

## REQUEST FOR PROPOSAL

*For*

**ENGAGEMENT OF A CONTRACTOR BY MCD FOR TOLL AND ENVIRONMENT COMPENSATION CHARGE (ECC) COLLECTION AT BORDER POINTS FROM SPECIFIED COMMERCIAL VEHICLES ENTERING DELHI AND UPGRADE THE EXISTING RFID SYSTEM TO THE MULTI LANE FREE FLOW (MLFF) BASED COLLECTION**

### Volume III – Draft Contract

Toll Tax Department  
Municipal Corporation of Delhi  
14<sup>th</sup> Floor, Dr. Shyama Prasad Mukherjee Civic Centre,  
Minto Road, New Delhi -110002  
Telephone No. 011-23226453

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**TOLL TAX & ECC COLLECTION AGREEMENT**

This Toll Tax & ECC Collection Agreement (hereinafter referred to as the "Agreement") is made and executed at \_\_\_\_\_ on this [ ] day of [ ] of 2026 ("Effective Date").

**BY AND BETWEEN**

**Municipal Corporation of Delhi** a statutory body constituted and governed by the Delhi Municipal Corporation Act, 1957, having its office at Dr. Shyama Prasad Mukherjee Civic Centre, Minto Road, New Delhi - 110002 and acting through its authorized representative \_\_\_\_\_ (hereinafter referred to as the "MCD" and which expression shall, unless repugnant to the context or meaning thereof be deemed to include its successors, legal representatives, administrators and assigns) of the **FIRST PART**;

**AND**

[ ], a [company] / [partnership] validly incorporated / organised and registered under the [laws of [ ] with its [registered/corporate/head office] situated at [ ] and acting through its authorized representative \_\_\_\_\_ (hereinafter referred to as the "Contractor", which expression shall unless repugnant to the context or meaning thereof be deemed to include its successors, legal representatives, administrators and permitted assigns) of the **OTHER PART**.

The MCD and the Contractor shall hereinafter be individually referred to as the "Party" and collectively referred to as the "Parties".

**WHEREAS**

- A. By virtue of the provisions of section 113(2)(g) of the Delhi Municipal Corporation Act, 1957 ("DMC Act"), the MCD is empowered to levy and collect toll tax on Commercial Vehicles (as defined hereunder) and commercial vehicle as specified entering the NCT of Delhi and further as per the direction of Apex Court in the matter M.C. Mehta Vs. UOI & Ors. in WP (C) No. 13029 of 1985, ECC shall be collected as per the specified rate.
- B. Under the provisions of the DMC Act, MCD is empowered to collect the toll tax levied at the Site (as defined below) i.e. all entry points of NCT of Delhi.
- C. Vide order dated [09.10.2015 and 16.12.2015] passed by the Hon'ble Apex Court in W.P. (C) No. 13029 of 1985 titled M.C. Mehta Vs. UOI & Ors., the obligations has been placed upon the Toll Collectors to collect ECC from specified commercial vehicles at specified rates.
- D. Whereas to collect toll tax as per the DMC Act either by itself or through duly appointed contractor(s) and to authorize such contractor(s) to collect the toll tax & ECC, and for this purpose, the MCD had floated a tender vide Notification/NIT No. \_\_\_\_\_ dated [ ] having Sl. No. [ ]-for inviting offers/bids from the interested parties for collection of toll tax & ECC at the Site for a period of 05 (five) years from the Commencement Date w.e.f. \_\_\_\_\_ (6.00 AM) and extendable for a period of six months or till the date of appointment of new contractor, whichever is earlier, as per terms and conditions that may be decided by the Competent Authority of the MCD in case of exigency.
- E. The Contractor(s) who had sufficient resources and capacity to improve develop and operate the Toll Tax Barriers, Posts and Toll Plazas (as defined below) at the Site and had therefore participated in the aforesaid competitive bid. The Contractor had among others submitted its proposal bearing ref. No [ ] dated [ ] ("Proposal").

- F. The MCD upon carrying out the due process of scrutiny of all the proposals received from the various bidders, accepted the Proposal through its letter of Intent bearing ref. No [ ] dated [ ] ("LOI"), a copy of which is provided at Annexure 1 to the Exhibit -I of this, Agreement confirmed the acceptance of the Contractor's bid and awarded the bid to collect Toll Tax & ECC, develop, upgrade, operate and maintain the Toll Tax Barriers, Posts, Lanes and Toll Plazas at the Site, to the Contractor.
- G. In addition to above, the ECC collection also now falls within the ambit and scope of the contract, the same is now being included in the present contract.
- H. The improvements by installing appropriate electronic gadgets for making suitable arrangement at his own cost to plug leakages, if any, for the performance of contract w.e.f. \_\_\_\_\_.
- I. The Second Party M/s. \_\_\_\_\_ has agreed to pay weekly remittance for Toll Tax of Rs. \_\_\_\_\_ (Rs. \_\_\_\_\_) i.e. agreed / awarded amount [hereafter referred as Contract Amount] to First party i.e. Municipal Corporation of Delhi to collect the Toll Tax & ECC from the specified commercial vehicles entering Delhi at all entry points of Delhi which is Rs. \_\_\_\_\_ (Rs. \_\_\_\_\_) per annum for the period of 05(five) years, subject to enhancement of 2.5% in the awarded amount / committed amount after completion of every one year from the date of authorization by the competent authority of the agreed amount / awarded amount in consideration of authorization of the successful bidder for Toll Tax & ECC collection on behalf of MCD. Apart from weekly toll remittance, the Second party has also agreed to remit weekly ECC collection on actual basis to First Party i.e. to MCD as per the Terms & Conditions of this agreement and of RFP document.

**NOW THEREFORE THIS WITNESSETH AS UNDER:**

1. Subject to and in accordance with the provisions of this and the Applicable Laws and relying upon the representations and warranties of the Contractor to fulfil the obligations contained hereunder, the MCD hereby appoints the Contractor to provide the Toll & ECC Collection Services as set out in Schedule 2 to Agreement A of this during the subsistence of this and the Contractor hereby consents to its appointment and agrees to provide the Toll & ECC Collection Services strictly in accordance with the terms and conditions set forth herein and in Exhibit-I.
2. In furtherance of the appointment of the Contractor for the provisions of the Toll & ECC Collection Services, the MCD has delivered real and constructive possession of the MCD's Facilities as per the copy of the inventory provided at Annexure 3(b) to the complete satisfaction of the Contractor and then a corresponding detailed receipt will be separately given by the Contractor in respect of the same. The Contractor is, thus, subject to fulfilment and compliance with the terms and conditions of this and the Exhibit – I is entitled and empowered to collect toll tax & ECC from all the specified vehicles seeking entry through the Toll Tax Barriers, Posts, Lanes and Toll Plazas at the rates prescribed in this behalf by the MCD in the Schedule of Toll Rates (as defined hereunder).
3. The Contractor expressly agrees that:
  - (a) The offer, the terms and conditions of offer and set forth in Exhibit-I (that was previously provided to the bidders as [ ] of the Offer Document), and the letter of award and every part thereof shall be binding upon the Contractor and shall govern the relationship between the Contractor and the MCD in relation to the matters provided hereunder. If any inconsistency occurs between the express provision of the Agreement and other stipulations elsewhere, the provisions of this Agreement shall prevail. It is further agreed

that if there is inconsistency *inter se* in the meaning of two similar stipulations, the same shall be resolved by referring the inconsistent stipulations to the Commissioner of the MCD whose decision in this regard shall be final and acceptable to the Contractor and shall be a part of this Agreement as if it was originally agreed between the Parties.

- (b) The other terms and conditions in particular about the procedure or the manner of performance of the Agreement and such other aspects not specifically provided in the Agreement shall be regulated by written instructions issued by the MCD and / or its authorised officer in this behalf as also the direction passed by the Hon'ble Apex Court in W.P. (C) 13029/1985 titled as M.C. Mehta Vs. UOI & Ors. from time to time and other court of law.
- (c) The grey areas which have remained unaddressed in the present documents due to oversight or any other reasons would be clarified by the Commissioner MCD, as and when the need arises and the decision would be acceptable and binding upon the Contractor.
- (d) **The selected Contractor shall be responsible for a dual-scope of work:**

- i) **Part A Upgradation to MLFF :** To Design, Develop, Commission, Operate, and Maintain a comprehensive Multi-Lane Free Flow (MLFF) tolling infrastructure. This mandate includes the deployment of gantry-mounted hardware—comprising high-fidelity RFID transceivers and ANPR imaging systems—ensuring seamless integration with the current RFID system.

The project should be defined as a complete turnkey solution for transition from RFID Lanes to Multi-Lane Free Flow (MLFF) at toll entry points of Delhi. The scope must include:

- **Design and Development:** Conduct field surveys, prepare design drawings, and supply all MLFF equipment, materials, and spare parts.
- **Infrastructure Installation:** Implementation of a comprehensive MLFF-based tolling system, including the necessary field equipment and sensors mounted on gantries.
- **Operations & Maintenance (O&M):** Full operation and maintenance of the MLFF facility and system throughout the contract period, including skilled resources at the location.
- **RFID Integration:** Seamless integration with the current RFID tags for real-time fare calculation and payment processing.
- **Post-Passage Notice Mechanism:** Automated generation and issuance of digital notices for vehicles whose entry or passage through the MLFF system is recorded but for which the applicable Toll Tax and/or ECC remains unpaid, together with system support for subsequent recovery action, all strictly in accordance with the Delhi Municipal Corporation Act, 1957, including section 161, the Delhi Municipal Corporation (Toll Tax) Bye-Laws, 2007, and all amendments, rules, notifications, directions and orders issued from time to time.

- ii) **Part B Collection:** Collection of Toll Tax and Environment Compensation Charge (ECC) from notified commercial vehicles at all designated border entry points of Delhi using MLFF.

- (e) The Successful bidder is bound for collection of Toll & ECC through installed and fully operationalized barrier-free Multi-Lane Free Flow (MLFF) System at their own costs and expenses integrated with existing installed RFID System. During implementation stage the Successful Bidder/Contractor shall use the existing system/infrastructure to the collection of Toll Tax & ECC. The details of MLFF Standards & Technical Specifications given in Annexure-5 of Volume-III.

**IN WITNESS WHEREOF**, the Parties have respectively set their hand/s and/or common seal hereto on the day, month and year hereinabove written.

**SIGNED, SEALED AND DELIVERED**

By Addl. Commissioner (Toll Tax)/MCD

Municipal Corporation of Delhi

The Party of the FIRST PART

In presence of the following witnesses:

- 1.
- 2.

**SIGNED, SEALED AND DELIVERED**

By Shri./ M/s .....

i.e., the Party of the OTHER PART

In presence of the following witnesses:

- 1.
- 2.

The common seal of ..... above named Contractor was affixed pursuant to the resolution passed at the meeting of the Board of Directors of said company duly convened and held on \_\_\_\_\_ day of \_\_\_\_\_ 2026 hereto affixed.



## EXHIBIT I – TERMS AND CONDITIONS

### 1. DEFINITIONS, INTERPRETATIONS & DOCUMENTS

#### 1.1 Definitions

In the Agreement and this Exhibit, unless the context otherwise requires:

**"Addl. Commissioner"** means the Additional Commissioner, Toll Tax, for the time being in-charge of supervising the Toll Tax Department.

**"Dy. Commissioner/Additional Deputy Commissioner"** means the Dy. Commissioner/Additional Deputy Commissioner In-charge of Toll Tax Department or any other person exercising the delegated authority of the Commissioner MCD in this regard.

**"Additional Facilities"** shall have the meaning ascribed to it in Clause 11.6(a).

**"Agreement"** means this agreement together with the Schedules, Agreements and Annexure, as may be amended, modified or notated from time to time.

**"Additional Agreement"** means this together with the Schedules, Agreements and Annexure, clarifications issued by the Commissioner, MCD, amendments, modifications and corrigendum issued by the MCD from time to time.

**"Applicable Laws"** means any law, legislation, court orders/judgements, statute, rule, directive, notification, exemption, regulation or any interpretation thereof enacted, issued, or promulgated by any Authority and applicable to either Party, their obligations or this from time to time.

**"Approval"** means any consent, authorisation, registration, filing, lodgement, notification, Agreement certificate, commission, lease, licence, permit, approval or exemption from, by or with an Authority as may be required from time to time in connection with the Site or any performance of any obligation under this.

**"Assistant Commissioner"** means the Assistant Commissioner (Toll Tax) for the time being in charge of supervising the Toll Collection Services or his assigns and successors or any other person exercising the delegated authority of the Commissioner MCD in this regard.

**"Authority"** means any government department, local government council, government or statutory authority or such other party, exercising any sovereign function, and includes any municipal or local authority.

**"Cash Security"** shall have the meaning ascribed to it in Clause 6.2(a).

**"Commercial Vehicles"** means a vehicle registered as a 'Transport Vehicle' under the Motor Vehicles Act-1988 and includes in relation to a motor vehicle, a taxi tempo, TATA 407, goods carrying three-wheeler, bus, truck, Nishan, TATA 709, Canter, six wheels truck, ten wheels truck, fourteen and above wheels truck and allied commercial vehicle.

**"Commencement Date"** means the date on which the work of Toll & ECC Collection Services would be entrusted to the Contractor which shall be [ ] or any other such date as notified by the Commissioner MCD.

**"Commissioner"** means the Commissioner of MCD.

**"Competent Officer"** shall have the meaning ascribed to it in Clause 5.1.

**"Confidential Information"** means any information, object, document, data, programs, techniques, systems, processes or any such information (whether as an original or a copy marked as "Confidential" by a Party) relating to the affairs, business, finances, trade secrets or operations of such Party, however stored or recorded, or any other information communicated between the Parties that is not in the public domain or generally known to third parties.

**"Contract Amount"** means total awarded / agreed amount for Toll for total awarded period, incurred for operation of Toll and ECC Collection, but it does not include ECC Amount.

**"Contract Facilities"** means the collective reference to the MCD's Facilities and the Developed Facilities.

**"Contract Fee Instalments"** shall have the meaning ascribed to it in Clause 12.1(a).

**"Contract Performance Guarantee"** shall have the meaning ascribed to it in Clause 6.3(a).

**"Contractor's Event of Default"** shall have the meaning ascribed to it in Clause 17.1.

**"Deputy Commissioner"** means the Deputy Commissioner In-charge of Toll Tax Department or any other person exercising the delegated authority of the Commissioner MCD in this regard.

**"Developed Facilities"** means the buildings, equipment, facilities, etc. constructed/ developed/renovated by the Contractor in accordance with the list of facilities required to be developed and in connection with the provision of Toll Collection Services, whether owned, leased or hired during the Term.

**"DMC Act"** shall have the meaning ascribed to it in Recital A of the Agreement.

**"ECC"** Environment Compensation Charge.

**"EMD"** shall have the meaning ascribed to it in Clause 6.1(a).

**"Expiry Date"** shall have the meaning ascribed to it in Clause 4.1.

**"Force Majeure"** and **"Force Majeure Event"** shall have the meaning ascribed to it in Clause 15 but would not include the litigations and court directions resulting as an act of omission or commission of the Contractor.

**"Good Industry Practices"** means currently recognized methods and practices in the toll collection industry that would reasonably be expected from experienced and competent toll collection contractors under conditions comparable to those applicable to the Site.

**"Insurances"** shall have the meaning ascribed to it in Clause 13.5(a).

**"Intellectual Property"** means any and all patentable inventions, copyrights, trademarks, designs or other intellectual property by whatever name called.

**"Losses"** shall have the meaning ascribed to it in Clause 14.1.



**"MCD"** means the Municipal Corporation of Delhi, established under the DMC Act.

**"MCD's Facilities"** means facilities that do not require any further construction/renovation/development by the Contractor unless and until so clarified by the MCD.

**"NHAI"** means the National Highways Authority of India;

**"Notices"** shall have the meaning ascribed to it in Clause 19.1.

**"Offer Documents"** means the 3 volumes (viz: the Instruction to Bidders (ITB), Project Information Memorandum (PIM) and Draft Contract agreement) issued as instructions/information to the Contractor at the "Request for Proposal" stage of the bidding process for the appointment of a toll collection contractor for the Site.

**"Other Additional Facilities"** shall have the meaning ascribed to it in Clause 11.7(a).

**"Party"** means either the MCD or the Contractor, and **"Parties"** means a joint reference to the MCD and the Contractor.

**"Person"** includes any individual, Corporation, partnership, joint venture, trust, unincorporated organisation or government (or any agency or political subdivision thereof).

**"Proposal"** shall have the meaning ascribed to it in Recital D of the Agreement.

**"Schedule of Toll Rates"** shall have the meaning ascribed to it in Clause 12.2(a).

**"Separate Contractors"** means contractors (other than the Contractor) engaged by the MCD for carrying out any works or Toll Collection Services of whatever nature at or in the vicinity of the Site.

**"Site"** means the collective reference to Toll Tax Barriers, Posts and Toll Plazas established at any place in the vicinity of the toll tax limits i.e. the limits of the Union Territory of Delhi and as more particularly described in Schedule 7.1.

**"Specified Bank"** means the State Bank of India in accordance with Section 100 of the DMC Act.

**"Taxes"** means any and all taxes, duties, cess, imposts, levies, charges or other levies other than direct taxes applicable on corporate income of a Party relating to or otherwise applicable from time to time on the Toll Collection Services provided pursuant to this, Agreement imposed, withheld, levied or otherwise assessed under Applicable Law including the DMC Act.

**"Term"** shall have the meaning ascribed to it in Clause 4.1.

**"Toll Collection Services"** means the toll & ECC collection and related services more particularly set forth in Schedule 2.

**"Toll Plaza"** shall mean a building used for toll tax collection along with associated land, toll canopy, equipments and/or other structures including electronic software, hardware etc, toll collection lanes and other plants and infrastructure installed at the site of a toll plaza.

**"Toll Tax Barrier"** means a barrier established for collection of toll tax & ECC at any place being the entry point of the territorial limits toll of tax collection which means the limits of the Union territory of Delhi and office, the toll barrier canopy, kerbed lanes and toll booths.

**"Toll Post"** means a post established for collection of toll tax & ECC at any place being the entry point of the territorial limits of the GNCTD.

**"Valuer" or "Valuation Panel"** means: (a) an independent third party nominated by the Parties; or (b) a 3 member panel consisting of a nominee each of the respective Parties and a third individual mutually nominated by the 2 nominees as their chairman; for the purpose of valuing the Additional Facilities.

**RFID or RFID System** means Radio Frequency Identification Device

## 1.2 Interpretation

In this Exhibit (unless the context otherwise requires):

- (a) a reference to a part, clause, schedule, exhibit and annexure refers to them of, in and to this Exhibit;
- (b) a reference to "the Agreement " or "this Agreement " includes all schedules, exhibits and annexures to the Agreement ;
- (c) a reference to singular includes the plural and vice-versa;
- (d) a reference to any legislation or legislative provision includes any statutory modification or re-enactment of, or legislative provision substituted for, and any subordinated legislation issued under, that legislation or legislative provision;
- (e) the metric system of measurement shall be used for the purpose of this Exhibit
- (f) headings do not affect the interpretation of the terms and clauses of this Exhibit
- (g) a reference to any Party includes that Party's executors, administrators, substitutes, successors and permitted assigns;
- (h) a reference to a day, month or year is relevant to a day, month or year in accordance with the Gregorian calendar; unless otherwise specified in this Exhibit.
- (i) a reference to an Agreement, deed, instrument or other document include the same as amended, novated, supplemented, varied or replaced from time to time;
- (j) the expressions "including", "includes" and "include" have the meaning as if followed by "without limitation";
- (k) The expression "writing" or "written" shall include communications by telex, telegram, facsimile (FAX), electronic mail (E-mail) and letter;

- (l) If any provision in Clause 1.1 is a substantive provision conferring a right or imposing an obligation on any Party, effect shall be given to it as if it were a substantive provision in the body of this Exhibit; and
- (m) Any word or expression used in this Agreement shall, unless otherwise defined or construed in this Exhibit, bear same meaning as assigned to them under the DMC Act and rules made there under.

## 2 WARRANTIES

### 2.1 Warranties as to Capacity and Performance

The Contractor hereby represents and warrants to the MCD that as of the Commencement Date or Effective Date whichever is earlier:

- (a) it is validly existing and in good standing under the laws of its country of origin and is qualified to do business as contemplated herein and is in good standing in all places where necessary in the light of the business it conducts and properties it owns and to perform its obligations hereunder and to carry out the acts and activities contemplated to be carried out by it hereunder;
- (b) the execution, delivery and performance of this Agreement and the Contract Performance Guarantee, have been duly authorised by the Contractor and its respective board of directors and by all other necessary corporate action;
- (c) the execution of this agreement by the Contractor is not in conflict or does not infringe any third party rights.
- (d) there are no proceedings pending, for the liquidation of the Contractor or that could materially adversely affect the performance by the Contractor of its obligations under this Agreement ;
- (e) this Agreement and the Contract Performance Guarantee constitute legal, valid and binding obligations of the Contractor, enforceable against the Contractor in accordance with the terms and conditions of agreement;
- (f) the execution, delivery and performance of the Agreement shall not conflict with, result in the breach of or constitute a default or violation under any of the terms of its constitutional documents including applicable memorandum and articles of incorporation or the by-laws of the Contractor under Applicable Laws applicable to its business or properties or under any material covenant, Agreement understanding, decree or order to which the Contractor is a party or by which the Contractor or any of its properties or assets may be bound or affected;
- (g) no consent, approval, authorisation, order, registration or qualification of, or with, any court or regulatory authority or other governmental body having jurisdiction over the Contractor is required the absence of which would adversely affect the legal and valid execution, delivery and performance by the Contractor of this agreement or the documents and instruments contemplated hereby or the taking of any actions by the Contractor contemplated herein, is required;
- (h) the Contractor has the necessary expertise, experience and capability including sufficient and competent work force, including managers, engineers, supervisors,

foremen and other personnel to provide the Toll Collection Services efficiently and expeditiously in accordance with this Agreement ;

- (i) the Contractor warrants and agrees that it shall perform the Toll & ECC Collection Services in accordance with the Applicable Laws and:
  - (1) exercising a reasonable standard of skill, diligence and care; and
  - (2) to a standard equal to or better than Good Industry Practice; and
- (j) the representations and warranties as specified herein shall continue to be valid and subsisting till the expiry of this agreement.

### 3. ACKNOWLEDGEMENTS

- (a) An inventory of all material, property and equipments present and provided by the MCD for the toll & ECC collection i.e., the MCD's Facilities, as authenticated by any competent officer of the MCD, has been delivered to the Contractor, a copy of which is provided at Annexure 3(b) to this Exhibit.
- (b) The Contractor hereby acknowledges and agrees that it has been allowed adequate access to the Site and the Contract Facilities for inspection and review, has had sufficient time to thoroughly review the Offer Documents and has carried out its own independent investigations of the Site, its surroundings and the Contract Facilities before the Effective Date and has made its own assessment as to the existing physical conditions of the Site and its surroundings and the Contract Facilities.
- (c) The Contractor hereby acknowledges and agrees that any failure in carrying out the inspection of the Site or inability to fully apprise itself regarding the Site shall not relieve the Contractor in any manner whatsoever of its liability to perform the obligations in accordance with the terms of this Agreement .
- (d) The Contractor agrees and confirms that neither the MCD nor the Competent Officer shall be liable in any manner whatsoever, whether in contract, tort or otherwise, for any damage, expense, loss or liability suffered or incurred by the Contractor howsoever caused in respect of any information relating to the Site, or the accuracy thereof, or any such information which is/could not be provided by the MCD to the Contractor.
- (e) The Contractor agrees and confirms that it shall not be entitled to any compensation rebate or reduction in Toll Collection Contract Fee on account of change or variation in traffic pattern, volume or intensity for any reason whatsoever other than as specifically permitted in accordance with this Agreement.
- (f) The contractor agrees and confirms that it shall not be entitled to any compensation, rebate or reduction in toll collection contract fee in the event of extension / discontinuation / modification of ECC. It is also agreed that it shall not fasten any liability on either side i.e. MCD or contractor.
- (g) The contractor hereby acknowledges that the amount collected in furtherance to this agreement is "Toll Tax" and "ECC" respectively as per the nature of collection.

- (h) Lead member with 51% stake cannot be changed its statue during the period of contract and liable to bear all commitment to MCD as per T&C of the contract.

#### 4. TERM OF THE AGREEMENT

##### 4.1 Term

- (a) **Contract Duration :- 5years** Toll Tax and ECC collection and transition from existing RFID Lanes to Multi-Lane Free Flow (MLFF) system from the Commencement Date subject to earlier termination in accordance with Clause 17 (hereinafter referred to as the "Term"). The last date of the Term shall be referred to as the "Expiry Date".

For implementing MLFF = 6 Months (Design, Development, and Implementation period) and 54 Months as O&M period (After successful completion/commissioning of the MLFF System).

**Note:**

The Successful bidder is bound for collection of Toll & ECC through installed and fully operationalized barrier-free Multi-Lane Free Flow (MLFF) System at their own costs and expenses integrated with existing installed RFID System. During implementation stage the Successful Bidder/Contractor shall use the existing system/infrastructure to the collection of Toll Tax & ECC. The details of MLFF Standards & Technical Specifications given in Annexure-5 of Volume-III.

#### 5. PARTIES REPRESENTATIVES

##### 5.1 A) Competent Officer

Dy. Commissioner/Addl. Dy. Commissioner (Toll Tax Department), In-charge of Toll Tax Department or Assistant Commissioner (Toll Tax Department) shall act as Competent Officer or the Commissioner, MCD may from time to time nominate a representative (hereinafter referred to as the "Competent Officer").

##### B) High Level Committee (Dispute Resolution Committee)

A High Level Committee consisting of officers of Municipal Corporation of Delhi (MCD) as Members under the Chairmanship of Addl. Comm. (TT) shall be constituted by the Commissioner, MCD which shall act as Dispute Resolution Committee.

##### 5.2 Contractor's Representative

No later than [10] days following the Commencement Date, the Contractor shall by written notice to the Commissioner, MCD nominate a representative ("Contractor's Representative"). The Contractor may remove the Contractor's Representative and appoint another person in his or her place; however, the Contractor is required to duly intimate the Commissioner, MCD about the same. The Contractor shall ensure that Contractor's Representative so appointed after the said removal is a person more professionally capable of carrying out the role and responsibilities prescribed to be performed by the Contractor's Representative's under this Agreement.



## **6. PERFORMANCE SECURITIES**

### **6.1 Earnest Money Deposit**

(a) The Earnest Money Deposit equivalent to Rs.18.50 crores in the form of RTGS/FD/DD/BG from State Bank of India or its subsidiaries, any Indian Nationalized Bank, IDBI/ICICI Bank, A Foreign Bank (issued by a branch outside India) with a counter guarantee from SBI or its subsidiaries or any Indian Nationalized Bank and any Scheduled Commercial Bank approved by RBI having a net worth of not less than Rs.500 crores 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 taken into account deposited by the successful bidder as EMD should be kept valid for the period of 120 days.

The Bank Guarantee shall be as per prescribed format by the MCD will be acceptable.

### **6.2 Deleted**

### **6.3 Contract Performance Guarantee by the Contractor**

(A) The successful Applicant/Bidding Firm shall be required to deposit performance security equivalent to 10% of the Quoted Amount/Awarded Amount/Negotiated amount for Toll Tax and Rs. 12.00 crore (Rs. Twelve Crore only) for ECC through RTGS or in the form of DD/FD/BG from State Bank of India or its subsidiaries, any Indian Nationalized Bank, IDBI/ICICI Bank, A Foreign Bank (issued by a branch outside India) with a counter guarantee from SBI or its subsidiaries or any Indian Nationalized Bank and any Scheduled Commercial Bank approved by RBI having a net worth of not less than Rs.500 crores 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 taken into account within specified period from the date of issue of Letter of Intent (LOI) as per detailed below:-

(a) Rs.18.20 crores already deposited as EMD shall be converted as part of performance Guarantee. However, in case successful Applicant/Bidding paid EMD of Rs.18.20 crores through online payment, the said EMD shall be refunded after receiving full amount of Performance security in the form of BG subject to the condition that there shall be no pending outstanding due on successful bidder on that particular day and in case, there is any outstanding due, then Rs.18.20 crores shall not be refunded and the same shall be adjusted accordingly, as the case may be.

(b) Part of performance guarantee i.e. amount equivalent to 5% of the Quoted Amount / Awarded Amount / Negotiated amount (after deducting Rs.18.50 crores already deposit by the bidder as EMD which shall be adjusted in the performance security) shall be deposited through RTGS or in the form of DD/FD/ BG valid for 39 months within 7 working days from the date of issue of LOI. In case of BG validity shall be for 39 months.

(c) The balance performance guarantee i.e. amount equivalent to 5% of the Quoted Amount / Awarded Amount / Negotiated amount shall be deposited through RTGS or in the form of DD/FD/ BG valid for 39 months within 15 working days from the date of signing of agreement or from the date of handing over of site whichever is earlier. In case of BG validity shall be for 39 months.



(d) In addition to performance security, the bidder shall deposited 52 weeks Post Dated Cheques (PDC) for the weekly committed / awarded amount for Toll Tax & ECC (after refund) initially for period of one year and bound to deposit another 52 weeks post dated cheques of the weekly committee amount / awarded amount before one month from the date of start of every next year with incorporating the provision of increase of 2.5% in the existing awarded amount / committed amount after every one year.

(e) For delay of more than one day in weekly remittance of agreed / awarded Toll Tax & ECC(after refund) amount, the bidder is liable to pay the interest as specified in the RFP document. In case of delay of one week or more in weekly remittance of agreed / awarded Toll Tax & ECC (after refund) amount, MCD shall be authorized simultaneously to en-cash the weekly post dated cheques (PDC) by depositing the post dated cheques in MCD bank account.

#### NOTE-

1) The Demand Draft shall be in favour of Commissioner, MCD.

2) In case selected bidder deposit performance security in cash i.e. in the form of Demand Draft or through RTGS, the MCD shall not pay any interest incurred during the contract period. However, the successful Applicant/Bidding Firm shall be permitted to replace the cash performance security with the bank guarantee (BG) during the contract period. MCD after obtaining the bank guarantee from the successful Applicant/Bidding Firm, the amount already received as cash performance security equivalent to the bank guarantee shall be adjusted in the weekly remittance. The detail of bank account No. IFSC code etc. shall be provided to the successful bidder, if requested.

B) MCD shall have the right to encash and appropriate proceeds of the Contract Performance Guarantee without any notice to the Contractor in the event of a breach of its obligations by the Contractor as mentioned hereunder including where:

- (a) this Agreement is terminated for reasons other than the MCD's Event of Default or Force Majeure; or
- (b) any amount due and payable (including interest) by the Contractor to the MCD in accordance with this Agreement remains unpaid by the Contractor on its due date; or
- (c) there is a failure on part of the Contractor to renew or extend or replace the Contract Performance Guarantee at least [15] days prior to its expiry, unless such expiry is due to the termination or expiry of this Agreement.
- (d) That in the event of any breach of any of the covenants, the decision as to the interpretation of the alleged breach as interpreted by the MCD shall be sole, exclusive and final interpretation and decision thereupon of MCD shall be final and conclusive.
- (e) The Contract Performance Guarantee shall be refunded without any interest to the Contractor within [2] months of the expiry or termination of the Agreement

and upon full compliance by the Contractor in discharging all its obligations and requirements hereunder.

#### 6.4 Interest and Maintenance

- (a) The Contract Performance Guarantee either in the form of Bank Guarantee or Cash shall not carry any interest whatsoever to be paid to the Contractor by MCD in any circumstances.
- (b) The Contractor shall always maintain the original amount of the said Cash Security and Contract Performance Guarantee and shall forthwith deposit any such amount as may be necessary in order to total up to the original amount of the said Cash Security and Contract Performance Guarantee.
- (c) The Contractor shall ensure that the bank providing the said Contract Performance Guarantee shall forthwith release the complete Contract Performance Security amount upon receipt of a demand notice from the MCD for the same. In the event a demand notice is raised by the MCD and the bank that gave the said Contract Performance Guarantee on behalf of the Contractor refuses to honour the request of the MCD for encashing the said Contract Performance Guarantee within 24 (twenty four) hours, the MCD shall be entitled to terminate the Agreement and encash the said Contract Performance Guarantees for whatever amount is available.
- (d) In the event of said Contract Performance Guarantee being found insufficient or if the said Contract Performance Guarantee has been wholly encashed and has been unable to satisfy the complete dues, the balance of the total sum recoverable by MCD from the Contractor as the case may be, shall be deducted from the Cash Security and any other sum due to the Contractor or which at anytime thereafter may become due to Contractor under this Agreement. In the event that the said sum/amount is still not sufficient to cover the full amount recoverable, the Contractor shall forthwith pay to the MCD on demand the balance amount due otherwise the same shall be recovered as arrears of Taxes under the provision of the DMC Act and any other Applicable Laws.
- (e) A tripartite agreement shall be executed amongst the Municipal Corporation of Delhi, Concessionaire's bank(s) and the MCD banker to make provision for the revolving bank guarantee. In case of default in remittance of Toll Tax collection to the MCD, the banker will be authorised to en-cash the Bank Guarantee of Concessionaire's bank(s). The amount so deducted by the MCD banker due to any default in the payment of Toll Tax remittance will be recouped in terms of the said tripartite agreement.

### 7. COMMENCEMENT AND DEVELOPMENT OBLIGATIONS

The Parties shall at their own cost and expenses fulfil the obligations set forth in this Clause 7.

#### 7.1 Handover of Site

- a) The MCD shall, on [ ] provide access to all that forms part and parcel of the Site as described in Schedule 7.1 to the Contractor on "as is where is basis" of the MCD's Facilities and the already existing items of the Developed Facilities as identified in the inventory delivered to and acknowledged by the Contractor in accordance with Clause 3 (b) and provided at Annexure 3 (b). The Contractor has inspected and further conducted

its own study of the Site and has satisfied itself of the MCD's Facilities and existing items of the Developed Facilities before submission of the bid. The Contractor shall not make any claim, demand, damages, etc., of any nature whatsoever with respect to the availability of the MCD's Facilities or the existing items of the Developed Facilities.

- b) The Successful bidder is bound for collection of Toll & ECC through installed and fully operationalized barrier-free Multi-Lane Free Flow (MLFF) System at their own costs and expenses integrated with existing installed RFID System. During implementation stage the Successful Bidder/Contractor shall use the existing system/infrastructure to the collection of Toll Tax & ECC. The details of MLFF Standards & Technical Specifications given in Annexure-5 of Volume-III.

## 7.2 Contractor's Obligations

- (a) The Contractor shall immediately, on gaining access to any Toll Tax Barriers, Posts, Lanes and Toll Plazas and receives the Contract Facilities for such Toll Plaza or Toll Tax Barrier in accordance with Clause 7.1, at its own cost and expenses cause the up-gradation / modification / addition / construction / renovation / development and commissioning of the Developed Facilities if required.
- (b) The Contractor shall from the Effective Date ensure that the composition of the entity is not altered directly or indirectly without the prior written consent of the Competent Officer during the subsistence of this Agreement.
- (c) The Contractor shall at all times during the Term of this Agreement ensure availability of adequate funds in the bank account.
- (d) Notwithstanding anything contrary to this effect in the present, all rates, levies, taxes, cesses, charges, compensation, penalties, fees of any form or any nature whatsoever as may be levied by any authority at present or in future would be payable by the Contractor at the rates at which are levied and being paid by the MCD.
- (e) The contractor shall also comply with all other requirements of law, as may be applicable, with regard to this contract, including its publication, declaration, registration etc., if so required under any law and shall pay all fees, charges, taxes, duties, levies and other charges in any form whatsoever in this regard, without any obligation on the MCD.
- (f) Compensations to be paid as a result of any direct or indirect act of omission and commission on the part of the Contractor mandated by any law, authority, forum or Commission shall be promptly paid by the Contractor without any manner involving the MCD in any manner.
- (g) Any Taxes, if applicable, is to be paid by the contractor.
- (h) No separate service charge is payable to the contractor for collection of ECC. The quoted bid amount of the bidder is expected to account for toll collection charges as well as ECC collection charges.
- (i) No monthly passes shall be issued for the vehicles on which Environment Compensation Charge (ECC) is leviable (either for toll or for ECC).
- (j) As per the directions/orders of Hon'ble Supreme Court of India, the titled M.C. Mehta Vs. UOI & Ors. W.P.(C) No. 13029 of 1985. The Bidder is upgrade the RFID system to MLFF at all entry points and also bound to use & operate the facilities and infrastructure to be created at all entry points of Delhi in the Project for collection of MCD Toll Tax

and ECC; use and operate the facilities and infrastructure created at the permanent POS in the Project for RFID tagging of vehicles as well as recharging of RFID tags; and the Web Portal for undertaking registration of vehicles and recharging of RFID tags. These 154 toll plaza/ post/ barrier / lanes locations have been listed in Appendix 1 of Volume II-PIM of this RFP document.

- (k) The MCD has proposed for providing MLFF system at all entry points and the proposed system shall be integrated with the existing RFID system.
- (l) The selected bidder is bound to use MLFF system integrated with RFID system at all entry points of Delhi. The selected bidder shall made alternate arrangement of electricity / internet for smooth functioning system round the clock without any interruption. Any interruption in system due to negligence of selected bidder shall be penalized and a penalty of Rs. 10.00 lakh per day per lane shall be levied.
- (m) The successful bidder shall recharge the RFID Tags online or in cash through POS in its bank account.
- (n) Weekly remittance of ECC shall be remitted to MCD account by the successful bidder as per the provision in the RFP document.
- (o) However, it shall be binding upon the successful bidder to remit the agreed / awarded amount of Toll Tax to MCD account on weekly basis during the tenure of the project.
- (p) On the basis of daily settlement report provided by the RFID system, daily reconciliation of pending amount of users in their RFID Tags shall be done. The pending recharge amount of users in their RFID Tags shall not be used / withdraw by the successful bidder. The weekly statement regarding the pending user amount in the account shall be furnished by the successful bidder to the MCD.
- (q) On expiry of contract or termination of contract as the case may be, the successful bidder shall be bound to remit the pending amount of users in their RFID Tag to MCD from its bank account. In case of delay in remittance of pending amount of users in their RFID Tag to MCD beyond the date of expiry of contract or termination of contract the amount shall be recovered through encashment of Bank Guarantee.

### 7.3 Notice

The Contractor shall, as soon as possible, and no later than 3 (three) days prior to the end of the period mentioned in Clause 7.2(a), notify the MCD of the compliance by it of its obligations under Clause 7.2 together with documentary evidence, if any, of such compliance. Upon receipt of such notice the MCD may seek any clarification or additional information that it may require.

### 7.4 Failure to Meet Obligations

- (a) In the event the MCD is unable to fulfil or is partly unable to fulfil its obligations under Clause 7.1, the Competent Officer and the Contractor's Representative shall consult each other and determine an acceptable extension of the said time limit, as relevant per site, however, within the subsistence of the Term of the Agreement.

## 8. CONTRACTOR'S OBLIGATIONS

### 8.1 Compliance with law

The Contractor shall at all times:

- (a) comply with Applicable Laws during the performance by it of its obligations under this Agreement, including, for the avoidance of doubt, compliance with Approvals relating to the Site and maintenance of all relevant statutory records required to be maintained in respect of the Toll Collection Services
- (b) comply with all the relevant guidelines issued by Authorities and relevant Indian standards in respect of the Site or the performance of the Toll Collection Services and its other obligations under this Agreement;
- (c) ensure installation of necessary computer hardware compatible with the Corporation(s) software and provide summary of the day indicating various type of vehicles at different toll plazas on daily basis in a soft copy;
- (d) the Contractor shall provide display board indicating the Mobile number and email Id where complaints of any nature including irresponsible behaviour can be lodged;
- (e) the contractor shall keep a complaint register on every Toll point / Plaza for lodging any complaint and forward the action taken on the complaints;
- (f) promptly provide the Competent Officer duly self certified copies of all relevant documents issued by or presented to Authorities.
- (g) confirm and implement all Central and State statutes, rules and regulations and other judicial orders issued from time to time in all respect; and
- (h) the Hon'ble Supreme Court of India vide orders dated 6.12.2001 in IA No: 150, in IA No-15-16 in Writ Petition (Civil) No:13029/85 titled as "M. C. Mehta Vs Union of India & Ors has directed that no goods vehicles will ply on Inter State route by passing through Delhi or New Delhi. Environmental Pollution Control Agency (EPCA) constituted by the Hon'ble Supreme Court of India has also advised that the entry ticket must bear the name of the firm with address i.e. destination where the vehicle is destined. The orders of the Hon'ble Supreme Court of India regarding entry of non-destined vehicles are to be complied with strictly and in true spirit to avoid contempt of Court or any other legal action in this regard. The violation of these orders will amount to contempt of court, which can lead to cancellation of the contract. The Contractor shall comply with the aforesaid directions of the Hon'ble Supreme Court of India. Further the directions qua collection of ECC are to be complied with by the Contractor in true letter and spirit.
- (i) Follow the notifications issued by Govt. of Delhi time to time relating to Environment Compensation Charges (ECC).

## 8.2 Approvals

- (a) The Contractor shall, in consultation with the Competent Officer, from time to time obtain all such Approvals or renewals thereof as may be required with respect to the Site, the Toll Collection Services or performance of any of its obligations under this Agreement from the concerned authorities. The MCD shall provide reasonable assistance as may be required and duly requested in writing by the Contractor to comply with the Contractor's obligations as set forth in this clause. Any delay in grant of such approvals, permissions etc. By any other authority, resulting in monetary loss would have to be borne by the Contractor and he will not be entitled to claim any apportionment of any loss or part thereof from the MCD.
- (b) The Contractor shall at all times:
  - (i) keep the Competent Officer fully informed of the Approvals or renewals obtained by it; and



- (ii) promptly provide to the Competent Officer with the copies of all Approvals or renewals obtained by the Contractor.

### 8.3 Compliance with directions

The Contractor shall comply with all directions given by the MCD and the Competent Officer in consonance with this Agreement.

### 8.4 Security and maintenance of the Site and Contract Facilities

- (a) The Contractor shall be solely responsible for the overall security of the Site and the Contract Facilities for the Term and shall ensure that such security is consistent with the Good Industry Practices and shall take all the necessary steps and precautions as the Contractor would have taken if the Contract Facilities were his own.
- (b) The Contractor shall be solely responsible for the maintenance of the Site and the Contract Facilities to keep the same in good working condition and to replace consumable spare parts and damaged equipments during the subsistence of the Term of this Agreement free of charge and without any financial liability to the MCD.

### 8.5 Revenue Sharing

- 8.5.1 The Contractor shall extend full reasonable co-operation to any and all contractors/toll collection services agents appointed by the NHAI/ PWD or any other Government Department at any of the entry points to NCT of Delhi and shall, if required, enter into revenue sharing Agreement /arrangements with such contractors/toll collection services agents subject to the prior written approval of the MCD. In the event that the Contractor enters into any revenue sharing Agreement with any other contractor/toll collection services agent, with respect to any entry point, the Contractor shall alone be liable to bear all amounts in relation to such Agreement arrangement(s). For the avoidance of any doubt, it is hereby clarified that no revenue shall be shared by the MCD.

In case there is any requirement of signing any tripartite agreement by the MCD, with any other agency, including NHAI, the same would be duly signed by the Selected Bidder and the financial obligations would be borne by the Selected Bidder. Any delay or default in this regard resulting in any financial implication, on account of any act of omission or commission of the Selected Bidder would be the sole responsibility of the Selected Bidder.

- 8.5.2 In case of Toll Plazas, which are to be integrated with the concessionaire of the NHAI or any third party operating such Toll Plaza the Contractor shall pay the service charges at the actual payable rates which may vary from point to point, at all such integrated Toll Plazas (irrespective of the Toll Plaza being operated by a NHAI Concessionaire or any other private party). MCD shall in no event be responsible or liable for any other loss or liability arising to the Contractor on this count.

### 8.5.3 Provisions/arrangements for collection of toll tax at defunct Rajokari Gurgaon Toll Plaza (NH-8)



NHAI has allowed MCD to collect Toll Tax & ECC from specified commercial vehicles using RFID system entering Delhi through 6+3 toll lanes located on extreme left side on Jaipur-Delhi Bound carriageway and also on split plaza booths.

The islands between the toll lanes of the abandoned toll plaza will remain as it is for the time being. The concessionaire of NHAI has installed sign boards for sensitizing and directing the commercial vehicles at a distance of 500 mtr., 1.0 km. 1500 mtr. and 2.0 km before the toll collection booths towards Jaipur side along with provision of divider line (yellow), plastic barriers/ traffic cones and traffic bollards on the nosing of the islands in the direction of traffic movement to channelize the commercial traffic towards the entry tax collection lanes. A separate electricity meter (sub-meter) has been installed by the present toll tax contractor. The payments shall be made by the next selected bidder/toll tax contractor directly to the concerned State Electricity Department as per electricity consumption. The cost of all Electrical equipments, poles, fixtures and repairs etc. shall be borne by the selected bidder.

- 8.5.4 Selected bidder will have to pay a rent for use of National Highway (NH) land, toll booths/any structure and office space at defunct Rajokari Gurgaon Toll Plaza, NH-8 or at all other such defunct toll plazas whichever are in accordance with provisions of control of National Highway (Land and Traffic) Act, 2002 and Highway Administration Rules 2004.

The access to the booths in the MCD tax collection lanes (6+3 Nos.) on existing Rajokari toll plaza at NH-8 will be allowed on as is where is basis.

- 8.5.5 Selected bidder would be allowed to collect the toll tax & ECC from the specified commercial vehicles coming from connecting road from Kapashera and joining NH-8 ahead of existing toll plaza booths towards Delhi side. The Concessionaire of NHAI have made the arrangements to restrict the direct entry of the traffic of that lane on the main carriageway.

- 8.5.6 Traffic Calming Measures have been installed Speed Bump (3 inch speed breaker plastic) by the concessionaire of NHAI before the six existing incoming free lanes (designated for the Corporations' toll tax collection work) to enable the toll tax contractor to stop and divert the specified commercial vehicles with the help of wheeled/ rolling barriers and marshals. The wheeled barriers and marshals are to be arranged by the selected bidder at all toll lanes to divert specified commercial vehicles towards the six toll tax lanes to be operated by the selected bidder. Installation of Speed Bump (3 inch speed breaker plastic) have also been agreed to by the NHAI before the 10 existing free lanes, in continuation as installed before the 6 existing toll tax collection lanes.

A Prominent Fine line has been marked on the pavement/ road alongwith signage/ instructions stating that specified commercial vehicles entering in other than six dedicated toll tax lanes would be penalized as per the rules.

Maintenance of the entire road is already in the Concession Agreement of the Concessionaire of NHAI, who will maintain it. However, the maintenance of the toll booths, toll lanes and other electrical fixtures etc. required for collection of municipal tax would be undertaken by selected bidder.

Sub-meter at Rajokari NH-8 is to be installed by the Contractor. The reference is regarding electricity & water connection.

Putting speed breakers in 10 free lanes at Rajokari is subject matter of negotiation with the NHAI being highway road.

8.5.7 Deleted.

8.5.8 Selected bidder/next toll tax contractor shall also be bound by terms & conditions of all agreements entered into by the Municipal Corporation of Delhi with NHAI and or any 3<sup>rd</sup> agency with respect to integrated toll plazas at Badarpur & DND Flyway, and at defunct toll plaza at Rajokari Toll Plaza, Gurgaon, NH-8 or any other toll plazas related to payments towards rent of land/space, electricity or all other facilities extended by NHAI and or any 3<sup>rd</sup> agency for smooth operation of toll tax collection at toll plaza. Relevant Annexure-4 is attached.

#### 8.6 Contractor's General Obligations

- 8.6.1 The Contractor shall in addition to timely remittance to the MCD as per contract, at its own cost and expenses, be responsible for the activities described in Schedule 8.6.
- 8.6.2 With respect to any toll integration private tolling facilities, it would be the sole responsibility of the Contractor to integrate the toll collection at such a Site with the BOT operator of the specific road at their own cost without any financial implications on the MCD, but with prior written approval of the Competent Officer within the MCD.
- 8.6.3 The Contractor shall pay to the MCD, a nominal fee of Rs. 1/- per annum each for every toll plaza, post or barrier buildings created and handed over to it by the MCD. Such nominal fee shall be inclusive of, but not limited to, the 2 permanent toll buildings at GT Karnal Road Border and GT Road, Apsara Border, and all buildings/ structures associated with the 7 toll plazas [Refer Schedule 7.2 of this Draft Contract Agreement of the RFP document] which were previously computerized.
- 8.6.4 The Contractor shall ensure that all property pertaining to Toll Plazas and belonging to the MCD shall not be used for any purpose other than toll tax collection. Commercial use of the same including display of advertisements shall not be permitted. The MCD reserves its rights to outsource the advertisement rights separately for displaying the hoardings, advertisement, unipoles at Toll Plazas/Toll Posts/ Toll Lanes or its associated land during the Term of this Agreement.
- 8.6.5 The Contractor shall honour the existing toll collection agreements/arrangement made and executed by the erstwhile Municipal Corporation of Delhi/ MCD with Noida Toll Bridge Company Ltd. (DND), NHAI, Government of Haryana and their concessionaries without any financial liabilities on the MCD. The Contractor shall also honour the proposed integration agreed by the MCD with NHAI or their concessionaire without any financial liabilities on the MCD. The contractor shall further comply with directions of the Apex Court regarding ECC collection. The Contractor will not enter into any Agreement for toll tax collection integration with NHAI or any other agency/ firm without prior written approval from the MCD.

In case by operation of law, contract, court orders or any other reason what so ever the concessionaire appointed by the NHAI or any other authority do not collect the toll tax & ECC, it shall be the liability of the contractor to make its own arrangements for collecting the same without any obligations financial or otherwise falling on MCD.

That in the event of the NHAI or any other authority appointing a concessionaire at any toll collection point, it shall be the sole responsibility of the contractor to honour such agreements/arrangements made and executed by the Noida Toll Bridge Company Ltd.

(DND),NHAI, Government of Haryana and their concessionaries without any financial liabilities on the MCD. It would be the sole responsibility of the contractor to enter into such agreements and to make such arrangements as may be required, to integrate its toll collection with the toll collection facilities of such concessionaire, without any obligation, financial or otherwise, of the MCD:

8.6.6 The infrastructure and facilities installed by Contractor for MLFF purpose will be property of MCD. At the end of contract period the contractor shall handover the complete MLFF system in running conditions to MCD.

## 8.7 Procedure of Report and Consequences of non-compliance

- (a) The reporting and presentation of the data of the specified classified volume count would be done in accordance with the information entered in the MLFF/RFID System/Computer or any other electric mode as per actual condition. The details of said data will be maintained by the successful contractor during the whole Contract Agreement. The said collection data of Toll Tax & ECC for each day prepared by the concessionaire will submit to MCD as & when required as per format provided to them.
- (b) In addition to the above, the Contractor would be required to address all queries including for miscellaneous items as may be required from time to time. In case of any delay/non-compliance the Commissioner, MCD may impose a penalty of Rs.15,000/- (Rupees Fifteen Thousand Only) per day per deficiency.
- (c) The MCD or its officers or through any authorised agency reserves the right to access any Toll Plaza/Toll Posts/Toll Tax Barriers/points / Toll Lanes without any prior notice or information and inspect the Toll Plazas and its infrastructure in respect of toll collection, records, sanitation, inspection or any other specified purposes and submit the report to MCD. In case of adverse reports the Contractor is bound to remove the minor/major complaints/objections within 3-days/1 week respectively to the full satisfaction of the MCD. In case the Contractor does not rectify the defect within the stipulated time frame, he will be liable to be penalized at a rate Rs.15,000/- per day for the extended period.
- (d) The Contractor will maintain a round the clock Toll Plaza/Toll Posts/Toll Tax Barriers/points / Toll Lanes manager and support staff who shall supervise the complete operations of the Toll Plazas. The Toll Plaza/Toll Posts/Toll Tax Barriers/points / Toll Lanes manager should have sufficient experience in accounts, management, operations and maintenance of Toll Plazas/Toll Posts/Toll Tax Barriers/ Toll Lanes locations.
- (e) Any default/misappropriation detected in the system by joint team of MCD and transport department, Government of Delhi will render the contractor liable for imposition of a penalty at the rate of Rs.10.00 lakh for every default as per EPCA letter dated 12.01.2016.

## 9. SITE

### 9.1 Right to use the Site

The MCD grants to the Contractor from the Commencement Date the right to use the Site solely for the purposes of providing the Toll & ECC Collection Services and performing

its other directly related obligations under this Agreement, however, such Sites/ Toll Plaza/Toll Posts/Toll Lanes etc. shall always remain accessible to the Officials from MCD for all purposes, particularly from the Toll Tax Department.

## **9.2 Conditions of Right to use the Site**

The right referred to in Clause 9.1:

- (a) shall terminate immediately upon the expiration or termination of this Agreement for any reason whatsoever;
- (b) does not confer on the Contractor any right of lease, tenancy or any other proprietary interest in and/or with respect to the Site;
- (c) confers on the Contractor the exclusive right to use the MCD's Facilities subject to supervision and control of MCD, during the Term of this Agreement; and
- (d) confers on the Contractor the exclusive right to use the Developed Facilities as described as being already in existence, subject to the control and supervision of MCD during the tenure of this agreement.

## **9.3 Prohibited use of the Site**

- (a) The Contractor shall not, without the Competent Officer's written consent:
  - (i) use or allow the Site to be used for any purpose other than for the provision of Toll Collection Services;
  - (ii) undertake or permit to be undertaken any alterations/ improvements to the Site or the Contract Facilities.
  - (iii) do or allow any act or omission on the Site which may result in any breach or revocation of any Approvals;
  - (iv) do not by any of its acts of omission or commission permit the violation of any direction passed by the Hon'ble Apex Court or any other Court of law.
- (b) The Contractor shall not:
  - (i) do or allow any illegal or offensive act or omission on the Site;
  - (ii) do or allow any act or omission which causes a nuisance, disturbance or damage to any other person using the Site or using or occupying any land in the vicinity of the Site;
  - (iii) do or allow any act or omission which results in the MCD incurring any liability or becoming bound by any obligation in respect of the Site, except as expressly agreed to by the MCD.

#### 9.4 Separate Contractors on Site

- (a) The Contractor acknowledges that the MCD or any other Government agency such as the NHAI/ PWD/ DMRC etc. may utilize Separate Contractors on the Site to perform such activities not contracted to the Contractor.
- (b) The Contractor shall co-operate with any Separate Contractors appointed by the MCD or any other Government agency such as the NHAI/ PWD/ DMRC etc. and coordinate its work with such other Separate Contractors' work to minimise any interference or delays with such Separate Contractors' work in a manner which is not prejudicial to the interests of MCD.
- (c) The Contractor shall comply with all written directions from the Competent Officer regarding Separate Contractors and their work and shall allow any Separate Contractors engaged by the MCD to use the amenities, utilities, and facilities available on Site.

#### 9.5 Responsibility for Care of the Site and Contract Facilities

The Contractor shall be responsible for the care of the Site and the Contract Facilities as made available to it by the MCD immediately from the time when the MCD makes the entire Site or such parts of the Site, as the case may be, available to the Contractor up to the Expiry Date.

### 10. PERSONNEL

#### 10.1 Personnel

- (a) The Contractor shall ensure that all Toll Collection Services are performed by, and under the supervision of, appropriately qualified, experienced and skilled personnel. The Contractor shall appoint knowledgeable computer operators and experts/consultants for operating computerized cash collection system.
- (b) The Competent Officer may by written notice require the Contractor to remove from the Site, or from any activity connected with the Toll Collection Services, any person employed/engaged by the Contractor in connection with the provision of the Toll Collection Services who, in the reasonable opinion of the Competent Officer, is guilty of misconduct, is incompetent or negligent or whose presence at the Toll Tax Barrier or Toll Post or Toll Plaza is considered undesirable or is nuisance to passengers or traffic generally.
- (c) The Contractors shall be responsible for the compliance with all the necessary applicable labour laws with respect to the personnel deployed by the Contractor and MCD shall not be responsible for the same in any manner whatsoever.
- (d) The Contractor's staff manning the Toll Tax Barriers and Toll Plazas shall wear proper uniforms while on duty. These uniforms will be approved by the MCD's competent authority and the design shall be in accordance with the safety guidelines.

#### 10.2 ISO Certification

The Contractor (including a sub-contractor appointed by it) should obtain, and maintain throughout the Term of this Agreement, an ISO 9001 certification or its equivalent



certification, regarding any service, including any IT or IT enabled services, to be provided under this Agreement by the Contractor.

## **11. CONTRACT FACILITIES**

### **11.1 Provision of Facilities**

- (a) The MCD shall provide the MCD's Facilities already in existence for use by the Contractor free of charge for the performance of the Toll & ECC Collection Services on an "as is where is basis" including the RFID facility at 13\* entry points of Delhi. The expenses incurred thereafter in operating and maintaining all the Contract Facilities during the Term of the Agreement shall be borne by the Contractor.
- (b) The Contractor shall inform the Competent Officer before acquiring, hiring, leasing, transferring or replacing any equipment forming part of the MCD's Facilities. All such intimation shall contain:
  - (i) details of the number, model and size of the equipment item;
  - (ii) if the item is to be acquired, transferred or replaced, details of the costs (including the depreciation values of that item), maintenance history and mechanical audit reports for that equipment item;
  - (iii) if the item is to be hired or leased, identity of the title-holder / hirer, and the expected period of hire or leasing; and
  - (iv) in case of leasing, the lease Agreement shall first be approved by the MCD.

### **11.2 Equipment for Toll Collection Services**

The Contractor shall generally use new equipment or refurbished equipments for the performance of Toll Collection Services. New equipments shall be deemed to be equipments not previously used. Refurbished equipments have to be certified by the original equipment manufacturer or its authorised dealer. MCD shall have a right to inspect such refurbished equipments and the necessary certifications either by itself or through any other person authorised in this regard. MCD shall also have a right to take immediate steps as it may deem fit in case of any deviation by the Contractor. However, in case of RFID system equipments, the sole responsibility of maintaining is with RFID concessionaire.

### **11.3 Register of Developed Facilities**

The Contractor shall establish and maintain an asset register of the Developed Facilities constructed/renovated/developed by the Contractor that sets out in reasonably sufficient detail:

- (a) identification details for every item of the Developed Facilities used in providing the Toll Collection Services;
- (b) whether the Developed Facilities (including equipments) are owned, leased or hired by the MCD/Contractor and, if leased or hired, who owns the Developed



Facilities and whether they are encumbered (and if so, reasonable details in this regard); and

- (c) all other information necessary for or relevant to the safe and efficient operation, maintenance and repair of the Developed Facilities.

#### 11.4 Retention of Contract Facilities

On the expiration of the Term of the Agreement or termination of the Agreement, the Contract Facilities shall remain at the Site and shall be handed over to the MCD in good working condition. The MCD shall also have the right, in its sole discretion, to require the Contractor to hand over Additional Facilities (provided in accordance with the Project Information Memorandum (PIM), Volume II of this RFP document also annexed in Schedule 2), if any, commissioned in accordance with Clause 11.6. Upon the expiry or earlier termination of the Agreement, the title with respect to all Contract Facilities existing or developed under the Agreement shall vest with the MCD and the Contractor shall not have any right to claim the ownership or title to such facilities.

#### 11.5 Consumables

The Contractor shall procure on its own cost and expenses all consumables required for the performance of the Toll Collection Services and fulfilment of other obligations under this Agreement.

#### 11.6 Additional Facilities

- (a) The Contractor shall make necessary provisions for installation of other equipments, as may be required by the MCD in addition to the Contract Facilities identified in the Agreement ("Additional Facilities").
- (b) The cost of installing such Additional Facilities, including costs relating to their operation and maintenance, shall be borne by the Contractor. In case, there is a deficit in respect to already handed over assets, equipments ( Electronics, Electrical or other), gadgets, accessories and infrastructure at the commencement of the contract, the contractor shall be responsible to replace the same at its own cost and shall keep it in good working condition.
- (c) On the expiry or termination of Agreement the Contractor shall hand over all the facilities including Additional Facilities, equipments assets provided by the Contractor, free of charge to the MCD in good running condition along with all relevant documents. Contractor shall have no claim whatsoever in this regard.

#### 11.7 Other Additional Facilities

- (a) The Contractor shall make necessary provisions for installation of other equipments including X-ray machines, weigh in motion equipments or any other equipments, as may be required by any Authority with the prior written approval from the MCD ("Other Additional Facilities").
- (b) The cost of installing such Other Additional Facilities shall be borne by the relevant Authorities and the Contractor shall be reimbursed for the same directly by such Authorities. The Contractor shall have no claim towards MCD for such Other Additional Facilities.

- (c) In the event the relevant Authority wishes to employ the Contractor for the provision of operation, maintenance or related services for the Other Additional Facilities, the Contractor may, with the prior written approval from the MCD, enter into an operation and maintenance contract with the relevant Authority. Alternatively, the Contractor may perform operation, maintenance or related services in respect of the Other Additional Facilities and charge a service fee for the provision of such services from the relevant Authority. However, any such service fee shall be subject to the prior written approval of the MCD.
- (d) In the event, however, if the relevant Authority and the Contractor fails to agree on an operation, maintenance or related services Agreement in respect of the Other Additional Facilities, or any fee to be paid there under, the relevant Authority may bid such services to a third party. In such an event, the Contractor shall be obligated, on prior notice from the relevant Authority to the MCD, to provide adequate physical space on the Site, to the relevant Authority or to any third party engaged by the said Authority, to enable the provision of operation, maintenance or related services with respect to the Other Additional Facilities.

## 12. TOLL & ECC COLLECTION CONTRACT AMOUNT, TOLL & ECC RATES, RECOVERY OF DUES

### 12.1(A) Toll & ECC Collection Contract Amount

(a) The toll collection contract amount means the agreed / awarded amount payable by the Contractor to the MCD for the due performance of the toll & ECC collection stated as the composite tender value in the Proposal and as confirmed in the LOI ("Toll Collection Contract Amount"). The Contractor shall pay the Toll Collection Contract amount to the MCD by remittance on weekly basis through banks RTGS. The Applicant/Bidding Firm shall remit the weekly amount to MCD latest by 5:00 P.M. MONDAY of every week and if Monday happens to be a Bank holiday, then by next banking working day. This amount is payable in addition to weekly remittance of ECC amount.

For delay of more than one day in weekly remittance of agreed / awarded Toll Tax amount, the bidder is liable to pay the interest as specified in the RFP document. In case of delay of one week or more in weekly remittance of agreed / awarded Toll Tax amount, MCD shall be authorized simultaneously to en-cash the weekly post dated cheques (PDC) by depositing the post dated cheques in MCD bank account.

For calculating the weekly amount, the amount quoted for 01 years shall be divided by the number of weeks. The week should be counted from Monday to Sunday. In the case the number of days in the first and last week happens to be less than 7 days, then the concessionaire should deposit the amount proportionately.

(b) In case of delay in remittance of weekly instalment due under the contract to MCD beyond the fixed day shall result in levy of penalty @ 0.1% per day for first week and in case of a default, the default balance amount shall be recovered through encashment of Bank Guarantee. On account of repeated defaults in this regard, the

Corporation shall have the right to terminate the contract forthwith, without assigning any reasons whatsoever. The penalty so levied shall be recovered from the Performance Guarantee which shall be replenished by the Contractor within 10 days from the date of such recovery failing which the contract is liable to be terminated.

Any such termination shall be without prejudice to any other right that the MCD may have under this Agreement or any other law being in force.

(c) In the event of termination of the Agreement in accordance with Clause 12.1(b), the possession and operation of the Site along with the MCD's Facilities and Developed Facilities shall automatically stand transferred to the MCD and the MCD may appoint another Toll & ECC Collection Contractor at the cost and expenses of the Contractor.

(d) It is expressly clarified and agreed that nothing in this Clause shall give the Contractor the right to claim set off of unrealised Contract Fee Instalments against the Cash Security or the Contract Performance Guarantee and the MCD's right to set off the Cash security and/or encash the Contract Performance Guarantee shall not be affected in any manner whatsoever.

#### NOTE-

1) During the period of Force Majeure Event as per clause 15.2, the weekly post dated cheques (PDC) shall not be deposited by MCD in its bank account subject to the condition that the contractor shall continue to deposit the actual amount collected during the period of Force Majeure event alongwith the traffic data to MCD. However, if there will be any pending dues after settlement of Force Majeure claim of contractor as per clause 15.7 of RFP document Vol.-III and in case, pending dues is not deposited by the contractor, within the specified period as communicated by the MCD as per Clause 12.5 of RFP document Vol.-III, in that case, the MCD will en-cash the weekly post dated cheques (PDC) by depositing the post dated cheques in MCD bank account and recover the pending dues. The Selected Bidder shall also be liable to pay a penalty @0.1% per day for any delay caused in remittance.

2) In case of expiry of PDC before the settlement of the claim, the contractor will be liable to revalidate the PDC.

#### 12.1 (B) Collections of Environment Compensation Charges (ECC) amount:

- (a) The amount of ECC means the charges payable as per direction of Hon'ble of Supreme Court of India in pursuance of which Notification issued by the GNCTD. The Contractor shall pay the ECC amount by remittance on weekly basis through banks RTGS latest by FRIDAY, or as directed by the Hon'ble Supreme Court of India or GNCTD.
- (b) The concessionaire will compile vehicle category wise data of the ECC collected each day from 6:00 AM to 6:00 AM next day and communicate this data through email to MCD and Transport Department of GNCTD latest by 5:00 PM on the same day. The concessionaire will also compile each day vehicle category wise and collection data of ECC of a week, starting from Friday to Thursday (referred as weekly ECC traffic data) and will submit to Transport Department and MCD

in the shape of book and soft copy in pen drive or hard disc. Non submission of this data would render the concessionaire liable for action for violation of terms and conditions of the contract agreement. In case, concessionaire delays in submission of daily and weekly ECC collection data, the Commissioner, MCD may impose penalty of Rs.15,000/- per day per deficiency.

- (c) The weekly ECC amount payable to MCD by the successful bidder shall be on actual basis. The total collected amount on account of ECC also be deposited on every Friday in the bank account of MCD on actual basis as specified above.
- (d) In case of delay in weekly ECC remittance due under the contract to MCD beyond the fixed day shall result in levy of penalty @ 0.1% per day for first week and in case of a default, the default balance amount shall be recovered through encashment of Bank Guarantee. On account of repeated defaults in this regard, the Corporation shall have the right to terminate the contract forthwith, without assigning any reasons whatsoever. The penalty so levied shall be recovered from the Performance Guarantee which shall be replenished by the Contractor within 10 days from the date of such recovery failing which the contract is liable to be terminated.

Any such termination shall be without prejudice to any other right that the MCD may have under this Agreement or any other law being in force.

## 12.2 Toll and ECC Rates

- (a) The Contractor shall collect toll from all specified vehicles passing the Toll Tax Barriers or Toll Plazas/Toll Posts/points only at the rates mentioned in Annex 12.2 which is a notification issued by MCD under the DMC Act ("Schedule of Toll Rates"). The Schedule of Toll Rates shall specify the vehicles exempted from payment of toll tax and various other concessions offered as applicable and approved by the MCD. The ECC would be on the basis of schedule rates as notified in compliance to the orders of Hon'ble Apex Court.
- (b) The Schedule of toll rates and ECC shall be prominently displayed on board(s) of the size and design in Hindi/English, as may be prescribed by the Competent Officer erected prominently in the vicinity of the Toll Tax Barriers, Toll Post and Toll Plazas.
- (c) The Contractor shall have no authority to assess the toll tax leviable on vehicles passing the Toll Tax Barriers, Toll Posts and Toll Plazas and shall only collect such tax as has been specified by the MCD for different types of vehicles alongwith the ECC at the specified rates.
- (d) Notwithstanding any other provision in this Agreement, the MCD has the right to revise the toll rates during the Term of this Agreement and any such revision of toll rates by the MCD shall be binding upon the Contractor.
- (e) In the event of revision of toll & ECC rates during the Term of this Agreement, the Contractor will enhance payments to be made to the MCD, in the same ratio as the increase of toll & ECC rates, as approved by the MCD/ Hon'ble Supreme Court/ Delhi Govt./CAQM etc.

### 12.3 Set Off

Any sum payable to the MCD by the Contractor under this Agreement or any other contract may be appropriated by the MCD and set off against any claim of the Contractor.

### 12.4 Bribes and Commissions

The Agreement shall not be assigned or sublet without the prior written approval of the Commissioner, MCD. In the event the Contractor gives, promises or offers any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary, any inducement or incentive or otherwise, either directly or indirectly to any public officer or person in the employment of the MCD, the Commissioner, on behalf of the MCD, shall have power to take any action that he thinks fit and appropriate to be taken in such a situation or adopt any of the courses specified in the Agreement against the Contractor as he may deem best suited to the interest of the MCD and in the Agreement event of any of these courses being adopted the consequences specified in the shall ensue.

### 12.5 Recovery of Dues

The Commissioner of MCD, without waivering of or prejudice to any other rights or remedies specified in this Agreement, reserves the right to recover from the Contractor any outstanding amounts owed to or recoverable by MCD in furtherance to this agreement as arrears of land revenue and/or arrears of tax under Section 455 of the Delhi Municipal Corporation Act (as may be amended from time to time) or as per any other law governing the Revenue recovery of land revenue and the relevant laws governing tax recovery, without any geographical restrictions.

The lead member as well as the other member of the Consortium/JV will be jointly as well as severally responsible for obligations/ responsibilities of the bidder (s) included in the contract including recovery of dues.

### 12.6 Fraud and corrupt practices

The Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Bidding Process and subsequent to the issue of the LOI and during the subsistence of the Concession Agreement. Notwithstanding anything to the contrary contained herein, or in the LOI or the Concession Agreement, the Authority may reject a Bid, withdraw the LOI, or terminate the Concession Agreement, as the case may be, without being liable in any manner whatsoever to the Bidder or Concessionaire, as the case may be, if it determines that the Bidder or Concessionaire, as the case may be has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bidding Process. In such an event, the MCD shall be entitled to forfeit and appropriate the Bid Security or Performance Security, as the case may be, as Damages, without prejudice to any other right or remedy that may be available to the MCD under the Bidding Documents.

Without prejudice to the rights of the MCD hereinabove and the rights and remedies which may have under the LOI or the Concession Agreement, or otherwise if a Bidder or Concessionaire, as the case may be, is found by the MCD to have directly or indirectly or through



an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Bidding Process, or after the issue of the LOI or the execution of the Concession Agreement, such Bidder or Concessionaire shall not be eligible to participate in any tender of RFP issued by the MCD during a period of 2 (two) years from the date such bidder or Concessionaire, as the case may be, is found by the MCD to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practices, as the case may be.

The contractor shall also be liable for civil and criminal liability including penalty for violation any terms and conditions of RFP document including evasion of ECC.

For the purposes of this Clause, the following terms shall have the meaning hereinafter respectively assigned to them:

- (a) "corrupt practice" means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bidding Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the MCD who is or has been associated in any manner, directly or indirectly, with the Bidding Process or the LOI or has dealt with matters concerning the Concession Agreement or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the MCD, shall be deemed to constitute influencing the actions of a person connected with the Bidding Process); or (ii) engaging in any manner whatsoever, whether during the Bidding Process or after the issue of the LOI or after the execution of the Contract Agreement, as the case may be, any person in respect of any matter relating to the Project or the LOI or the Concession Agreement, who at any time has been or is a legal, financial or technical adviser of the MCD in relation to any matter concerning the Project; or (iii) evasion of ECC in any manner.
- (b) "fraudulent practice" means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bidding Process and in performance of contract;
- (c) "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;
- (d) "undesirable practice" means (i) establishing contact with any person connected with or employed or engaged by the Authority 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
- (e) "restrictive practice" means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Bidding Process.
- (f) The Bidder has to sign and execute agreement for Integrity Pact with the Authority as per Format provided in the CVC memorandum.

### 13. INSURANCE

#### 13.1 Insurance by Contractor



- (a) The Contractor shall throughout the Term effect and maintain insurance in respect of:
- (i) the Site, including any material, property and equipments provided by the MCD;
  - (ii) public liability; and
  - (iii) liability for death of or injury to its employees.
- (b) The Contractor shall, from the Commencement Date till the Expiry Date, effect and maintain insurance in respect of loss of or damage to the Site as handed over by the MCD or its other contractors, including any loss or damage to the Site including the Contract Facilities and/or toll collected by virtue of theft, dacoity, fire or other contingencies. The Parties shall cooperate with each other on a good faith basis to effect the transfer of insurance obligations from the MCD to the Contractor in accordance with this Clause 13.1(b).
- (c) The Contractor shall provide to the MCD certified copies of all valid and subsisting proof of insurance and receipts for premiums paid with respect to all the Contract Facilities and the Site. The Commissioner, MCD shall be entitled to terminate the contract as per clause 17 of the contract and any liability that may arise on account of failure to obtain adequate insurance the same shall be borne by the contractor exclusively without any liability being upon by the Corporation.

#### 13.2 Insurer

All insurance required by the Contractor in accordance with Clause 13.1 shall be effected with an insurer approved by the Government of India in accordance with the Insurance Act 1938.

#### 13.3 Names in which Insurance Effected

The Contractor shall obtain public liability insurance in the names of the Contractor and the MCD as separately insured parties for their respective rights and liabilities.

#### 13.4 Application of Insurance proceeds

- (a) The insurance proceeds received under the Contractor's Insurances and the MCD's Insurances (collectively "Insurances") for any loss shall accrue to the MCD.
- (b) Save as expressly provided in this Agreement or the Insurances, the proceeds of any insurance claim made due to loss or damage to the Site or any part of the Site shall be first applied to reinstatement, replacement or renewal of such loss or damage.

#### 13.5 Review of Insurances

Upon request in writing by the MCD, each insurance policy may be reviewed annually.

#### 13.6 Failure to Maintain Insurance

Notwithstanding anything in Clause 13, if the Contractor fails to effect and keep in force all Insurance required as per law or as required under this Agreement, or fails to provide

certified true copies of the policies to the Commissioner, the MCD may exercise its rights as outlined in Clause 17.

#### 14. INDEMNITY

##### 14.1 Indemnity by Contractor

The Contractor agrees to indemnify and hold the MCD harmless from and against any and all damages, losses, liabilities, obligations, claims of any kind, interest, cost, fee, or expenses of any nature whatsoever (including, but not limited to attorneys' fees and expenses) (collectively referred to as the "Losses") suffered, incurred or paid, directly or indirectly by MCD, as a result of or in connection with or arising out of the following:

- (a) any breach by the Contractor of any of its respective covenants or obligations contained under this Agreement, including breaches by any sub-contractor of its obligations under any sub contract arrangement entered into by the Contractor to execute or carry out any of the works/or provide any services;
- (b) any failure by the Contractor to make payment of wages or other amounts due to its employees/personnel or non compliance with any of its legal or statutory obligations under this Agreement;
- (c) any and all losses or injury to or death of persons or damage to or loss of property of such persons, or loss of any material and/or equipment, arising out of acts or omissions of the Contractor or any other sub contractor;
- (d) claims or sanctions or penalties imposed by any Authority for any failure by Contractor or any other sub contractor or any of their respective officers, directors, employees, servants or agents to comply with any Applicable Laws;
- (e) any and all losses arising directly from or incurred by reason of any failure of the Contractor or any other sub contractor or any of their respective officers, directors, employees, servants or agents (i) to pay any taxes relating to income or any other taxes required to be paid by such person; (ii) to make any payments in respect of taxes which are to be paid by such person in connection with the performance of its obligations relating to this Agreement; (iii) to file tax returns as required by Applicable Laws or comply with reporting or filing requirements under Applicable Laws relating to taxes; or (iv) arising out of any misrepresentation by or on behalf of such person to any competent authority in respect of payment of such taxes;
- (f) any and all claims, losses, damages arising out of breaches of any third party with respect to any intellectual property rights;
- (g) any or all losses resulting from any court orders litigations or change in laws and
- (h) any and all losses arising out of or incurred by reason of any material inaccuracy in any representation, warranty or covenant of the Contractor set forth in this Agreement .

It is agreed and understood between the Parties that the MCD shall be entitled to claim and be paid by the Contractor as indemnification under Clause 14.1 above a sum which is equal to the Losses. The decision of the MCD with regard to it having suffered losses

shall be final and binding on the contractor. In the event of non-compliance of this Clause by the Contractor, the MCD may exercise any of its rights under the Agreement including its rights as outlined in Clause 17 of this Agreement.

#### **14.2 Indemnity to Survive Termination**

The obligations of the Contractor under this Clause 14 shall survive the termination of this Agreement.

### **15. FORCE MAJEURE**

#### **15.1 Force Majeure**

"Force Majeure" shall mean (with respect to either Party) any event or circumstances or combination of events or circumstances:

- (a) beyond the reasonable control of the Party claiming relief under Clause 15;
- (b) which materially and adversely affects, prevents, delays any Party in the performance of its obligations under this Agreement;
- (c) which could not have been foreseen, prevented, overcome or remedied by the affected Party by exercising a standard of care and diligence consistent with Good Industry Practices.

#### **15.2 Force Majeure Events**

Force Majeure events shall include, without limitation, the following:

- (a) riots (other than those on account of Contractor's employees);
- (b) war (whether declared or not), invasion, act of foreign enemies, hostilities, civil war, rebellion, revolution, insurrection, military or usurped power;
- (c) Any change in law which has a material adverse effect on toll tax collection;
- (d) Epidemics in Delhi and National Capital Region (NCR) or Country;
- (e) Transporters Strike;
- (f) Any restriction/ban on the entry of commercial vehicles into Delhi for any reason whatsoever, if notified by Govt. of India/ Govt. of NCT of Delhi / Central Pollution Control Board / Environment Pollution (Prevention & Control) Authority/CAQM by Court of Law;
- (g) damages from aircraft; and
- (h) Acts of God, such as earthquake, lightening and unprecedented floods.  
Provided that the court orders and judicial interventions result in any kind of stoppage of /obstruction in the working of the Contactor would not constitute Force Majeure Event.

#### **15.3 Procedure on occurrence of an event of Force Majeure**

Immediately upon any occurrence of an event of Force Majeure or, in any event, no later than 5 (five) days following such occurrence, the Party affected by such event of Force Majeure event shall:

- (a) notify the other Party and provide documentary proof (if any) of the existence of an event of Force Majeure, and such notice and proof to include (i) the particulars of the event giving rise to such Force Majeure claim, in as much detail as is then reasonably available, (ii) its current estimate of the extent to which, and the period during which, the performance of such Party will be affected by such event of Force Majeure, and (iii) the particulars of the programme to be implemented to ensure prompt and full resumption of such Party's normal performance under this Agreement;
- (b) thereafter provide interim reports of the status of the event of Force Majeure, reasons for continued existence of the event of Force Majeure and an estimate of the anticipated duration of the event of Force Majeure; and
- (c) upon request in writing by the other Party, give or procure access insofar as is reasonably practicable to do so for a reasonable number of representatives of that other Party at that other Party's sole risk and cost, to examine the scene of the relevant event or circumstances of Force Majeure.

#### 15.4 Performance Excused

An event of Force Majeure may be relied upon by a Party only to the extent that it continues to directly affect the performance or observance of this Agreement by that Party and the Party shall resume performance and observance of this Agreement immediately after abatement of the event of Force Majeure.

Provided, upon the occurrence, declaration, notification or announcement of any Force Majeure Event, the MCD shall, as soon as reasonably practicable, undertake or cause to be undertaken a comprehensive data study and operational review for the affected period and affected toll locations in order to ascertain, inter alia, whether and to what extent specified commercial vehicles were allowed to enter Delhi, whether toll tax and/or ECC remained collectible or was in fact collected, whether the Contractor or its personnel permitted passage of vehicles despite availability of collection infrastructure or operational means, and the extent of actual disruption caused by such Force Majeure Event. For the aforesaid purpose, the Contractor shall forthwith provide to MCD all relevant data, including ANPR records, RFID records, transaction logs, lane-wise and point-wise traffic data, barrier or gantry event data, device uptime and downtime reports, manual registers, exception reports, notices generated, collections made, and such other information as may be required by MCD. On the basis of such study, MCD shall reconcile the accounts for the affected period and determine the actual financial impact, if any, of the Force Majeure Event, including the extent to which remittance obligations, recoverable dues, collected amounts, leakage, or contractor responsibility survived despite the event. No remission, adjustment, suspension, deferment or waiver of the Contractor's remittance or other obligations shall be claimed or granted automatically merely upon occurrence of a Force Majeure Event, and the same shall be determined only after such data study and reconciliation by MCD, whose decision, taken on the basis of records and material available, shall be binding subject to the provisions of this Agreement.

#### 15.5 Resumption of Normal Performance

During the period of delay attributed to an event of Force Majeure (unless this Agreement has been terminated or cancelled in accordance with its terms):

- (a) the affected Party shall use best efforts to overcome and minimise the effects of any event of Force Majeure and resume performance of obligations as soon as practicable after the effect of the event of Force Majeure ceases to exist;
- (b) in order to resume normal performance of this Agreement within the shortest practicable time, the affected Party shall take all measures to the effect which are commercially reasonable in the circumstances, taking into account the consequences resulting from such event of Force Majeure and shall, every month thereafter, give the other Party a written statement on its progress; and
- (c) the Parties shall perform their obligations under this Agreement to the extent not prevented by the occurrence of an event of Force Majeure and take reasonable steps to mitigate the impact of such event.

#### 15.6 Notice when Force Majeure ends

- Upon resolution of the cause of delay, interruption or failure, the Party affected shall promptly within 3 (three) days of such resolution give notice to the other Party of such fact and the performance of such affected Party's obligations under this Agreement shall thereupon be resumed.

#### 15.7 Mechanism for relief under Force Majeure Event

The High Level Committee shall decide the relief under Force Majeure Event keeping in view all the aspects / facts provided by the successful Applicant/Bidding Firm, facts provided by the department and data/ information/ report received from all entry points through MLFF/RFID system.

### 16. DISPUTE RESOLUTION

- 16.1 Except where otherwise provided in the Agreement, all questions and disputes in any way arising out of or relating to the Agreement shall be dealt with as mentioned below.
- 16.2 In the event the Contractor considers any work demanded of it as being outside the requirements of the Agreement, or disputes any record or decision given in writing by the Competent Officer i.e. by Addl. Dy. Commissioner, Toll Tax Department /Assistant Commissioner, Toll Tax Department authorize in any matter in connection with or arising out of the Agreement, to be unacceptable, it shall promptly within [15] days request the "High Level Committee" (Dispute Resolution Committee) in writing to give instructions or decision in respect of the same. Thereupon, the High Level Committee shall give written instructions or decision within a period of [30] days from the receipt of the Contractor's letter.
- 16.3 If the "High Level Committee" fails to give his instructions or decision in writing within the aforesaid period or if the Contractor is dissatisfied with the instructions or decision of the "High Level Committee", the Contractor may, within [15] days of receipt of the "High Level Committee" instructions or decision, appeal to the Commissioner, MCD who shall afford an opportunity to the Contractor to be heard by him or the officer authorized by him, if the latter so desires, and to offer evidence in support of its appeal. The Commissioner, MCD or the officer authorized by him shall give his decision in writing within [30] days of receipt of Contractor's appeal which shall be acceptable to the Contractor.



## **17. TERMINATION**

### **17.1 Event of Default**

The following shall constitute a Contractor's event of default ("Contractor's Event of Default"):

- (a) If the Contractor is deemed by Applicable Laws as unable to pay its debts as they fall due or enters into voluntary or involuntary bankruptcy, liquidation or dissolution (other than a voluntary liquidation for the purpose of amalgamation or reconstruction), or becomes insolvent or makes an arrangement with, or assignment in favour of its creditors, or if a receiver, administrator, trustee or liquidator is appointed over any substantial part of its assets or if proceedings are commenced against the Contractor under any Applicable Laws relating to reorganization, arrangement or readjustment of debts in connection with dissolution or liquidation or if any steps are taken to enforce any security interest over the Contractor or its assets which, under Applicable Laws has a substantially similar effect to any of the foregoing events.
- (b) The repudiation of the Agreement by the Contractor and/or non commencement of the Toll Collection Services in accordance with the terms of the Agreement.
- (c) The failure by the Contractor to comply with the terms and conditions of RFP or contract and instructions or directions issued by the MCD or the Competent Officer.
- (d) The giving of false or incorrect information regarding eligibility to the MCD as revealed during or any time after the issuance of the letter of award including under Clause 3.
- (e) Repeated and reported, non courteous or rude behaviour with the toll tax payer and failure to remove rude and uncourteous staff at the end.
- (f) The failure of the Contractor to maintain the amount of Contract Performance Guarantee in accordance with Clause 6.4(b).
- (g) Commission of any other breach by the Contractor of its obligations under this Agreement that is capable of being remedied and has not been remedied within [10] days of receiving notice in writing from the MCD or the Competent Officer specifying the breach and requiring the breach to be remedied.
- (h) The failure by the Contractor in complying with the data capture and reporting requirements identified in section B of Schedule 2 and Schedule 8.6.
- (i) The failure by the Contractor to meet any of its obligations under this Agreement or the 'request for proposal' document, including, but not limited, to failure to make timely payments of its dues to the MCD; failure to install any facilities or equipment as required under this Agreement; inadequate maintenance of the database or inadequate reporting to the MCD, etc.
- (j) The failure by the Contractor in complying with the orders of the Hon'ble Supreme Court of India or any other court/tribunal.



**17.2 Suspension of Toll Collection Services**

- (a) Without prejudice to any right that the MCD may have, the MCD through any of its competent authority/ officer/ representative may by notice to the Contractor suspend all or any part of the Toll Collection Services, for any reason whatsoever, including on the occurrence of a Contractor's Event of Default. The suspension notice issued by the MCD shall state the estimated length of and reason for the suspension. The Contractor shall on receipt of a notice of suspension take all reasonable steps to reduce any cost consequent upon the suspension. If requested by the Competent Officer to do so, the Contractor shall promptly re-direct its labour force and/or the Contract Facilities to, as far as possible, work on a portion of the Site unaffected by the reason for the suspension.
- (b) A suspension under Clause 17 shall not terminate this Agreement.
- (c) The Competent Officer shall, when the reason for any suspension no longer exists, direct the Contractor in writing to recommence providing the Toll Collection Services and the Contractor shall comply with the direction promptly.
- (d) During the suspension period of Toll Collection service and if, asked selected bidder to continue the collection of ECC, in such circumstances, the selected bidder shall be entitled to get 5% of weekly remittance amount / agreed amount on pro-rata basis as a compensation to accommodate the expenses incurred in collection of ECC for that period of suspension of toll only (for e.g. In case, the toll collection shall be suspended for 9 days, the weekly remittance / agreed amount shall be converted in per day remittance amount. The compensation shall be  $9 \times 1$  days remittance amount / agreed amount  $\times 5/100$ ).

In case of suspension of Toll & ECC Collection services, no compensation shall be given to the selected bidder. In such circumstances, the bidder shall be bound to act as per clause 17.2.

**17.3 Termination**

- (a) In the event any of the Contractor's Event of Default continues for a period of [30] days without cessation, the MCD may, unless otherwise agreed by the Parties, after serving a notice of termination upon the Contractor, terminate the Agreement. The Agreement shall terminate with effect from such date as may be specified, not exceeding [45] days from the date of the said notice of termination issued by the MCD pursuant to this Clause.
- (b) For the avoidance of doubt, it is clarified that nothing contained in Clause 17.3 shall prejudice the right of the MCD to terminate the Agreement in accordance with Clause 7.4, Clause 12.1 or any other Clause as mentioned under this Agreement.

**17.4 Remedies on Termination or Expiry****17.4.1 Liabilities of the MCD**

Upon termination or expiry of this Agreement including termination in accordance with Clause 17.3(a), Clause 7.4, Clause 12.1 or any other Clause as mentioned in this Agreement, the contractor shall pay the amount as may be due and payable to the MCD, after setting off any amounts due and payable by the MCD to the contractor, in case of

termination of the contract agreement due to change in the policy/(s), the Corporation(s) shall not be liable in any manner whatsoever due to that effect.

#### 17.4.2 Liabilities of the Contractor

Upon termination or expiry of this Agreement for any reason,

- (a) cease the performance of the Toll Collection Services within the time specified in the written notice;
- (b) ensure that the Site is left in a safe condition and is properly secured;
- (c) hand over to MCD all the equipments, assets, infrastructure, etc which are owned by the Contractor;
- (d) hand over to the MCD all related documentation, drawings, materials, designs, etc. along with the assets and the Additional Facilities relating to the Toll Collection Services at the Site created as per Schedule 7.2 and read in conjunction with the Project Information Memorandum (PIM) presented in Volume II of the RFP document;
- (e) do all things reasonably required by the MCD to assist the MCD or to place the MCD or its nominee/ officers/ representatives in possession and control of the Site, the Contract Facilities, the Additional Facilities (as may be identified by the MCD in accordance with Clause 11.4) and Other Additional Facilities, Annual Maintenance Contracts (AMC) of applicable facilities/components if any, so as to allow (if applicable) the continuation of the toll tax collection-related activities at the Site;

Provided, that the Municipal Corporation of Delhi shall not be liable, responsible, or accountable in any manner whatsoever for the non-detection, non-interception, non recovery, or non-realisation of toll tax in respect of any commercial vehicle that evades, bypasses, defeats, or otherwise avoids the toll collection or enforcement infrastructure, whether by reason of obscured, tampered, or false registration marks; invalid, blacklisted, or non-functional tags; technological failure or limitation of the detection system; insufficient coverage of entry points or routes; failure or delay in interception; or any other cause whatsoever. The entire risk of detection, interception, and recovery of toll tax from evading vehicles shall vest in and be borne exclusively by the Concessionaire/Service Provider, and no claim, demand, adjustment, compensation, or reduction in concession fee, revenue share, or any other contractual obligation shall be entertained by MCD on account of such non-recovery. The Concessionaire/Service Provider expressly acknowledges that the revenue model is premised on its own enforcement capability, technological deployment, and operational efficiency, and that MCD makes no representation, warranty, or assurance as to the volume of compliant vehicles, the rate of evasion, or the recoverability of toll tax from defaulting or evading vehicles. Also the contractor shall not go for any litigation arising out of above issues.

- (f) comply with the MCD's directions in respect of the demobilisation from the Site of persons and the Additional Facilities and the assignment to the MCD or its nominee/ officers/ representatives of all rights and benefits under contracts

entered into by the Contractor with third parties in relation to the Toll Collection Services; and

- (g) pay all such amounts as may be due and payable by the Contractor to the MCD and the MCD shall without prejudice to its right have the right to invoke the Contractor's Performance Guarantee.
- (h) In addition to the provision for the Contract Performance Guarantee, in event of premature termination of the Agreement during the subsistence of the Term of the agreement due to the default of the Contractor, the Contractor shall pay 20 (twenty) % of the Total Collection Contract Fee to the MCD.

#### 17.5 Preservation of Rights on Termination

Termination of this Agreement due to any reason whatsoever does not affect the rights and obligations of any Party that arise before the termination, or as a consequence of the event or occurrence giving rise to the termination, or as a consequence of the breach of any obligation under this Agreement which continues to take effect after termination.

#### 17.6 Surrender of contract

- (i) In the case of surrender of the Toll & ECC contract, the contractor shall have to give at least 90 days' notice, but not before the lapse of 12 months from the start of the contract, so as to enable the MCD to examine the notice and to take decision and to make alternative arrangement for collection of Toll & ECC from all entry points for safeguard of municipal revenue. The Toll & ECC contractor is bound to the terms & conditions of the Agreement during the Notice Period and shall pay the committed weekly amount to the Corporation as per agreement.
- (ii) In the case of surrender of the contract, Performance security deposit shall not be adjusted against the weekly committed amount for next 90 days and 25% of Performance Security deposit shall be forfeited. The remaining 75% of the Security Deposit shall either be forfeited or refunded as the case may be.
- (iii) In case of Surrender of Contract before expiry of 12 months from the date of start of the contract or the contractor surrender the contract after expiry of 12 months but failed to give 90 days notice, the department shall forfeit 100% Performance Security Deposit.
- (iv) The contractor or either member of Firm/Entity in the case of Proprietor/Partnership /Pvt. Ltd. /Ltd. and JV, who has surrendered Toll & ECC contract, shall not be eligible to participate in the re-tender process of Toll & ECC Contract neither individually nor as a member of any Firm/Entity.
- (v) In case the department may not found any successful bidder after re-tendering of Toll & ECC Contractor within 90 days of Notice period, in that case, the MCD reserves the right to ask the Toll & ECC contractor to collect the toll & ECC from all entry points on the revised terms & conditions of the agreement temporarily for a specific period but not more than another 90 days or till the award of new contract within 90 days as the case may be and in such an event the Toll & ECC contractor shall be bound to re collect the toll & ECC from all entry points till the period MCD requires as specified above and to handover possession of all the entry points including all infrastructure, computer with complete hardware and software etc. in working condition to MCD or new Contractor as and when asked. Any violation in this regard shall invite penal action including forfeiture of Performance Security Deposit, etc. and the blacklisting of the Contractor.
- (vi) That the surrender notice shall not be valid unless up to date dues including notice

period are paid up on the date of submission of such surrender notice.

- (vii) That in case the contractor wants to withdraw the surrender notice, he/she may do so by giving a request in writing provided the request has been received before the re-tender of the Toll & ECC Contract and up to date dues including interest, if any, towards the same are deposited.

#### 17.7 Foreclosure of Contract

Notwithstanding anything contained herein, the Municipal Corporation of Delhi (MCD) shall have the right to foreclose this Agreement, in whole or in part, by issuing a written notice of thirty (30) days to the Concessionaire, if the MCD discontinues the collection of Toll/ECC.

##### Upon such foreclosure:

- a) The Concessionaire shall immediately cease all collection of Toll/ECC operations at the designated toll plazas;
- b) The Concessionaire shall, within thirty (30) days of such notice, dismantle and remove all equipment, structures, and apparatus installed at the toll collection sites at its own cost and shall restore the sites to their original or mutually agreed condition;
- c) MCD shall not be liable to pay any compensation, damages, or reimbursement for loss of revenue or profits arising out of such foreclosure;
- d) Any dues or outstanding payments owed by the Concessionaire under this Agreement to the MCD shall be paid by the concessionaire immediately.

#### 18. CONFIDENTIALITY & MEDIA RELEASES

##### 18.1 Confidentiality

(a) Each Party shall maintain in strict confidence and protect the confidentiality of all the provisions and contents of this Agreement and of all information, reports, data, software or other material, whether written or oral, in electronic or magnetic format, and the contents thereof and any reports, digests or summaries created or derived from any of the foregoing that is provided by one Party to the other Party ("Confidential Information"), and shall not disclose any such Confidential Information to any third party without the prior written consent of the other Party; provided, however, that each Party shall be entitled to disclose Confidential Information to its respective officers, directors and employees who need to know such Confidential Information for furtherance of the provisions of this Agreement, provided that such Party shall ensure that such officers, directors and employees do not disclose further such Confidential Information; and provided that the receiving party shall use the same degree of care and protection to protect Confidential Information received by it from the disclosing Party as it uses to protect its own Confidential Information of a like nature, and in no event such degree of care and protection shall be of less than a reasonable degree of care which an ordinary prudent person will exercise.

- (b) Each Party may disclose Confidential Information to the extent that such Confidential Information:
- (i) was in the public domain prior to its delivery to such Party or after such delivery if it becomes part of the public domain without breach of any confidentiality obligations by the receiving Party under this Agreement ;

- (ii) was obtained from a third party with no known duty to maintain its confidentiality;
  - (iii) is required to be disclosed by Applicable Laws (including the Right to Information Act, 2005) or judicial or administrative or arbitral process or by any Authority;
  - (iv) is provided to professional advisors, agents, auditors or representatives of a Party as is reasonable under the circumstances; provided, however, that Party receiving such Confidential Information shall require such Persons to undertake in writing to keep such Confidential Information confidential and shall use its best efforts to ensure compliance with such undertaking and further provided that such disclosure is necessary to enable such Party to perform or comply with, or to protect or enforce its rights under, this Agreement.
- (c) The Parties agree that upon termination or expiry of this Agreement, the receiving Party shall promptly deliver to the disclosing Party Confidential Information and copies thereof in its possession or under its direct or indirect control, and shall destroy all memoranda, notes and other writings prepared by the receiving Party or its Affiliates or directors, officers, employees or advisors based on Confidential Information and promptly certify such destruction, provided that each Party may retain a copy of any Confidential Information which is required to be kept by that Party pursuant to Applicable Laws or which is required to form part of the permanent records of such Party.

## 18.2 Media releases

- (a) Neither Party may advertise or issue any information, publication, document or article for publication or media releases or other publicity relating to the Toll Collection Services, the Site, this Agreement or the other Party's business and activities without the prior written approval of the other Party, except that a Party may disclose such information and other matters:
- (i) to its shareholders, directors, officers employees, contractors or consultants, and to any Authorities who have a specific need to have access to such information and other matters; or
  - (ii) as required by Applicable Law.
- (b) The Contractor shall refer to the Toll Tax Department of MCD for any enquiries from the media concerning the Toll Collection Services, the Site or the MCD's business and activities and shall assist the MCD and the Competent Officer in any public relations activities relating to the Services or the Site providing, if requested, such personnel as may be required.
- (c) The Contractor ensure that its employees do not, take any photographs or video recording of any Toll Collection Services or any part of the Site, without the prior written approval of the Competent Officer.

## 19. NOTICES

### 19.1 Form



Unless expressly stated otherwise in this Agreement, all notices, certificates, consents, approvals, waivers and any other communication in connection with this Agreement ("Notices") shall be in writing, signed by a Party or the Competent Officer or the Contractor's Representative, as the case may be, marked for the attention of the person, and sent to the address identified in this Agreement as may be amended by Notice at any time by a Party or its representative.

## **19.2 Delivery**

Notices shall be:

- (a) sent at the address described in the Agreement;
- (b) sent by prepaid ordinary post (airmail if appropriate) to the address described in the Agreement;
- (c) sent by fax to the number mentioned in the Agreement;
- (d) sent by email to the email address mentioned in Agreement; and / or
- (e) given in any other way permitted by Applicable Law.

However, any change to the aforesaid addresses should be notified in writing to the other Party and subsequent communication or correspondence shall be to that changed address or number.

## **19.3 Effectiveness of Notice**

Notices take effect from the time they are received unless a later time is specified.

## **19.4 Deemed receipt**

- (a) If sent by post, Notices are taken to be received 5 (five) days after posting (or 10 (ten) days after posting if sent to or from a place outside India).
- (b) If sent by fax, Notices are taken to be received at the time shown in the transmission report as the time that the whole fax was sent and delivery is shown as accomplished.
- (c) If sent by email, Notices are taken to be received at the time shown in the delivery confirmation report generated by the sender's email system.

## **20. MISCELLANEOUS PROVISIONS**

### **20.1 Governing Laws and Jurisdiction**

- (a) The interpretation and performance of this Agreement shall be governed and construed in accordance with the Applicable Laws of India.
- (b) All disputes arising out of this Agreement shall be subject to sole and exclusive jurisdiction of the courts of Delhi only.

### **20.2 Entire Agreement**

Save as provided herein, this Agreement constitutes the entire Agreement between the Parties in respect of its subject matter and supersedes all prior s, Agreement

representations, warranties, promises, statements, negotiations and letters in respect of its subject matter.

### 20.3 Amendment

This Agreement shall only be amended, modified or supplemented by a written instrument signed by authorized representatives of the Parties.

### 20.4 Severance

If any provision of this Agreement is ineffective, void, voidable, illegal or unenforceable, or if this Agreement would, if a particular provision were not omitted, be ineffective, void, voidable, illegal or unenforceable that provision (without in any way affecting the effectiveness, validity, legality and enforceability of the remainder of this Agreement) shall be severable from this Agreement and this Agreement shall be read, construed and take effect for all purposes as if that provision were not contained in it.

### 20.5 Nature of the relationship

Except to the extent set forth herein:

- (a) Nothing in this Agreement constitutes a joint venture, agency, partnership or other fiduciary relationship between the MCD and the Contractor;
- (b) The Contractor acknowledges that it has no authority to bind the MCD; and
- (c) At all times during the provision of the Toll Collection Services and the performance of the Contractor's other obligations under this Agreement, the Contractor or any of its employees/ recruits/ sub-contractors etc. is an independent Contractor and not an employee of the MCD.

### 20.6 Survival

Notwithstanding anything to the contrary herein, the provisions of this Agreement, including Clause 13.5 (Application of Insurance Proceeds), Clause 15 (Force Majeure), Clause 17 (Termination), Clause 14 (Indemnity), Clause 16 (Dispute Resolution), and Clause 20 (Miscellaneous) which expressly or by their nature shall survive the Term or termination of this Agreement shall continue and survive the expiry or termination of this Agreement.

### 20.7 Approval or Consent requirements

Unless otherwise expressly provided in this Agreement, where a Party's approval or consent to any act, matter or thing is required under this Agreement:

- (a) the approval or consent shall be in writing;
- (b) the approval or consent shall be obtained prior to the act, matter or thing to which it relates;

- (c) the approval or consent may be refused, given unconditionally or given subject to conditions in the discretion of the Party giving it;
- (d) a Party seeking approval or consent shall use its best endeavours to ensure that the Party giving approval or consent is given reasonable time and information to make a determination as to the act, matter or thing (and not object to the Party taking reasonable time in making that determination); and
- (e) the Parties shall not be unreasonable in refusing, delaying or imposing conditions on its approval or consent.

#### **20.8 No implied approval by the MCD**

The Contractor acknowledges that no comment, review, representation, vetting, inspection, testing or approval by the MCD or the Competent Officer in respect of the Contractor's obligations under this Agreement shall lessen or otherwise affect the Contractor's obligations under this Agreement.

#### **20.9 Parties' rights and remedies not affected**

The rights, powers and remedies provided in this Agreement are cumulative with and not exclusive of the rights, powers or remedies provided by law independently of this Agreement.

#### **20.10 Further Assurances**

Each Party shall promptly undertake all measures and execute all further documents necessary to give full effect to this Agreement.

#### **20.11 Responsibility for contractors**

The contractor shall be responsible for all acts, omissions, and other failures of any entities that it contracts with (including Affiliates and subcontractors) to perform its obligations hereunder, and any actions on the part of such entities shall be attributable to the contractor who has responsibility for their performance.

#### **20.12 Waiver**

- (a) Neither Party shall be deemed to have waived any right under this Agreement, unless such Party shall have delivered to the other Party a written waiver signed by an authorised officer of such waiving Party. No delay or omission in the exercise of any power or remedy shall affect that right, power or remedy or be construed to be a waiver of any default or acquiescence therein.
- (b) The single or partial exercise of any right, power or remedy available under Applicable Laws or under this Agreement shall not preclude any other or further exercise of it or the

exercise of any other right, power or remedy, except to the extent provided in this Agreement.

#### 20.13 Assignment

The Contractor shall not assign any or all of its rights or delegate any or all of its obligations under this Agreement without the prior written consent of the MCD and any attempt to assign or delegate without obtaining the said consent shall be of no effect whatsoever.

#### 20.14 RFP as part of this Agreement

Unless expressly modified herein the terms of the RFP documents and any amendments thereof shall be considered to be a part of this Agreement.

Signed this ..... Day of \_\_\_\_\_, 2026

Signed for and on behalf of:

Signed for and on behalf of:

**MCD**

**(Contractor)**

By:

By:

Authorized Representative

Authorized Representative

in the presence of:

in the presence of:

(Witness)

(Witness)

## **Annexure 1 – LETTER OF AWARD/INTENT**

Reference is invited to Annexure 14, Volume I of the RFP document – Instructions to Bidders for the draft of the letter of award



**Annexure 3(b)**

***[Certified Copy of Inventory of MCD Facilities]***

**Annex 12.2 - Schedule of Toll Tax Rates****TOLL TAX/FEE CHARGEABLE IN RESPECT OF SPECIFIED COMMERCIAL VEHICLES ENTERING DELHI AT ALL TOLL POINTS OF THE MUNICIPAL CORPORATIONS OF DELHI**

S.No.	Type of Vehicle	Entry Per Visit	Monthly Pass
		(Rs)	(Rs)
1	Taxi, Tempo, Tata-407 and such type of other Commercial vehicles	100	3000
2	Bus, Truck – Nissan, Tata – 709/ Canter and such type of other Commercial vehicles	200	6000
3	06 Wheels Truck	300	9000
4	10 Wheels Truck	500	15000
5	14 Wheels Truck	1200	36000

*(Note: These Toll Tax Rates have been made applicable w.e.f. 01.02.2016 (00 hrs.).*

The aforesaid rates are subject to proposed amendments in Toll Tax Bye laws-2007, pending publication from MOUD, GNCTD, after having been approved by the Corporation.

In the event of revision of toll rates during the Term of this Agreement, the Contractor will enhance payments to be made to the MCD, in the same ratio as the increase of toll rates, as approved by the MCD.

In addition, Smart Cards, which will work on computerized toll plazas only, shall be issued to interested commuters at the same discount rates and structure as relevant to the pass holders, as mentioned above.

**Note:** No toll tax shall be payable or collected in respect of the following vehicles namely:-

- Ambulances
- Fire Fighting Vehicles
- Police Vehicles
- Government Vehicles having red and amber lights
- Defence Vehicles
- Hearses

**Penalty:-**

Any of the specified commercial vehicles found entering Delhi without payment of toll tax, shall be punishable penalty prescribed as per DMC ACT 1957 or Toll Tax Bye Laws.

**Entry Prohibited:-**

The Hon'ble Supreme Court of India vide orders dated 06.12.2001 in I.A. No: 15-16 in Writ Petition (Civil) No: 13029/85 titled as "M.C. Mehta Vs Union of India & Ors" has directed that no goods vehicles will ply on Inter State route by passing through Delhi or New Delhi.

The rates of toll tax/ fee, the categories of vehicles exempted from payment of toll tax/ 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 two places which are at a distance

of 500m ahead of the Toll Tax booths and at the Toll Tax booths also in Hindi and English by placing proper hoardings. The height of the display boards and size of letters being such that it is easy for drivers to read the display boards.

**Environment Compensation Charges / Rates**

Category	Rate
Category 2 (Light duty vehicles etc.) and Category 3 (2 axle trucks)	Rs. 2000/- Per entry
Category 4 (3 axle trucks)and Category-5 (4 axle trucks and above )	Rs. 4000/- Per entry

**Exempted from paying ECC:-**

1. Passenger vehicles
2. Ambulances
3. CNG Vehicles

**Penalty:-**

1. Any of the specified commercial vehicles found entering Delhi without payment of ECC, shall be punishable with penalty prescribed for such type of vehicles, as per order of Hon'ble Supreme Court of India/Delhi Govt./MCD etc.

The ECC and commercial vehicles exempted from paying ECC would be on the basis of schedule rates, notified by GNCTD in compliance of orders of Hon'ble Apex Court.

The rates of ECC, the categories of vehicles exempted from payment of ECC 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 two places which are at a distance of 500m ahead of the Toll Tax booths and at the Toll Tax booths also in Hindi and English by placing proper hoardings. The height of the display boards and size of letters being such that it is easy for drivers to read the display boards.

## **SCHEDULES**

### **Schedule 2 – Toll & ECC Collection Services / Scope of work for the Contractor**

(Reference is invited to Appendix V and VI; Volume II of the RFP document – the Project Information Memorandum)

## **Schedule 6.2 – Contract Performance Guarantee**

(Reference is invited to view draft of the contract performance guarantee at Annexure 12, Volume I of the RFP document – the Instructions to Bidders)

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### **Schedule 7.1 – Site Inventory, Description and Information**

(Reference is invited to Appendix I and III, Volume II of the RFP document – the Project Information Memorandum )

### **Schedule 8.1 – General Obligations of the Contractor**

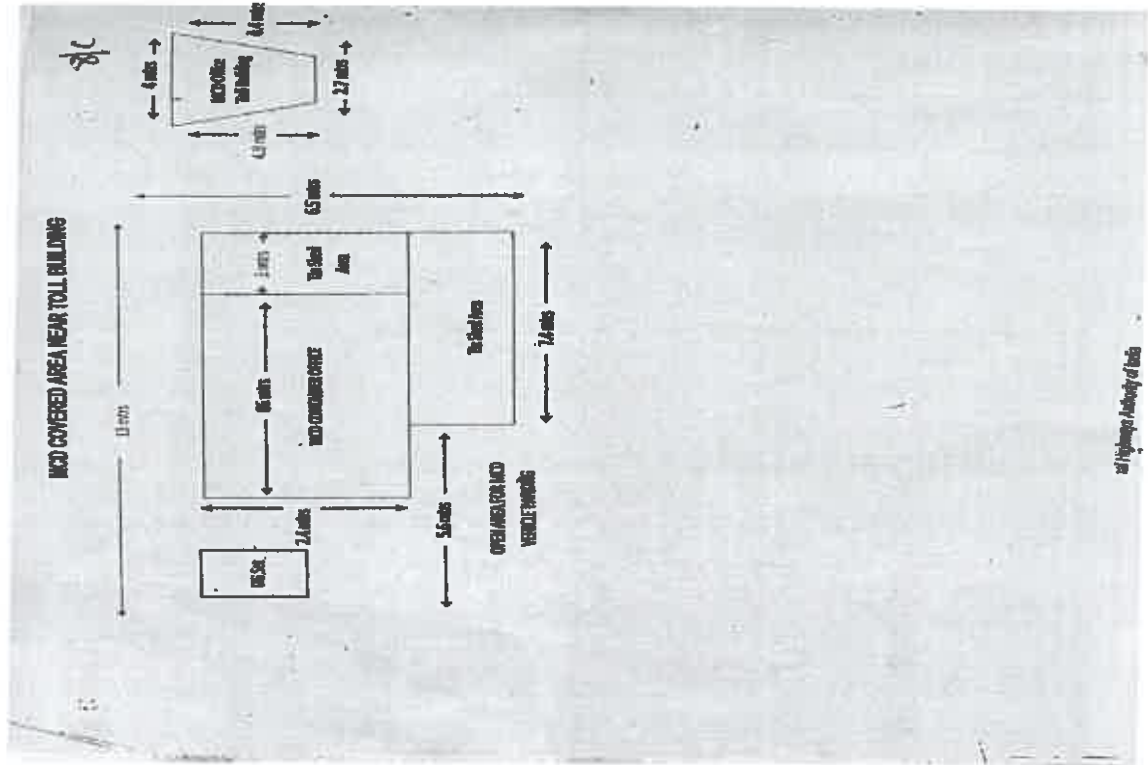
The Contractor shall, at its own cost and expense, be responsible for the following activities:

- (a) Demanding and collecting toll & ECC only from specified Commercial Vehicles that pass over the Toll Tax Barriers, Posts and Toll Plazas at the prescribed rates of toll stipulated in Annex 12.2. Toll & ECC shall be collected at the same rates as specified even from vehicles that use the Toll Tax Barriers, Posts and Toll Plazas frequently and the Contractor shall make arrangements for frequent travellers in the form prescribed by the MCD.
- (b) Employing such number of employees as may be considered adequate by the MCD from time to time and removing an employee(s) who is directed to be so removed by the MCD without delay or demur.
- (c) Arranging collection of toll efficiently in such a manner that the traffic at the Toll Plazas is not unreasonably detained resulting in blocking up of traffic and there being no complaints from toll tax payers/passengers about undue waste of time or detention of vehicles for more time than due for collection.
- (d) Maintain a monthly progress report ("MPR") and submit a certified copy of the same before the fifth day of every succeeding month clearly indicating the progress of performance of its obligations under this Agreement. The Contractor shall ensure correct and true representation of the facts in the MPRs.
- (e) Using Toll Plazas only for the purpose of collection of toll and for no other purpose whatsoever and protecting, preserving and maintaining them properly until and unless otherwise instructed by the MCD in writing.
- (f) Handing over possession of the MCD's Facilities to the MCD, upon expiry or early termination of this Agreement, in the condition in which it was handed over to the Contractor, subject to reasonable wear and tear.
- (g) Paying to the MCD the cost, if any, of making good the damages caused to the MCD's Facilities during the subsistence of the Term of the Agreement.
- (h) Making necessary arrangements for street lighting and ensuring proper working of the Toll Tax Barriers/ Toll Posts/ Toll Plazas and regulation of traffic near it by way of:
  - (i) provision of own water, electric arrangement and electric lighting/solar lanterns/generators, etc, in sufficient numbers including all expenses required therefore for the entire Term;
  - (ii) paying punctually the electricity charges, telephone charges, mobile phone charges and water supply bills payable in respect of consumption of utilities at the Toll Tax Barriers, Toll Posts and Toll Plazas, if and wherever such arrangements are already provided by MCD as they become due and payable and not to allow them to fall in arrears. Non payment of such amount on due date will be treated as a breach of this Agreement; and
  - (iii) Replacing at its own cost and expenses the bulbs, tubes and consumables at the Toll Tax Barriers, Toll Posts and Toll Plazas.

- (i) Not undertaking any other business, making or retaining any secret profit or margin during provision of the Toll Collection Services which is not in the knowledge of the MCD.
- (j) Permitting the Competent Officer and other officers duly authorised by the MCD, at any time or times during the Term, to enter upon the premises of any Toll Tax Barriers or Toll Posts or Toll Plazas for the purpose of inspection.
- (k) Carrying out in all respects instructions or directions that may from time to time be given by a competent Authority.
- (l) Arranging and preserving at a place to be indicated by the MCD in the vicinity of the Toll Tax Barriers, Posts and Toll Plazas, boards of such size and design as may be prescribed by the MCD on which the rates at which tolls have been levied and conditions of levy are written. At every Toll Tax Plaza or Toll Post or Toll Tax Barrier, the Contractor shall keep an up-to-date and duly authenticated copy of Schedule of Toll Tax Rates and Toll Tax Bye Laws with the signature and the seal of the Administrative Officer (Toll Tax).
- (m) Complying with the provisions of the preamble of the DMC Act and rules made there under.
- (n) Maintaining all the MCD's Facilities including electrical equipment and fittings and fixtures of the MCD in good working condition till the Expiry Date.
- (o) Replacing consumable spare parts of the MCD's Facilities as per directions of the Competent Officer.
- (p) Not selling entry passes at rates more than those specified in the Schedule of Toll Rates.
- (q) Replacing or carrying out repairs of the MCD's Facilities as and when necessary.
- (r) Assisting the MCD in procuring all the rights and entitlements of the Contractor with respect to this Agreement. For avoidance of any doubts, it is hereby clarified that all the rights and entitlements of the Contractor that are a subject matter of this Agreement shall stand transferred to the MCD without any cost whatsoever being payable to the Contractor by the MCD on the expiry or early termination of this Agreement. : In view of change in the policy/(s), the Corporation(s) shall not be liable in any manner whatsoever due to that effect.
- (s) Appointing a Project Director who will brief the Assistant Commissioner (Toll Tax), MCD daily, about the day-to-day barrier wise collection and apprises him about the performance or toll collection at each Toll Tax Plaza/Toll Post/Toll Tax Barrier.
- (t) The day to day maintenance of existing Toll Plazas, Toll Posts, Toll Tax Barriers etc. shall be done by the Contractor however any new construction like erection of additional toll plazas/barriers/posts at locations other than the Toll Plazas will be done by the Contractor after prior written approval of the Competent Officer.
- (u) Obtaining all Approvals necessary for providing the Toll Collection Services from appropriate Authorities including NHAI, Public Works Department of the State Government of Delhi etc. in respect of the infrastructure required/commissioned for providing the Toll Collection Services.

- (v) Currently, the present contractor has arrangement with private contractors for toll collection along highways and roads where they are unable to maintain their own infrastructure. The Contractor is required to assess all such locations where he may have to make his own arrangements for toll collections at his cost and expense. Sites currently not covered by the Toll Tax Department of MCD for toll collection are provided in enclosed map. Any of the aforesaid arrangement/ Agreement will have no financial bearing on the MCD but the Contractor will have to take a prior written approval of the MCD for the same.
- (w) Notifying all Toll Tax Barriers, Posts and Toll Plazas of the requirement of filing a complaint with the Delhi Police in cases involving private vehicles being used for commercial purposes or any other vehicles that are required to pay the toll tax under this Agreement and are refusing to pay toll tax and entering the NCT Delhi through free lanes.
- (x) Keeping a minimum of 2 (two) (7m) lanes and adjoining area free from all unnecessary obstruction during the toll collection work and, whenever possible, ensuring that traffic flow is smooth and unaffected by obstructions. The Contractor shall always keep all the lanes operative at all times irrespective of volume of traffic. The Contractor shall take prior written consent of the Commissioner, MCD before making any lane inoperative.
- (y) Collecting data of prepaid and exempted vehicles in the prescribed form daily.
- (Z) Charging penalty from toll tax evading specified commercial vehicles entering Delhi shall be punishable penalty prescribed as per DMC ACT 1957 or Toll Tax Bye Laws. As regard to Charging of penalty from ECC evading specified Commercial vehicle is concerned it should be charged in accordance to the terms of Delhi Government notification No.F.10 (13)/ Env/2015/2878-2900 dated 26.04.2016.
- (za) Tractor Trolley does not come/cover under the definition of commercial vehicles. However, would be subject to future changes/amendment.
- (zb) No advertisement in any form whatsoever shall be allowed on Toll Ticket, Toll Booths etc.
- (zc) Ensure installation of necessary computer hardware compatible with the Corporation(s) software and provide summary of the day indicating various type of vehicles at different toll plazas on daily basis in a soft copy.
- (zd) The Contractor shall provide display board indicating the Mobile number and email id where complaints of any nature including irresponsible behaviour can be lodged.
- (ze) The Concessionaire shall keep a complaint register on every Toll point / Plaza for lodging any complaint and forward the action taken on the complaints
- (zf) The Concessionaire shall ensure installation of necessary computer hardware compatible with the Corporation(s) software and provide summary of the day indicating various type of vehicles at different toll plazas on daily basis in a soft copy.

Annexure -4 – Sketch/Drawing of area provided by NHAI to MCD at Rajokari Toll Plaza and its present details of land/space rent-rate - detail at present.



#### Calculation of land rent

Land Area used : 99.91 Sqm.

Building Area (1 Room): 15.41 Sqm. (165.81 Sq.ft.)

Rent: Rs. 1,08,236/- Per month [in accordance with provisions of Control of National Highway (Land & Traffic), Act, 2002 and Highway Administration Rule, 2014]

**Annexure-5 – MLFF Guidelines (Schedule-A, B & C)****GENERAL CONDITIONS OF MLFF****1. Scope of Work**

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

- a) **Design, Development and Implementation of the MLFF Tolling :** Undertake the design, development, and implementation of an MLFF-based Toll Tax & ECC collection system at the 154 entry points of Delhi listed in Appendix-I (Volume-II), with the provision of facilities as specified in Schedule-B, and ensure compliance with the Specifications and Standards outlined in Schedule-C.
- b) **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.
- c) **Web based Application Portal -** The Bidder shall provide a web-based application/portal for real-time monitoring of system health and availability, traffic count (RFID Tag and Non-RFID Tag) and automatic alerts for MLFF equipment downtime. The portal should facilitate access to transactions, issuance of discounted pass, toll revenue collected, reconciliation reports, e-Notice 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.
- d) **Cleanliness and Maintenance of Control Centre, Plaza Building, Toilets, and Surrounding Areas:** The Bidder is responsible for maintaining cleanliness and upkeep of the Control Centre, 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.
- e) **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.
- f) **Performance and fulfilment of obligation:** Ensure the performance and fulfilment 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.
- g) **Electricity Power Management:**
  - **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 MCD.

- **Lighting:** The Bidder shall ensure to maintain the existing lighting at toll plaza area for seamless operation and road safety.
- **Electricity Charges:** The bidder will bear all recurring electricity charges, including those for backup power sources.

## 2. Commencement of Services

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

## 3. Assignment

This Contract Agreement shall not be assigned by the Bidder to any person / agency except with the prior consent in writing of MCD and MCD shall be entitled to decline without assigning any reason whatsoever. Notwithstanding anything to the contrary contained in this Contract Agreement, MCD 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 MCD, capable of fulfilling all MCD's then outstanding obligations under this Contract Agreement.

## 4. Time Schedule

Sl. No.	Activity	Time period for each Toll Tax 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 MCD.	7 days
3.	Design, Development & Implementation of RFID Tag-ANPR MLFF Toll Tax & ECC 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 MCD for each Toll Tax plaza	06 Months
5.	"Go-Live" of MLFF system, subject to successful completion of SAT for each Toll Tax plaza	06 Months

6.	Operation & Maintenance Period for each Toll Tax plaza	54 months from the date of Go-Live
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**a. 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 RFID/ MCD CCH, 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.

**4.1.1 Site Acceptance Testing**

- i. After successful completion of successful implementation of MLFF facility at Major toll Plazas, the successful bidder shall give self undertaking on the Stamp Pad (Rs.100/-) duly notarized Site Acceptance Testing (SAT) duly mentioning the start date of SAT for major toll plazas, in consultation with MCD. 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 4.1.3 below. The SAT shall be considered successful only if it meets all the requirement description mentioned in table under Clause 4.1.3.
- iii. The successful bidder shall get maximum duration as per specified under Sl # 4 of Clause 4 above for completion of . 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 Service Provider, MCD or its designated representatives shall conduct the SAT at the respective site. The Service Provider, 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 Service Provider 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 successful contractor is unable to demonstrate compliance with the required parameters in the second round of testing, the SAT shall be considered as unsuccessful.

**4.1.2 Consequences of Unsuccessful SAT**

- i. The Toll Plaza(s) where the Site Acceptance Test (SAT) is declared unsuccessful in terms of Clause 4.1.1 shall be de-scoped from the Scope of

Work under Schedule-B, without any financial liability or obligation whatsoever on MCD. Upon such de-scoping, MCD 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 Toll Tax 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 BG of the Cash Performance Security/Performance Bank Guaranty or its part, furnished under Clause 6.3 of Volume-III shall stand forfeited Rs. 1.00 crore per week if not paid by the contractor.
- iii. The Parties expressly agree and acknowledge that the forfeiture of performance security as per clause 4.1.2(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 MCD as a consequence of the Bidder's failure to achieve successful SAT.
- iv. The Contractor 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 MCD.
- v. The Contractor 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 MCD.

#### 4.1.3 Parameters to be checked during Site Acceptance Testing (SAT)

The following high-level parameters shall be evaluated during the Site Acceptance Test (SAT). MCD 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 / Successful bidder 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.

Sl	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.
2)	Vehicle classification accuracy	<p>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.</p> <p>The classification of the vehicles shall be as per Toll Tax Byes Laws/MCD &amp; ECC as per order of Hon'ble Supreme Court of India/CAQM/Delhi Govt. Notification (Determination of Rates and Collection) shall be taken into consideration for the evaluation of this requirements.</p>
3)	ANPR Camera Accuracy	<p>The ANPR camera system should read reflective vehicle registration number (VRN) plates with minimum accuracy of 95% under both day and night conditions.</p> <p>The bidder shall be solely responsible of deployment of any additional arrangement e.g. lighting etc. to achieve the desired accuracy.</p> <p>Note:</p> <p>1. The 95% 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 not readable" shall be excluded from the total count used for accuracy calculation.</p> <p>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.</p>

		<p>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 MCD for every defined test condition.</p> <p>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.</p> <p>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.</p>
4)	API integration with RFID system/MCD CCH for ETC transaction processing	<p>The proposed MLFF system should be able to integrate into RFID System/ MCD CCH system as per process flow diagram provided in the RFP. The integration shall be as per the draft Technical Specification Document circulated by RFID System/ RFID System/ MCD CCH system.</p> <p>Verification of seamless integration of the MLFF system with RFID System/MCD CCH's infrastructure as per the process flow and draft Technical Specification Document provided in the RFP, including successful API communications, authentication, and transaction processing protocols.</p> <p>It should be possible to create an ETC transaction from a valid, functional RFID Tag 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 RFID System/MCD CCH system.</p> <p>Parameters shall be checked as below:</p> <ul style="list-style-type: none"> <li>• Verification of successful RFID Tag transactions captured by the MLFF system, including correct matching of vehicle passages with RFID Tag IDs and VRN.</li> </ul>



		<ul style="list-style-type: none"> <li>• Accuracy and completeness in capturing transaction data, including date, time, plaza code, vehicle class, transaction amount, and unique transaction identifiers.</li> </ul>
5)	Generation of e-Notice cases	<p>The proposed MLFF solution must have the capability to seamlessly raise a case for e-Notice generation through API integration with RFID System/MCD CCH, providing all necessary data and supporting images, while adhering to the prescribed API protocols and authentication standards.</p> <p>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.</p>
6)	Payment reconciliation for successful RFID Tag transactions and e-Notice	<p>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 RFID System/ RFID System/ MCD CCH system.</p> <ul style="list-style-type: none"> <li>• Correct identification and categorization of ETC transactions (unsuccessful or rejected/failure to pay, exempted etc.</li> <li>• Accuracy and reliability of cases of e-Notice generation for non- RFID Tag transactions, including correct vehicle identification based on VRN &amp; Tag ID, timestamping, penalty calculation, and image/evidence details.</li> <li>• Confirmation that e-Notice are generated, dispatched, tracked, and archived appropriately as per defined business rules.</li> <li>• System capability to generate reconciliation reports with detailed insights into matched and unmatched transactions, including discrepancies or errors.</li> <li>• 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 (2x) 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.</li> </ul>
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-Notice cases.
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\*The Successful bidder may install adequate number as per requirement and design.

## 5. Damages

### 5.1. Damages for Delay in completion of work

Refer to Section Service Level Agreements (SLA), in the RFP Clause 10 of Volume-III of MLFF Guidelines.

### 5.2. 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 MCD within a reasonable time frame after becoming aware of the delay.
- iii. MCD 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 MCD.
- 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 MCD 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.

### 5.3. 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 MCD (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 MCD (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. MCD shall also take legal action against the errant staff of the successful Bidder, as such safety lapses may lead to major safety concerns / hazards for the road users as well as the workers

#### **6. Change of Scope**

- a) bidder shall not be entitled for any payment in case of Change of Scope order is given by MCD. Change of Scope will be initiated in the following cases only after written instructions from MCD 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 MCD or its representative, the bidder 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 MCD or its representative for issue of the Change of Scope Order.

#### **7. 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 MCD.
- 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.
- e) No payment will be made for any CCN.

#### **8. 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 bidder 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 MCD or its representative in running condition.

## **9. 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 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

**10. List of Major Toll Plazas**

<b>List of Major Toll Tax Plaza</b>		
<b>Sr. No.</b>	<b>Zone</b>	<b>Entry Plaza Name</b>
1	Kapashera	Kapashera Main
2	Kapashera	Aya Nagar
3	Kapashera	Banswara
4	Kapashera	Rajoukari Main
5	Kapashera	Bajghera 3 <sup>rd</sup> (Dwarka Expressway)
6	Badarpur	Badarpur Main Sarai
7	Badarpur	Badarpur Flyover
8	Badarpur	Pul Prahaladpur
9	Badarpur	Kalindi kunj
10	Badarpur	Jaitpur-IV
11	Badarpur	Durga Builder
12	Tikri	Tikri Main
13	Tikri	Dhansa Border
14	Tikri	Jharodha VI (Flyover)
15	Shahdara	Shahdara Main
16	Shahdara	Shahdara Flyover
17	Shahdara	Mandoli Main
18	Shahdara	Loni Main
19	Shahdara	New Seemapuri-I
20	Shahdara	Chander nagar
21	Shahdara	Wazirabad
22	KGT	KGT Main
23	KGT	Auchandi-II
24	KGT	Harewall
25	KGT	Lampur
26	KGT	Safiabad
27	KGT	T T Post
28	KGT	Kundli-II
29	Gazipur	Gazipur Main
30	Gazipur	Gazipur old
31	Gazipur	New Kondli
32	Gazipur	Noida Major
33	Gazipur	DND Flyway

## Schedule – A: Site of the Project

### 1. The Site

a) **154 Entry Points** – The all entry points of Delhi. The toll plaza location chainage is described in Annex-I of this Schedule-A.

#### 1.1 Annex – I (Schedule-A)

##### 1.1.1. Toll Plaza /MLFF Control Centre Location

2. The Site of the Delhi Entry Points comprises the proposed Toll Plaza described in Table A-1/ Appendix –I of Volume-II.

Table-A-1		
Location of Toll Plaza	Total Lanes	Location of Plaza Building
All Delhi Entry Points	As per Plaza wise	At Entry Points of Delhi

#### 1.1.2 Appendix A-1

Index Map of Project :

At Entry Points of Delhi

## **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 all entry points of Delhi.
- 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 MCD CCH payment ecosystem for the deduction of the Toll Tax & ECC.
- iii. The Successful bidder is required to Design, Develop, Test, Commission, Operate and Maintain the Multi Lane Free Flow (MLFF) based tolling system at toll plazas/Delhi entry points detailed in Schedule A/Appendix-I of Volume-II along with Toll Tax & ECC collection and seamlessly integrating it with the RFID System as part of the project to provide all the services as defined by MCD. The proposed MLFF system must be developed as per Technical Specification Document circulated by MCD & RFID Tags/MCD CCH and enable real-time processing of all vehicle transactions at MLFF gantry while also connecting with RFID System/MCD CCH system (Switch and Mapper) to accurately calculate toll fares and process payments efficiently. The MLFF system must also detect all cases of violation of failure to pay Toll Tax & ECC by vehicle users and seamlessly integrate with RFID System/MCD CCH, and other external system for e-Notice management as per process flow defined in the RFP.
- iv. The system should comply with all applicable RFID Tag Procedural Guidelines (PG document) as well as Interface Control Document (ICD) rules of RFID System/MCD CCH & MCD 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 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 must also ensure that the existing equipment and electrical appliances currently used by toll agencies/SIs are taken over for use only after the MLFF system goes live, following a proper handover and takeover process without disrupting current toll operations.

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

- i. Through this RFP, MCD seeks to select a certified successful bidder for all ETC transactions at 154 entry points of Delhi using Multi Lane Free Flow technology. The successful bidder will be responsible for all roles as defined in the Procedural Guidelines – RFID System issued by MCD CCH, and any subsequent guidelines/circulars issued by MCD/CAQM/Delhi Govt./ Hon'ble Supreme Court of India.
- ii. The Scope of Project includes Design, Supply, Installation, Testing, Commissioning and Operation & Maintenance of Integrated Multi Lane Free Flow (MLFF) System at 154 entry



points of Delhi as described in this Schedule-B and in Schedule-C.

**c) The Bidder shall develop following at each Toll plaza:**

MLFF based tolling facility by installing new Gantries on main toll plazas/entry points of Delhi of the road (minimum 02 (01 Main & 01 redundant) or as per requirement) for direction (LHS) for MLFF based tolling within approx. 350m from each of the existing location of the toll plaza or as per requirement.

The Bidder 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:**

- i. 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. Separate Command and Control Centre need to be set-up as communicated by MCD/ or as provided in Schedule A.

**ii. MLFF Server:**

- a. The contractor shall ensure the setup of a MLFF Server at Control Centre. The MLFF server will be interconnected with the gantries/plazas of that location/locations.

- iii. The Bidder shall ensure to provide two (02) dedicated lease line internet connections (Primary and Secondary) with a minimum bandwidth of 1 Gbps for seamless communication with the MLFF system at each of the plaza locations provided in Schedule A.

- iv. MLFF based sensors / smart devices on field and integrating, analyzing data shall be received from these field devices / sensors at a Control Centre (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.

- v. CC shall have 3 major functional areas namely Command and control with monitoring, manual validation 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. 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 or not connected to the

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 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 Monthly Pass .
- ii. Point-of-Sales (POS) for sale of RFID Tag 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 Service Provider 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 RFID System/MCD CCH programme, Interface Control Document (ICD) and Other Technical Specification Document as issued by MCD / MCD CCH from RFID Tag 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 – RFID Tag based MLFF system as mentioned in Schedule B & C.

#### **c. Rate of Toll Tax & ECC:**

1. The bidder shall collect Toll Tax & ECC through MLFF based tolling as per the provisions of the Toll Tax Bye Laws-2007/MCD and also ECC as per order Hon'ble Supreme Court of India/CAQM/Delhi Govt. etc (Determination of Rates and Collection) as amended from time to time, and in strict compliance with the provisions of the notification.
2. The bidder 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 Toll Tax & ECC specified in the Notification referred above.
3. The bidder 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 bidder 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 Toll Tax & ECC**

The Toll Tax shall be subject to revision in terms with Toll Tax Bye-Laws-2007 (Determination of Rates and Collection) and ECC as per directions of Hon'ble Supreme Court of India/CAQM/Delhi Govt. etc. as amended from time to time.

#### **e. Display of Rate of Toll Tax & ECC and Toll Tax & ECC Notification:**

1. The rates of Toll Tax & ECC, the categories of vehicles exempted from payment of Toll Tax & ECC 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 shall also display, a copy of Notification in published by MCD, appended to this Contract at a conspicuous place of the Toll Tax & ECC 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 Toll Tax & ECC:**

Refer Clause 12 titled "Toll & ECC collection Contract Amount, Toll & ECC Rates, Recovery of Dues" of Volume-III.

#### **g. Operational Transparency**

The bidder shall be solely responsible for efficient and transparent working and management of Toll Tax & ECC collection at all times. The bidder shall ensure the following:

- (i) All transactions including violations, and exemptions/concessions will be processed through MLFF System available at Toll plaza. Furthermore, the deployment or usage of any alternate software/system for Toll Tax & ECC collection, except for the MLFF through which RFID Tag transactions are processed, is strictly prohibited. Any instance of usage of such unauthorized software/system shall be treated as Fraudulent Activity and the bidder, including its JV Member, employees, the Director(s) of such entities or owner, found practising such fraudulent activities will attract penal action as per relevant clause of the contract agreement including debarment from MCD 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 Toll Tax & ECC Collection portal as provided by Successful bidder and ensure that such transactions shall process using RFID Tag 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 Successful Bidder**

- 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 RFID System/MCD CCH system as per e-Notice Module, if required.
- 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 Successful Bidder 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 responsibility to maintain the minimum required spares at any given time to meet the SLA requirement at no additional cost to the Client. bidder should keep minimum 10% spare parts of critical equipment at any given point of project execution.
- g) The bidder 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.
- h) Procurement of any software licenses and hardware required for implementation of the solution is the sole responsibility of the bidder. MCD 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 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 Toll Tax & ECC substantially in the form as per monthly report provide in Clause 2.13, Schedule II (the "Monthly Toll Tax & ECC Statement") of Schedule-C. Proper record is to be maintained at the plaza for the purpose of providing such information. The bidder 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 undertakes the responsibility of the complete job of Toll Tax & ECC collection, upkeep/maintenance of adjacent Toilet blocks including recouping the consumable items maintenance of all records, maintenance of Toll Tax & ECC collection account, maintenance of vehicle type wise Traffic Data on shift to shift basis, maintaining the cleanliness of Toll Tax & ECC 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 MCD 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 MCD. 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 Toll 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 including the gantry and control centre and to monitor or to ensure that any or all the activities are being carried out properly by the personnel deployed by the bidder.

b) The Authority may exercise any check/control to ensure discharge of various obligations by the bidder under the Contract including but not limited to following:

- i. Correctness of the Toll Tax & ECC charges recovered from users, including various discounts, as prescribed.
- ii. Maintenance of proper registers including those relating to collection of Toll Tax & ECC from different types of vehicles.
- iii. Weekly remittance of amount due from the bidder by the prescribed day.
- iv. Checking data in electronic/soft form.
- v. Maintain the gantry and control centre and its appurtenances by the bidder 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 Toll Tax & ECC any blockage/hindrance 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.

#### **6. Cleanliness & Maintenance of Toilets, Control Center & Surrounding Areas**

Bidder shall be solely responsible for the Operation and Maintenance of the toilets surrounding areas as per requirements of MCD, without requiring any supervision and interference of MCD whatsoever.

It is the responsibility of the Bidder 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 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 road Users 24x7x365.

- i. The bidder shall make necessary arrangements for supply chain management, store management and category management, solely at his own cost and risk.
- ii. The bidder or its representatives shall not involve in any act or deed which may cause nuisance and/ or annoyance to MCD to Toll Tax & ECC user.
- iii. The bidder 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 shall arrange to provide adequate staff for Operations and maintenance activities and MCD shall not be responsible for any loss, theft or dacoity in relation to any of the activity relating to the 'Toilets'.
- v. The bidder shall be solely responsible for maintenance and cleanliness of toilets.
- vi. The bidder shall take care of disposal of all rubbish, garbage and keeping the premises neat and tidy and will be essential.
- vii. The bidder 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 shall be liable to follow the obligations of the operation and maintenance pointed out by MCD or any of its representatives from MCD found out during routine inspections.
- ix. The bidder shall conduct a regular maintenance program in place for toilet/washroom cleaning to maintain the facilities in a clean, working condition.
- x. The bidder shall ensure that cleanliness and maintenance of Control Centre, 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:

Bidder shall make necessary arrangement for automated generation and issuance of digital notices for vehicles whose entry or passage through the MLFF system is recorded but for which the applicable Toll Tax and/or ECC remains unpaid, together with system support for subsequent recovery action, all strictly in accordance with the Delhi Municipal Corporation Act, 1957, including section 161, the Delhi Municipal Corporation (Toll Tax) Bye-Laws, 2007, and all amendments, rules, notifications, directions and orders issued 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. Surveillance Camera System
  6. Detectors – Radar
  7. Detectors-Lidar
  8. Networking and Communications
  9. Software Application, Dashboard and Portal
  10. MLFF Control Centre.
  11. Power Supply for Field Equipment as well as for MLFF Control Centre
  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 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 MCD. In addition, the minimum technical specifications have been prescribed in this document, wherever indispensable. The bidder is responsible for the design of complete project and the system architecture to deliver state-of-the-art solution to MCD 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 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 hereafter may be called as 'bidder 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 bidder will be provided/own arrangement with space in the Toll Plaza building for setting up of MLFF Control Centre. The bidder 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.
- g. The bidder 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 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 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 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 bidder shall quote for the entire system and facilities on a "single responsibility" basis. bidder 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 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 shall be responsible for Integration of MLFF system and sub-systems with the MCD Central Command Centre, or TMCC or any other projects as per the requirement raised from time to time by MCD 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 MCD.
- 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 RFID Tag Id, Vehicle Registration Number (VRN) through equipment installed over the Multi Lane Free Flow (MLFF) gantry.
  - 2. Integration of MLFF systems and RFID System/MCD CCH systems.
  - 3. Adherence to all NETC guidelines.
- p. **Integration with CCH:** The Successful Bidder 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 RFID System/MCD CCH 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 Successful Bidder must ensure to comply with ICD 2.5 or latest specifications for processing the

transactions similar to NETC Programme.

**r. Integration with TMCC –**

- i. **All Transactional Data:** The bidder shall integrate all the cameras and system of the MLFF System with Central Control Centre (CCC) and MCD CCH 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 MCD CCH software for monitoring the real time health status. The SLA of MLFF equipment shall be calculated based on MCD CCH software and through other measures by MCD. 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 MCD CCH dashboard.
- s. **Future integration with advanced technologies:** The Bidder's solution should include API based integration with future tolling technologies like NETC, GNSS or any other similar system at no extra cost

**9. Deleted**

**10. Service Level Agreement**

- i. The Parties acknowledge and agree that this Agreement is a Toll Tax & ECC 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-Notice, 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 bidder and are intended to compensate the other party for the adverse impact of such breaches.
- iii. SLA shall be calculated separately for each major toll plaza

## SLA Table

Sl.No.	Parameter	Timelines	Basis of measurement	Penalties
<b>Implementation Phase</b>				
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
<b>Operation &amp; Maintenance Phase</b>				
2.	Manpower Availability (Aadhar based Bio metric Attendance is mandatory for deployed Manpower)	Attendance and availability of manpower	8 Hrs. per Shift	<p>a) In case of non-availability of manpower flat 3000 Rs per person/ Day shall be applicable.</p> <p>b) In case, if the non-availability of manpower is consecutively observed by MCD for more than 5 days then bidder shall be liable to replace the manpower</p>
<b>Control Centre Equipment and Software</b>				
3.	Availability of all MLFF Equipment and Software in Control Center	The uptime availability of all equipment of MLFF system shall be 95%	Maximum permissible downtime for all Equipment shall be 44	<ul style="list-style-type: none"> <li>Beyond 44 mins, a penalty of Rs 1,00,000 per hour shall be applicable, in case redundancy is</li> </ul>

		per month  The downtime shall be calculated at a cumulative level when any of the equipment is non-operational.	minutes per month, subject to availability of MLFF system through redundant System (Gantry/Lanes).	not working.  • The upper limit of the penalty shall be equal to total Performance Security  • Beyond that, MCD may consider it as a case of breach and may take necessary actions.  If system availability is below than 95%, it shall be considered as a breach
<b>Lane Equipment</b>				
4.	E-Notice for end users	The E-Notice shall be generated within 48 hrs as per e-Notice Module post validation by bidder.	Maximum 48 Hours	Within forty eight hour: No penalty  After that per hours- per instance a penalty of Rs 1000/- shall be applicable.
<b>Accuracy – Vehicle Count and classification</b>				
5	Vehicle Count (For Tollable only)	95% Vehicle count (on daily basis)	95%	<ul style="list-style-type: none"> <li>For any missing count of any vehicle in the accuracy, a penalty of equivalent amount of the ECC X2 shall be applicable per day.</li> </ul>



				<ul style="list-style-type: none"> <li>Below 95% accuracy, shall be considered as breach.</li> </ul>
6	Vehicle Classification (For Tollable only)	95% Vehicle Classification (on daily basis)	95%	<ul style="list-style-type: none"> <li>For any missing Classification of any vehicle in the accuracy, a penalty of equivalent amount of the ECC X2 shall be applicable.</li> <li>Below 95% accuracy, shall be considered as breach.</li> </ul>
<b>System Accuracy – Instance Wise</b>				
7.	Un availability of Images and video	<p>The vehicle passed through the lane, Service Provider must account for the vehicle through ANPR (front and back) and Surveillance Cameras.</p> <p>Images and videos are not available it will be considered instance of unaccounted vehicle.</p>	Per instance	Per Instance penalty shall be Rs 10,000 is applicable along with revenue loss incurred from unidentified vehicles.

8	Remote video Check	<p>MCD should be able to access any remote access or overview through IP and authentication details provided by MCD.</p> <p>If for any reason (wrong, IP Password, network downtime etc.) the footage is not visible, or photo is not available in ANPR, surveillance Camera then it will be considered a violation.</p> <p>Simple screenshot with a date time visible shall be enough to prove violation MCD.</p>	Per instance	<p>Rs. 5000/- per camera per day.</p> <p>Same camera will not be checked again in the same day if violation found and recorded</p>
9	API based data sharing with MCD MIS/ERP system	API or uploads-based sharing of reports from	Per instances	<p>Per Instance penalty shall be Rs 3000</p> <p>for data sharing</p>

		software to MCD ERP/MIS as prescribed in the contract and any notification / circular issued from time to time.		missed by Service Provider.
10	Incorrect Manual Transaction	In case of any incorrect VRN based manual transaction done as per MCD	Per instance	A penalty of Rs 5,000/- per instance as per provision of Manual Transaction Policy of MCD
11				
12	Transaction (remittances)	As per Payment Terms of Contract Agreement		
Spare Availability				
13	Availability of 10% spare of critical equipment <ul style="list-style-type: none"><li>RFID Reader &amp; Antenna,</li><li>Lidar</li><li>Radar</li><li>Surveillance Camera</li><li>ANPR Camera</li></ul>	Audit at any point of time.  MCD conduct surprise inspection for validation/ verification of spares	100%	Each violation/instance shall attract the penalty of Rs. 1,00,000/-.
Cleanliness and Maintenance of Public Toilets, Control centre, and Surrounding areas of Plaza Building				
14	Maintenance of Toilets and Sanitation, Hygiene, Control Centre, Plaza Building, and assets and	Audit at any point of time.  MCD conduct	100%	Each violation/instance shall attract the penalty of Rs.

	Surrounding Areas, Maintenance of existing lighting at toll plaza area	surprise inspection of toilets hygiene		1,00,000/-
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**Note:**

- i. Penalty shall be recovered as per procedure mentioned in RFP.
- 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 major toll plaza, if MLFF tolling is implemented at more than 1 toll plaza as per RFP.

**11. 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 and as specified by MCD from time to time and submit the same to MCD as communicated time to time the successful bidder:

- i. **ANPR and 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 MCD.

**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.

**12. 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 Service Provider feels more manpower shall be required to meet the SLAs, they may consider in their commercials.

#	Operation & Maintenance (O&M) Manpower (Major 35 Plazas)	Minimum Manpower* requirement
1.	Project Manager (Dedicated On-site) – (1 Nos.)	1 (For the entire project)
2.	Field Engineer (8 Nos)	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

#	Operation & Maintenance (O&M) Manpower (Rest Minor Plazas)	Minimum Manpower* requirement
1.	Field Engineer (4 Nos)	1 in each shift + 1 reliever
2.	Auditor/Transaction Validator	1 in each shift + 1 reliever
3.	Security	1 in each shift + 1 reliever
4.	Cleaner	1 in each shift + 1 reliever

\*The successful bidder may deploy adequate number as per requirement.

**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 RFID Tag and Monthly Specific Discount Pass**

- i. Bidder is responsible to set up a 24\*7 POS at the Control Centre Building for issuance of RFID Tag as per RFID System/MCD CCH Guidelines and providing services of Monthly Specific Discount Pass .
- ii. The POS executive should be trained to assist road users with making payments for e-Notice.
- iii. If required, in case the successful bidder is not a RFID Tag issuer under the RFID System/MCD CCH program, the bidder 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 RFID Tags 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 Service Provider 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 MCD.

(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 MCD.

### 1.1 RFID Reader

Sl. No.	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).
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 9 of Annexure-5 of the RFP Volume-III.

**Note\*** The Successful bidder may install adequate number as per requirement and design.

## 1.2 RFID Antenna

Sl. No.	Parameter	Minimum Specifications
1	Frequency Range	UHF 865-868 MHz (configurable)
2	Gain	10 dBi $\pm$ 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 $\Omega$
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 9 of Annexure- 5 of the RFP Volume-III.

**Note\*** The Successful Bidder may install adequate number as per requirement and design.

### 1.3 Surveillance Camera

Sl. NO.	Parameter	Minimum Specifications
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°C
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.
		<b>Note: The product should be complaint with Clause 9 of Annexure-5 of the RFP Volume-III.</b>

**Note\*** The Successful Bidder may install adequate number as per requirement and design.

#### 1.4 Automatic Number Plate Recognition Systems

Sl. NO.	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/Rolling Shutter / 1.8" Progressive CMOS
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
<b>l</b>	<b>MTBF</b>	<b>45,000 Hours</b>
<b>l</b>	<b>Power</b>	<b>24/48V DC or compatible</b>
<b>m</b>	<b>Shutter Speed</b>	<b>1 sec. to 1/100,000 sec. or better shutter speed to cater to capturing number plate and video evidence</b>
<b>n</b>	<b>Frame Rate</b>	<b>Upto 50/60 fps with controllable bit rate and frame rate.</b>
<b>o</b>	<b>Chipset/Processor</b>	<b>The Camera to be provided by the bidder should not have Hisilicon chipset/Processor.</b>
<b>p</b>	<b>Camera Housing</b>	<b>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 &amp; dirt protection, and NEMA 4X-rating or IK10 or higher rating for Vandal-proof. The housing shall have built-in heater and blower.</b>
<b>q</b>	<b>Certification</b>	<b>CE/ FCC/ BIS Certification, NEMA 4X, IP67 (Full metal Casing),</b>
<b>r</b>	<b>Preferred OEMs</b>	<b>Pelco/Avigilon, Axis, Vivotek, FETCI, Tattile, BOSCH</b>  <b>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.</b>  <b>Note: The product should be complaint with Clause 9 of Annexure-5 of the RFP Volume-III.</b>
<b>3.</b>	<b>On site – Network Connectivity &amp; Electrical Interface</b>	
<b>a.</b>	<b>Data Storage on site</b>	<b>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>
<b>b.</b>	<b>Network Connectivity</b>	<b>Wired/GPRS based wireless technology with 3G /4G upgradable to 5G capability.</b>
<b>c.</b>	<b>The system should be capable of working in ambient temperature range of -10°C to +55°C</b>	
<b>d</b>	<b>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.</b>	
<b>e.</b>	<b>The housing(s) should be capable of withstanding vandalism and harsh weather conditions and should meet IP66, IK10 standards (certified).</b>	



4.	<b>Video Recording</b>
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.

**Note\*** The Successful Bidder may install adequate number as per requirement and design.

## 1.5 IR Illuminator

Sl. NO.	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
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**Note\*** The Successful Bidder may install adequate number as per requirement and design.

### 1.6 Detector-Lidar

Sl. NO.	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\*** The Successful Bidder may install adequate number as per requirement and design.

### 1.7 Detector-Radar

Sl. NO.	Parameter	Minimum Specifications
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	<±1%
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.

**Note\*** The Successful Bidder may install adequate number as per requirement and design.

## 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.

Sl. NO.	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

\* The Successful Bidder may install adequate number as per requirement and design.

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

Sl. NO.	Parameter	Minimum Specifications
1.	Solution Type	IP Based/iSCSI/FC/NFS/CIFS/N2N
2.	Storage	<p>Storage Capacity should be minimum 125 TB or more as per requirement (usable, after RAID configuration)</p> <p>To store all types of data (Data, Voice, Images, Video, etc) Storage system should be capable of upward scalability.</p> <p><i>Note: Storage space to be finalized during the design phase.</i></p>
3.	Hardware Platform	<p>Rack mounted form-factor</p> <p>Modular design to support controllers and disk drives expansion</p>
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	<p>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.</p> <p>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.</p> <p>A single command console for entire storage system.</p> <p>Should also include storage performance monitoring and management software.</p> <p>Should provide the functionality of initiative-taking monitoring of Disk drive and Storage system for all disk</p>

		failures.  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	<ol style="list-style-type: none"> <li>1. Successful bidder shall keep the storage of complete data (Images and videos). Images for 180 days and Videos for 30 days.</li> <li>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.</li> <li>3. Any type of additional storage requirement shall be borne by the bidder.</li> </ol>

**Note\*** The Successful Bidder may install adequate number as per requirement and design.

### 1.10 Monitoring Workstations

Sl. NO.	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).
11.	Keyboard	104 keys minimum OEM keyboard
12.	Mouse	2 button optical scroll mouse (USB)
13.	PTZ joystick controller (With 2 of the	PTZ speed dome control for IP cameras Minimum ten programmable buttons



	workstations in CC)	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.

\* The Successful Bidder may install adequate number as per requirement and design.

**Note:**

1. Bidder shall be responsible to disable all ports/interfaces from all workstations installed at site.

### 1.11 Firewall

Sl. NO.	Parameter	Minimum Specifications
<b>Performance</b>		
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
<b>Physical Interfaces</b>		
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
<b>Environment</b>		
12.	Power consumption	10-50W

13.	Operating temperature	0-40°C (operating) -10 to +70°C (storage)
14.	Humidity	10%-90%, non-condensing
<b>Physical Specifications</b>		
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

**Note\*** The Successful Bidder may install adequate number as per requirement and design.

## 1.12 Server Rack

Sl. NO.	Parameter	Minimum Specifications
1.	Type	<p>27 / 42 U racks mounted on the floor</p> <p>Floor Standing Server Rack – 27 / 42 U with Heavy Duty Extruded Aluminium Frame for rigidity. Top cover with FHU provision. Top &amp; 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.</p> <p>All racks should have mounting hardware 2 Packs, Blanking Panel. Stationery Shelf (2 sets per Rack)</p> <p>All racks must be lockable on all sides with unique key for each rack.</p> <p>Racks should have Rear Cable Management channels, Roof, and base cable access.</p> <p>The depth of the server rack should be 1200MM</p>
2.	Wire managers	Two vertical and four horizontals
3.	Power Distribution Units	<p>Two per rack</p> <p>Power Distribution Unit - Vertically Mounted, 32AMPs with 25 Power Outputs. (20 Power outs of IEC 320 C13 Sockets &amp; 5 Power outs of 5/15 Amp Sockets), Electronically controlled circuits for Surge &amp; Spike protection, LED readout for the total current being drawn from the channel, 32AMPS MCB, 5 KV AC</p>

		isolated input to Ground & Output to Ground
4.	Doors	<p>The racks must have steel (solid / grill / mesh) front / rear doors and side panels. Racks should NOT have glass doors / panels.</p> <p>Front and Back doors should be perforated with at least 63% or higher perforations.</p> <p>Both the front and rear doors should be designed with quick release hinges allowing for quick and easy detachment without the use of tools.</p>
5.	Fans and Fan Tray	<p>Fan 90CFM 230V AC, 4" dia (4 Nos. per Rack)</p> <p>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 &amp; temperature sensor</p>
6.	Metal	Aluminum extruded profile
7.	Side Panel	Detachable side panels (set of 2 per Rack)

**Note\*** The Successful Bidder may install adequate number as per requirement and design.

### 1.13 Field Junction Box

Sl. NO.	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.

**Note\*** The Successful Bidder may install adequate number as per requirement and design.

### 1.14 Edge Level Switch

Sl. NO.	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, 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
13	Switching Capacity	30 Gbps or better

**Note\*** The Successful Bidder may install adequate number as per requirement and design.

### 1.15 Core Switch

Sl. NO.	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 LACP 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
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	<p>1) Support 802.1Q Tagged VLAN and port based VLANs and Private VLAN</p> <p>2) The switch must support dynamic VLAN Registration or equivalent.</p> <p>3) Dynamic Trucking protocol or equivalent</p>
11.	Protocol and Traffic	<p>1) Network Time Protocol or equivalent Simple Network Time Protocol support</p> <p>2) Switch should support traffic segmentation.</p> <p>3) Traffic classification should be based on user-definable application types: TOS, DSCP, Port based, TCP/UDP port number</p>
12.	Management	<p>1) Switch needs to have a console port for management via a console terminal or PC.</p> <p>2) Must have support SNMP v1, v2 and v3.</p> <p>3) Should support 4 groups of RMON.</p> <p>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</p>
13.	Resiliency	<p>1) Dual load sharing AC and Primary power supplies</p> <p>2) Redundant variable-speed fans</p>

**Note\*** The Successful Bidder may install adequate number as per requirement and design.

### 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

Sl. NO.	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 $\leq 1$ 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.

**Note\*** The Successful Bidder may install adequate number as per requirement and design.

## 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 & ECC collection via RFID Tag. This is achieved using RFID readers and antenna installed on Multi- Lane Free Flow (MLFF) gantries or lanes.

#### Operational Overview:

##### 1. RFID Tag Detection:

- RFID readers emit signals to scan and read the RFID Tag affixed to vehicles.
- The information from the detected RFID Tag 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 RFID Tag 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 RFID Tags simultaneously without errors or conflicts.

5. The RFID Reader shall authenticate and process the information from RFID Tags 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 Toll Plaza Control Centre 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 RFID Tag 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 colour 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

Sl. No.	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 converts 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.
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 95% 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)	<p>The recording and display of information should be detailed on the snapshot of the infracting vehicle as follows:</p> <ul style="list-style-type: none"> <li>a) Computer generated unique ID.</li> <li>b) Date (DD/MM/YYYY)</li> <li>c) Time (HH:MM: SS)</li> <li>d) Equipment ID</li> <li>e) Location ID</li> <li>f) Lane Number of the vehicle</li> <li>g) Time Stamp of RFID Reader at the time VRN captured by ANPR</li> <li>h) Registration Number of vehicle</li> </ul>
13	<p>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.</p> <ul style="list-style-type: none"> <li>a) The system should have secure access mechanism for validation of authorized personnel.</li> <li>b) Deletion or addition and transfer of data should only be permitted to authorized users.</li> <li>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.</li> <li>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.</li> </ul>
14	Mounting structure
a:	<ul style="list-style-type: none"> <li>a) It will be Mounted on the Canopy/Gantry.</li> <li>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.</li> </ul>

Note: The Service Provider may install adequate number as per requirement and design.

## 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 Surveillance Camera

- a) Surveillance Cameras shall be installed on each MLFF gantry, with one camera positioned 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 night-time 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 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 MCD'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 cars, and heavy goods vehicles (HGV). The system must maintain a counting accuracy of 95% 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 2D, 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 ransom ware, advanced threats, phishing emails, and other cyber security 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 Centre (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-Notice 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 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) If required by MCD, the MLFF application shall be integrated with the VAHAN database of NIC through an API to retrieve the any details of vehicles passing through the gantry/lanes based on Vehicle Registration Number (VRN) or Vehicle Identification Number (VIN). This integration shall be implemented at no additional cost to MCD, with MCD providing the necessary support to the bidder for seamless integration with NIC.
- 8) The Contractor shall act only as the collection, technology, operations and enforcement-support contractor of MCD and shall at all times function subject to the Delhi Municipal Corporation Act, 1957, the Delhi Municipal Corporation (Toll Tax) Bye-Laws, 2007, all notifications, directions, court orders and amendments thereto from time to time. The Contractor shall not exercise any sovereign, statutory or coercive power except to the extent expressly permitted by Applicable Law and written directions of the Commissioner.
- 9) 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. 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 Tag for further action.
  - viii. 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.
  - ix. 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.

- 10) 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.
- 11) The Bidder shall set up a Role-Based Access Control system to manage who access field devices, application systems, ensuring all access is logged.
- 12) 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.
- 13) The Bidder shall upgrade all subsystems (devices, applications) - preferably remotely through a secure process without any system downtime.
- 14) The Bidder shall build or present a roadmap for application systems using container-based micro services and open-standard CI/CD deployments.
- 15) The Bidder shall design and maintain a multi-location database with automatic failover and replication, implement API retry for VAHAN, and RFID System/MCD CCH integrations, ensure continuous heartbeat monitoring, and share quarterly failover reports with MCD.
- 16) The Bidder shall provide a northbound interface for the National Command Centre (as and when it is established by MCD) to enable observability and analytics for detecting duplicate tag use, route deviations, and repeated violations.
- 17) The Bidder shall ensure full cyber security compliance, including endpoint protection, TLS encryption, and annual VAPT by a CERT-In-approved agency.
- 18) 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 MCD 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. health status of MLFF equipment, including Gantries and Plaza building.

- b. operational status of lanes.
- c. equipment health status, direction-wise and lane-wise.
- d. traffic and revenue updates incrementally (Daily, Weekly, Monthly)
- e. Traffic and revenue analytics for the last 7 days displayed as bar charts.
- f. status of accepted ,rejected and exempted e-Notice 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-Notice as below:
  - i. **Accepted:** Automatic integration with e-Notice and RFID System / MCD CCH 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-Notice (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:** 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 RFID Tag Classification Report:** Comparison of LiDAR vehicle classification with RFID Tag 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 RFID Tag 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 Notice:** Count of issued, accepted, rejected, and exempted Notice.
- 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. **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. **Cyber security Report:** Logs failed login attempts, potential breaches, and system vulnerabilities.

j. **Exempt Transaction Report** – This report module shall provide the details of vehicles exempted from the system.

k. **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. 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. MLFF through Gantry for each Toll plaza:

Development Phase		BOQ		
S.No.	Description of work	Unit	Qty	Remarks
MLFF Through Gantry with Redundant Gantry				
A	Field Equipment			
1.	RFID Antenna	Nos	1	Per lane
2.	RFID Reader	Nos	2	Per lane
3.	Detector -Radar	Nos	1	1 for 02 lanes or as per solution
4.	Detector – LIDAR	Nos	1	1 for 02 lanes or as per solution
5.	ANPR Camera (Including Housing and Mounting) +Controller+ Pole/Cantilever with all licenses	Nos	2	Per lane (Back & Front)



6.	Surveillance Camera and Mounting + Pole/Canti Lever with all licenses	Nos	1	Per lane
7.	IR Illuminator	Nos	1	Per lane as per solution
8.	Field Junction Box with Surge Protector Device	Nos	1	Per lane
9.	Edge Level switch ( 8 Port or as per requirement)	Nos	1	Per lane
10.	Switch (Layer 3) – 24 Port (HA Mode)	Nos	1	Per Direction
11.	Any additional Component	-	Lumpsum	
<b>B</b>	<b>Control Room Equipment</b>			
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.	Junction Box with 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	
<b>C</b>	<b>Network &amp; Cabling</b>			
1.	Armored OFC		Lumpsum	
2.	Electrical Cable		Lumpsum	
3.	Cat-6 A cable with adequate Cable tray		Lumpsum	
4.	Earthing, Lightning Protection, Network		Lumpsum	

	Surge Protection			
D	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 Per Channel		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	

**Note\*** The Successful Bidder may install adequate number as per requirement and design. For Major Plaza the specs and qty shared above are minimum requirement. For minor plaza, the Bidder may design on its own as per the requirement.

## 2.12 Minimum Manpower Requirements & Qualifications:

a) Manpower Requirement: The bidder 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	Remarks
1.	Project Manager	
2.	CC Transaction Validator/Auditor at CC	-
3.	Field Engineer at Field Location	
4.	Security Guard (It is the responsibility of the Bidder to ensure safety and security of the command control center and associated premise/infrastructure/space allocated for the purpose of the project. Bidder should ensure appropriate deployment of manpower/resources to ensure the same)	
5.	Cleaner	

**Note\*** The Successful Bidder may install adequate number as per requirement and design.

**b) Manpower Requirement & Qualification**

Sl.No.	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.	<b>Security Guard</b> (It is the responsibility of the Bidder to ensure safety and security of the command control center and associated premise/infrastructure/space allocated for the purpose of the project. Bidder 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.	<b>Cleaning Person</b>	
		Minimum 2 cleaner per shift(8hrs) and 2 relievers.

**Note\*** The Successful Bidder may deploy adequate number as per requirement.

**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 Toll Tax & ECC Collection Statement

All report formats shall be finalized in consultation with MCD