill in the quantities and unit rates for the equipment/services/software, etc., as specified above to meet the functional requirements outlined in Schedule B, adhering to the standards and specifications in Schedule C. Any variations in quantities or omitted items will not result in additional payments or changes to the scope.

2. Form F-2 is solely for calculating the Depreciated Cost according to Clause 1.2.35 of the General Conditions of Contract in the RFP. The L-1 Bidder will be selected based on the Fixed Per

Transaction Cost in Form F-1. If the cost of installations derived from Form F-2 exceeds ₹5 crore for each fee plaza, the depreciated cost will be calculated based on the ceiling limit of ₹5 crore for each location, as per clause 1.2.35 (2) of the RFP.

3. Line items not applicable to the bidder's proposed design may be left blank. The rates should include all statutory taxes/levies, excluding service tax/GST (as applicable). Updates should be made according to the reference RFP shared by IHMCL.

PART-III
DRAFT FORM OF CONTRACT AGREEMENT

1.1. DRAFT CONTRACT AGREEMENT

No. …………………..

This Contract Agreement (hereinafter called the "Contract") is made on this_____day of the month of_____, 202_.

BETWEEN

Indian Highways Management Company Limited (IHMCL), incorporated under Companies Act 1956, and having its registered office at G 5 & 6, Sector 10, Dwarka, New Delhi-110075 (hereinafter referred to as the *"IHMCL"*, which expression shall, unless repugnant to or inconsistent with the context, mean and include its successors and assigns) of the first part.

AND

M/s_____, an Acquirer Bank incorporated under the provisions of the ……………. (Hereinafter referred to as the *"Bidder/Bank"* which expression shall unless repugnant to or inconsistent with the context, mean and include its successors and assigns) of the OTHER PART.

WHEREAS

a)   IHMCL is mandated by NHAI to implement and manage the Operation & Maintenance (O&M) of the MLFF (FASTag-ANPR) user fee collection system on National Highways, where IHMCL facilitates toll collection on behalf of NHAI.

b)   the Bidder, in the ordinary course of its business, is engaged in providing similar services to their clients, and have represented to IHMCL through their bids, against RFP for Selection of Acquirer Bank for FASTag-ANPR based Multi Lane Free Flow (MLFF) User Fee Collection at 09 Fee Plazas in the State of Rajasthan (Bundle-RJ 02) on Fixed Transaction Fee Model" that they have the required experience, professional skills, personnel and technical resources to provide the required Services.

c)   on the basis of the said Tender, IHMCL has adjudged the Bidder as a Successful Bidder and issued Letter of Award (LoA) No. ……………………… dated.__.202_ for the same.

d)   the Bidder has agreed through their letter of acceptance No ………. dated ……. to provide the said Services on the terms and conditions set forth in this Contract Agreement and has also submitted performance bank guarantee equivalent to ....(Rs .

   a.   …………………….) such that it remains valid until one year beyond completion of the contract.

NOW THEREFORE, in consideration of the foregoing and the respective covenants and

agreements set forth in this Contract Agreement, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound hereby, the Parties hereby agree as follows:

1. The mutual rights and obligations of the Bidder and IHMCL shall be as set forth inthis Contract Agreement, in particular:

   i. The Bidder shall carry out the Services in accordance with the provisions ofthe Contract and Good Industry Practice; and

   ii. IHMCL shall make payments to the Bidder in accordance with the provisionsof the Contract.

2. The following schedules/ appendices shall be deemed to form and be read and construedas part of this Contract Agreement viz.

General Conditions of Contract	
Schedule A:	The Site
Schedule B:	The Proposed MLFF Facilities
Schedule C:	Standards & Technical Specifications
Appendices:	
Appendix A	Copy of Financial Bid of the Bidder
Appendix B	Letter of Award issued by IHMCL
Appendix C	Letter of Acceptance submitted by the Bidder
Appendix D	Copy of the Performance Security submitted by the Bidder including copies of confirmation provided by the respective bank.
Appendix E	Copy of the Technical Bid and/or any subsequent correspondence of the Bidder/ IHMCL
Appendix F	Copy of RFP Document and subsequent amendment / addendum including Minutes of Pre-bid Meeting if any

IN WITNESS WHEREOF, the parties hereto have caused this Contract Agreement to be executed by their respective authorized representatives on the day and year first before written.

FOR AND ON BEHALF OF

(Indian Highways Management Company Limited) (Authorized Representative)

Name: _____

Designation_____

Indian Highways Management Company LimitedG-5&6, Sector – 10, Dwarka

New Delhi – 110075

FOR AND ON BEHALF OF

(M/s_____)

(Authorized Representative)

Name: _____

Designation: _____

M/s_____

Address:_____

In the presence of following witnesses:

Name: _____

Designation_____

Indian Highways Management Company Limited

G-5&6, Sector – 10, Dwarka

New Delhi – 110075

Name: _____

Designation_____

Indian Highways Management Company Limited

G-5&6, Sector – 10, Dwarka

New Delhi – 110075

Name: _____

Designation: _____

M/s _____

Address:_____

Name: _____

Designation: _____

M/s _____

Address:_____

1.2. GENERAL CONDITIONS OF CONTRACT

1.2.1. Definition

The words and expressions beginning with capital letters and defined in this Contract Agreement shall, unless the context otherwise requires, have the meaning ascribed thereto herein and the words and expressions defined in the Schedules and used therein shall have the meaning ascribed thereto in the Schedules annexed hereto. Words used in capitals and not defined herein but defined in the RFP shall have the meaning as ascribed thereto in the RFP.

1.2.2. Interpretation

1.2.2.1.   In this Contract Agreement, unless the context otherwise requires,

a) references to any legislation or any provision thereof shall include amendment or re-enactment or consolidation of such legislation or any provision thereof so far as such amendment or re-enactment or consolidation applies or can apply to any transaction entered hereunder.

b) references to laws of India or Indian law or regulation having the force of law shall include the laws, acts, ordinances, rules, regulations, bye laws or notifications which have the force of law in the territory of India and as from time to time may be amended, modified, supplemented, extended or re-enacted.

c) references to a "**person**" and words denoting a natural person shall be construed as a reference to any individual, firm, company, corporation, society, trust, government, state or agency of a state or any association or partnership (whether having separate legal personality) of two or more of the above and shall include successors and assigns.

d) the table of contents, headings or sub-headings in this Contract Agreement are for convenience of reference only and shall not be used in, and shall not affect, the construction or interpretation of this Contract Agreement.

e) the words "**include**" and "**including**" are to be construed, without limitation and shall be deemed to be followed by "**without limitation**" or "**but not limited to**" whether they are followed by such phrases.

f) any reference to any period shall mean a reference to that according to Indian Standard Time.

g) references to a "day" shall be construed as a reference to all days of the year.

h) any reference to month shall mean a reference to a calendar month as per the Gregorian calendar.

i) references to any date, period or time shall mean and include such date, period ortime as may be extended pursuant to this Contract Agreement.

j) any reference to any period commencing "**from**" a specified day or date and "**till**" or "**until**" a specified day or date shall include both such days and dates; provided that if the last day of any period computed under this Contract Agreement is not a business day, then the period shall run until the end of the next business day.

k) the words importing singular shall include plural and vice versa.

l) "**lakhs**" means a hundred thousand (100,000) and "**crore**" means ten million (10,000,000).

m) references to the "**winding-up**", "**dissolution**", "**insolvency**", or "**reorganization**" of a company or corporation shall be construed so as to include any equivalent or analogous proceedings under the law of the jurisdiction in which such company or corporation is incorporated or any jurisdiction in which such company or corporation carries on business including the seeking of liquidation, winding-up, reorganization, dissolution, arrangement, protection or relief of debtors.

n) save and except as otherwise provided in this Contract Agreement, any reference at any time to any agreement, deed, instrument, license or document of any description shall be construed as reference to that agreement, deed, instrument, license or other document as amended, varied, supplemented, modified or suspended at the time of such reference; provided that this Sub-clause shall not operate so as to increase liabilities or obligations of IHMCL hereunder or pursuant hereto in any manner whatsoever;

o) any agreement, consent, approval, authorization, notice, communication, information or report required under or pursuant to this Contract Agreement from or by any Party shall be valid and effective only if it is in writing under the hand of a duly authorized representative of such Party, as the case may be, in this behalf and not otherwise.

p) the Schedules and Recitals to this Contract Agreement form an integral part of this Contract Agreement and will be in full force and effect as though they were expressly set out in the body of this Contract Agreement.

q) References to Recitals, Articles, Clauses, Sub-clauses or Schedules in this Contract Agreement shall, except where the context otherwise requires, mean references to Recitals, Articles, Clauses, Sub-clauses and Schedules of or to this Contract Agreement and references to a Paragraph shall, subject to any contrary indication, be construed as a reference to a Paragraph of this Contract Agreement or of the Schedule in which such reference appears; and

r) the damages payable as set forth in this Contract Agreement, whether on per diem basis or otherwise, are mutually agreed genuine pre-estimated loss and damage likely to be suffered and incurred by the Party entitled to receive the same and are not by way of penalty (the "**Damages**").

s) "Arbitration Act" means the Arbitration and Conciliation Act, 1996 and shallinclude amendments, modifications to or any re-enactment thereof as in force from time to time.

t) "**MLFF**" refers to Multi Lane Free Flow system for collection of user fee through FASTag-ANPR.

u) "**SYSTEM**" means "MLFF based Tolling System."

v) "**Effective Date**" shall mean date of this Contract Agreement.

w) "**Uptime**" refers to the duration during which an MLFF equipment or system is actively functioning, operating, and ready to execute its intended tasks effectively, meeting the operational characteristics as defined in the RFP document, without encountering significant interruptions or failures.

x) "**Downtime**" refers to the period during which MLFF equipment or system is either non-functional or not actively operating to execute its intended tasks effectively, thus failing to meet the operational characteristics outlined in the RFP document due to significant interruptions or failures.

y) **"Bank", "Bidder", "Acquirer Bank" and "Service Provider"** mean 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.

z) **"Quoted Value"** mentioned in the RFP shall mean Fixed Per Transaction Fee quoted by the bidder in Form F-1.

1.2.2.2. Any word or expression used in this Contract Agreement shall, unless otherwise defined or construed in this Contract Agreement, bear its ordinary English meaning, and, for these purposes, the General Clauses Act 1897 shall not apply.

1.2.3. Definitions

The definitions mentioned in the RFP is referred from the Section under "Definitions" in the RFP.

1.2.4. Arithmetic conventions

All calculations should be rounded to two decimal places. If the third digit after the decimal point is 5 or higher, the same shall be rounded up. If the third digit is less than 5, he same shall be rounded down.

1.2.5. Priority of Agreements, Clauses, and Schedules

1.2.5.1. In case of inconsistency between the provisions of this Contract Agreement and the RFP, the terms of this Contract Agreement shall prevail to the extent of such inconsistency.

1.2.5.2. In case of ambiguities or discrepancies within this Contract Agreement, the following shall apply:

(a) between two or more Clauses of this Contract Agreement, the provisions of a specific Clause relevant to the issue under consideration shall prevail over those in other Clauses.

(b) between any two Schedules/Articles, the Schedule / Article relevant to the issue shall prevail.

(c) between the written description on the drawings/design documents, if any, and the Specifications and Standards, the latter shall prevail; and

(d) between any value written in numerals and that in words, the latter shall prevail.

1.2.6. Scope of Work

Under this Agreement, the scope of the Project shall mean and include:

1. **Design, Development and Implementation of the MLFF Tolling** : Undertake the design, development, and implementation of an MLFF-based user fee collection system at the Fee Plazas provided in Schedule-A in the State of Rajasthan listed in Schedule-A, with the provision of facilities as specified in Schedule-B, and ensure compliance with the Specifications and Standards outlined in Schedule-C.

2. **Operations & Maintenance:** Carry out the operations and maintenance of the MLFF-based tolling system in accordance with this Agreement, adhering to the requirements specified in Schedule-C.

3. **Web based Application Portal -** The Bidder shall provide a web-based application/portal for real-time monitoring of system health and availability, traffic count (FASTag and Non-FASTag) and automatic alerts for MLFF equipment downtime. The portal should facilitate access to transactions, issuance of discounted pass, toll revenue collected, reconciliation reports, e-notices issued, and other toll plaza details. The design should prioritize scalability to accommodate future advancements and technologies, ensuring the portal remains adaptable and continues to meet evolving requirements effectively. Minimum requirement of web-based application portal is given at Clause no. 2.10 of Schedule C.

4. **Cleanliness and Maintenance of Control Center, Plaza Building, Toilets, and Surrounding Areas**: The Bidder is responsible for maintaining cleanliness and upkeep of the Control Center, Plaza Building, toilets, and surrounding areas for the entire contract duration. This includes implementing regular cleaning schedules, efficient waste management, and adherence to hygiene standards. Sufficient staff and resources must be deployed to ensure these facilities remain fully functional, clean, and presentable at all times. Regular inspections should be conducted to promptly address maintenance issues. The Bidder must also comply with relevant health and safety regulations, ensuring a clean and safe environment for all users.

5. **Data Security and Protection**: The Bidder shall ensure robust data security and protection measures in compliance with Government of India guidelines, including but not limited to the Information Technology (IT) Act 2000 and the Digital Personal Data Protection (DPDP) Act 2023, to safeguard user data, prevent unauthorized access, and maintain the integrity and confidentiality of all collected information.

6. **Performance and fulfilment of obligation:** Ensure the performance and fulfillment of the Bidder's obligations in accordance with the provisions of this Agreement, including all incidental or necessary activities required to meet the obligations under this Agreement.

7. **Electricity Power Management:**

   a) **Power Supply for MLFF system (Gantry/existing Plaza):** The Bidder shall ensure a 24x7 power supply for the Command-and-Control Centre and MLFF field equipment, with the primary source being the Electricity Department. This supply should be supported by UPS systems, renewable energy sources (such

as solar power), and a DG set of adequate capacity. The Bidder shall make all necessary arrangements for the electricity needed for the execution of the Works and O&M period for the entire period of the Contract. The raw power will be supplied by NHAI.

b) **Lighting**: The Bidder shall ensure to maintain the existing lighting at toll plaza area for seamless operation and road safety.

c) **Electricity Charges:** The bidder will bear all recurring electricity charges, including those for illumination in plaza area, power backup etc.

1.2.7. Relationship between the Parties

Nothing in this Contract Agreement shall be interpreted to establish a relationship of master and servant or principal and agent between IHMCL and the Bidder. The Bidder, while performing the Services under this agreement, shall have full authority and responsibility over its personnel and representatives. The Bidder shall be solely accountable for the remuneration and statutory compliance concerning its employees, contractors, or representatives. IHMCL shall bear no liability with respect to the Bidder's personnel or representatives, and the Bidder shall indemnify IHMCL against any claims, liabilities, or obligations arising from such relationships.

1.2.8. Governing Law and Jurisdiction

This Contract Agreement shall be construed and interpreted in accordance with and governed by the laws of India, and the courts at Delhi shall have exclusive jurisdiction over matters arising out of or relating to this Contract Agreement.

1.2.9. Language

This Contract Agreement has been executed in English, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract Agreement.

1.2.10. Effectiveness of Contract

This Contract Agreement shall come into effect on the date the Contract is signed by both the Parties. The date, the Contract comes into effect is defined as the Effective Date.

1.2.11. Commencement of Services

The Bidder shall commence the services from the date of signing of Contract Agreement with IHMCL.

1.2.12. Duration and Extension of Contract

The term of this Contract Agreement shall be **6 months for design, development & implementation of the MLFF system and 5 years for Operation and Maintenance (O&M)** phase, starting from the Effective Date, which shall be **extendable up** to **a period up to 2 years upon the satisfactory performance and** as per requirement of IHMCL.

Any additional implementation work awarded within the original Contract Period of 5 year and 6 months period will be incorporated into the implementation and O&M phases in such a way that the total original Contract duration does not exceed the initial 5 years and 6 months,

unless an extension is granted by IHMCL.

1.2.13. Assignment

This Contract Agreement shall not be assigned by the Bidder to any person / agency except with the prior consent in writing of IHMCL and IHMCL shall be entitled to decline without assigning any reason whatsoever. Notwithstanding anything to the contrary contained in this Contract Agreement, IHMCL may, after giving 30 days' notice to the Bidder, assign and/ or transfer any of its rights, benefits and/or obligations under this Contract Agreement to an assignee who is, in the reasonable opinion of IHMCL, capable of fulfilling all IHMCL's then outstanding obligations under this Contract Agreement.

1.2.14. Severability

If for any reason whatsoever any provision of this Contract Agreement is or becomes invalid, illegal or unenforceable, or is declared by any court of competent jurisdiction or anyother 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 whichmay 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 Agreement or otherwise.

1.2.15. Notices

Any notice, request or consent required or permitted to be given or made pursuant to this Contract Agreement shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent to such Party at the address specified below. The mode of service of any notice shall be either courier or registered post or e-mail or fax or by hand.

The addresses for service of Notice shall be:

IHMCL: Chief Operating Officer

Address: Indian Highways Management Company Limited, G-5&6,
Sector-10, Dwarka, New Delhi - 110075

E-mail: tenders@ihmcl.com & coo@ihmcl.com

Bidder: …………………….

Attention: ……………………….

Address: …………………………

E-mail: …

1.2.16. Time Schedule

Sl. No.	Activity	Time period for each fee plaza
1.	Date of signing of Contract Agreement	T0
2.	Submission of Project Implementation plan with detailed resource based work break down schedule for monitoring by IHMCL.	7 days
3.	Design, Development & Implementation of FASTag-ANPR based MLFF User Fee Collection System and Offer for Site Acceptance Testing (SAT) with an intimation for "Go-Live" readiness.	05 Months
4.	Conduct of Site Acceptance Testing as per RFP (3 days' trial) and closure/rectification of all punch list/observations by IHMCL for each fee plaza	06 Months
5.	"Go-Live" of MLFF system, subject to successful completion of SAT for each fee plaza	06 Months
6.	Operation & Maintenance Period for each fee plaza	Five (05) Years from the date of Go-Live

1. **Go-Live Definition –**

"Go-Live" of the Multi-Lane Free Flow (MLFF) Tolling System shall refer to the official commencement of live electronic toll collection operations under actual traffic conditions at the designated site/plaza, along with complete deployment and readiness of all MLFF system components—including field hardware, application software, central back-office systems, and on-site operational teams. The MLFF system must be fully functional, with end-to-end integration of all modules and seamless interoperability with external interfaces with NPCI, TMCC, payment gateway(s), as per requirements. Go-Live shall be deemed achieved only upon confirmation that all subsystems meet the defined performance criteria and compliance requirements as stipulated in the contract. For avoidance of doubt, "Go-Live" shall be considered successful only after acceptance of SAT for each fee plaza.

2. **Phased SAT and Go-Live for Bundle of Fee Plazas as per Schedule A**

   a. The total timeline for Design, Development, Supply, Installation, Testing, Commissioning, and Go-Live of the MLFF System for all Fee Plazas under this Bundle shall be **six (6) months** from the Date of Signing of the Contract Agreement.

   b. The Bidder may, at its discretion, offer individual Fee Plazas for Site Acceptance Testing (SAT) on a phased basis, upon completion of installation and readiness of the respective

plaza.

c. Upon successful completion of SAT for an individual Fee Plaza and issuance of written approval by the Authority, such Fee Plaza may be declared "Go-Live" independently, without waiting for completion of the remaining plazas.

d. Notwithstanding the above, the Bidder shall ensure that:

    i. The **Central/Local Control Room** and all associated backend infrastructure are fully completed, tested, and operational prior to declaration of Go-Live of any individual Fee Plaza; and

    ii. All Fee Plazas under the Bundle achieve successful SAT and Go-Live within the overall maximum period of six (6) months.

e. Failure to complete SAT and Go-Live for all Fee Plazas within the stipulated six (6) month period shall constitute a delay under the provisions of the Contract and shall attract applicable SLA penalties.

1.2.16.1.   Site Acceptance Testing

i. After successful completion of successful implementation of MLFF facility, the successful bidder shall make a formal request to IHMCL for Site Acceptance Testing (SAT) duly mentioning the start date of SAT for each fee plaza, in consultation with IHMCL. The formal request shall include all the required documentation, test certificates, evidence for installation etc.

ii. The SAT shall be conducted for the parameters mentioned in Clause 1.2.16.3 below. The SAT shall be considered successful only if it meets all the requirement description mentioned in table under Clause 1.2.16.3.

iii. The successful bidder shall get maximum duration as per specified under Sl # 4 of Clause 1.2.16 above for completion of SAT. This includes initial trial, rectification of punch list of SAT, refinements and adjustments of the solution, and second trial in line with Sl no. (v) below.

iv. Post receipt of Offer for Site Acceptance Test (SAT) by the Acquirer Bank, IHMCL or its designated representatives shall conduct the SAT at the respective site. The Acquirer Bank, along with its sub-contractors, shall extend full support and facilitate the demonstration of all required functional and performance parameters of the deployed MLFF solution, as stipulated in the scope of work and technical specifications.

v. If the Acquirer Bank/Bidder fails to meet the required performance parameters during SAT trial run, a period of fifteen (15) days (Cure Period) shall be granted for necessary refinements and adjustments to its solution. Following this refinement period, a second round of SAT shall be conducted. If the Acquirer Bank is unable to demonstrate compliance with the required parameters in the second round of testing, the SAT shall be considered as unsuccessful. For avoidance of doubt, this Cure Period shall mean the same as mentioned in Clause 1.2.33 (b).

1.2.16.2. Consequences of Unsuccessful SAT

i. The Fee Plaza(s) where the Site Acceptance Test (SAT) is declared unsuccessful in terms of Clause 1.2.16.1 shall be **de-scoped** from the Scope of Work under Schedule-B, without any financial liability or obligation whatsoever on IHMCL. Upon such de-scoping, IHMCL shall be entitled, at its sole discretion and without any restriction, to invite fresh bids or take up the work in any other manner it deems appropriate in respect of such Fee Plaza(s), and the Bidder/Contractor shall have no claim, right or entitlement in this regard.

ii. In the event that the Bidder/Contractor fails to achieve successful Site Acceptance Test (SAT) as stipulated under this Agreement, the cash component of the Performance Security or its part, furnished under Clause 6.5 shall stand forfeited.

iii. The Parties expressly agree and acknowledge that the forfeiture of cash performance security as per clause 1.2.16.2(ii) does not constitute a penalty, but represents a fair, genuine and reasonable pre-estimate of the costs, losses, damages, expenses and administrative efforts incurred or likely to be incurred by IHMCL as a consequence of the Bidder's failure to achieve successful SAT.

iv. The Acquirer Bank shall be responsible for dismantling and removing all equipment, hardware, and associated infrastructure installed at the site, at its own cost and within the timeline specified by IHMCL.

v. The Acquirer Bank shall also be required to restore the site to its original condition, ensuring that no damage, debris, or residual materials remain. All restoration activities must be carried out to the satisfaction of NHAI/IHMCL.

1.2.16.3. Parameters to be checked during Site Acceptance Testing (SAT)

The following high-level parameters shall be evaluated during the Site Acceptance Test (SAT). IHMCL reserves the right to provide further specifications or details regarding any of the requirements outlined in this RFP, as deemed necessary.

OEM certificates, Quality Report (Prior to Acceptance Testing)

The bidder shall submit reports / certificates from OEM / System Integrator (SI) certifying quality, performance accuracy including:

1. Performance (of ANPR Camera, RFID Reader, LiDAR, Radar and MLFF Application) under various scenarios e.g., fog, rain, glare, low illumination, high-speed, lane-switching, skewed -multilingual – non-standard plates, and all vehicle classes.

2. Verification of vehicle crossings count as obtained from various field devices – e.g., RFID Reader, ANPR Camera, LiDAR, RADAR.

3. System resiliency and recovery in event of network / server / system failure.

4. Submit performance reports demonstrating receiver sensitivity (in dBm), read-rate reliability (tags read per second), adjacent-lane interference rejection, and carrier/noise interference suppression under standardized test conditions.

During Site Acceptance Testing (SAT), bidders shall demonstrate deployment effectiveness, including antenna and camera alignment, beam directionality, IR/EIRP optimization, and overall

read reliability under live traffic conditions.

SI #	Parameters	Requirements Description
1)	Vehicle count accuracy	Assessment of the proposed MLFF system's capability to achieve the vehicle count accuracy levels defined in the RFP under clause **Schedule B, Clause 10, SL no. 5.** The vehicle count accuracy shall be validated through the TMS report of the plaza. IHMCL may also validate the same with an independent system.
2)	Vehicle classification accuracy	Evaluation of the MLFF system's ability to correctly classify all tollable vehicles passing through the gantry as per the vehicle classification norms defined in the RFP under clause **Schedule B, Clause 10, SL no. 6.** The classification of the vehicles shall be as per NH Fee (Determination of Rates and Collection) Rules, 2008 shall be taken into consideration for the evaluation of this requirements, which is as below: [3]Type of Vehicle Car, Jeep, Van or Light Motor Vehicle Light Commercial Vehicle, Light Goods Vehicle or Mini Bus Bus or Truck (Two Axles) Three-axle commercial vehicles Heavy Construction Machinery (HCM) or Earth Moving Equipment (EME) or Multi Axle Vehicle (MAV) (four to six axles) Oversized Vehicles (seven or more axles) The vehicle classification accuracy shall be validated through the TMS report of the plaza. IHMCL may also validate the same with an independent system.
3)	ANPR Camera Accuracy	The ANPR camera system should read all types of vehicle registration number (VRN) plates with minimum accuracy of 99% under both day and night conditions, without any manual validation/audit. The bidder shall be solely responsible of deployment of any additional arrangement e.g. lighting etc. to achieve the desired accuracy. Note: 1. The 99% ANPR accuracy refers to the ANPR system's overall performance, considering recognition from either the front or rear license plate. Number plates that are "humanly

Sl #	Parameters	Requirements Description
		not readable" shall be excluded from the total count used for accuracy calculation.
		2. A license plate shall be considered "humanly not readable" if its alphanumeric characters cannot be accurately identified by a person with normal vision under standard daylight or lighting conditions, due to factors such as physical damage, obstruction (e.g., mud, dust, stickers), tampering, or any deliberate alteration that renders the plate illegible to the naked eye.
		3. ANPR Accuracy shall be evaluated and reported across diverse real-world test scenarios - including fog, rain, glare, low illumination, multilingual and non-standard plates, high-speed and lane-switching vehicles, and plates at varied tilt or skew angles across all vehicle classes. Front–rear plate correlations shall be validated for each scenario to ensure end-to-end consistency and eliminate false associations. The accuracy percentages shall be independently reported by the vendor and approved by IHMCL for every defined test condition.
		4. "Humanly Not Readable" shall not exempt instances such as low-light readability, skewed or angled plates, fog, rain, or glare conditions that can be effectively addressed through IR illumination, multi-angle or dual-camera capture, HDR imaging, AI-based enhancement techniques or any other technology. Any such instances shall be explicitly reported by the vendor.
		5. Total vehicle crossings shall be cross-verified across all detection sources — ANPR, RFID, LiDAR, and Lane Counters. Any vehicle missed by ANPR due to camera frame delay, frame loss, latency, or system overload shall be explicitly reported, treated as an accuracy shortfall and reflected in the reported ANPR performance metrics.
4)	API integration with NPCI for ETC transaction processing	The proposed MLFF system should be able to integrate into NPCI system as per process flow diagram provided in the RFP. The integration shall be as per the draft Technical Specification Document circulated by NPCI.
		Verification of seamless integration of the MLFF system with NPCI's infrastructure as per the process flow and draft Technical Specification Document provided in the RFP,

SI #	Parameters	Requirements Description
		including successful API communications, authentication, and transaction processing protocols.
		It should be possible to create an ETC transaction from a valid, functional FASTag from a vehicle crossing the MLFF gantry at a high speed. (speed greater than 100 km/hr). This test ETC transaction should be verifiable from NPCI system.
		Parameters shall be checked as below:
		• Verification of successful FASTag transactions captured by the MLFF system, including correct matching of vehicle passages with FASTag IDs and VRN.
		• Accuracy and completeness in capturing transaction data, including date, time, plaza code, vehicle class, transaction amount, and unique transaction identifiers.
5)	Generation of e-Notice cases	The proposed MLFF solution must have the capability to seamlessly raise a case for e-Notice generation through API integration with NPCI, providing all necessary data and supporting images, while adhering to the prescribed API protocols and authentication standards.
		Assessment of the system's ability to handle API responses, including successful case acknowledgments, error messages, retries, and exceptions, ensuring robust handling of various API interaction scenarios under different network and load conditions.
6)	Payment reconciliation for successful FASTag transactions and e-Notices	The proposed MLFF system should be able to ensure accurate reconciliation and validation of financial transactions. Validation of successful posting of transaction details to the NPCI system
		• Correct identification and categorization of ETC transactions (unsuccessful or rejected/failure to pay, exempted etc.
		• Accuracy and reliability of cases of e-Notice generation for non-FASTag transactions, including correct vehicle identification based on VRN & Tag ID, timestamping, penalty calculation, and image/evidence details.
		• Confirmation that e-Notices are generated, dispatched, tracked, and archived appropriately as per defined business rules.

SI #	Parameters	Requirements Description
		• System capability to generate reconciliation reports with detailed insights into matched and unmatched transactions, including discrepancies or errors. • Vendors shall adequately dimension all subsystems and ensure that the end-to-end MLFF system, including the Transaction Engine and Reconciliation Engine, is sized to handle at least twice (2×) the current peak traffic observed at the plaza and in any individual lane. This capacity provisioning is intended to ensure that the overall system operates at no more than 80% utilization, even after accounting for future traffic growth and load variations.
7)	Reporting/MIS	Confirmation of comprehensive audit trails, robust traceability of transaction reconciliation processes, and the capability to generate detailed reconciliation reports highlighting matched, unmatched, or erroneous transactions, e-notices cases.

1.2.17. Damages

1.2.17.1.   Damages for Delay in completion of work

Refer to Section Service Level Agreements (SLA), in the RFP Schedule B Section 11.

1.2.17.2.   Extension of Time (EOT)

i.   The Bidder may request an extension of time beyond the binding completion schedule if it encounters unforeseen circumstances or events beyond its control that materially and significantly impact its ability to meet the deadline.

ii.   The Bidder shall submit a written request for the extension, detailing the reasons for the delay and providing supporting documentation, to IHMCL within a reasonable time frame after becoming aware of the delay.

iii.   IHMCL shall review the extension request and may grant an extension if it deems the reasons provided by the Bidder to be valid and justifiable.

iv.   If the Bidder fails to request an extension of time within thirty (30) day from the date of occurrence of the delay-causing event or if the delay is not attributable to reasons beyond its control, the request of the Bidder will not be considered by IHMCL.

v.   The Bidder shall not be entitled to any extension of time or relief from damages for delays caused by its own negligence, inadequate planning, insufficient resources, or failure to adhere to project timelines.

vi.   The decision of IHMCL regarding extension requests and imposition of damages shall be final and binding on the Bidder, subject to dispute

resolution mechanisms as outlined in the Contract Agreement.

1.2.17.3. Damages for Non-Compliance to Safety Standards at site

Failure by the Bidder's personnel in maintaining the safety standards at the site as per Schedule-C at any time shall attract damages on every instance noticed by the IHMCL (or its representatives).

a. Staff working without safety gears – damages of INR 10,000/- per instance. In the case of repeated instances by the same staff member of the Bidder, the damages shall be doubled per instance. The Bidder shall have to Replace the repeated offenders / personal (safety lapses more than thrice) with immediate effect.

b. Improper safety measures at site, safety hazard to the commuters due to poor workmanship, etc. working during low visibility hours or at night time without proper safety measures, warning signages and lighting/ improper traffic diversion / non-standard warning signages etc. / unauthorized lane closure / traffic rule violation – minimum damages of INR 1,00,000/- per instance shall be imposed on recommendation of the IHMCL (or its representatives). In cases of repeated instance, the penalty shall be doubled per instance. The Bidder shall have to Replace the repeated offenders / personal (safety lapses more than twice) with immediate effect. IHMCL shall also take legal action against the errant staff / sub-contractor (SI) of the Bidder, as such safety lapses may lead to major safety concerns / hazards for the road users as well as the workers

1.2.17.4. Damages for non-adherence of Service Level Agreement (SLA)

a. Non-Adherence of SLA during the O&M period would result in damage mentioned in Schedule-B of the Agreement. The damage will be recovered as defined under clause 1.2. 19 of the General Conditions of the Contract.

b. During the Contract Agreement, every first week of the Quarter, the Bidder is obligated to make an inventory of the items presented and provide a copy to IHMCL. Furthermore, the Bidder shall provide an undertaking attesting to the presence and functionality of all required items as per the Technical Bid, accompanied by the necessary documentary evidence to support this claim.

c. To verify the undertaking or even otherwise, every quarter, IHMCL or its representative can do an inventory or inspection of the items that are to be present and working as per the technical bid. If technical requirements are not found to be met, IHMCL can pause the calculation payments until all technical requirements are met again. In such cases, IHMCL will eliminate the paused period and make prorated payments for that quarter.

1.2.18. Payments

(a) The payment shall be made based on the Fixed Per Transaction Cost (in Rs.), as specified in the Bidder's Financial Bid Form F-1 and accepted by the Authority, in consideration of the obligations outlined in this Agreement.

(b) Under no circumstances shall the value quoted by the Bidder be revised upwards,

even if there is an increase in any tax, statutory, or financial liability of the Bidder that was not in existence or prevalent at the time of bid submission.

(c) The Fixed Per Transaction Cost (in Rs.) in the financial bid, unless otherwise specified in the Contract Agreement, shall cover all the Bidder's responsibilities for the works outlined in this Agreement, including all essential, desirable, and obligatory items for the Implementation, operation, and maintenance of the MLFF system. This shall be done without compromising on the quality standards specified in the Contract Agreement, Good Industry Practice, and any official memos, circulars, or notices issued or to be issued by IHMCL/NHAI, which are relevant to the scope of this Contract Agreement, as well as the remedying of any defects in the MLFF-based tolling system.

1.2.19. Payment Terms

1.2.19.1. The bank shall be entitled for payments as per following procedure for each Fee Plaza:

(a) The Acquirer bank shall deposit the collected user fee amount for all clean transactions processed through FASTag-ANPR, and the amounts collected by bidder for *Plaza Specific Discount Pass[1] issued in that week*, every Tuesday, for the period from Tuesday (00:00:00 Hrs.) of the prior week to Monday (23:59:59 Hrs.), after deducting the Bidder's applicable Total Payout.

The Settlement (Deposit) shall be processed through RTGS on all 365 days except for specified bank holidays as and when declared by RBI.

(b) The Total Payout shall be calculated as under:

Total Payout = Fixed Per Transaction Cost x N

Where, N = (N1 + N2 + N3 + N4 + N5)

And

i.   N1= Number of Clean Transactions

ii.   N2= Number of E-notices generated, subject to Clause 1.2.19.1. (d)

iii.   N3 = Number of Transactions of Global Pass issued as provision of sub-rule 3(B) (Annual Pass) of Rule 9 of the National Highways Fee (Determination of Rates and Collection) Rules, 2008

iv.   N4 = Number of Transactions of Plaza Specific Discount Pass issued as per provision of sub-rule 2 (Monthly 50 trip Pass) and sub-rule 3(A) of Rule 9 of the National Highways Fee (Determination of Rates and Collection) Rules, 2008

v.   N5 = Number of Transactions of Plaza Specific Discount Pass issued as per provision of sub-rule 3 (local Pass for residents within 20km) of Rule 9 of the National Highways Fee (Determination of Rates and Collection) Rules, 2008, subject to Clause 1.2.19.1. (c)

(c) Notwithstanding anything to the contrary, the maximum number of transactions eligible for Fixed Per Transaction Cost, in respect of any individual vehicle under the category

N5 (local Pass for residents within 20km) mentioned above, shall be limited to four (4) transactions per vehicle within a 24-hour period.

The Bidder shall continue to process all transactions beyond this limit in accordance with the provisions of the RFP and as per NETC guidelines; however, no Fixed Per Transaction Cost shall be payable for such additional transactions pertaining to the same vehicle within the said 24-hour period.

Furthermore, the total monthly payout for any such vehicle holding a valid Local Pass shall not exceed the cost of the Local Pass issued as per the provision of sub-rule 3 of Rule 9 of the National Highways Fee (Determination of Rates and Collection) Rules, 2008. The value of such Local Pass FY 2025–26 is ₹350/-.

Illustration 1:

Consider a vehicle bearing registration number DL20XX123 that holds a Plaza-Specific Local Pass (under Category N5). If the vehicle crosses the toll plaza six (6) times within a single 24-hour period, only the first four (4) transactions shall be eligible for payment of the Fixed Per Transaction Cost to the Bidder. The remaining two (2) transactions shall still be processed in accordance with the provisions of Schedule B and applicable NETC guidelines, but no Fixed Per Transaction Cost shall be payable for these additional transactions.

If the vehicle performs six (6) transactions daily for 30 consecutive days in June 2025, only 120 transactions (4 per day × 30 days) shall be eligible for payment. Furthermore, the total monthly payout for this vehicle shall be capped at ₹350/-, being the value of the Local Pass for FY 2025–26.

(d) The bank is also entitled for the Fixed Per-Transaction Cost for e-notice generated on Tollable Traffic as per conditions in e-Notice Module under Schedule B and as mentioned below:

  i. The e-Notices issued by the Bank shall be accurate and correct, with the Bank bearing full responsibility for their content.

  ii. No grievance is pending against the said e-notice.

  iii. E-Notice Amount and Payout: Each e-Notice shall reflect an amount equivalent to twice the applicable user fee for the vehicle's category. The Bank shall be entitled to a payout for e-notices issued. The payout for e-notices shall be calculated based on Fixed Per-Transaction Cost multiplied by total number of e-Notice issued, provided the notices are accurate, correct and substantiated by clear photographs of the vehicle (front and rear) and subject to (ii) above.

  iv. The Bank shall be entitled for adjusting payout for e-notices cases from the user fee collection only after 14 days of the issuance of e-notices. For avoidance of doubt, the applicable payout for e-notice cases authorized in week one (1) shall be adjusted by bank from collected user fee in week three (3) duly considering the SLAs for e-notices.

  v. No e-notice shall be generated for vehicle with Plaza Specific Discount Pass,

Global Pass and vehicles under Exempted category.

(e) The Bidder shall be not be entitled for any fixed per-transaction cost for processing transactions of exempted vehicles, i.e., those vehicles as specified under Rule 11 of the National Highways Fee (Determination of Rates and Collection) Rules, 2008, as amended from time to time. Also, no fixed per transaction cost is applicable on Global Pass issued as per provision of Rule 11 of the National Highways Fee (Determination of Rates and Collection) Rules, 2008.

It may be noted that, any exemption granted to vehicles outside the scope of the aforementioned Rules shall attract SLA penalties as specified in Schedule B.

Illustration 2:

Let's assume the following data is recorded for a given week (from Tuesday, 04.03.2025 00:00:00 hrs to the following Monday, 10.03.2025 23:59:59 hrs):

Transaction Category	Total Transactions Logged	Transactions Disqualified for Payout (beyond 4 per same vehicle/day and Exempted vehicle)	Eligible Transactions (for payout)	Total Revenue Collection
N1 – Clean Transactions	1,25,000	NA	1,25,000	3,29,00,000
N2 – E-Notices (issued to 2 weeks before)	5,000	NA	5,000	-
N3 – Global Pass Transactions (Annual Pass)	5,000	NA	5,000	-
N4 – Plaza Specific Discount Pass (Monthly & District Pass)	2000	NA	2,000	1,20,000
N5 – Plaza Specific Discount Pass (Local Pass)	10000	2000	8000	5000
Total (N)	1,47,000	2000	1,45,000	3,30,25,000

Assume the **Fixed Per Transaction Cost** Quoted by the Bidder is ₹2.00 per transaction.

Total Payout Calculation:

Total Payout= Fixed Per Transaction Cost × N =₹2.00×1,45,000=₹ 2,90,000/-
Settlement Instruction:

- The Acquirer Bank shall deposit the net amount of Rs. 3,27,35,000/- (Rs. 3,30,25,000 – Rs. 2,90,000) collected during the period via RTGS on Tuesday, 11.03.2025 for the period of the preceding Tuesday, 04.03.2025 00:00:00 hrs to the following Monday, 10.03.2025 23:59:59 hrs.

- Any transactions beyond 4 per same vehicle per 24 hours for vehicles with Plaza Specific Discount Pass, shall not be eligible for payout.

(f) SLA calculations shall be done on monthly basis. SLA Penalty settlement shall be done in first week of every month.

(g) The Acquirer bank shall be required to pay the penalty amount within 3 working days of the intimation by IHMCL failing which the same will be adjusted from the Cash Performance Security. Cash Performance security shall be replenished by the bidder within 3 working days from the date of such recovery. If agency fails to replenish the performance security within 3 working days of such recovery, the amount shall be recovered by encashment of Performance Bank Guarantee which shall be considered as a breach of the Contract Agreement.

1.2.20. Incentive for higher clean transactions

(a) If, in any given quarter, the number of clean ETC transactions exceeds 95% of the total transactions recorded at the toll plaza, the Bidder shall be entitled to an additional amount. This additional amount shall be calculated as 25% of the Fixed Per Transaction Cost, applicable only to the number of clean ETC transactions that exceed the 95% threshold and are successfully settled during that quarter.

For the avoidance of doubt:

   i. "Clean ETC Transaction" shall refer to any toll transaction processed via FASTag and successfully settled through the NETC system of NPCI.

   ii. "Total Transactions" shall include all toll transactions (numbers) at the plaza, including but not limited to those related to e-Notices, exempted vehicles, violation cases, and dispute cases, etc.

   iii. "Quarter" shall refer to the standard financial year quarter (i.e., April–June, July–September, October–December, January–March).

Illustration: If the system is declared Go-Live on 20th February 2025, the first quarter shall be considered as the period from 20th February 2025 to 31st March 2025.

(b) The incentive shall be adjusted in the settlement of 3rd week cycle of the succeeding quarter after duly hosting the reconciliation report on the web portal.

Illustration – Incentive for Clean ETC Transactions Exceeding 95%

Assume the following for a specific quarter:

- Total Transactions at Toll Plaza: 10,00,000
- Clean ETC Transactions: 9,70,000
- 95% of Total Transactions: 9,50,000
- Fixed Per Transaction Cost Quoted by the bidder: ₹2.00

Eligible Clean ETC Transactions for Incentive=9,70,000−9,50,000=20,000

Incentive Calculation = ₹ 0.50 (25% of ₹2.00) * 20,000 = ₹10,000

1.2.21. Change of Scope

a) Bank shall be entitled for additional payment over and above the Fixed Per Transaction Cost only in case of Change of Scope order is given by IHMCL. Change of Scope will be initiated in the following cases only after written instructions from IHMCL or its representative:

   i. Installation of MLFF Solution at any other location/ toll plaza other than mentioned in Schedule-A. For avoidance of doubt, any variation in quantity(ies) of gantries, equipment, support system, OFC, Civil/Mechanical Works, Software/Hardware etc. of MLFF tolling solution or any software/App upgradation works mentioned in Schedule-C to meet the scope of work and SLA parameters shall not constitute any Change of Scope.

b) The estimate of any Change of Scope Work due to the condition mentioned above shall be derived as per mutually agreed terms based on Good Engineering Practice.

c) Upon receipt of written instruction from IHMCL or its representative, the bank shall submit the Change of Scope proposal within 15 days duly including the estimate, design drawing of the work along with functional and technical specifications and time required for completion of the additional work, to IHMCL or its representative for issue of the Change of Scope Order.

1.2.21.1. Change Control Note (CCN)

a) This applies to and describes the procedure to be followed in the event of any proposed change to contract, site Implementation, and Service levels. Such change shall include, but shall not be limited to, changes in the scope of services provided by Successful bidder and changes to the terms of payment.

b) Change requests in respect of the contract, the site implementation, or the Service levels shall emanate from the Parties' representative who shall be responsible for obtaining approval for the change and who shall act as its sponsor throughout the Change Control Process. CCNs shall be presented to the other Party's representative who shall acknowledge receipt by signature of the authorized representative of the IHMCL.

c) Successful bidder and Authority while preparing the CCN, shall consider the change in the context of whether the change is beyond the scope of Services including ancillary and concomitant services required.

d) The CCN shall be applicable for the items which are beyond the stated/implied scope of work as per the RFP document.

1.2.22. Project Administration

The Project Directors of Concerned Project Implementation Unit (PIU) of NHAI shall be administrator of the Contract. COO, IHMCL shall act as coordinator, who will be responsible for the coordination of activities under this Contract Agreement. For acceptance and finalization of the services and of other deliverables IHMCL/NHAI may appoint a Supervision Consultant or any official of IHMCL/NHAI to act on its behalf.

1.2.23. Audit

i. IHMCL/NHAI at its sole discretion may conduct regular /forensic audit of the services under this Contract Agreement. The Bank shall cooperate and provide all required documentation, access to IT system during such audit, failing which, it shall be considered as breach of Contract Agreement on part of Bidder under Clause No. 1.2.32(p).

ii. NHAI/IHMCL reserves the right to install or appoint any third party to install additional infrastructure, such as a separate gantry, cameras, or any other equipment, to facilitate third-party audits. This infrastructure may be deployed to independently verify data, monitor operations, or ensure compliance with service level agreements (SLAs). The successful bidder shall provide all requisite support to the third-party facility such as Power, Integration with successful bidder solution etc. without any additional cost to NHAI/IHMCL.

1.2.24. Fraud and Corruption

1.2.24.1. Definitions

It is IHMCL's policy that IHMCL as well as bidder observe the highest standard of ethics during the selection and execution of such contracts. In pursuance of this policy, IHMCL defines, for the purpose of this provision, the terms set forth below as follows:

i. "Corrupt practice" means the offering, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the selection process or in contract execution.

ii. "Fraudulent practice" means a misrepresentation or omission of facts to influence a procurement process or execution of a contract with IHMCL; and includes collusive practice among bidders, prior to or after bid submission, designed to establishbid prices at artificially high or non-competitive levels and to deprive IHMCL of the benefits of free and open competition.

iii. "Collusive practices" means a scheme or arrangement between two or more bidders, with or without the knowledge of IHMCL, designed to establish prices at artificial, non-competitive levels.

iv. "Coercive practices" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process or affect the execution of a contract.

v. "Unfair trade practices" means supply of services different from what is ordered on, or change in the Scope of Work which was not agreed to; and

vi. "Restrictive practices" means forming a cartel or arriving at any understanding or arrangement among bidder(s) with the objective of restricting or manipulating a full and fair competition in the bidding process.

1.2.24.2. Measures to be taken by IHMCL.

a) IHMCL may terminate the contract if it determines at any time that representatives of the

Bidder were engaged in corrupt, fraudulent, collusive or coercive practices during the selection process or the execution of that contract, without the Bidder having taken timely and appropriate action satisfactory to IHMCL to remedy the situation; and

b) IHMCL may also sanction against the Bidder, including blocklisting or declaring the Bidder ineligible, either indefinitely or for a stated period, to be awarded a contract if it at any time determines that the Bidder has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or executing a contract with IHMCL.

1.2.25. Confidentiality of the Assignment/Findings

(a) During the term of this Contract Agreement and for three years following its expiration or termination, the Bidder shall not divulge or authorise the disclosure of the services, this Contract Agreement, or the business or operations of IHMCL to a third party without IHMCL's prior written consent. This excludes its agents, consultants, or sub-contractors (SI) who require the information for the purpose of performing its duties under the Contract Agreement. The Bidder must ensure that such agents, consultants, or sub-contractors (SI) are bound to preserve the complete confidentiality of any Proprietary and Confidential Information of IHMCL.

(b) The Bidder and its personnel shall use such Proprietary Information only for the purpose for which it was disclosed and shall not use or exploit such Proprietary Information for its own benefit or the benefit of another without the prior written consent of the IHMCL. Without limitation of the foregoing, Bidder shall not cause or permit reverse engineering of any Proprietary Information or recompilation or disassembly of any information or software programmes that are part of the Proprietary Information received by it under this Contract Agreement. For the purposes of this Contract Agreement - Proprietary Information shall include, but not be limited to, strategies, official secrets, actual and anticipated research, developments or plans, services, software, source codes, inventions, processes, discoveries, formulas, architectures, concepts, ideas, designs, drawings, personnel, financial information, demonstrations, operations, records, assets, technology, data, and information derived, whether existing or derived or analysed out of the information made available to the Bidder in the form of raw data or reports, in any form whatsoever.

(c) The Bidder alone shall be responsible for ensuring the maintenance of confidentiality as contemplated above and shall be responsible for employing sufficient measures to prevent any unauthorised access to the Proprietary Information.

1.2.26. Insurance cover to be maintained.

(a) The Bidder shall ensure to maintain proper insurance coverage of all the equipment, materials, establishment against fire, theft, vandalism or any other perceived risk(s) / natural disaster etc. during the entire duration of the contract period. It shall sole responsibility of bidder to claim the insurance and replace the damaged component or system during contract period.

(b) In addition to material and equipment, the Bidder shall also ensure to have adequate

insurance for all its personal working/ deployed under this Contract Agreement. The insurance shall also fully cover the personnel / workers / laborers of sub-contractors (SI). In case any worker / laborer claim is not covered by the insurance company, the Bidder shall be responsible for covering the entire expenses for medical, transportation, wages, compensation etc. of the personnel in case of any incident / accident/ mishap / death, or a claim by the third party etc. Suitable compensation shall be paid by the Bidder to the personnel deployed at the project in case of any incident / accident/ mishap / death, etc. if any happened on the site/ project or in transit, irrespective of thereason. Hence the insurance policy shall be comprehensive and shall cover all types of risks and compensation.

(c) The Bidder shall fully indemnify IHMCL against any damage/ loss of property or personnel of Bidder working on any site under this Contract Agreement.

(d) The Bidder shall submit copies of the insurance policies to IHMCL within 15 days of Contract Signing, and renewal policy within 15 days of the expiration of the policy until the end of the Contract period. A penalty of INR 10,000 shall be levied on the Bidder for each working day from the due date of submission or expiry of the insurance policy documents till the actual date of submission.

1.2.27. Labour Laws

(a) The Bidder shall obtain all relevant labor registrations and comply with all relevant labor laws applying to its employees and shall duly pay them and afford them all their legal rights.

(b) The Bidder shall make all deductions of tax at source and all contributions to the Payment of Gratuity, Provident Fund (including Employees' contribution) and Employees' State Insurance Scheme as may be required by Applicable Laws and deposit the aforesaid contributed amount with the appropriate authority/(s).

(c) The Bidder shall require all personnel engaged in the work to obey all Applicable Laws and regulations. The Bidder shall permit the Authority to witness labor payments for the Bidder direct labor or the sub-contractors'(SI) labor. The Bidder shall ensure that all its sub-contractors (SI) strictly comply with all labor laws.

(d) Documentary evidence confirming the above compliance, as may be required from time to time, shall be provided to the IHMCL's Representative.

(e) IHMCL shall not be liable for any delay or default of the Bidder in compliance with the labor laws.

1.2.28. No partnership

This Contract Agreement 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 act as an agent or representative of, or to otherwise bind, the other Party.

1.2.29. Intellectual Property Rights

All Intellectual Property of the respective Parties shall continue to vest with the respective Party and one Party may make use of the Intellectual Property only with the express consent of the other Party. However, it is agreed and acknowledged by the Bidder that intellectual property rights in the Proprietary Information as well as any other data or information/ reports generated during the performance of services contemplated herein by the Bidder shall always vest with IHMCL and Bidder or its employee, agent, official, sub-contractor (SI) will not have any right in such IPR whatsoever.

1.2.30. Force Majeure Events

1.2.30.1 Definition

Force Majeure event means an event or circumstances or a combination of events and circumstances referred to in this clause which has occurred for 7 (seven) or more consecutive calendar days and which are beyond the reasonable control of the Party or Parties to this Contract under which could not have prevented or reasonably overcome with the exercise of its reasonable skill and care in relation to performance of its obligations pursuant to this Contract and which are of the nature, without limitation of those described below:

i.   **Prolonged Transporter Strikes:** Publicly declared strike by registered and recognized association of transporters, impacting toll revenue collection.

ii. **Natural Disasters:** Occurrence of floods, earthquakes, or other natural calamities that have a material adverse impact on the performance of obligations of the parties thereof.

iii. **War, Terrorism, or Civil Unrest:** Act of war, invasion, armed conflict or act of foreign enemy. unexpected call up of armed forces, blockade, embargo, revolution, riot, terrorism or act of such threat, or any other political or social event having material adverse impact on the performance of obligations of the parties thereof.

iv. **Change in law:** Any change in law resulting impacting toll revenue collection due to reasons beyond the control of the Successful Bidder/ Acquirer Bank.

v.   **Judicial Orders:** Any decision or order of a competent court or tribunal, which has a material adverse impact on the performance of obligations of the parties thereof.

vi. **Suspension of Traffic:** Suspension of traffic on the said section of National Highway/ said bridge or any part thereof, impacting toll revenue collection due to reasons beyond the control of the Successful Bidder/ Acquirer Bank.

vii. **Diversion of Traffic:** Any diversion of traffic, including but not limited to diversions ordered/implemented by local authorities, NHAI or State/Central Government impacting toll revenue collection due to reasons beyond the control of the Successful Bidder/ Acquirer Bank.

viii. **Pandemic or Epidemic:** Any pandemic or epidemic declared by the Government of India, which has a material adverse impact on the performance of obligations of the parties thereof.

1.2.30.2 Notification and Obligations of the Affected Party

Upon the occurrence of a Force Majeure Event, the Affected Party:

i. Shall notify the other Party in writing within seven (7) calendar days of the occurrence of the Force Majeure Event, detailing the nature of the event, the obligations affected, and the expected duration of impact.

ii. Shall take all reasonable steps to mitigate the effects of such an event at its own cost and resume performance of its obligations as soon as possible.

iii. Shall provide periodic updates on the status of the event and the expected resolution timeline

iv. Notwithstanding anything contrary specifically stated in this Contract, no party shall be relieved of its obligations under this Contract by reason of impossibility of performance or any other circumstance not beyond its control.

1.2.30.3 Consequences of Force Majeure

i. Upon occurrence of such Force Majeure Event, the Affected Party shall immediately take reasonable steps to remove the causes resulting in Force Majeure if within its control and mitigate the effect thereof. Any costs incurred and attributable to such an event or its resolution shall be solely borne by the Affected Party.

ii. The Force Majeure Period shall commence when the Total Transactions "N" as defined under Clause 1.2.19.1 falls below 50% of the Total Transactions "N" as defined under Clause 1.2.19.1 of the corresponding day in the previous year, escalated by 5%.

iii. The Force Majeure Period shall cease to exist on the day when the Total Transactions "N" as defined under Clause 1.2.19.1 reaches at least 50% of the Total Transactions "N" as defined under Clause 1.2.19.1 of the corresponding day in the previous year, escalated by 5%.

iv. The Affected Party may claim an extension of the Contract Period as per Clause 1.2.30.4, subject to the following conditions:

    a. If the Force Majeure period occurs within 365 days (1 year) of Go-Live, there shall be no extension of the Contract Period.

    b. There shall be no extension of the Contract Period if the period between the commencement of the Force Majeure event (when Total Transactions "N" as defined under Clause 1.2.19.1 falls below 50% of the corresponding day of the preceding year escalated by 5%) and the cessation of the Force Majeure event (when Total Transactions "N" as defined under Clause 1.2.19.1 exceeds 50% of the corresponding day of the preceding year escalated by 5%) is less than seven (7) calendar days.

1.2.30.4 Compensation for Force Majeure

i. The Successful Bidder/Acquirer Bank shall be entitled to invoke this clause by providing written notice to NHAI, specifying the nature and impact of the Force Majeure Event, as per the procedure mentioned in Clause 1.2.30.2.

ii. In the event that a Force Majeure claim is deemed valid under the above conditions, the Successful Bidder/Acquirer Bank shall be entitled for extension in the Contract Period by a

period equal to the duration of the Force Majeure period, subject to fulfilment of Clause 1.2.30.3.

Illustration of Force Majeure Event

Scenario: There occurs a transporter strike, leading to drop in Total Transactions threshold specified in Clause 1.2.30.3.

Step 1: Notification- The Acquirer Bank notifies IHMCL & NHAI in writing within seven (7) calendar days of the lockdown being imposed, specifying the impact on Total Transactions and estimating the period of disruption.

Step 2: Mitigation Efforts- The Acquirer Bank shall take all reasonable steps to mitigate the effects of such an event at its own cost and continues performance of its obligations under the contract.

Step 3: Periodic Updates- The Bank provides periodic updates to IHMCL & NHAI on the revenue status, measures taken, and projected recovery timeline.

Step 4: Consequences & Compensation

- Assuming the Go-live **Feb 15, 2024** and assume Total Transations "N" as defined under Clause 1.2.19.1 "on **March 1, 2024** (corresponding day of the previous year) was **10,000**. Applying a 5% escalation, the threshold for **March 1, 2025** would be **10,500**.

- Due to the Force Majeure event, the actual Total Transactions "N" as defined under Clause 1.2.19.1 on **March 1, 2025** drops to **5,000**, which is below 50% of 10,500 (i.e., **5,250**). This marks the commencement of the Force Majeure Period.

- Over the next few days, Total Transactions "N" as defined under Clause 1.2.19.1 remains below 5,250 for each calendar day.

- On **March 10, 2025**, the Total Transactions "N" as defined under Clause 1.2.19.1 reaches **8,000**, which is above 50% of the corresponding escalated Total Transactions "N" as defined under Clause 1.2.19.1. This marks the cessation of the Force Majeure Period.

- The total duration of the Force Majeure Period is **March 1, 2025, to March 10, 2025 (10 days)**, which exceeds the **7-day minimum requirement**.

- Since the Force Majeure Period lasted more than 7 calendar days and falls beyond 365 days of Go-Live, the Contract Period is likely to be extended by **10 days**.

1.2.31. Dispute Resolution

Dispute resolution procedure shall be as mentioned in Clause 6.6 of the RFP.

1.2.32. Events of default by the Bidder

The failure on the part of the Bidder to perform any of its obligations or comply with any of the terms of this Contract shall constitute an Event of Default on the part of the Bidder. The events of default as mentioned above may include inter-alia of the following:

a. the Bidder fails to provide, extend, or replenish the Performance Security in accordance with

this Agreement.

b. the Bidder abandons or manifests intention to abandon the implementation or O&M of the Project without the prior written consent of the Authority.

c. the Project Completion Date does not occur within the period specified in RFP Clause 1.2.12 for the Scheduled Completion Date, or any extension thereof accorded under Clause 1.2.12. point no 2.

d. the Bidder fails to rectify any Defect, the non-rectification of which shall have a Material Adverse Effect on the Project, within the time specified in this Agreement or as directed by the Authority.

e. the Bidder fails to complete successful SAT as per Clause 1.2.16.1.

f. the Bidder creates any Encumbrance in breach of this Agreement.

g. an execution levied on any of the assets of the Bidder, or if a trustee or receiver is appointed for the Bidder or for the whole or material part of its assets that has a material bearing on the performance of the Bidder under the Contract Agreement.

h. the Bidder is adjudged bankrupt or insolvent, has been, or is in the process of being liquidated, dissolved, wound-up.

i. the Bidder has been or is in the process of being amalgamated or reconstituted in a manner that would cause, in the reasonable opinion of the Authority, a Material Adverse Effect or would be in breach of the terms of the Contract Agreement.

j. any representation or warranty of the Bidder herein contained which is, as of the date hereof, found to be false or that the Bidder is at any time hereafter found to be in breach or non-compliance thereof.

k. the Bidder submits to the Authority any statement, notice or other document, in written or electronic form, which contains false contentions/ information and can potentially adversely impact the Authority's rights, obligations or interests if accepted on its face value.

l. the Bidder has failed to fulfil any obligation, for which failure Termination has been specified in this Agreement.

m. the Bidder commits a default in complying with any other provision of this Agreement if such a default causes a Material Adverse Effect on the Project or on the IHMCL.

n. the Bidder fails to deposit the collected amount in NHAI bank account within timeline defined in Payment Terms.

o. In case bidder fails to complete Hand Over Take Over (HOTO) activities during the contract period, as per Clause 1.2.36.

p. The bidder's refusal to allow or failure to support the conduct of a forensic audit or IT system audit of their MLFF system.

q. The bidder fails to submit Acquirer Bank certification under the FASTag NETC Programme from NPCI within 90 days from the date of issuance of Letter of Award (LOA).

r. The bidder fails to meet SLA as mentioned in the Contract Agreement.

s. Gives or offers to give (directly or indirectly) to any person any bribe, gift, gratuity,

commission, or other thing of value, as an inducement or reward:

   i. for doing or forbearing to do any action in relation to the Contract, or

   ii. for showing or forbearing to show favor or disfavor to any person in relation to the Contract, or

   iii. if any of the Bidder's personnel, agents, or sub-contractors (SI) give or offer to give (directly or indirectly) to any person any such inducement or reward as is described in this sub-paragraph (o). However, lawful inducements and rewards to Bidder's Personnel shall not entitle termination.

1.2.33. Consequences of Default

Where an Event of Default subsists or remains uncured then IHMCL shall be entitled to:

1) Impose any such obligations and conditions and issue any clarifications as may be necessary to inter alia ensure smooth continuation of project and the Services which the Bidder shall be obliged to comply with. The Bidder shall in addition take all available steps to minimize is resulting from such event of default.

2) Notwithstanding anything stated in this Contract Agreement, in the event of any defaults on part of the Bidder, IHMCL shall issue a notice to the Bidder (hereinafter referred to as Cure Period Notice) setting out specific defaults / deviances / omissions / non-compliances / non-performances and providing a notice of Fifteen (15) days ("Cure Period") to enable such defaulting party to remedy the default committed. If the Bidder fails to cure the default within the Cure Period, as stated in the Cure Period Notice, the Bidder shall be deemed to be in default of this Contract Agreement, unless the default has occurred solely as due to Force Majeure or for reasons not attributable to the Bidder. The Cure Period under this Clause shall be calculated from the date of receipt of the notice by the Bidder or when the default comes into the knowledge of the Bidder, whichever is earlier. If the Bidder fails to remedy the default after lapse of Cure Period notice, the contract is liable to be terminated by IHMCL.

3) In the event that the Authority issues a notice to the Bank pursuant to a breach of the Contract under Clause No. 1.2.32 of the Contract Agreement, the Bank shall be obligated to deposit the entire toll collected into the designated account of NHAI within T+1 working day. For the avoidance of doubt, from the date of issue of notice for the breach, the Bank's entitlement to Fixed Per Transaction Cost and the 7-day float shall remain suspended until the breach is fully remedied to the satisfaction of the Authority. Furthermore, the Authority reserves the right to implement alternative tolling arrangements as necessary to safeguard its User Fee Revenue.

1.2.34. Termination

(a) Without prejudice to any other rights or remedies which the Authority may have under this Agreement, upon occurrence of a Bidder Default, the Authority shall be entitled to terminate this Agreement by issuing a Termination Notice to the Acquirer bank; provided that before issuing the Termination Notice, the Authority shall by a notice inform the Acquirer bank of its intention to issue such Termination Notice and grant 15 (fifteen) days to the Bidder to make a representation, and may after the expiry of such 15 (fifteen) days, whether or not it is in receipt of such representation, issue the

Termination Notice.

(b) 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.

(c) Nothing herein shall restrict the right of the IHMCL to invoke the Bank Guarantee and other Guarantees furnished hereunder and pursue such other rights and/or remedies that may be available to the IHMCL under this Agreement and/or the Applicable Law.

1.2.35. Consequence of Termination

1. Upon Termination on account of Clause 1.2.34 (a):

    i. the Authority shall encash and appropriate the Performance Security, Additional Performance Security if any.

    ii. the Authority may debar/blacklist the successful bidder from participating in any other project/assignment/work of IHMCL for a period as determined by IHMCL at its sole discretion.

2. Upon Termination on account of Clause 1.2.34 (b), the Authority shall make Termination Payment as under:

    i. During (06 Months Implementation period) + O&M Period (60 months) :

    I.   Depreciated value of the equipment(s) and shall take into possession the installed equipment(s). In such a case the depreciating cost of the equipment shall be calculated as below:

        b) The depreciation value of the indicated equipment in Form F-2 of the financial bid shall be reduced by 20% every year to the rate mentioned for the respective items, subject to the provision of Note 3 of Form F-2.

        c) If the unit cost of any equipment is Rs. 100/-, after 1 year, the depreciated cost of the equipment remains Rs. 80/-. Similarly, after the 2nd year, the cost of equipment remains Rs. 60/-, after the 3rd year, the cost of equipment remains Rs. 40/-, after the 4th year, the cost of equipment remains Rs. 20/-, and after the 5th year, the cost of equipment remains Rs. 0/-.

    ii. During O&M Period (From 67 to 84 months)

        I.   The Bidder expressly agrees that Termination Payment shall constitute a full and final settlement of all claims of the Bidder on account of Termination of this Agreement and any other payment payable with respect to the Contract Agreement. The Bidder undertakes that it shall not have any further right or claim under any law, treaty, convention, contract, or otherwise, arising out of or in connection with the Contract Agreement.

3. Upon Termination, the Bidder shall handover all reports, all applicable photographs, videos and all other data generated in readable format as per the provision of entire MLFF based tolling system data facility including all data, backup data and any other material / document set forth in this Agreement, to IHMCL or its representative in running condition

1.2.36. Handing over and taking over

a) After the expiration of the Maintenance Period stipulated in the Contract Agreement and any extensions thereof, the Bidder shall hand over the gantries in a good, workable, and painted condition as per the conditions outlined in the RFP.

b) After the expiry of the Maintenance Period set forth in the Contract Agreement and any extension thereof, the bank shall handover entire facility in good working condition, reports, all applicable photographs, videos and migration of all other data generated in readable format as per the provision of entire MLFF based tolling system data facility including all data, backup data and any other material / document set forth in this Agreement, to IHMCL or its representative in running condition.

1.2.37. Survival of rights

Notwithstanding anything to the contrary contained in this Contract Agreement, any Termination pursuant to the provisions of this Contract Agreement shall be without prejudice to the accrued rights of either Party including its right to claim and recover money damages, security deposits, and other rights and remedies whichit may have in law or contract.

1.2.38. Indemnification

(a) The Bidder shall indemnify, defend, save and hold harmless, IHMCL and NHAI and M/o RoadTransport and Highways (MoRTH) and its Officers, Agents, Engineer, 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, such as fees and expenses 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 Bidder's obligations under this Contract Agreement or any other related agreement or otherwise, any fraud or negligence attributable to the Bidder or its Agents or Sub-Contractors (SI), 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 Agreement on the part of IHMCL.

(b) The Bidder shall indemnify IHMCL and NHAI and MoRTH of all legal obligations of its professionals deployed. IHMCL and NHAI and MoRTH also stand absolved of any liability on account of death or injury sustained by the Bidder's staff during the performance of their work and for any damages or compensation due to any dispute between the Bidder and its staff.

(c) The remedies provided under this Article are not exclusive and shall not limit any rights or remedies that may otherwise be available to IHMCL Indemnified Party at law or in equity.

(d) The provisions of this Article shall survive Termination.

1.2.39. Compensation for default by the Bidder

1) In the event of the Bidder being in breach of this Contract Agreement, unless such default or delay is on account of Force Majeure or through no fault of the Bidder, the Bidder shall pay to IHMCL, all direct costs suffered or incurred by IHMCL because of such breach, within 30 days of receipt of the demand supported by necessary particulars thereof.

2) The Bidder shall pay to IHMCL all direct costs suffered or incurred by IHMCL incurred because of all losses, claims, damages and liabilities (including, without limitation, legal fees and other expenses incurred in connection with any suit, action orproceeding or any claim asserted, such as fees and expenses incurred), joint or several,that arise out of, or based upon:

    (i)   Any untrue statement or misrepresentation of a material fact provided by the Bidder or an omission to state a material fact required to be communicated.

    (ii) Any non-performance or breach of the roles, responsibilities, representations, warranties, undertakings and declarations contained herein by the Bidders or its directors, employees, personnel or representatives.

    (iii) Negligence, fraud or misconduct of the Bidder or any of its employees, agents, affiliates or advisors.

1.2.40. Cap on Liability of Parties

a) Subject to Clause 1.2.40 (b), the aggregate liability of Bank (and its Affiliates) to the IHMCL for any Losses arising in connection with this Agreement, whether based upon an action or claim in contract, tort (including negligence), misrepresentation, equity or otherwise (including any action or claim arising from the acts or omissions of the Bank (or, as the case may be, its Affiliate)) shall not exceed the Performance Security or an amount equal to the Charges for Services paid to the Bank under the Agreement till the date of such event, whichever is higher.

b) The limitation described in Clause 1.2.40 (a) above will not apply to (i) Bank's obligations under Clauses 1.2.25 [Confidentiality of the Assignment/Findings] or 6.7 [Indemnity].

c) Bank has a duty to mitigate the damages and any amounts payable under an indemnity that would otherwise be recoverable from the IHMCL pursuant to signing of the resultant Agreement by taking appropriate and commercially reasonable actions to reduce or limit the amount of such damages or amounts.

1.2.41. Representation and Warranties of the Bidder

The Bidder declares, represents, and warrants as follows:

1) It is duly organized and validly existing under the laws of India and has full power and authority to execute and perform its obligations under this Contract Agreement and to carry out the works and provide services contemplated hereby.

2) It has taken all necessary corporate actions under Applicable Laws to authorize the execution and delivery of this Contract Agreement and to validly exercise its rights and perform its obligations under this Contract Agreement.

3) It has obtained all necessary internal/external approvals, registrations and certifications required from relevant authorities and other entities for fulfilling its obligations as set out in this Contract Agreement.

4) It has not violated any of the conditions subject to which such approvals, registrations and certifications have been granted or any other applicable regulations and / or guidelines or directives or statutes.

5) It shall ensure that such approvals, registrations and certifications will remain in force, including, by taking prompt steps for timely renewal of the same.

6) It undertakes to continue to comply with all Applicable Laws with respect to its roles / obligations under this Contract Agreement.

7) There are no actions, suits, proceedings, or investigations pending 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 Agreement 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 Agreement.

8) Deleted

9) No representation or warranty by the Bidder contained herein or in any other document furnished by it to IHMCL in relation to Applicable Laws contains or will contain any untrue or misleading statement of material fact or omits or will omit to state a material fact necessary to make such representation or warranty not misleading.

10) No sums, in cash or kind, have been paid or will be paid, by or on behalf of the Bidder, to any person by way of fees, commission or otherwise for securing the award of this Contract Agreement or for entering into this Contract Agreement or for influencing or attempting to influence any officer or employee of IHMCL in connection therewith.

1.2.42. Exit Management

1. The bidder shall submit a structured & detailed Transition and Exit Management plan to IHMCL along with the bid.

2. At the end of the contract period or during the contract period, if any other agency is identified or selected for providing services related to the scope of work, the bidder shall ensure that a proper and satisfactory handover is made to the other agency.

3. All risk during transition stage shall be properly documented by the bidder and mitigation measures shall be planned to ensure a smooth transition without any service disruption.

4. The bidder must ensure that no end of support products exist at time of transition.

5. The bidder must provide notice 06 (six) months in advance before starting the exit management activities.

6. The transition & exit management period will start 6 (six) months before the expiration of the contract. The bidder will provide shadow support for at least three months and secondary support for an additional three months before the end of the O&M period or termination of the contract or mutually exit, as applicable at no additional cost to IHMCL. In case of termination, the exit management period will start from effective date of termination, or such other date as may be decided by IHMCL but no later than 3 months from effective date of termination.

7. Closing off all critical open issues as on date of exit. All other open issues as on date of Exit shall be listed and provided to IHMCL.

8. The bidder shall provide all necessary knowledge transfer and transition support. The deliverables are indicated below:

    a) Updated transition plan on periodic basis

    b) Complete documentation for the entire system handed over to the IHMCL /identified agency.

    c) Handover of all AMC support related documents, credentials etc. for all OEM products supplied/maintained in the system.

    d) Handover of the list of complete inventories of all assets created for the project.

    e) Assisting the new agency/ IHMCL with the complete audit of the system including

    f) Detailed walk-throughs and demos for the solution.

    g) Handover of all data generated during the contract period, along with project documentation, including images, videos, and other applicable materials, shall be provided to IHMCL at no additional cost.

    h) Knowledge transfer of the system to IHMCL to the satisfaction of the prescribed conditions per the specified timelines.

9. The bidder shall be released from the project once successful transition is completed by meeting the parameters defined for successful transition.

10. Any new gantry constructed by the bidder under this project shall be handed over to IHMCL along with all civil works, electrical fixtures in a good, workable, and painted condition as per the conditions outlined in the RFP.

Schedule-A: Site of the Project

1. **The Site**

1.1. **Toll Plaza Locations**

The Site of the Project Highway comprises the proposed Toll Plaza described in Table below:

S. No.	Project Stretch	Plaza Name	PIU	NH No	Highway Lane Configuration (2LPS/4L/6L/8L)	Number of Lanes at fee plaza
1	Jaipur Ring Road	Hingonia	Jaipur	148C	6L	26
2	Jaipur Ring Road	Sitarampura	Jaipur	148C	6L	26
3	Jaipur - Kishangarh Section	Kishangarh	Jaipur	48	6L	14
4	Jaipur - Kishangarh Section	Thikariya	Jaipur	48	6L	14
5	Jaipur - Reengus Section	Tatiawas	Jaipur	52	4L	10
6	Reengus-Sikar Section (Annuity-PF)	Akhepura	Jaipur	52	4L	10
7	Rajgarh-Pilani	Thirpali Badi	Jaipur	709 E	6L	6
8	Dausa-Lalsot-Kothoon NH-11A Extn.	Titoli	Dausa	11A Extn	2LPS/4L	12
9	Dausa-Lalsot-Kothoon NH-11A Extn.	Rabawata	Dausa	11A Extn	2LPS/4L	10

1.2. Control Centre – Available at fee plaza.

1.1.1. Appendix A-1

Index map of Project Highway
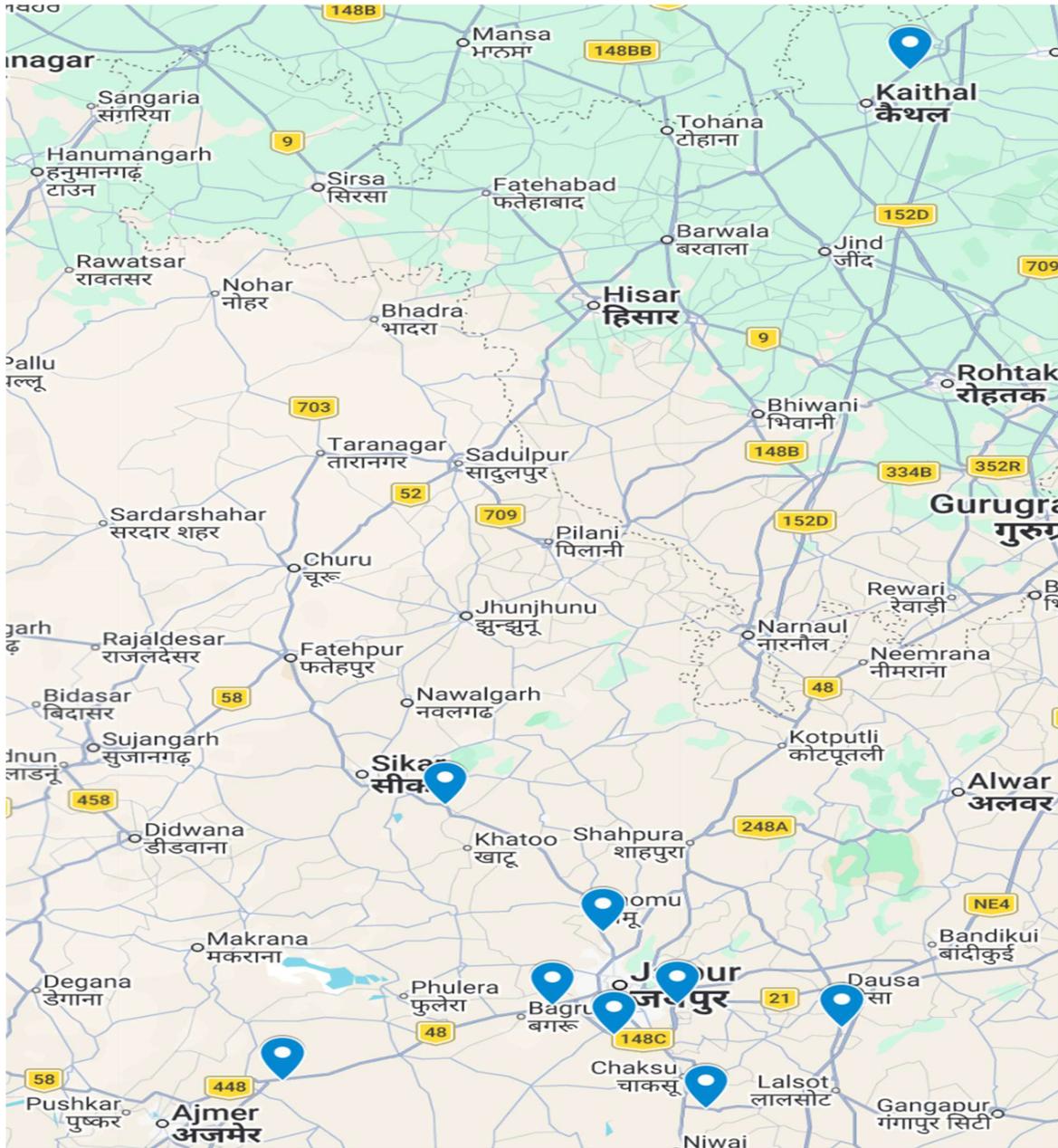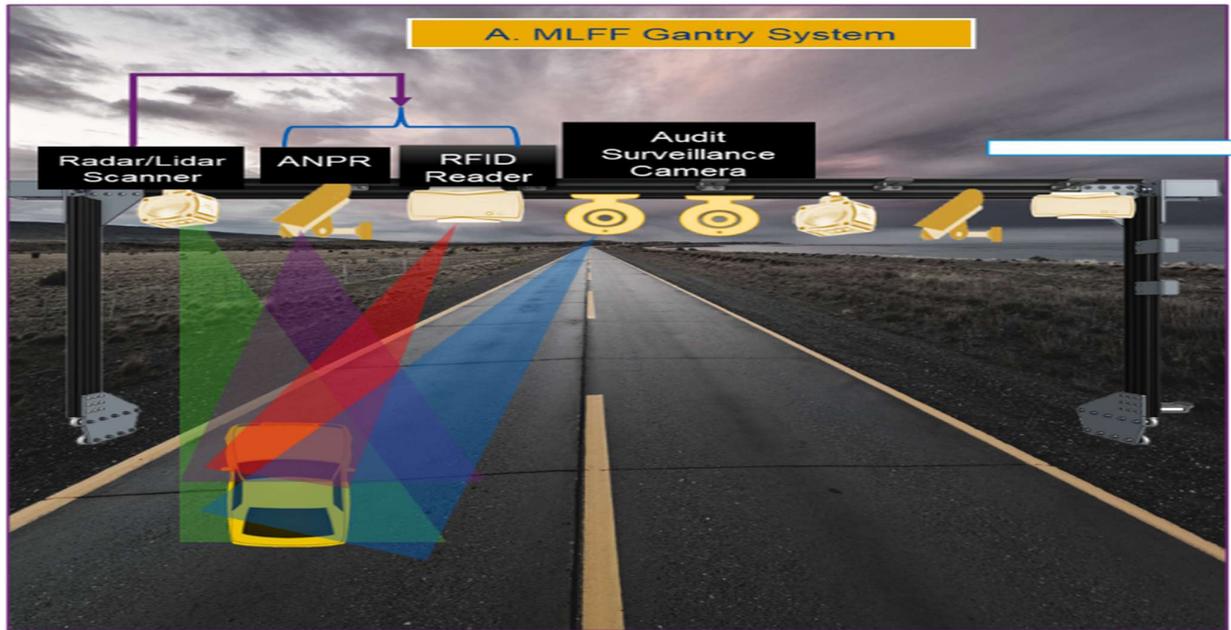
Schedule – B

1. **Development of the MLFF based tolling facility.**

a) **About the MLFF based Tolling Project**

    i. The Authority has envisaged implementation of MLFF system on the project to reduce travel time, make road-travel efficient & sustainable, and enable stress-free travel by adoption of Integrated MLFF System on Fee Plazas provided in Schedule-A in the State of Rajasthan.

    ii. The MLFF system will consist of field equipment and sensors mounted on gantries, which will capture the necessary information from passing vehicles. This data will be transmitted to the NETC payment ecosystem for the deduction of the user fee.

    iii. The Successful bidder/bank is required to Design, Develop, Test, Commission, Operate and Maintain the Multi Lane Free Flow (MLFF) based tolling system at fee plazas detailed in Schedule A along with user fee calculation and seamlessly integrating it with the bank's acquiring platform as part of the project to provide all the services as defined by IHMCL and NPCI for Acquiring bank. The proposed MLFF system must be developed as per Technical Specification Document circulated by IHMCL & NPCI and enable real-time processing of all vehicle transactions at MLFF gantry while also connecting with NPCI system (NETC Switch and NETC Mapper) to accurately calculate toll fares and process payments efficiently. The MLFF system must also detect all cases of violation of failure to pay user fee by vehicle users and seamlessly integrate with NPCI, and other external system for e-Notice management as per process flow defined in the RFP.

    iv. The system should comply with all applicable NETC Procedural Guidelines (PG document) as well as Interface Control Document (ICD) rules of NPCI & IHMCL as updated from time to time.

    v. The MLFF System shall be provided with functional and technical specifications specified in the Schedule-C and shall be operated and maintained throughout the contract period.

    vi. The successful bidder/bank must implement and commence the MLFF system services without disrupting ongoing toll operations or causing any revenue loss to the toll collection agency until the MLFF system goes live. Additionally, the bidder must ensure the proper migration of all databases from the existing TMS before transitioning to the new MLFF system. The Bidder may, at its discretion, utilize the existing infrastructure, equipment, and electrical appliances available at the Fee Plaza after the successful Go-Live of the MLFF system.

b) **Development of the Multi Lane Free Flow (MLFF) based Tolling Project**

    i. Through this RFP, IHMCL seeks to select a certified Acquirer Bank to acquire all ETC transactions at Fee Plazas provided in Schedule-A in the State of Rajasthan using Multi Lane Free Flow technology. The successful bidder/bank will be responsible for all roles as defined in the Procedural Guidelines – National Electronic Toll Collection Network (latest version) issued by NPCI, and any subsequent guidelines/circulars issued by NHAI/IHMCL/NPCI/MoRTH.

    ii. The Scope of Project includes Design, Supply, Installation, Testing, Commissioning and Operation & Maintenance of Integrated Multi Lane Free Flow (MLFF) System at Fee

Plazas provided in Schedule-A in the State of Rajasthan as described in this Schedule-B and in Schedule-C

c) The Bidder shall develop the MLFF tolling at each fee plaza as per following schedule:

i. At Existing Fee Plaza Infrastructure:

The Bidder/Bank shall implement the Multi-Lane Free Flow (MLFF) tolling system at the existing Fee Plaza location, enabling an ANPR–RFID based barrier-less tolling system in the lanes as per Table give below. Upon successful commissioning of the MLFF system, the remaining lanes (if any) not designated for tolling operations shall be closed by NHAI. The Bidder/Bank shall ensure that such non-designated lanes remain closed, physically secured, and are not used for any tolling or traffic operations during the Contract Period, unless expressly authorized in writing by the Authority.

In the event that any ancillary structure is required for installation of MLFF equipment at the Fee Plaza lanes, such structure shall be structurally stable, secured with sufficient ground clearance and duly certified by a Chartered Engineer/ Structural Engineer.

S. No.	Plaza Name	Total Number of Lanes to be Provisioned for MLFF Tolling at the Existing Fee Plaza (Including Two (2) Standby Lanes)
1	Hingonia	16
2	Sitarampura	16
3	Kishangarh	14
4	Thikariya	14
5	Tatiawas	10
6	Akhepura	10
7	Thirpali Badi	6
8	Titoli	12
9	Rabawata	10

ii. Construction of MLFF tolling gantry after crossing the fee plaza

a. The Bidder/Bank shall also design, supply, install, test, and commission MLFF-based tolling infrastructure by providing one (1) gantry on the main carriageway, including paved shoulders, in each direction (LHS and RHS) after crossing the toll plaza. The gantry for each direction shall be installed at a location within approximately 350 meters downstream of the respective Fee Plaza, in the direction of traffic movement.

b. Based on the mutually agreed location and site conditions, the Bidder/Bank shall finalize the detailed MLFF design, including optimal gantry placement and configuration. Each gantry may be designed to cover a minimum of two (2) lanes

and up to five (5) lanes, as required, ensuring that the entire traffic flow on the main carriageway is effectively captured under the MLFF tolling system.

c. The Bidder/Bank shall be fully responsible for ensuring the continuous safety, security, and illumination of the installed gantries, covering all necessary measures to protect the infrastructure and provide clear visibility under all weather and lighting conditions.

Note:

iii. The bidder shall be required to submit detailed design drawings including design calculations of gantries which should be approved from any of the Indian Institute of Technology (IIT)/ National Institute of Technology (NIT).

d) Control Center

i. Bidders shall use the existing and proposed future facilities available at the toll plaza. Bidders can set up the control center at remote location for support services like audit, validation etc. subject to approval of IHMCL. For any additional space requirement, the bidder may arrange porta cabin/container cabin of sufficient size at their own cost. Each Local Control Centre (LCC) shall be responsible for the day-to-day operation, audit, validation, maintenance, and security of the plaza facility, including but not limited to the upkeep of gantry equipment, tolling infrastructure, and provision of Point of Sale (PoS) facilities for user support.

ii. In case, more than one Fee Plaza is included in the Scope of Work, the Successful Bidder may, at its sole discretion and cost, additionally establish a Common Control Centre (CCC) at any one of the Fee Plazas identified in Schedule A, or at such other location as may be approved by NHAI/IHMCL, for monitoring, auditing, manual validation of transactions and initiation of e-Notices.

Notwithstanding the above, the maintenance and upkeep of the tolling facility, mandatory localized control setup, provision of Point of Sale (PoS) facilities, and ensuring safety and security of each individual Plaza facility shall remain the responsibility of the respective Local Control Centre (LCC) established at each Fee Plaza.

iii. MLFF based sensors / smart devices on field and integrating, analyzing data shall be received from these field devices / sensors at a Control Center (CC). The Application System and Field Devices as part of the MLFF project should have provision to share necessary data with the central application software at Dashboard and CC so that more informed decisions and Audit can be taken at the CC for Highways management or during enforcement of revenue.

iv. The Bidder shall provide at least one Primary and one Secondary Internet leased line connectivity of 1 Gbps from two different service providers to ensure high system availability. Automatic failover between the links shall be configured so that transaction processing and data transmission continue without interruption in the event of failure of any one link.

The connectivity shall be provided only by telecom operators holding a valid

Unified License (UL) or Internet Service Provider license issued by the Department of Telecommunications, Government of India, and the Bidder shall ensure that connectivity is provisioned directly through the licensed operator's backbone infrastructure.

v. CC shall monitor, manual validate and audit of transactions with low accuracy and generation of cases for issuance of e-Notice to toll violators with all data and evidences.

vi. A separate team of staff shall be dedicatedly working on the manual validation and audit process for which the ANPR camera & RFID readers had less accuracy or confidence level to initiate the ETC transaction at the gantry application level. The staff shall be using the evidence from the system generated from the gantry end and validate the correct transaction of the vehicle.

vii. To ensure the operation quality and system performance, the team should design in two levels of resources plan for 24*7 operation. Operations and Maintenance will be segregated into two parts:

Level I. Real-time Facility Monitoring Center (Remote)

a. Control and Monitoring module shall be a tool to check and monitor and control the real-time health status of gantry equipment.

b. CC operators shall get an alert on the module if any device is down of not connected to thew network.

c. GUI of this module should represent all the devices connected to the gantry and Server and their health status including network status.

d. Operator for complete the transaction validation will be bidder/bank scope as per their requirement to fulfil the 24*7 operation of transaction at CC.

e. As MLFF Gantry system is man less operation. Thus, the team should keep all equipment monitored by 24*7 Online through Control Center. When the alerts will come out, the issues will be handled by online setting remotely. If the issues can't be solved, the system should notify the Level II onsite engineers and request for corrective maintenance.

Level II. 24*7 of Front-end O&M Locations (on site)

a. When the Level I operation mechanism will not fix the issues remotely, the alerts should be sent to onsite engineers. They will check and correct the issues at the gantries and Control Centre, ensuring compliance with the defined Service Level Agreement (SLA) in Clause 10 of Schedule-B.

2. **Operations & Maintenance of the MLFF based Tolling System (Refer detailed roles and responsibilities in Section 8 below)**

a) **Operations Activities:**

1. Data Management:

i. Transaction Records: Maintain detailed records of all toll transactions for

auditing and reporting purposes.

ii. Compliance Reporting: Generate reports to comply with regulatory requirements and provide insights for traffic management.

2. Customer Support:

i. For issuance of Plaza Specific Discount Pass .

ii. Point-of-Sales (POS) for sale of FASTag and

iii. Assistance in payment of e-Notice payments

b) **Maintenance Activities:**

1. System Infrastructure:

i. Equipment Upkeep: Regular maintenance of RFID readers, cameras, and other tolling equipment to ensure optimal performance.

ii. Software Updates: Implement updates and patches to the MLFF system software to enhance functionality and security.

2. Network Management:

i. Connectivity Monitoring: Ensure continuous and reliable network connectivity for real-time data transmission.

ii. Troubleshooting: Address and resolve any technical issues promptly to minimize system downtime.

3. Security Measures:

i. Data Protection: Implement robust security protocols to protect financial and personal data from cyber threats.

ii. Fraud Prevention: Monitor transactions for any fraudulent activities and take necessary actions to prevent them.

4. Performance Monitoring:

i. System Audits: Conduct regular audits to assess the performance and reliability of the MLFF system.

ii. Feedback Mechanism: Collect and analyze feedback from users to identify areas for improvement and implement necessary changes.

c. By efficiently managing these operations and maintenance activities, the acquirer bank ensures the MLFF system operates smoothly, providing a seamless tolling experience for vehicle owners and contributing to better traffic management.

d. **STQC and CERT-In Certification:** The Bidder shall be required to carry out STQC certification of its MLFF software within 6 months from the date of completion SAT. Further the Bidder shall be required to conduct CERT-In certification of its MLFF software every year post Go-Live of the MLFF.

3. **Toll Collection from the MLFF system**

a. **Transaction Processing for settled and non–settled transactions**:

1. **Real-Time Toll Collection**: All Clean transactions shall be settled in line with the Procedural Guidelines of the NETC programme, Interface Control Document (ICD) and Other Technical Specification Document as issued by IHMCL / NPCI from FASTag programme and amended from time to time.

2. **Violation Management**: As per e-Notice module as detailed at Schedule B.

b. **Toll Collection:**

The Toll collection shall be done through high performance ANPR – FASTag based MLFF system as mentioned in Schedule B & C.

c. **Rate of User Fee:**

1. The bidder/bank shall collect User Fees through MLFF based tolling as per the provisions of the National Highways Fee (Determination of Rates and Collection) Rules, 2008 as amended from time to time, and the toll fee notification of the plaza at such rates only and from such vehicles only as have been notified by the Central Government for the use of the said Section of the National Highway and in strict compliance with the provisions of the notification.

2. The bidder/bank specifically undertakes not to claim during continuity of the Contract any change including addition, deletion and change in the classification mentioned or the rate of User Fee specified in the Notification referred above.

3. The bidder/bank shall not be allowed to make its own interpretation about a particular type of vehicle attracting a particular rate to charge a higher rate from a particular type of vehicles. The decision of the Authority on such matter shall be final and binding.

4. Deleted

5. The Acquirer bank shall be responsible for conducting thorough due diligence to evaluate the project's potential and sustainability. This process includes, but is not limited to, carrying out detailed traffic surveys, site visits etc. to assess the estimated volume of traffic and estimate the potential revenue.

d. **Change in the Rate of User Fee**

1. The User Fee shall be subject to revision every year in terms with Rule 5 of the National Highways Fee (Determination of Rates and Collection) Rules, 2008 as amended from time to time.

2. The proposal on the revised User Fee with the supporting calculations shall be submitted by the bidder/bank to concerned NHAI PIU at least 7 days prior to the actual applicable date. NHAI will give approval within 7 days. Delay in submission of proposal shall be considered as material breach.

e. **Display of Rate of User Fee and User Fee Notification:**

1. The rates of User Fee, the categories of vehicles exempted from payment of User Fee and the name, address, and telephone number of the Authority to whom complaints, if any, should be addressed, shall be conspicuously and prominently displayed at the existing display board at the toll plaza. The height of the display

boards and size of letters being such that it is easy for drivers to read. The display boards shall be provided by the Authority.

2. The bidder/bank shall also display, a copy of Notification in published by IHMCL, appended to this Contract at a conspicuous place of the User Fee Plaza(s) for the information of the road users and the public and (ii) provide a copy of same to road user on demand upon payment of copying charges on a 'no profit no loss' basis.

f.   Penalty for Failure to Pay Collected User Fee:

1. In case of delay in remittance of the User Fee of any instalment due under this Contract to the Authority beyond the due/specified day as mentioned above, the Authority shall levy penalty @ 0.2% per day for delay in remittance of payment. The bidder/bank will be required to pay the dues along with penalty within 3 working days of the specified day failing which the same will be adjusted from the Cash Performance Security. Cash Performance security shall be replenished by the bidder/bank within 3 working days from the date of such recovery. If the agency fails to replenish the performance security and clear the dues in the next 3 working days, the contract is liable to be terminated. Immediate/real time credit in the prescribed account after the completion of week,

2. For avoidance of doubt, if more than one remittance is delayed and the contractor deposits a lumpsum amount, this will be adjusted following First-in-First-out (FIFO) approach, i.e., the earliest instalment due shall be first adjusted along-with the applicable penal interest on the earliest remittance on that date and in similar manner the other remittances shall be adjusted. No further interest shall be applicable on the penal interest component. The penal interest shall be simple, i.e., it shall not be compounded.

    (a) If the remittances outstanding including penal interest, if any, on ending of the contract is less than the cash performance security, then such amount shall be recovered from cash performance security, accounts will be settled, and balance securities will be released, and penal interest shall be levied only upto end date of contract. In case the contractor has not deposited the remittance of last week on ending of the contract period which is also to be adjusted from the cash performance security, then an additional penal interest @ 0.2% per day for 3 working days on the last week remittance shall also be levied.

    (b) If the remittances outstanding including penal interest, if any, on ending of the contract are more than the cash performance security, then the dues to the extent of cash performance security will be adjusted as provided Para 2 above, following FIFO approach and the balance including penal interest shall be deposited by the bidder/bank.

    (c) For avoidance of doubt, it is clarified that the end of contract period, the penal interest @ 12% p.a compounded annually only will be applicable on the balance remittances and the penal interest due as on end date of contract period, till payment of dues by the bidder/bank.

g. Operational Transparency

The bidder/bank shall be solely responsible for efficient and transparent working and management of User Fee collection at all times. The bidder/bank shall ensure the following:

(i) All transactions including violations, and exemptions/concessions will be processed through MLFF System available at fee plaza. Furthermore, the deployment or usage of any alternate software/system for user fee collection, except for the MLFF through which FASTag transactions are processed, is strictly prohibited. Any instance of usage of such unauthorized software/system shall be treated as Fraudulent Activity and the bidder/bank, including its sub-contractor, employees, the Director(s) of such entities or owner, found practising such fraudulent activities will attract penal action as per relevant clause of the contact agreement including debarment from NHAI /IHMCL for a period up to (1) year.

(ii) Lane IDs (wherever applicable) will be correctly mapped in transaction files and no fraudulent / unauthorized transaction shall be processed and hosted to Acquirer system.

(iii) Valid users are to be added into the discount category through User fee Collection portal as provided by Acquirer Bank and ensure that such transactions shall process using FASTag only.

(iv) No fraudulent/parallel system in lanes to process cash/exempt transaction.

(v) Video recording system of toll plaza will be provided to Command Centre on 24*7 basis and is not mishandled.

4. **Obligations of the Bidder/Bank**

   a) To Design, Develop, Test, Commission, Operate and Maintain the Multi Lane Free Flow (MLFF) based tolling system as per the Contract Agreement

   b) To adhere to the SLA parameters given under the Contract Agreement

   c) Integration with NPCI and NIC system as per e-Notice Module

   d) Ensuring all equipment functioning 24x7x 365 and redundancy of all equipment to achieve uninterrupted operations.

   e) Maintaining high availability (HA) of servers, network, and bandwidth.

   f) The Acquirer Bank shall assess the quantity of spares/ consumables to meet the SLA clauses mentioned in the bidding documents and factor that as part of his Bid. It is the bidder/bank responsibility to maintain the minimum required spares at any given time to meet the SLA requirement at no additional cost to the Client. bidder/bank should keep minimum 10% spare parts of critical equipment at any given point of project execution.

   g) The bidder/bank shall ensure that the toll plaza, including its equipment, is powered primarily by the (raw power) grid and secondarily by UPS, DG sets, and other renewable sources. The secondary power sources must ensure seamless connectivity in case of grid power cuts. All electricity charges for both grid and secondary power

sources shall be borne by the bidder/bank.

h) Procurement of any software licenses and hardware required for implementation of the solution is the sole responsibility of the bidder/bank. IHMCL bears no responsibility towards the same or towards any consequence resulting from non-conformance or non-compliance. All software utilized must be duly licensed, legally procured, and compliant with applicable licensing agreements; the deployment or use of unlicensed, pirated, or unauthorized software is strictly prohibited and shall constitute a violation of contractual and legal obligations.

i) The bidder/bank specifically undertakes to abide by all the instructions issued by the Authority from time to time on operational matters and further agrees not to raise any dispute against the same including any additional cost that the Contractor may be required to bear to comply with such instructions.

j) During the Contract Period, the contractor shall furnish to the Authority, within 7 (seven) days of completion of each month, a statement of User Fee substantially in the form as per monthly report provide in Clause 2.13, Schedule II (the "Monthly User Fee Statement") of Schedule-C. Proper record is to be maintained at the plaza for the purpose of providing such information. The bidder/bank shall also submit such information sought by the Authority in such a format, as may be prescribed by the Authority from time to time.

k) The bidder/bank undertakes the responsibility of the complete job of User Fee collection, upkeep/maintenance of adjacent Toilet blocks including recouping the consumable items maintenance of all records, maintenance of User Fee collection account, maintenance of vehicle type wise Traffic Data on shift to shift basis, maintaining the cleanliness of User Fee plazas/User Fee collection booths and surrounding area etc. and any other duty as may be assigned by the Authority from time to time.

l) **Non-Disclosure Agreement (NDA)**: The bidder shall be required to sign a Non-Disclosure Agreement (NDA) with IHMCL on a non-judicial stamp paper of appropriate value, as prescribed under the applicable laws of the jurisdiction. The NDA must be executed immediately after the award of work by IHMCL. It shall include provisions to ensure the confidentiality, integrity, and security of all data, information, and materials shared during the execution of the contract.

m) The Bidder shall provide dedicated internet leased line connections with a redundant setup (Primary and Secondary) of at-least 1 Gbps as a minimum requirement at the fee plaza, sourced from different Internet Service Providers, to ensure uninterrupted processing of transactions and video streaming at remote locations.

n) To maintain operational transparency throughout the Contract Duration.

5. **Right of Inspection:**

   a) The Authority reserves the right to conduct checks including surprise checks at any time, to check/observe/witness the activities of the bidder/bank including the gantry and control center and to monitor or to ensure that any or all the activities are being

carried out properly by the personnel deployed by the bidder/bank.

b) The Authority may exercise any check/control to ensure discharge of various obligations by the bidder/bank under the Contract including but not limited to following:

i. Correctness of the User Fee charges recovered from users, including various discounts, as prescribed.

ii. Maintenance of proper registers including those relating to collection of User Fee from different types of vehicles.

iii. Weekly remittance of amount due from the bidder/bank by the prescribed day.

iv. Checking data in electronic/soft form.

v. Maintain the gantry and control center and its appurtenances by the bidder/bank at its cost and ensure that they are in good running condition.

vi. Arrangements for lighting and water at Plaza location are in order.

vii. There is no delay to the traffic due to procedure of collection of User Fee any blockage/hinderance to the passing vehicles, lane closure; and

viii. Any other check or control as considered appropriate by the Authority including through its authorized representative.

ix. Checking spare quantity at the plaza to maintain the SLA as mentioned in the Contract Agreement.

The above rights of inspection by the Authority also extends to the Toilet blocks handed over to the bidder/bank.

6. **Cleanliness & Maintenance of Toilets, Control Center & Surrounding Areas**

Bidder/bank shall be solely responsible for the Operation and Maintenance of the toilets surrounding areas as per requirements of NHAI, without requiring any supervision and interference of IHMCL whatsoever.

It is the responsibility of the Bidder/Bank to ensure Facility Management, safety and security of the command control center and associated premise / infrastructure / space allocated for the purpose of the project. Bidder/Bank should ensure appropriate deployment of manpower and resources to ensure the same throughout the contract period.

The timings of the said 'Toilets' to be operated, maintained and remain available for Highway Users 24x7x365.

i. The bidder/bank shall make necessary arrangements for supply chain management, store management and category management, solely at his own cost and risk.

ii. The bidder/bank or its representatives shall not involve in any act or deed which may cause nuisance and/ or annoyance to IHMCL/NHAI or to Highway Users.

iii. The bidder/bank shall take care of all fitting, fixtures and related accessories available at 'Toilets' and immediately after expiry of the period or on sooner termination and handover all fitting, fixtures and related accessories available at 'Toilets', without

claiming any right, title or interest of any nature whatsoever in the "Toilet" or any part or portion thereof.

iv. The bidder/bank arranges to provide adequate staff for Operations and maintenance activities and IHMCL shall not be responsible for any loss, theft or dacoity in relation to any of the activity relating to the 'Toilets'.

v. The bidder/bank shall be solely responsible for maintenance and cleanliness of toilets.

vi. The bidder/bank shall take care of disposal of all rubbish, garbage and keeping the premises neat and tidy and will be essential.

vii. The bidder/bank shall be responsible for the availability of round the clock water supply and electricity for smooth and proper functioning of 'Toilets' and maintenance of surrounding areas.

viii. The bidder/bank shall be liable to follow the obligations of the operation and maintenance pointed out by IHMCL or any of its representatives from IHMCL/NHAI found out during routine inspections.

ix. The bidder/bank shall conduct a regular maintenance program in place for toilet/washroom cleaning to maintain the facilities in a clean, working condition.

x. The bidder/bank shall ensure that cleanliness and maintenance of Control Center, plaza building and its surrounding areas at the site is maintained on regular basis. Ensuring every facility should be in place at site such as water facilities.

7. **E-Notice Module:**

1. **Various Scenarios at MLFF lanes:**

The indicative process flow for MLFF ETC transaction under various scenarios is provided as below:
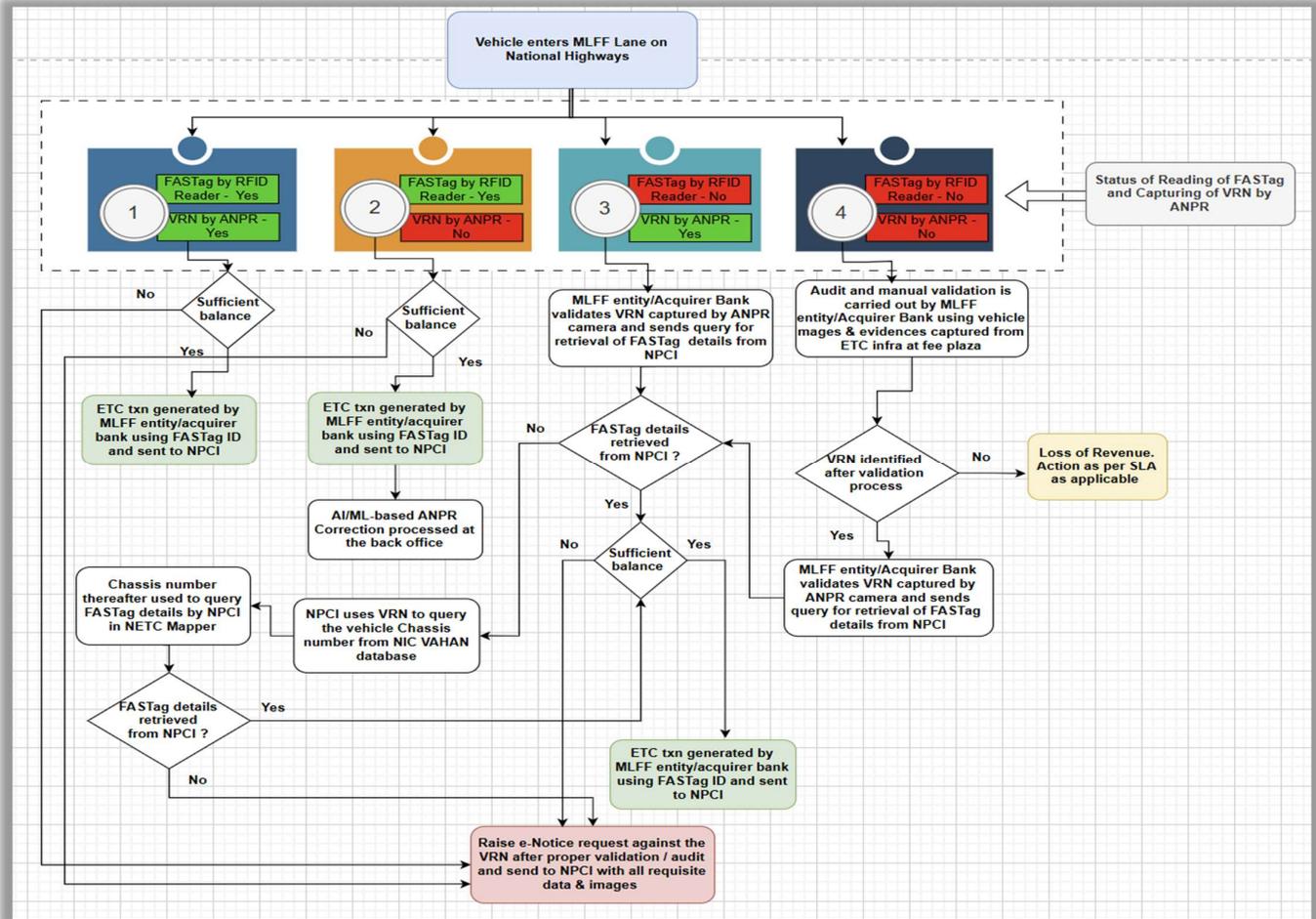
2. Tag transaction flow by MLFF entity / Acquirer Bank:

The indicative process flows for initiating and processing the ETC transaction under MLFF tolling system based on various FASTag Tag status provided below:
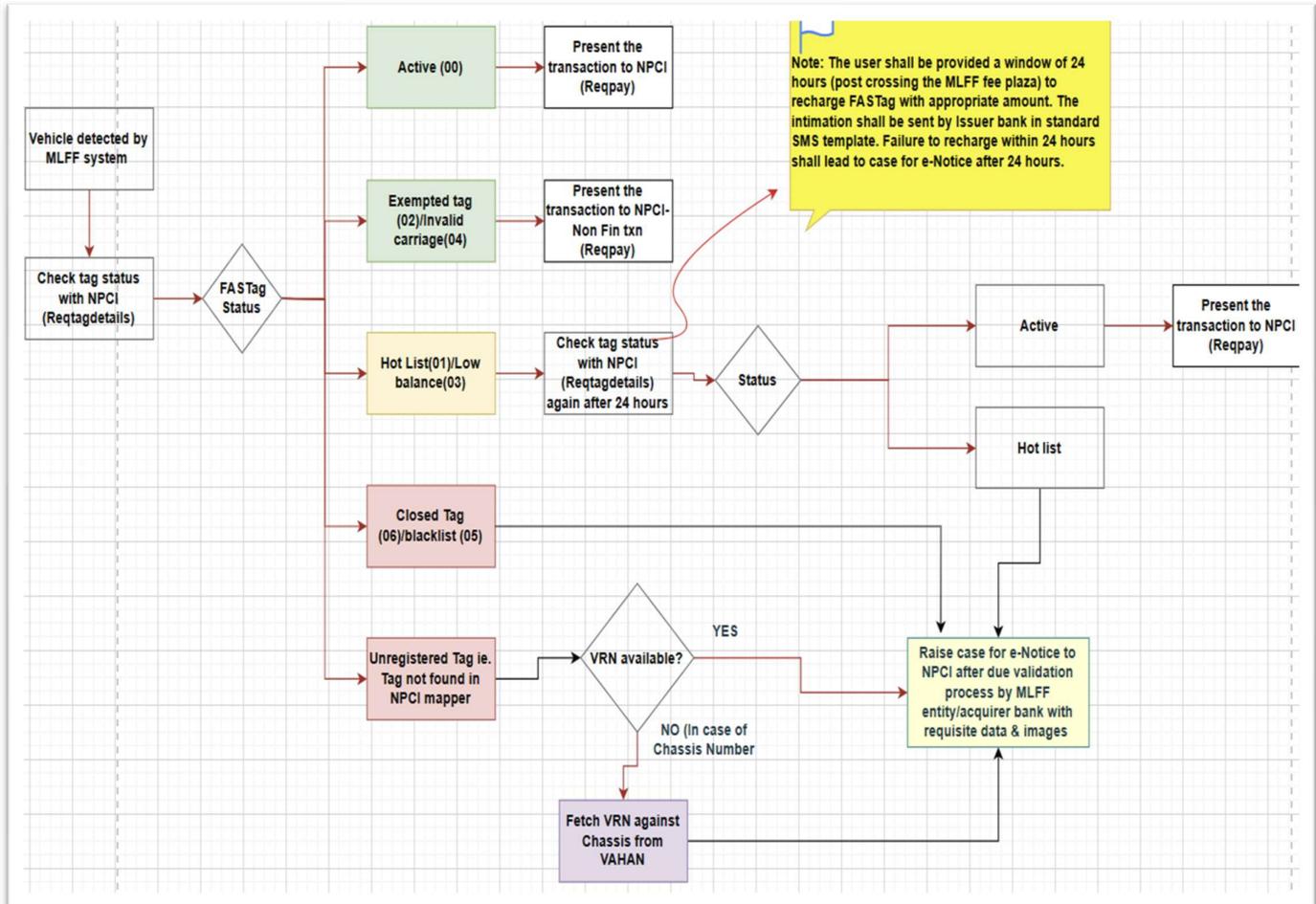
3. E-Notice Process Flow:

The E-Notices under MLFF shall be issued through integration between NPCI (NETC System) and NIC, where an e-notice shall be issued via SMS to the registered mobile number of the vehicle user as per VAHAN database. Simultaneously, it shall also be provisioned that such e-notices are also send to FASTag user via respective issuer bank (of the active tag). The indicative process flow for e-notice is provided as below:
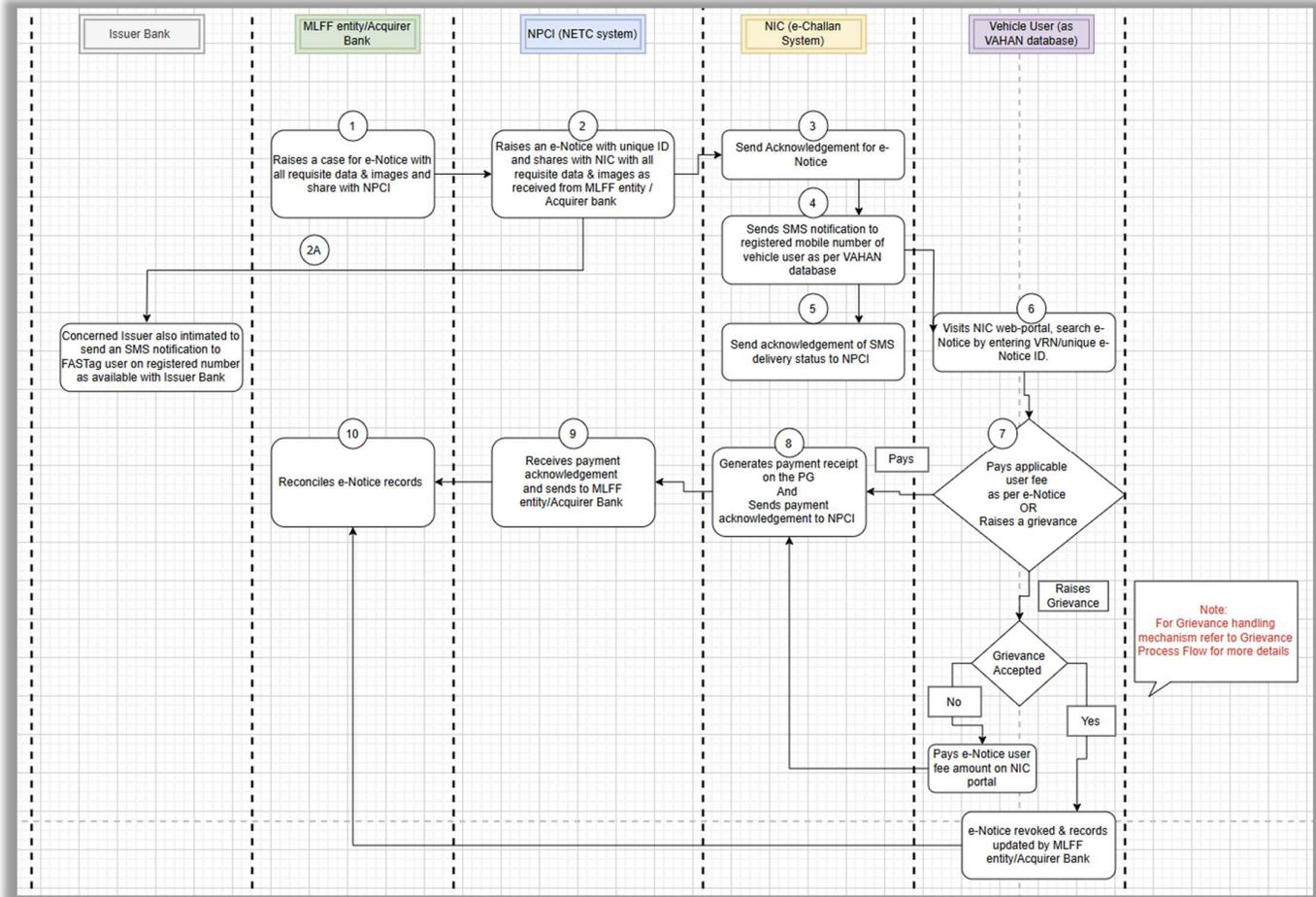
4. **Process flow for Grievance Mechanism:**

The Grievance mechanism for e-notices under MLFF shall be managed through a designated web-portal developed by NIC. The road user can raise dispute/grievances against the e-notice through this portal within 7-days of issuance of e-notice with supporting evidences. Access for various users/stakeholders shall be provisioned in the web-portal. The indicative process flow for grievance mechanism is provided as below:
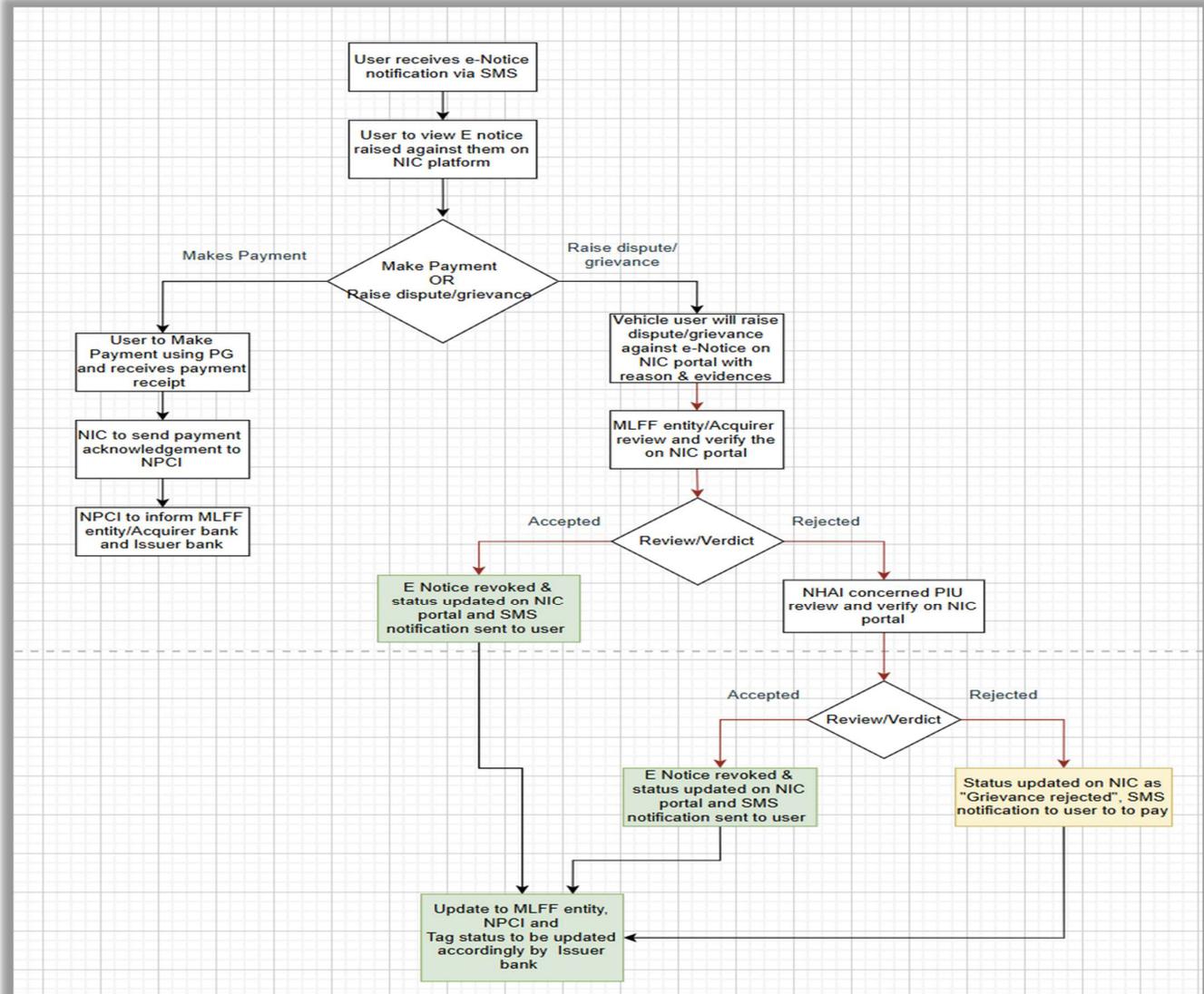
5. **E-Notice Restriction:**

   i.   E-Notice shall not be issued for vehicle falling under exempted categories as per Rule 11 of the National Highways Fee Rules, 2008 (as amended).

  ii.   E-notice shall not be issued for vehicles with valid Plaza Specific Discount Pass for the Fee Plaza.

 iii.   E-notice shall not be issued for vehicles with valid Global Pass.

 iv.   The system shall have appropriate checks to enforce this restriction.

Note:

  i.   E-Notice Issuance Timelines:

   a. For closed tags (code-06), blacklisted tags (code-05) and in case of unregistered tags:

      i. The Acquirer Bank / Bidder shall generate e-Notices in the prescribed format within 48 hrs from the time of crossing the MLFF system.

   b. For Hotlist (code-01) and Low balance(code-03):

      i. Acquirer bank/bidder shall intimate respective issuer entity on a near real-time basis through NPCI. Issuer entity shall immediately intimate the FASTag user via SMS in the prescribed format.

      ii. The vehicle user shall be provided a window of 24 hrs post crossing the MLFF fee plaza to recharge FASTag and pay the applicable user fee to avoid e-notice.

      iii. In case, the user does not recharge the FASTag and fails to pay applicable user fee, the Acquirer Bank/Bidder shall validate the case and raise a case for E-notice to NPCI within next 24 hrs along with all requisite data and images.

  ii.   Integration Requirements: The Acquirer Bank/bidder shall ensure successful integration with NPCI to fulfil the requirements of the prescribed process flow outlined in above process flow. For clarity, the Bank shall not bear responsibility for the recovery of unpaid user fees.

  iii. MIS Report: The application shall have the feature to generate MIS reports and other related reports based on parameters as required by IHMCL from time to time.

8. **MLFF Project**

   a. The MLFF Project shall broadly include, but not limited to the following components to be provided as per the functional and technical specifications mentioned in Schedule-C:

      1. Radio Frequency Identification (RFID) Reader

      2. Radio Frequency Identification (RFID) Antenna

      3. Automatic Number Plate Reader (ANPR) Camera System and Application

      4. IR Illuminator

      5. Audit Surveillance Camera System

      6. Detectors – Radar

      7. Detectors-Lidar

      8. Networking and Communications

      9. Software Application, Dashboard and Portal

10. MLFF Control Center

11. Power Supply for Field Equipment as well as for MLFF Control Center

12. Operation & Maintenance (O&M) of the entire MLFF Facility

b. The quantity and the technical specification of the equipment shall be proposed by the bidder/bank for each MLFF sub-system, unless until specified in this RFP, such that each sub-system fully meets the functional requirement as per the site conditions and SLA requirements.

c. The entire system should function efficiently as an integrated solution during the entire O&M period.

d. This RFP describes functional requirements envisaged by IHMCL. In addition, the minimum technical specifications have been prescribed in this document, wherever indispensable. The bidder/bank is responsible for the design of complete project and the system architecture to deliver state-of-the-art solution to IHMCL fully complying to the functional requirement specified in the RFP and site conditions. Any consideration affecting safety, security, redundancy, and compliance to stipulated provision prescribed by Government Authorities is the responsibility of the bidder/bank and shall be duly taken care of to ensure adherence to minimum functional and technical requirement stipulated in this document as well as the SLA parameters.

e. The 'bidder/bank hereafter may be called as 'bidder/bank shall conduct the field survey, preparation of design drawings and supply of MLFF equipment and materials, spare parts, test equipment, tools and materials, factory inspection (inspection of equipment & materials upon delivery), training, transportation, and site. delivery, implementation and installation, preparation of as-built drawings, testing and commissioning of the MLFF system.

f. The Bank will be provided with space in the Toll Plaza building for setting up of MLFF Control Centre. The bidder/bank shall be responsible for interior works, MEP works, etc. for implementation and setting up the MLFF Control Centre, including any related electrical, lighting, generator set (preferably eco-friendly Gas powered), power backup, HVAC works, access control, air conditioning, CCTV, firefighting, alarm, extinguishers, etc. shall be in the scope of the Bidder. All operational expenses towards electricity, diesel/fuel, and other consumables shall be in the scope of the bidder/bank.

g. The bidder/bank shall also undertake the works that are not specifically mentioned in this RFP but essential for the efficient implementation and operations of the MLFF System to meet the functional requirements specified in the RFP.

h. The bidder/bank shall propose the MLFF solution and equipment to fully meet the functional requirements of this RFP. The quantity and the technical specification of the equipment shall be proposed by the bidder/bank for each MLFF sub-system, unless until specified in this RFP, such that each sub-system fully meets the functional requirement as per the site conditions and SLA requirements.

i. The requirements stated herein shall be construed as minimum requirement and meeting the respective requirements shall not relieve the bidder/bank from the responsibility of supplying the MLFF System that functions efficiently as a system and

carry out its Operation & Maintenance for the entire Contract Period.

j.   The Bank shall quote for the entire system and facilities on a "single responsibility" basis. bidder/bank obligations mentioned in or to be reasonably inferred from the Contract Documents in respect of the design, manufacture, procurement, implementation, installation, adjustment and testing of the Works and remedying any defect therein and operation and maintenance of entire setup for the contract duration. This includes all requirements under the bidder/bank responsibilities for testing and commissioning of the systems and facilities, and where required by the Contract Documents, the acquisition of all permits, approvals, and license, etc.; the training services and such other items and services as may be specified in the Contract Documents.

k.   The bidder/bank shall be responsible for Integration of MLFF system and sub-systems with the IHMCL Central Command Centre, or TMCC or any other projects as per the requirement raised from time to time by IHMCL or its authorized agency.

l.   Growth and maturity levels – the proposed system shall be capable of meeting the requirements arising due to the increase in traffic in the coming years without any additional cost implication to IHMCL.

m.   The MLFF Software shall perform health monitoring check of all field equipment and generate an equipment downtime report based on the same as per provision of Schedule-C.

n.   In addition to the above requirements the MLFF Solution should include all the functional and technical requirements mentioned in schedule C.

o.   The MLFF solution should cover the entire transaction life cycle, including but not limited to:

   1.   Capture of information such as FASTag Id, Vehicle Registration Number (VRN) through equipment installed over the Multi Lane Free Flow (MLFF) gantry.

   2.   Integration of MLFF systems and NETC systems.

   3.   Adherence to all NETC guidelines.

p.   **Integration with CCH:** The acquirer bank must process transactions from the MLFF Plaza Server in an online-only mode, ensuring toll fare calculations and transaction processing to Central Clearing House (CCH) as per NETC guidelines as amended from time to time. The host system should be capable of supporting both online and offline transaction processing based on internet connectivity availability.

q.   **Compliance with Interface Control Document (ICD) 2.5 or latest:** The acquirer bank must ensure to comply with ICD 2.5 or latest specifications for processing the transactions.

r.   **Integration with TMCC** –

   i.   **All Transactional Data:** The bidder shall integrate the MLFF System with the Toll Monitoring and Control Centre (TMCC) software or any such software, via API for the purpose of sharing all transactional data.

ii. **Equipment Health Monitoring**: All Critical MLFF equipment shall be integrated with TMCC software for monitoring the real time health status. The SLA of MLFF equipment shall be calculated based on TMCC software and through other measures by IHMCL. Bidder shall strictly ensure provisioning of necessary arrangement including but not limited to proper network infrastructure, mapping of correct IP address etc. for reflection of correct uptime of equipment on TMCC dashboard.

s. **Future integration with advanced technologies**: The Bidder's solution should include API based integration with future tolling technologies like GNSS and NHAI Applications like Raj Marg Yatra etc. or, Advance Traffic Management System (ATMS), any other similar system at no extra cost

9. **Transaction Processing Cases**

S.No	Type of Transactions	Processing Cases	Timelines to be settled	Action to be taken	Outcome
1	Clean Transactions (Settled)	For every clean transaction having sufficient balance: In such case transactions amount shall be debited from the end user and collected by the Acquirer Bank on real time account through NETC/ NPCI for further settlement.	As per ICD 2.5 or latest	No e-Notice shall be issued in such cases.	
2	Exempted FASTag(Settled)	For exempted Vehicles - In such cases, MLFF system shall detect the vehicle through RFID reader and ANPR cameras installed at Toll Plaza and validate it from database. If the database has details of the vehicle under exempted category, then it shall be considered under clean (Settled) transactions.	As per ICD 2.5 or latest	No e-Notice shall be issued in such cases.	
3	Blacklisted Transactions (Un-Settled)	Insufficient Balance/Hot listed in FASTag - vehicle shall be considered for issuance of e-notice in case its respective FASTag		e-Notices shall be issued as per e-Notice module given in Schedule-B	If the timelines for issuance of e-notice exceeded, then applicable

S.No	Type of Transactions	Processing Cases	Timelines to be settled	Action to be taken	Outcome
		does not have sufficient balance / Threshold Amount to honour the toll payment as per NETC guidelines.			penalties as defined in SLA is applicable.
4	VRN based transaction processing	System fails to identify an RFID (FASTag) at toll plaza or there is no FASTag affixed on the vehicle– In such cases, MLFF system shall capture the Vehicle number plate through high resolution Automatic Number Plate Recognition (ANPR) cameras and carry out VRN based transactions through MLFF system (ANPR/Manual)	As per IHMCL /NHAI policy	If FASTag is issued on the Vehicle-Transaction shall be processed as per Sr. no.1 & 3 above. If FASTag is not affixed, e-Notices shall be issued as per e-Notice module.	If the timelines for issuance of e-notice exceeded, then applicable penalties as defined in SLA is applicable.
		RFID reader & ANPR fails to detect the VRN – In such cases, MLFF system shall detect the vehicle through Audit Surveillance cameras through Manual Transaction policy as per link provided:	Within 24 hours	If FASTag is issued on the Vehicle-Transaction shall be processed as per Sr. no.1 & 3 above. If FASTag is not affixed , e-Notices shall be issued as per e-Notice module.	If the timelines for issuance of e-notice exceeded, then applicable penalties as defined in SLA is applicable.

Note:

1. Detailed information on Settled and Un-Settled Transactions, refer latest NPCI PG Guidelines and ICD 2.5 or latest Guidelines amended time to time.

2. The detailed technical specification document of ETC transaction processing shall be implemented in consultation with by IHMCL and NPCI.

10. **Service Level Agreement**

i.   The Parties acknowledge and agree that this Agreement is a User Fee Collection Contract, and any breach of the Service Level Agreement (SLA) may result in significant financial losses to the Government, along with inconvenience to the public due to instances like wrong deductions, wrong issuance of e-notices, etc. Given the critical nature of the services provided under this Agreement, the penalties stipulated herein for any breach of the SLA are pre-estimated damages, representing the anticipated revenue losses and the disruption caused to the public.

ii. The Parties further agree that these penalties are a genuine and reasonable estimate of the losses likely to be incurred due to non-compliance with the SLA by the bank and are intended to compensate the other party for the adverse impact of such breaches.

iii. SLA shall be calculated separately for each fee plaza

SLA Table

SL #	Parameter	Timelines	Basis of measurement	Penalties
Implementation Phase				
1.	Supply, Installation, Testing and Commissioning, (Go-Live)	06 months from the date of signing of the Contract Agreement.	Signing of Contract Agreement	Rs. 2.5 Lakhs per week for initial two week of delay, further Rs 5 Lakhs per week for next four weeks and Rs 10 Lakhs per week thereafter upto cumulative penalty Amount of Rs 10 Cr beyond which it would be considered as Breach of Contract.
Operation & Maintenance Phase				
2.	Manpower Availability (Aadhar based Bio metric Attendance is mandatory for deployed Manpower)	Attendance and availability of manpower	8 Hrs. per Shift	a) In case of non-availability of manpower flat 3000 Rs per person/ Day shall be applicable. b) In case, if the non-availability of manpower is consecutively observed by IHMCL for more than 5 days then bidder shall be liable to replace the manpower.
Control Centre Equipment and Software				
SL no.	Parameter	Basis of measurement	Frequency	Penalties

| 3. | Availability of all MLFF Equipment and Software in Control Center | The uptime availability of all equipment of MLFF system shall be 99.9% per month

The downtime shall be calculated at a cumulative level when any of the equipment is non-operational. | Maximum permissible downtime for all Equipment shall be 44 minutes per month, subject to availability of MLFF system through redundant System (Gantry/Lanes). | • Beyond 44 mins, a penalty of Rs 1,00,000 per hour shall be applicable, in case redundancy is not working.

• The upper limit of the penalty shall be equal to total Performance Security

• Beyond that, IHMCL may consider it as a case of breach and may take necessary actions.

If system availability is below than 98%, it shall be considered as a breach |

Lane Equipment				
SL no.	Parameter	Basis of measurement	Frequency	Penalties
4.	E-Notice for end users	The E-Notice shall be generated within 48 hrs as per e-Notice Module post validation by Acquirer bank.	Maximum 48 Hours	Within forty eight hour: No penalty After that per hours- per instance a penalty of Rs 1000/- shall be applicable.

Accuracy - Vehicle Count and classification				
SL no.	Parameter	Basis of measurement	Accuracy	Penalties
5	Vehicle Count (For Tollable only)	99% Vehicle count (on daily basis)	99%	• For any missing count of any vehicle in the accuracy, a penalty of Rs 100000 shall be applicable Per day. • Below 98% accuracy, shall be considered as breach. • IHMCL reserves right to validate the accuracy through third party agency audit.

6	Vehicle Classification (For Tollable only)	99% Vehicle Classification (on daily basis)	99%	- For any missing Classification of any vehicle in the accuracy, a penalty of Rs 100000 shall be applicable per day. - Below 98% accuracy, shall be considered as breach. IHMCL reserves right to validate the accuracy through third party agency audit.

System Accuracy – Instance Wise

SL no.	Parameter	Basis of measurement	Frequency	Penalties
7.	Un availability of Images and video	The vehicle passed through the lane, Acquirer Bank must account for the vehicle through ANPR (front and back) and audit surveillance cameras. Images and videos are not available it will be considered instance of unaccounted vehicle. IHMCL shall get the video from various cameras processed through third-party on sample or complete basis and arrive on count of vehicles that have passed through each lane.	Per instance	Per Instance penalty shall be Rs 10,000 is applicable along with revenue loss incurred from unidentified vehicles.
8	Remote video Check	NHAI should be able to access any remote access through third party software or overview through IP and authentication details provided by NHAI/IHMCL.	Per instance	Rs. 5000/- per camera per day. Same camera will not be checked again in the same day if violation found and recorded

	If for any reason (wrong, IP Password, network downtime etc.) the footage is not visible, or photo is not available in ANPR, Audit surveillance Camera then it will be considered a violation. Simple screenshot with a date time visible shall be enough to prove violation by IHMCL/NHAI.			
9	API based data sharing with IHMCL MIS/ERP system	API or uploads-based sharing of reports from software to IHMCL ERP/MIS as prescribed in the contract and any notification / circular issued from time to time.	Per instances	Per Instance penalty shall be Rs 3000 for data sharing missed by Acquirer Bank.
10	Incorrect Manual Transaction	In case of any incorrect VRN based manual transaction done as per NHAI Manual Transaction Policy	Per instance	A penalty of Rs 1,00,000 per instance as per provision of Manual Transaction Policy of IHMCL IHMCL reserves right to validate the accuracy through third party agency audit
11	Wrong e-notices	In case of any wrong e-notices issued	Per instance	A penalty of Rs 10,000 per instance shall be applicable on each wrong e-Notices issued. IHMCL reserves right to validate the accuracy through third party agency audit
12	Delay in remit the collected charges	Penalty shall be imposed as per Clause under Schedule-B (3)(f)		
Spare Availability				

SL no.	Parameter	Basis of measurement	Accuracy	Penalties
13	Availability of 10% spare of critical equipment • RFID Reader & Antenna, • Lidar • Radar • Audit Surveillance Camera • ANPR Camera	Audit at any point of time. IHMCL conduct surprise inspection for validation/ verification of spares	100%	Each violation/instance shall attract the penalty of Rs. 3,00,000/-.

Cleanliness and Maintenance of Public Toilets, Control centre, and Surrounding areas of Plaza Building

SL no.	Parameter	Basis of measurement	Accuracy	Penalties
14	Maintenance of Toilets and Sanitation, Hygiene, Control Centre, Plaza Building, and assets and Surrounding Areas, Maintenance of existing lighting at toll plaza area	Audit at any point of time. IHMCL conduct surprise inspection of toilets hygiene	100%	Each violation/instance shall attract the penalty of Rs. 1,00,000/-

Note:

i. Penalty shall be recovered as per procedure mentioned in RFP Clause 1.2.19.1 (f) & 1.2.19.1 (g).

ii. Penalties shall be concurrent and cumulative, meaning multiple penalties can be applied for different types of non-compliance within the same period.

iii. In case of any system issues/ downtime, the recoverable damages shall be the actual revenue loss or the applicable SLA penalty amount, whichever is higher.

iv. The Service Level Agreement (SLA) shall be calculated for each fee plaza, if MLFF tolling is

implemented at more than 1 fee plaza as per RFP.

11. Consistent Penalty

If the penalty is more than 10% of Cash performance security for 3 consecutive months, it may be considered as breach and IHMCL reserves the right to terminate the contract and forfeit the PBG.

12. Data Retention and Handover

a) **Data Retention Period**:
The Successful Bidder shall ensure the retention of the following data for the specified durations throughout the Contract Agreement:

   i.   **ANPR and Audit Surveillance Camera Images**: Minimum retention period of **180 days**

   ii. **Video Recordings**: Minimum retention period of **30 days**.

   iii. **Transaction Data and Reports (as per Schedule-B)**: Retention throughout the Contract Agreement.

   iv. **Images, videos of all e**-Notice cases and other dispute cases shall be retained till the time the e-Notice or such case is disposed of.

b) **Data Handover:**
Upon the expiry or termination of the Contract Agreement, the Successful Bidder shall hand over all retained transaction data, including images, videos, and reports, in a complete and organized manner to the Authority

c) **Data Access and Evidence Provision**:
a. During the contract period, the Successful Bidder shall provide requisite image evidence and video recordings to the Authority within the defined storage limits upon request.
b. The data shall be made available promptly to assist the Authority in its operations, audits, or legal proceedings.

d) **Compliance and Penalty**:
The Successful Bidder shall ensure compliance with the above requirements. Non-compliance may result in penalties or other actions as deemed appropriate by the Authority.

e) **Confidentiality and Security**:
The Successful Bidder shall ensure the confidentiality and security of the retained data, preventing unauthorized access, misuse, or loss during the retention and handover period.

13. Minimum Operation & Maintenance (O&M) Manpower

(i) The O & M period after the successful completion of works shall include Operation & Maintenance of the entire MLFF Facility as per the Service Level Agreement (SLA) with

Qualified Manpower mentioned in Clause 2.12 of Schedule-C including supply of adequate spares, parts, consumables, and maintenance equipment required for the facility. The Bidder shall maintain required spare parts to maintain required service levels. The minimum Operations & Maintenance manpower requirement as per Clause 2.12 of Schedule-C is clarified as below. If acquirer bank feels more manpower shall be required to meet the SLAs, they may consider in their commercials.

#	Operation & Maintenance (O&M) Manpower	Minimum Manpower requirement
1.	Project Manager (Dedicated On-site) – (1 Nos.)	1
2.	Field Engineer (8 No. s)*	2 in each shift + 2 reliever
3.	Auditor/Transaction Validator	4 in each shift + 2 reliever
4.	Security*	4 in each shift + 2 reliever
5.	Cleaner*	2 in each shift + 2 reliever

- **At each Toll Plaza**

    Note: Please refer clause 2.12 for detailed qualification of manpower

    The Manpower deployed shall be dedicated for this project and shall not be deployed for any other project or assigned any other similar project.

(ii) The Bidder shall have sufficient infrastructure and capability to keep/store spares required for maintenances and will always during the contract period maintain sufficient inventory of spares and consumables for operating and maintaining the MLFF System, and to meet the Service Level Agreement.

(iii) Before the start of O&M Period, the Bidder shall deploy the O&M Personal mentioned at Schedule-C with prior approval of the Authority.

14. **Point of Sale (POS) setup for Sale of FASTag and Plaza Specific Discount Pass**

    i. Bidder is responsible to set up a **24*7** POS at the Control Centre Building for issuance of FASTag as per NETC Guidelines and providing services of Plaza Specific Discount Pass .

    ii. The POS executive should be trained to assist road users with making payments for e-Notices.

    iii. In case the acquirer bank is not a FASTag issuer under the NETC program, the bank shall be required to tie up with one or more issuer banks to ensure that a Point of Sale (POS) facility for the sale of FASTags is set up at the designated toll plaza as per RFP requirements.

Schedule - C

Standards & Specifications

1   Standards and Specification of all MLFF Sub System

Note:

a) All the specifications and compliance requirements should be either on OEM Letterhead or datasheet published by OEM on their website which will be countersigned by the Acquirer bank and the same shall be submitted during bid submission along with Manufacturer Authorization Form (MAF) issued by respective OEMs mentioning compliance requirement as per RFP number and date.

(b) The specifications given in the tables below are bare minimum. The bidders shall design their solution with the given or better specifications to meet the scope of work and SLA mentioned in the RFP without any additional financial implication to IHMCL.

(c) The type of equipment mentioned in the RFP are bare minimum. In case the solution designed by Bidder requires additional equipment (eg thermal camera etc) to meet the scope of work and SLA, the same should be provided in the solution without any additional financial implication to IHMCL.

1.1 RFID Reader

#	Parameter	Minimum Specifications
1	Frequency	UHF 865-868 MHz (configurable)
2	Supported Protocols	ISO 18000 6C/63, RAIN RFID/Gen2v1
3	Conducted Power	+10 to +33 dBm (33 dBm is recommended for free flow tolling)
4	Interference Rejection	Dense Interrogator Mode
5	Reader Speed Detection	**100 km/hr.** or higher.
6	Antenna ports	4 ports, N-type Female, switching time < 10 ms
7	Time synchronization	NTP /PPP
8	Communication Interface	10/100 BaseT, Ethernet, CAN, RS232, USB or better
9	Upgradeable Firmware	Yes
10	Operating Temperature	-10°C to +55°C (Ambient)

#	Parameter	Minimum Specifications
11	Storage Temperature	-10°C to +55°C
12	Relative Humidity	95%, non-condensing
13	Power	24DC or compatible
14	Regulatory	BIS / FCC
15	IP Rating	IP 65
16	Display	LED (Power, Transmit, Detect, LAN)
17	GPIO	2 Inputs, 2 Outputs
18	Memory	Persistent data storage for up to 10,00,000 unique transactions
19	Network Services	DHCP, HTTP, SNTP
20	Supported Regions	FCC, EN, FCC and RoHS
21	Safety	UL, IEC, EN
22	Preferred OEMs	SSI, Tag Master, Kathrein, Zebra **Or an OEM whose RFID Reader product has been deployed in a Multilane Free Flow Tolling (MLFF) System, either in India or internationally, and has been operational for a minimum of one (1) year as of the bid submission date.** **Note: The product should be complaint with Clause 3.1.1 of the RFP.**

1.2 RFID Antenna

#	Parameter	Minimum Specifications
1	Frequency Range	UHF 865-868 MHz (configurable)
2	Gain	10 dBi ± 1 dB
3	Return Loss	Below -15 dB
4	3 dB Beam width	-
5	Polarization	Linear or Circular
6	Front to Back Ratio	Below -30 Db
7	Maximum Input Power	6 Watt
8	Impedance	50 Ω
9	Lightning Protection	DC Grounded
10	Operation temperature	-10°C to +55 °C
11	Storage temperature	-10°C to +55 °C
12	IP Rating	IP 65
13	Connector	N-Type Female or any better
14	RoHS Compliance	Yes
15	Mounting Kit	Included
16	Preferred **OEMs**	SSI, Tag Master, Kathrein, Zebra **Or an OEM whose RFID Antenna product has been deployed in a Multilane Free Flow Tolling (MLFF) System, either in India or internationally, and has been operational for a minimum of one (1) year as of the bid submission date.** **Note: The product should be complaint with Clause 3.1.1 of the RFP**

1.3 Audit Surveillance Camera

#	Parameter	Minimum Specification
1	IR Illumination Source	High power IR without any visual distractions to the road user
2	Lane Coverage	Sufficient number of cameras to cover all lanes including paved/earthen shoulder
3	IR Effective Range	150M (Overview)
4	Speed Limit	150 km/hr. or higher.
5	Image Sensor	1/1.8" or better
6	Effective Pixels	2048 x 1536
7	Optical Format	1/1.8" or better
8	Min. Illumination	Color: 0.1Lux / BW: 0 Lux (IR ON)
9	S/N Ratio	More than 50 db
10	Electronic Shutter	1/32000 to 1s or better
11	Frame Rate	Up to 50/60 fps (50/60 Hz)
12	Lens	12.0 ~ 22.0 mm or better as per requirement.
13	Video Compression	H.265, H.264, M-JPEG, JPEG
14	Protocols	HTTP, RTP / RTSP (Uni / Multicast), TCP / IP(v4/v6), UDP, FTP, Telnet, HTTPS, PPPoE, SNMP, PAP / CHAP / RARP / ARP / DHCP, NTP, SMTP client, uPnP & etc.
15	Images Setting	Adjustable image size, quality, and bit rate Time/Date stamp and text caption overlay Configurable brightness, contrast, saturation, sharpness, white balance, and exposure AGC / AWB / AES / BLC / WDR should be at least 120 Db
16	Standard	ONVIF (Profile S & G/T/M)
17	Operating Temperature	-10 ~ +55℃

#	Parameter	Minimum Specification
18	Power Option	POE/POE+ /POE++/ External Power supply (Industrial Grade Power Supply)
19	Certification	CE / FCC / BIS Certification, NEMA 4X / IP67 (Full metal Casing)
20	Chipset/Processor	The Camera should not have Hisilicon chipset/Processor
21	Preferred OEMs	Pelco/Avigilon, Axis, Vivotek, FETCI, Tattile, BOSCH Or an OEM whose Surveillance Camera product has been deployed in a Multilane Free Flow Tolling (MLFF) System, either in India or internationally, and has been operational for a minimum of one (1) year as of the bid submission date. Note: The product should be complaint with Clause 3.1.1 of the RFP.

1.4 Automatic Number Plate Recognition Systems

#	Parameter	Minimum Specifications
1	General	The Camera should have feature and functionalities to capture number plate and video evidence from t-5 to t+5 sec of the Toll violation at maximum speed of 150KM/Hr or higher and should also be recorded (t being the instant at which the infraction occurred). The system should have capability to detect both Retroreflective and Non-Retroreflective number plates for the vehicles during the day as well as nighttime as per the accuracy levels specified. System should be capable of generating a video in any of the standard industry formats.
2	Automatic Number Plate Recognition (ANPR) Camera	
a	Sensor Type	Progressive scan (CMOS) Day / Night Camera, Global shutter
b	Resolution	3 Megapixels or better
c	Speed Detection	speed Upto 150 km/hr. or higher.
d	Video Compression:	H.264, H.265
e	Normal Horizontal Field of View	**Sufficient number of cameras to cover all lanes including paved/earthen shoulder**
f	Typical Range	40 meters. or better
g	Operating Temp.	-10°C to +55°C
h	Auto Iris Control	Yes
i	Protection rating	NEMA 4X / IP-IP66 or Better (protection against water and dust ingress), Resistance to corrosion in harsh environments. Certification: CE / FCC / BIS Certification, NEMA 4X / IP67 (Full metal Casing)
j	Communication	10/ 100/ 1000 Base-T Ethernet interface Static IP/ DHCP support for IP address assignment & network configuration Image transfer over Ethernet (FTP and/ or TCP/IP) NTP (network time protocol) time synchronization
k	Data Processing	Built-in processor running Linux OS Advanced image processing functions Image buffering, Data/ Time stamp and image tags
l	MTBF	45,000 Hours

#	Parameter	Minimum Specifications
l	Power	24/48V DC or compatible
m	Shutter Speed	1 sec. to 1/100,000 sec. or better shutter speed to cater to capturing number plate and video evidence
n	Frame Rate	Upto 50/60 fps with controllable bit rate and frame rate.
o	Chipset/Processor	The Camera to be provided by the bidder should not have Hisilicon chipset/Processor.
p	Camera Housing	The camera shall be housed in a suitable housing to protect them from solar radiation, UV, dust, and rain. The field of view of the camera shall not be obstructed by the housing. Picture quality or optical performance shall not be degraded by the housing. The Housing shall have IP-67/IP-68 rating for Weather-proof with better dust & dirt protection, and NEMA 4X-rating or IK10 or higher rating for Vandal-proof. The housing shall have built-in heater and blower.
q	Certification	CE/ FCC/ BIS Certification, NEMA 4X, IP67 (Full metal Casing),
r	Preferred OEMs	**Pelco/Avigilon, Axis, Vivotek, FETCI, Tattile, BOSCH** **Or an OEM whose ANPR Camera product has been deployed in a Multilane Free Flow Tolling (MLFF) System, either in India or internationally, and has been operational for a minimum of one (1) year as of the bid submission date.** **Note: The product should be complaint with Clause 3.1.1 of the RFP.**
3.	On site – Network Connectivity & Electrical Interface	
a.	Data Storage on site	The system should be equipped with appropriate storage capacity for minimum 24-hour recording, with overwriting capability. The images should be stored in tamper proof format only.
b.	Network Connectivity	Wired/GPRS based wireless technology with 3G /4G upgradable to 5G capability.
c.	The system should be capable of working in ambient temperature range of -10°C to +55°C	
d.	Lightening arrester shall be installed for safety of system (As per BIS standard IS 2309 of 1989) on the structure. SPD should be installed at junction box at each location.	

#	Parameter	Minimum Specifications
e.		The housing(s) should be capable of withstanding vandalism and harsh weather conditions and should meet IP66, IK10 standards (certified).
4.	Video Recording	
a.		The system should be capable of continuous video recording in control center in Unified Storage for 30 days. It should be noted that at any point of time the local storage at the base station should have the data of previous 30 days.
b.		Direct extraction through any physical device like USB, Hard disk shall be possible through Unified Storage.
c.		The Camera shall have inbuilt SD card slot and shall be provided with at least 128 GB class 10 SD card.

1.5 IR Illuminator

#	Parameter	Minimum Specifications
1.	Illumination Source	High power IR without any visual distractions to the road user
2.	Lane Coverage	Beam angle options Beam pattern Upto 90 or better
3.	Trigger Modes	Available
4.	Pulse with control	Available
5.	Communication Control	Full User Control on Illuminator parameters and strobe status output by USB/RS 485/RS 422/ANPR Camera system
6.	Connections	-
7.	Cable	Cable for Connector to ANPR Camera IO system is included (shielded, outdoor rated, terminated with the connector to fit with ANPR Camera system)
8.	Virtualization	Rugged, compact, corrosion-resistant enclosure IP66 (protection against water and dust ingress)
9.	Operating Temperature	-10°C to +55°C [heated enclosure]
10.	MTBF	90,000 hours
11.	Illumination Range	Minimum 50 Mtrs and should be adjustable
12.	Protection Function	Transient over peak suppression
13.	Power	Either POE+ or 24V DC or compatible
14.	Weight	Maximum of 4 kg
15.	Certifications	FCC Compliant, RoHS Compliant, CE Compliant / BIS
16.	**IP Rating**	IP 66 Rugged

1.6 Detector-Lidar

#	Parameter	Minimum Specifications
1.	Installation	Overhead
2.	Light Source	Infrared (865-905nm)
3.	Detect vehicle speed	10–220 km/hr.
4.	Coverage	Minimum two lanes per unit
5	IP rating	IP 67
6	Operating Temperature	-10°C to +55°C
7	Trigger response time	>=10ms
8	Observability	Device can minimum operate 15 mtrs under various weather conditions such as sunshine, heavy rain, fog...etc. These weather conditions should not affect the sensor performance
9	Communication	Ethernet TCP/IP 10/100 Mbit, Serial (RS-232, RS-422/485), USB
10	Power consumption	15-30 W,
11	Time synchronization	NTP
12	Inbuilt process unit	The Lidar shall have inbuilt / external processing unit to avoid any disruption in case of network/connectivity failure

Note: Lidar shall be installed at the Gantry Infrastructure only. Lidar shall not be installed at the Fee Plaza lanes.

1.7 Detector-Radar

#	Parameter	Minimum Specification
1	Objects Tracking	Up to 256 Objects
2	Lane Coverage	Up to 4 lanes with single sensor
3	Detection Range	Up to 300 m
4	Speed Detection Range	150 kmph or higher
5	Speed Detection Accuracy	$<\pm1\%$
6	Sensor Frequency	76 - 81 GHz
7	EIRP	Up to 36 dBm
8	Measurement	Cartesian (x, y, z) coordinates, Azimuth, Elevation, Speed
9	Communication Interfaces	Ethernet /USB, RS 485
10	Refresh time	24 MS
11	Power Supply	12V or Compatible
12	Power Consumption	10-40W
13	Operating Temperature	-10 to 60 ∘ C
14	Environment Protection	IP67
15	Certification	Speed detection accuracy of the system should have been Certified and tested for speed accuracy from any authorized agency by Government.

1.8 Local Server

BIDDER can supply the server as per the requirement to run the overall system. If required, the bidder must upgrade the server to achieve the desired outcome as per the requirement.

#	Parameter	Minimum Specifications
1.	Processor	Latest series/ generation of 64-bit x86 processor(s) with Twelve or higher Cores, Intel/ AMD Processor speed should be a minimum of 2.4 GHz. Minimum 2 processors per each physical server
2.	RAM	Minimum 64 GB or higher configured Memory per physical server
3.	Application Storage	Minimum 30TB storage available disk space. Minimum 7 days of storage should be available on local server, which shall be overwrite after every 7 days.
4.	Network interface	2 X 10 GbE LAN ports for providing Ethernet connectivity. Optional: 1 X Dual-port 16Gbps FC HBA for providing FC connectivity The required connectivity can be provided using converged FCOE ports on servers
5.	Power supply	Dual Redundant Power Supply
7.	RAID support	As per requirement/solution
8.	Operating System	Licensed version of 64-bit latest version of Linux/ Unix/Microsoft® Windows based Operating system)
9.	Form Factor	Rack mountable
10.	Virtualization	Shall support Industry standard virtualization hypervisor like Hyper- V, VMWARE and Citrix. Bidder will decide.
11.	Operating Temperature	5 degree C to 40 degree C, should be an Industrial grade model

Note: Local servers are required to be provided as per the RFP provisions. However, bidders may additionally propose redundant MeitY empanelled cloud-based infrastructure as part of their solution design, provided it meets all functional, performance, and availability requirements specified in the RFP.

1.9 Storage

#	Parameter	Minimum Specifications
1.	Solution Type	IP Based/iSCSI/FC/NFS/CIFS/N2N
2.	Storage	Storage Capacity should be minimum 125 TB or more as per requirement (usable, after RAID configuration) To store all types of data (Data, Voice, Images, Video, etc) Storage system should be capable of upward scalability. *Note: Storage space to be finalized during the design phase.*
3.	Hardware Platform	Rack mounted form-factor Modular design to support controllers and disk drives expansion
4.	Controllers	At least 2 Controllers in active/active mode. The controllers / Storage nodes should be upgradable seamlessly, without any disruptions / downtime to production workflow for performance, capacity enhancement and software / firmware upgrades.
5.	RAID support	Should support various RAID levels
6.	Cache Memory	Minimum 256 GB per controller of useable cache memory across all controllers. If cache memory is provided in additional hardware for unified storage solution if applicable, then cache memory must be over and above 256 GB per controller.
7.	Redundancy and High Availability	The Storage System should be able to protect the data against single point of failure with respect to hard disks, connectivity interfaces, fans, and power supplies.
8.	Management software	All the necessary software (GUI Based) to configure and manage the storage space, RAID configuration, logical drives allocation, snapshots etc. are to be provided for the entire system proposed. Licenses for the storage management software should include disc capacity/count of the complete solution and any additional disks to be plugged in in the future, upto max capacity of the existing controller/units. A single command console for entire storage system. Should also include storage performance monitoring and management software. Should provide the functionality of initiative-taking monitoring of Disk drive and Storage system for all disk failures.

#	Parameter	Minimum Specifications
		Should be able to take "snapshots" of the stored data to another logical drive for backup purposes
9.	Data Protection	The storage array must have complete cache protection mechanism either by de-staging data to disk or providing complete cache data protection with battery backup for up to 4 hours
10.	Storage Timelines	1. Successful bidder shall keep the storage of complete data (Images and videos). Images for 180 days and Videos for 30 days. 2. Successful bidder shall keep the storage of complete data (images/video recording) on storage devices, in case of any disputed/discrepancy, till the end of the contract period. 3. Any type of additional storage requirement shall be borne by the bidder.

1.10 Monitoring Workstations

#	Parameter	Minimum Specifications
1.	Processor	Latest generation 64bit X86 Quad core processor(3Ghz) (preferably Core i7 or better processors)
2.	Chipset	Latest series 64bit Chipset
3.	Motherboard	OEM Motherboard
4.	RAM	Minimum 8 GB DDR3/4/5 ECC Memory @ 1600 Mhz. Slots should be free for future upgrade. Minimum 4 DIMM slots, supporting up to 32GB ECC
5.	Graphics card	Minimum Graphics card with 2 GB video memory (non- shared)
6.	HDD	2 TB SATA-3 Hard drive @7200 rpm with Flash Cache of 64GB SSD. Provision for installing 4 more drives.
7.	Media drive	NO CD / DVD drive
8.	Network interface	10/100/1000 Mbps autosensing on board integrated RJ-45 Ethernet port.
9.	Audio	Line/Mic IN, Line-out/Spr Out (3.5 mm)
10.	Ports	Minimum 6 USB ports (out of that 2 in front),

#	Parameter	Minimum Specifications
11.	Keyboard	104 keys minimum OEM keyboard
12.	Mouse	2 button optical scroll mouse (USB)
13.	PTZ joystick controller (With 2 of the workstations in CC)	PTZ speed dome control for IP cameras Minimum ten programmable buttons Multi-camera operations Compatible with all the camera models offered in the solution. Compatible with VMS /Monitoring software offered
14.	Monitor	27" TFT LED monitor, Minimum 1920 x1080 resolution, 5 ms or better response time, TCO 05 (or higher) certified
15.	Certification	Energy star 5.0/BEE star certified
16.	Operating System	64-bit pre-loaded OS with recovery disc
17.	Security	BIOS controlled electro-mechanical internal chassis lock for the system.
18.	Antivirus feature	Advanced antivirus, antispyware, desktop firewall, intrusion prevention (comprising of a single, deployable agent) which can be managed by a central server. (Support, updates, patches and errata for the entire contract/ project period)
19.	Power supply	SMPS; Minimum 400-watt Continuous Power Supply with Full ranging input and APFC. Power supply should be 90% efficient with EPEAT Gold certification for the system.

Note:

1. Bidder shall be responsible to disable all ports/interfaces from all workstations installed at site.

1.11 Firewall

#	Parameter meter	Minimum Specifications
	Performance	
1.	Firewall throughput	5 Gbps or more
2.	IPS throughput	Minimum 1 Gbps
3.	NGFW throughput	Minimum 1 Gbps
4.	Threat Protection throughput	Upto 145 Mbps
5.	Concurrent	10,00,000 or more
6.	IPsec VPN	2000 Mbps or more
7.	SSL decryption + Threat Protection	1000
	Physical Interfaces	
8.	Storage	64 Gb SSD or more
9.	Ethernet interfaces	8 GbE copper or more, 1 SFP port
10.	I/O ports (rear)	2 x USB 2.0/USB 3.0
11.	Power	DC: 12/24V, 100-240VAC or compatible, 50-60 Hz
	Environment	
12.	Power consumption	10-50W
13.	Operating temperature	0-40°C (operating) -10 to +70°C (storage)
14.	Humidity	10%-90%, non-condensing
	Physical specifications	
15.	Mounting	Rackmount
16.	Dimension	Suitable for Network Rack
17.	Warranty	The proposed solution shall support 3 years Replacement and 24*7 TAC support.
18.	Support	The proposed solution should support Content filtering, Web Search Filtering, Intrusion Prevention, Threat Protection, Advanced Malware Protection and Active Directory Integration

1.12 Server Rack

#	Parameter	Minimum Specifications
1.	Type	27 / 42 U racks mounted on the floor Floor Standing Server Rack – 27 / 42 U with Heavy Duty Extruded Aluminium Frame for rigidity. Top cover with FHU provision. Top & Bottom cover with cable entry gland plates. Heavy Duty Top and Bottom frame of MS. Two pairs of 19" mounting angles with 'U' marking. Depth support channels - 3 pairs with an overall weight carrying Capacity of 500Kgs. All racks should have mounting hardware 2 Packs, Blanking Panel. Stationery Shelf (2 sets per Rack) All racks must be lockable on all sides with unique key for each rack. Racks should have Rear Cable Management channels, Roof, and base cable access. The depth of the server rack should be 1200MM
2.	Wire managers	Two vertical and four horizontals
3.	Power Distribution Units	Two per rack Power Distribution Unit - Vertically Mounted, 32AMPs with 25 Power Outputs. (20 Power outs of IEC 320 C13 Sockets & 5 Power outs of 5/15 Amp Sockets), Electronically controlled circuits for Surge & Spike protection, LED readout for the total current being drawn from the channel, 32AMPS MCB, 5 KV AC isolated input to Ground & Output to Ground
4.	Doors	The racks must have steel (solid / grill / mesh) front / rear doors and side panels. Racks should NOT have glass doors / panels. Front and Back doors should be perforated with at least 63% or higher perforations. Both the front and rear doors should be designed with quick release hinges allowing for quick and easy detachment without the use of tools.
5.	Fans and Fan Tray	Fan 90CFM 230V AC, 4" dia (4 Nos. per Rack) Fan Housing Unit 4 Fan Position (Top Mounted) (1 no. per Rack) - Monitored - Thermostat based - The Fans should switch on based on the Temperature within the rack. The temperature setting should be factory settable. This unit should also include - humidity & temperature sensor
6.	Metal	Aluminum extruded profile

#	Parameter	Minimum Specifications
7.	Side Panel	Detachable side panels (set of 2 per Rack)

1.13 Field Junction Box

#	Parameter	Minimum Specifications
1.	Size	Suitable size as per site requirements to house the field equipment
2.	Cabinet Material	Powder coated CRCA sheet/ Stainless steel
3.	Material Thickness	Min 1.2mm
5.	Number of Locks	Two
6.	Protection	IP 55, Junction Box design should ensure to keep the temperature within suitable operating range for equipment's and should also avoid intentional water splash and dust intake
7	Mounting	On Camera Pole / Ground mounted on concrete base
8.	Form Factor	Rack Mount/DIN Rail
9.	Other Features	Rain Canopy, Cable entry with glands and Fans/any other accessories as required for operation of equipment's within junction box.

1.14 Edge Level Switch

#	Parameter	Minimum Specifications
1.	Type	Managed Outdoor Industrial grade switch
2.	Total Ports	1) Minimum 24 port 1 Gbps PoE/PoE+ and 2 No's fiber Uplink ports of 10G. i. May require higher port density at some locations, depending upon site conditions. ii. May require fiber ports at some locations, depending upon site conditions/distances.
3.	PoE Standard	IEEE 802.3af/ IEEE 802.3at or better,

#	Parameter	Minimum Specifications
		370 watts Power budget or more, Dynamic PoE allocation
4.	Protocols	1) IPV4, IPV6 2) Support 802.1Q VLAN 3) DHCP support 4) IGMP 5) SNMP Management 6) Should support Loop protection and Loop detection. 7) Should support Ring protection. 8) End point Authentication 9) Should support NTP
5.	Access Control	1) Support port security 2) Support 802.1x (Port based network access control). 3) Support for MAC filtering
6.	PoE Power per port	Sufficient to operate the CCTV cameras/edge devices connected
7.	Enclosure Rating	IP 30 or equivalent Industrial Grade Rating (to be housed in Junction box)
8.	Operating Temperature	0 -55 C or better Industrial Grade Rating
9.	Multicast support	IGMP Snooping V1, V2, V3 MLD Snooping V1, V2
10.	Management	Switch needs to have RS-232/USB/RJ45 console port for management via a console terminal or PC. Web GUI NTP Syslog for log capturing. SNMP V1, V2, V3
11.	Compliance	UL/EN/IEC or equivalent
12	Power Supply	Inbuilt Dual Power Supply In built Dual Fan

#	Parameter	Minimum Specifications
13	Switching Capacity	30 Gbps or better

1.15 Core Switch

#	Parameter	Minimum Specifications
1.	Ports	1) 24 port 1G Ethernet ports, PoE/PoE+ port and 2 No's fiber Uplink ports of 10G. 2) All ports can auto-negotiate between all allowable speeds, half-. duplex or full duplex and flow control for half-duplex ports.
2.	Switch type	Layer 3
3.	MAC	Support 32K MAC address.
4.	Backplane	Capable of providing wire-speed switching
5.	Switching Capacity	48 Gbps or better
6.	Port Features	Must support Port Mirroring, Port Trucking and 802.3ad LACSP Link Aggregation port trunks
7.	Flow Control	Support IEEE 802.3x flow control for full-duplex mode ports.
8.	Protocols	1) IPV4, IPV6 2) Support 802.1D, 802.1S, 802.1w, Rate limiting. 3) Support 802.1X Security standards 4) Support 802.1Q VLAN encapsulation, IGMP v1, v2 and v3 snooping. 5) 802.1p Priority Queues, port mirroring, DiffServ 6) DHCP support 7) Support up to 1024 VLANs. 8) Support IGMP Snooping and IGMP Querying 9) Support Multicasting 10) Should support Loop protection and Loop detection, 11) Should support Ring protection

#	Parameter	Minimum Specifications
9.	Access Control	1) Support port security 2) Support 802.1x (Port based network access control). 3) Support for MAC filtering. 4) Should support TACACS+ and RADIUS authentication
10.	VLAN	1) Support 802.1Q Tagged VLAN and port based VLANs and Private VLAN 2) The switch must support dynamic VLAN Registration or equivalent. 3) Dynamic Trucking protocol or equivalent
11.	Protocol and Traffic	1) Network Time Protocol or equivalent Simple Network Time Protocol support 2) Switch should support traffic segmentation. 3) Traffic classification should be based on user-definable application types: TOS, DSCP, Port based, TCP/UDP port number
12.	Management	1) Switch needs to have a console port for management via a console terminal or PC. 2) Must have support SNMP v1, v2 and v3. 3) Should support 4 groups of RMON. 4) Should have accessibility using Telnet, SSH, Console access, easier software upgrade through network using TFTP etc. Configuration management through CLI, GUI based software utility and using. web interface
13.	Resiliency	1) Dual load sharing AC and Primary power supplies 2) Redundant variable-speed fans

1.16 Enterprise Management System

1) To ensure that MLFF systems are delivered at the performance level envisaged, it is important that an effective monitoring and management system be put in Place. It is thus proposed that a proven Enterprise Management System (EMS) is proposed by the bidder for efficient management of the system, reporting, SLA monitoring and resolution of issues. Various key components of the EMS to be implemented as part of this engagement are.

      I.   Network Monitoring System

     II.   Server Monitoring System

    III.   Helpdesk System

2) The solution should provide a unified web-based console which allows role-based access to the users.

3) The Proposed EMS shall be capable to monitor all SLA defined in the RFP.

4) The Proposed EMS shall be able to provide reports in pdf, excel and CSV file format.

1.17 Video Wall & Controller

#	Parameter	Minimum Specifications
1.	Technology	Solid state LED illumination technology or LED based Technology or equivalent
2.	Display Unit	The Visual Display Unit / Rear Projection Module
3.	Screen Size	55" cubes in a 4 X 2 display
4.	Resolution	Full high definition (1920X1080)
5.	Brightness	Uniformity of 85%
6.	Contrast Ratio	Min. 1400 : 1
7.	Wall Uptime	Min. 60,000 hours of rated life (Expected to be operational 24X7)
8.	Viewing Angle	180 degree viewing angle
9.	Screen to Screen gap	The inter screen gap should be <= 1 mm
10.	Other Features	RS232 control (with loop-through) On Screen Display (OSD) IR remote control flicker free image on the Large Screen Graphics Wall
11.	Input	IP Based
12.	Same OEM for Controller and Display	Display Controller and management software shall be from the same OEM. The number of outputs shall be capable to drive number of cubes to achieve the resolution.

1.18 PTZ Camera for Plaza and Gantry Surveillance

Feature	Specification
Image Sensor	1/3" or better
Active Pixels	1280(H) x 960(V) or better (2 MP)
Resolution	Minimum 2 MP
Sensitivity	0.005 lux (B/W), less than 0.06 lux (Colour) or better
Focus	3.5mm to 129mm or better
Optical Zoom	35x or better
Digital Zoom	16x
Night Vision	up to 100m
Signal to Noise	> 54 dB
AGC	Automatic
White Balance	Automatic
Electronic Shutter	Auto/Manual, 1/1 ~ 1/30,000s
Iris Control	Automatic
Encoding	H.264 or H.265 or JPEG
Video Output	Ethernet 10/100 Base-T
Pan Range	0 to 360 degrees, Auto flip at 180 degrees
Pan Speed	variable 0.2 degrees per sec. to 80 degrees per sec.
Tilt Range	+10 to -90 degrees
Tilt Speed	variable 0.2 degrees per sec. to 40 degrees per sec.
Pre-set Positions	255 minimum
Housing	IP66 or better
Power	230V, 50 Hz domestic supply
Protection Class	D for data/signal lines and class B for power

i. Two PTZ Cameras shall be installed at the fee plaza, one in each side (LHS and RHS) to cover the Plaza and Gantry area.

ii. PTZ Camera shall be for industrial use, capable of continuous operation under harsh environment on the highway. The minimum Zoom should be of 300 mtrs.

iii. Camera pole design shall adhere to site requirements and conditions, featuring a Hot Dipped Galvanized finish, an octagonal shape, and a length of 8 meters (may vary as per toll plaza size), complete with appropriate mounting arrangements. Additionally, ensure that separate pole earthing is included to mitigate the risk of lightning incidents.

2. Functional Requirements of all MLFF Sub System

2.1 RFID Reader

The primary function of automatic identification technology is to identify vehicles passing through the road to enable toll collection via FASTag. This is achieved using RFID readers and antenna installed on Multi-Lane Free Flow (MLFF) gantries or lanes.

Operational Overview:

1. **FASTag Detection:**

    a) RFID readers emit signals to scan and read the FASTag affixed to vehicles.

    b) The information from the detected FASTag is processed for initiating toll payments.

2. **Installation and Coverage:**

    a) RFID readers are mounted on MLFF gantries or lanes for optimal coverage.

    b) A single RFID reader can effectively cover up to two lanes.

3. **Data Transmission:**

    a) Identification data from the FASTag is transmitted via radio frequency to the RFID reader.

    b) The RFID reader forwards the data to the controller unit through cables for further processing transactions.

4. The RFID system shall have an anti-collision feature, enabling it to read multiple FASTags simultaneously without errors or conflicts.

5. The RFID Reader shall authenticate and process the information from FASTags efficiently and securely.

6. Each RFID Reader shall support a minimum of 4 radio channels to connect up to 4 antennas. No more than 4 antennas shall be connected to a single RFID Reader. Channel switching must occur within 6 milliseconds or faster to maintain operational efficiency.

7. To ensure accuracy, one or multiple RFID Readers may be deployed to manage a single lane effectively.

8. RFID channel switching customization shall be controlled at the Highway Control Center level via the MLFF application.

9. Deleted

10. All tags detected under the canopy must be stored in the reader's internal memory before being transmitted over the network.

11. RFID Reader housing shall be rugged, tamper-proof, and designed to operate under adverse weather conditions.

12. The reader must support robust data security measures, including anti-copying and anti-forgery functionalities.

13. It must withstand harsh climatic conditions while ensuring stable and consistent 24x7 operation.

2.2 RFID Antenna

RFID Antenna refers to the conductive element that sends and receives FASTag data. The minimum height clearance for the RFID antenna should be based on Indian regulations regarding road construction. The RFID antenna should be designed for high-speed toll collection systems (the MLFF system in this case).

2.3 ANPR and Application

The Automatic Number Plate Recognition (ANPR) camera system is designed to automatically read vehicle license plates using optical character recognition technology. This versatile system is used for surveillance in various toll applications.

    i.   Integration: ANPR technology should be embedded within security cameras (also known as ANPR Cameras) to ensure accurate readings regardless of the shape and color of the license plates.

    ii.   Lighting Conditions: The ANPR cameras must be capable of reading license plates under varied lighting conditions, including day, night, and adverse weather conditions.

    iii.   High-resolution ANPR Camera for multi-lane coverage (3MP or better, CMOS), Global shutter.

    iv.   High frame rate (50/60 fps) for traffic bursts and image sequence of speeding vehicles

#	System Parameter
General	
1.	ANPR system automatically captures the license plates of any vehicle(s) in the field of view (FOV) of a camera and stores them in database, so that details of the vehicles are available at any later point in time along with related video footage. It's OCR engine then coverts captured license plate number into editable text, for ease of validation of vehicle details. OCR engines need to be designed and customized as per the multiple number plate and various Indian scripts apart from standard HSRP number plates
2.	If there is more than one vehicle in the camera FOV, then all of them are independently processed and their license plates are recognized irrespective of the type of vehicle like car, bus, truck, auto rickshaw, motorcycle, etc.
3.	Non-standard number plates shall be subject to audit and manual validation. The ANPR solution is expected to leverage AI/ML capabilities to adapt and improve recognition accuracy over time, thereby enhancing future readings and minimizing manual intervention.
4.	The vehicle image produced by the system should be wide enough to give the exact position of the vehicles with respect to the virtually marked point.
5.	The system is capable to process and read number plate of vehicles with speed Upto 150km/hr. or higher.

#	System Parameter
6.	The system can capture vehicle color and label them as per predefined list of configured system colors. System allows option to search combination if vehicle color with vehicle registration number plate.
7.	The Evidence and ANPR camera should continuously record all footage in its field of view to be stored at the local base station. This should be extractable onto a portable device as and when required. The network should have the capability to provide the real time feed of the evidence camera to the CC at the best resolution possible on the available network.
8.	The system shall be equipped with IR Illuminator in-built as well as external to ensure clear images including illumination of the Number Plate under low light conditions and nighttime.
9.	The system support reading accuracy Upto 99.5% of standard number plate vehicles number plates which are visible by human eyes.
11.	The system support API for integration with 3rd parties' application.
12.	Recording & display information archive medium
12 (a)	The recording and display of information should be detailed on the snapshot of the infracting vehicle as follows: a) Computer generated unique ID. b) Date (DD/MM/YYYY) c) Time (HH:MM: SS) d) Equipment ID e) Location ID f) Lane Number of the vehicle g) Time Stamp of RFID Reader at the time VRN captured by ANPR h) Registration Number of vehicle

#	System Parameter
13	The ANPR application should be a tightly coupled system with the MLFF software deployed on the servers. The ANPR application should only be accessible through the MLFF Software. a) The system should have secure access mechanism for validation of authorized personnel. b) Deletion or addition and transfer of data should only be permitted to authorized users. c) The system should have the capability to transfer the data to CC (Control Centre) through proper encryption in real time and batch mode for verification of the processing of E-Notice as defined in the e-Notice module. d) If connectivity to server is not established due to network/connectivity failures, then all data shall be stored on site on the Edge system / LPU and will be transferred once the connectivity is re-established automatically. There shall also be a facility of physical transfer of data on portable device whenever required. There should be a provision to store minimum one week of data at each site on a 24x7 basis.
14	Mounting structure
a.	a) It will be Mounted on the Canopy/Gantry. b) The ANPR camera shall be placed in such a way that it should be able to view the edge shoulders as well as the service lanes to capture the vehicle license plates and process the same for deduction of toll.

2.4 IR Illuminator

The illuminator should be equipped with ANPR Camera will be able to provide complete coverage for image capture. Under MLFF, the IR Illuminator should also be able to handle different driving behavior in MLFF environment including lane switching, high speed, tailgating, low speed, etc. The light given off by the illuminator should be set to minimize potential distraction to motorists.

a) High power, compact and lightweight

b) Up to 75 Hz for traffic bursts and image sequences

c) Infrared (invisible)

d) Rugged IP66 enclosure

e) Long life, low total cost of ownership

2.5 Audit Surveillance Camera

a) Audit Surveillance Cameras shall be installed on each MLFF gantry, with one camera positioned on the **Right-Hand Side (RHS)** and one on the **Left-Hand Side (LHS)**. The cameras shall be mounted at an appropriate height to ensure full coverage of all lanes, including the shoulder lane,

on their respective sides. The setup must enable clear capture of every vehicle passing through the gantry or lanes of the toll plaza.

b) Adequate illumination, such as IR flashers, shall be installed to enhance the accuracy of the camera during nighttime operations. The camera's image quality must be clear enough to count and vehicles with color based, color code and their types passing under the gantry/canopy. It shall also capture video with clear number plates within a range of 30 meters.

c) The Audit Surveillance Camera shall be positioned to ensure visibility of the edge shoulders as well as service lanes. This configuration must enable the capture of vehicle details for further processing by the MLFF server to meet functional requirements.

d) If connectivity to server is not established due to network/connectivity failures, then all data shall be stored on site on the Edge system / LPU and will be transferred once the connectivity is re-established automatically. There shall also be a facility of physical transfer of data on portable device whenever required. There should be a provision to store minimum one week of data at each site on a 24x7 basis.

e) The proposed solution must be highly customizable to accommodate IHMCL's specific requirements and evolving needs.

2.6 Detector- LIDAR & RADAR

a) The bidder shall propose appropriate technical solution/ product to check speed, count the number of vehicles and classification of the passing vehicle at each lane. The output of the detectors should be to indicate the presence/ passage of vehicles and shall be used to trigger the MLFF system to generate counts, vehicle classification, and speed at each lane.

b) Vehicle passage detection shall utilize a LiDAR radar scanner mounted overhead to scan the road surface for vehicles entering the capture zone. Upon detecting a vehicle within zone, the system shall trigger the vehicle passage event, initiating the capture process.

c) The detection device shall operate reliably under various weather conditions, including sunshine, heavy rain, and fog. The Bidder shall clearly specify the Placement of the detector **(Count, Speed) for each lane.**

d) The detector shall accurately count vehicles in non-lane-based, mixed-traffic flow conditions and differentiate between various vehicle types, such as two-wheelers, three-wheelers, cars, and heavy goods vehicles (HGV). The system must maintain a counting accuracy of 99% across all lighting and weather conditions. The Bidder shall outline the methodology to achieve this accuracy in their technical proposal.

e) A detector that does not change its status at least once during a stage execution shall be notified to the Server (in MLFF) at the termination of the associated stage.

f) The system shall feature advanced 3D, or 4D LiDAR sensors for powerful and efficient vehicle detection.

g) The detection device shall have a compact housing with an enclosure rating of IP67, along with integrated heating to enable consistent operation in outdoor environments.

2.7 Firewall

The firewall must provide unparalleled visibility into risky users, unknown or unwanted applications, advanced threats, suspicious payloads, and encrypted traffic. It shall ensure robust protection of the network from ransomware, advanced threats, phishing emails, and other cybersecurity risks, with the following minimum functionalities:

i.   Firewall Block Access to Unapproved Websites, address, URLs

ii. Protect the Network, Data, and machine from Malicious Code

iii. Firewalls shall have Control of Internet content connected to the gantry equipment.

iv. Shall have Limits set options on Bandwidth Usage

v.   Shall Secure Network when using remote sessions or Remote Monitoring from Anywhere

vi. Shall Work 24/7, Monitoring the Network and Protecting It from Harmful codes, sites, malware, ransomware attacks.

vii. The firewall must be capable of managing multiple firewalls from different vendors, both virtual and physical, providing seamless integration and centralized management.

2.8 Communication and Time Synchronization

The Communication and Time Synchronization of MLFF system shall be as per below requirements:

1) **Communication Interface:** The Equipment shall support Ethernet interface to communicate with the MLFF server.

2) **Power Saving:** Appropriate energy saving mechanisms and approaches.

3) **Real Time Clock:** The system should maintain a real-time clock of the system and sync with all the field equipment. The real time clock shall be based on Network Time Protocol (NTP) or Simple Network Time Protocol (SNTP). This shall maintain the transaction time and become an integral part of the system.

2.9 MLFF Application Software

1) The MLFF application is the core of the Multi Lane Free Flow (MLFF) system, responsible for processing transactions and payments based on predefined business rule logics. The application shall be deployed at two key locations: the Gantry/Lanes and the Control Center (CC). The core MLFF application will be hosted on a centralized server, which manages the MLFF applications at gantry/lanes. The Gantry MLFF application will establish a dedicated communication link to the server to sync configuration parameters and receive real-time updates. In case of a loss of connectivity, the Gantry application will continue functioning autonomously, storing transactions (settled, unsettled, or requiring manual validation) locally. Once connectivity is restored, the stored data will be synchronized with the core server application. All transaction data originating from the Gantry MLFF application will be assimilated into the centralized MLFF application at the server

2) The MLFF application will track vehicle flow in real-time to calculate vehicle counts and classifications using various sensors, such as RFID readers, ANPR cameras, and vehicle detectors. The MLFF application will also ensure real-time data processing and the correct assignment of toll charges based on vehicle type, lane used, and other relevant parameters. The application software will support automated generation of e-Notices of vehicles crossing the Gantry/Lanes area under violation category.

3) MLFF application shall take the decision of sending the file for transaction based on the confidence of the RFID and ANPR camera read accuracy.

4) MLFF application at Gantry/lanes should be capable of distinguish between tollable and non-tollable vehicles (two-wheelers, 3-wheelers, etc.) without any human intervention. It should have the function to determine the direction of the vehicle travel (such as forward or reverse)

5) The transactions recorded at the Gantry (tolling point) are initially stored in the Gantry MLFF application. This data is then transmitted to the core MLFF application, hosted at the Control Center or a central server, for processing based on the transaction status. This ensures that all transaction records received from the Gantry/Lanes are centralized and processed by the core system.

6) The MLFF core application manages the entire interface of the MLFF system and receives both transaction data and heartbeat signals from the Gantry equipment via the Gantry application. The core MLFF application and the Gantry application synchronize essential elements such as time, configuration settings, and transaction data. Access to the core MLFF application at the Control Center (CC) is controlled based on user rights and roles. For example, the Manual VRN Transaction Validation Team will only have access to the pending transactions that require manual validation. On the other hand, the Auditor/Validator, responsible for authorizing the e-notice issued, will only be able to access transactions requiring manual validation for approval.

7) The MLFF application shall be integrated, through an API, with the VAHAN and SARATHI systems of National Informatics Centre (NIC) for the purpose of vehicle validation, verification, and retrieval of vehicle-related information, including but not limited to Vehicle Registration Number (VRN), Vehicle Class, Gross Vehicle Weight (GVW), etc., for vehicles passing through the gantry/lanes. The MLFF system should also have necessary provision for integration with NIC for Speed Enforcement. This integration shall be implemented at no additional cost to IHMCL, with IHMCL providing the necessary support to the bidder for seamless integration with NIC.

8) The MLFF Gantry Application encompasses several key functionalities critical to the MLFF system, represented by the following interconnected components:

i. **Device Configuration:** Allows configuration of the field devices at the Gantry for accurate toll collection and monitoring.

ii. **Toll Transaction Processing:** Manages the processing of toll transactions, ensuring data accuracy and timely processing.

iii. **Rules & Fare Engine:** Defines the tolling rules and fare structure to ensure correct toll calculations based on vehicle type, lane, and other factors.

iv. **Sync with Core MLFF Application:** Facilitates synchronization of data and configuration settings between the Gantry application and the central MLFF server.

v. **Field Device Health:** Monitors the health and status of field devices to ensure smooth operation of the tolling system.

vi. **Manage Exception List:** Handles exceptions, such as missed toll reads or invalid transactions, ensuring proper follow-up and resolution.

vii. Rule 138A of the CMVR -1989 mandates fitment of FASTag on all categories of M & N motor vehicles including those sold in the form of driveaway chassis without windscreen by the manufacturer of the vehicle or its authorized dealer.

viii. The bidder shall submit the details including TEMP numbers, Make& Model etc of all such vehicles which are passing through MLFF system and not fitted with FASTag for further action.

ix. Vehicles without number plate, damaged or tampered number plate, in such cases the successful bidder shall ensure the data of such vehicles along with the images for further action.

x. Additionally, the MLFF system must include a provision to generate and fetch the necessary reports for the above through the web-portal.

This central integration ensures the smooth operation and efficiency of the toll collection system at each Gantry location, aligning all components with the core MLFF application.
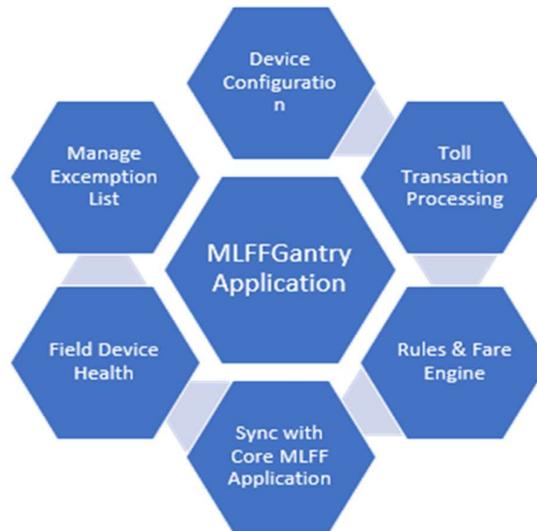
MLFF Gantry Application

9) The Bidder shall establish a secure, tamper-proof device registry for all deployed hardware and software, ensuring checksum validation, and logs for all configurations, updates, and modifications.

10) The Bidder shall set up a Role-Based Access Control system to manage who access field devices, application systems, ensuring all access is logged.

11) The Bidder shall ensure all field devices send telemetry data regularly - in a standard format with details like device ID, time, CPU and memory use, firmware version, etc.

12) The Bidder shall upgrade all subsystems (devices, applications) - preferably remotely through a secure process without any system downtime.

13) The Bidder shall build or present a roadmap for application systems using container-based microservices and open-standard CI/CD deployments.

14) The Bidder shall design and maintain a multi-location database with automatic failover and replication, implement API retry for NIC, VAHAN, and NPCI integrations, ensure continuous heartbeat monitoring, and share quarterly failover reports with IHMCL.

15) The Bidder shall provide a northbound interface for the National Command Centre (as and when it is established by IHMCL) to enable observability and analytics for detecting duplicate tag use, route deviations, and repeated violations.

16) The Bidder shall ensure full cybersecurity compliance, including endpoint protection, TLS encryption, and annual VAPT by a CERT-In–approved agency.

17) To ensure long-term interoperability across deployments, the Bidder shall ensure all system APIs follow open standards, remain vendor-neutral, and integrate seamlessly with third-party platforms.

2.10 Web-Portal:

The bidder shall develop an advanced and user-friendly online web-portal with access for IHMCL and NHAI via a secure web-based login system. The portal must feature a comprehensive dashboard, alert

system, and customizable MIS reports. It should provide access control to ensure functionality can be assigned to authorized users as per requirements. The portal must support real-time data visualization and reporting for selectable date ranges. Key features include, but are not limited to:

1) **Dashboard**

   a. Real-time health status of MLFF equipment, including Gantries and Plaza building.

   b. Real-time operational status of lanes.

   c. Real-time equipment health status, direction-wise and lane-wise.

   d. Real-time traffic and revenue updates incrementally (Daily, Weekly, Monthly)

   e. Traffic and revenue analytics for the last 7 days displayed as bar charts.

   f. Real-time status of accepted ,rejected and exempted e-Notices generated.

   g. Comparison of RFID reader vs. ANPR accuracy (success rate).

   h. Alerts for anomalies in traffic, revenue, or equipment health.

2) **E-Notice Module**

   a. e-Notice Module functionality within the web portal.

   b. Role-based access management to ensure only authorized personnel can access the e-Notice Module.

   c. Features to validate the generated e-Notices as below:

      i. **Accepted:** Automatic integration with NIC e-Notice and NETC systems for processing.

      ii. **Rejected:** Mandatory comments required for rejection reasons (e.g., VRN not visible etc.).

      iii. **Exempted:** Mandatory comments for exemption (e.g., testing vehicle, convoy).

   d. Status monitoring for issued e-Notices (Accepted, Rejected, Exempted) on the main dashboard.

   e. Tracking and reporting of repetitive exempted or rejected cases over various time periods (daily, weekly, monthly).

3) **Reports**

   The portal should allow the user to customize and generate reports based on time periods, locations, or other specified parameters. The portal must generate detailed and customizable reports as per requirements, including but not limited to:

   a. **Equipment and Lane Reports**

      i. Equipment Uptime Report: Tracks uptime and performance of all MLFF equipment as per SLA.

      ii. Lane Uptime Report: Provides uptime and operational status of lanes.

      iii. Network Uptime Report: Monitors link status and uptime between each location and the MLFF Server.

iv. Network Status Report: Detailed network performance metrics, including latency, uptime, and outage analysis.

b. **Traffic and Revenue Reports**

    i. Traffic & Revenue Report: Lane-wise, gantry-wise, and overall revenue and traffic details.

    ii. Tollable vs. Non-Tollable Transaction Report: Classification of transactions into tollable and non-tollable categories.

    iii. Vehicle Count Report: Class-wise vehicle count passing through gantries, categorized as Tollable and Non-Tollable.

c. **Accuracy Reports**

    i. LiDAR vs FASTag Classification Report: Comparison of LiDAR vehicle classification with FASTag data.

    ii. LiDAR vs Mapper Classification Report: Comparison of LiDAR classification with Mapper system data.

    iii. ANPR Accuracy Report: Tracks the accuracy of vehicle number plate recognition and exceptions.

    iv. RFID Reader Accuracy Report: Evaluates FASTag recognition accuracy and exceptions.

d. **Revenue Share Report**

e. **Reconciliation and Settlement Reports**

    i. **Total Transactions:** Successful, failed, and pending transactions.

    ii. **Reconciled Amount:** Match between toll plaza and bank records.

    iii. **Settlement Status:** Amounts credited or awaiting settlement.

    iv. **Adjustments:** Chargebacks, discrepancies, or penalties.

f. **E-Notice Report**

    i. **Total Notices:** Count of issued, accepted, rejected, and exempted notices.

    ii. **Penalty Status:** Paid and pending penalties.

    iii. **Reasons for Rejection/Exemption:** With counts.

    iv. **Repeat Offenders:** Vehicles with multiple violations.

    v. **Trend Analysis:** Weekly/monthly e-Notice issuance and payment trends.

g. **Event and Activity Reports**

    i. **Event Report:** Summarizes incidents, system logs, and user activities.

    ii. **Audit Trail Report:** Detailed logs of all system changes and user actions for audit purposes.

h. **Historical and Analytical Reports**

     i. **Real-Time & Historic Data Reports:** Includes transaction history, revenue collections, and trends.

     ii. **Trend Analysis Report:** Identifies traffic and revenue patterns over selected timeframes.

     iii. **Predictive Maintenance Report:** Uses historical data to predict potential equipment failures.

i. Security Reports

     i. **Antivirus Report:** Status of active nodes, virus definitions, periodic scans, and infections detected.

     ii. **Cybersecurity Report:** Logs failed login attempts, potential breaches, and system vulnerabilities.

j. **Exempt Transaction Rep**ort – This report module shall provide the details of vehicles exempted from the system.

k. **Real Time & Historic Data** – including but not limited to transactions and revenue collections, etc.

l. **Antivirus Report:** Generates a list of active nodes in the antivirus system, along with their status, latest virus definitions, periodic scans, and any detected infections.

m. **Real Time & Historic Data –** including but not limited to transactions and revenue collections, etc.

n. The Bidder shall provide a tool or dashboard to track and monitor SLA performance, uptime, response time, and overall system health in real time.

2.11   Indicative Minimum Bill of Quantity (BOQ):

1. Equipments at Gantry for each fee plaza:

S. No.	Description of work	Unit	Qty	Remarks
1.	RFID Antenna	Nos	1	Per lane
2.	RFID Reader	Nos	1	Per lane
3.	Detector -Radar	Nos	1	Per lane
4.	Detector – LiDAR	Nos	1	1 for 02 lanes or as per solution
5.	ANPR Camera (Including Housing and Mounting) +Controller+ Pole/Canti lever with all licenses	Nos	2	Per lane (Back & Front)
6.	Audit Surveillance Camera and Mounting + Pole/Canti Lever with all licenses	Nos	1	Per direction
7.	IR Illuminator	Nos	1	Per lane or as per solution
8.	Field Junction Box with Surge Protector Device	Nos	1	Per lane or as per solution
9.	Edge Level switch (8 Port or as per requirement)	Nos	1	Per lane or as per solution
10.	Switch (Layer 3) – 24 Port (HA Mode)	Nos	1	Per Direction or as per solution
11.	Any additional Component	-	Lumpsum	

2. Equipment at Fee Plaza Existing Lanes

S. No.	Name of Equipment	Unit	Qty	Remarks
1.	RFID Antenna	Nos	1	Per lane
2.	RFID Reader	Nos	1	Per lane
3.	Detector -Radar	Nos	1	Per lane

S. No.	Name of Equipment	Unit	Qty	Remarks
4.	ANPR Camera (Including Housing and Mounting) +Controller+ Pole/Canti lever with all licenses	Nos	2	Per lane (Back & Front)
5.	Audit Surveillance Camera and Mounting + Pole/Canti Lever with all licenses	Nos	1	Per direction or as per solution
6.	IR Illuminator	Nos	1	Per lane or as per solution
7.	Field Junction Box with Surge Protector Device	Nos	1	Per lane
8.	Edge Level switch (8 Port or as per requirement)	Nos	1	Per lane
9.	Switch (Layer 3) – 24 Port (HA Mode)	Nos	1	Per Direction
10.	Any additional Component	-	Lumpsum	

3. Plaza Level Equipment

S. No.	Name of Equipment	Unit	Qty	Remarks
1.	MLFF Local Server (HA mode)	Nos	2	
2.	Workstation with Display 27"	Nos	5	
3.	Storage (Minimum 125 TB)	Nos	1	
4.	Server Rack (27U)	Nos	1	
5.	Surge Protector Device	Nos	1	
6.	Firewall with all licenses	Nos	1	
7.	Redundant Internet Connectivity (1 Gbps)	Nos	2	Leased Line

8.	Video Wall and Controller	Nos	1	
9.	PTZ Camera for Plaza and Gantry Surveillance	Nos	2	
Network & Cabling				
1.	Armored OFC		Lumpsum	
2.	Electrical Cable		Lumpsum	
3.	Cat-6 A cable with adequate Cable tray	-	Lumpsum	
4.	Earthing, Lightning Protection, Network Surge Protection		Lumpsum	
Toll Plaza Software Application (CC & Field)				
1.	Multi Lane Free Flow Software with portal and Dashboard and two license	-	Complete in respect	Perpetual Licenses /Open source
2.	ANPR Application		01 per ANPR Camera	Perpetual Licenses /Open source
3.	Video Management Software Base License		1	Perpetual Licenses /Open source
4.	Video Management Software Per Channel license		01 per Camera	Perpetual Licenses /Open source
5.	Detector -Radar applications		1	Perpetual Licenses /Open source
6.	Detector -LiDAR applications		1	Perpetual Licenses /Open source
7.	RFID Reader and Antenna Application		1	Perpetual Licenses /Open source

8.	Video Analytics (Camera/ Application)		01 per Camera	Perpetual Licenses /Open source
9.	Firewall at CC (Control Centre)		Lumpsum	Lumpsum
10.	Enterprise Management Software (EMS)		Lumpsum	1 (Master License + Nodes=60)
11.	Integration with VAHAN		Lumpsum	
12.	Operating System		Lumpsum	Licensed version
13.	Any additional		Lumpsum	

2.12   Minimum Manpower Requirements & Qualifications:

a)   Manpower Requirement: The Bank shall deploy personnel as specified below. The actual number of personnel shall be determined based on project requirements, ensuring that the minimum numbers indicated below are maintained.

S. no.	Manpower Details	Minimum Number of Resources	Remarks
1.	Project Manager	1	
2.	CC Transaction Validator/Auditor at CC	4 in each Shift + 2 Reliever	-
3.	Field Engineer at Field Location*	2 in each shift + 2 Reliever	
4.	Security Guard* (It is the responsibility of the Bidder/Bank to ensure safety and security of the command control center and associated premise/infrastructure/space allocated for the purpose of the project. Bidder/Bank should ensure appropriate deployment of manpower/resources to ensure the same)	4 in each shift + 2 reliever	
5.	Cleaner*	2 in each shift + 2 reliever	

*At each Toll Plaza

b) Manpower Requirement & Qualification

#	Manpower Designation	Minimum Qualifications
1.	Project Manager (Dedicated On-site)	Minimum Education: B.E/B.Tech/MCA along with MBA is required.
		Total experience: 12 years and above.
		Languages known (Read, Write and Speak): Hindi and English
		Prior project management experience of at least 10 years of handling ETC based Toll Plaza projects.
		Excellent writing, communication, time management and multi-tasking skills
		Project Experience of managing components
2.	Field Engineer	B. E/ B. Tech/ MCA/ MTech with minimum five years of experience in Systems/Software Quality Assurance
		2 Engineer for each shift (8Hrs) and 2 relievers
3.	CC Auditor/ Transaction Validator	Graduate in any discipline with at least 2 years of relevant experience in citizen contact service.
		Minimum 4 auditors/Validator per shift(8hrs) per MLFF plaza and 2 relievers. Number of auditors may be dependent on the volume of traffic which is to be decided by the bidder.
4.	Security Guard (It is the responsibility of the Bidder/Bank to ensure safety and security of the command control center and associated premise/infrastructure/space allocated for the purpose of the project. Bidder/Bank should ensure appropriate deployment of manpower/resources to ensure the same.)	Minimum Metric in any discipline with at least 2 years of relevant experience. Ex service in Central Government/ Defence/ Retired army man are preferable.
		Minimum 4 guard per shift (8hrs) and 2 relievers.
5.	Cleaning Person	
		Minimum 2 cleaner per shift(8hrs) and 2 relievers.

Please note:

The provided BoQ is indicative and the Successful Bidder shall be solely responsible for proposing a solution that meets all the features, functions, and performance criteria outlined in this RFP. The Successful Bidder will be responsible for the complete design, development, and implementation of the required MLFF solution, along.

2.13 Schedule II – Indicative Format for Monthly User Fee Collection Statement

All report formats shall be finalized in consultation with IHMCL