

PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.

PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.

25th Floor, Gift One Building, Gift City, Gandhinagar

Phone: 9099029965 & 9717055224, email: itnl.projectbids@itnlindia.com, Web site:
www.itnlindia.com

RFQ for Empanelment of System Integrator(s) for implementation of
Hybrid ETC System at Toll Plazas on National Highways.

Tender Number: **07**

Date: **08-Nov-2021**

Contact person: **Rashid Zeya**

Contact Number: **9099029965 & 9717055224**

PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.

DISCLAIMER

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

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

PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD. also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Applicant upon the statements contained in this RFQ. **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD** may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this RFQ.

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NOTICE INVITING APPLICATIONS

1.1 The complete Bidding Documents can be viewed / downloaded from e-procurement portal
http://www.itnlindia.com/Tenders.aspx?page_ID=37&Sec_ID=36_

1.2 PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD. has adopted the following process (referred to as the "Bidding Process") for empanelment of the Agencies.

- a. Eligibility and qualification of the Bidder will be examined based on the details submitted under Technical Bid with respect to eligibility and qualifications criteria prescribed in this RFQ.
- b. Post evaluation of Technical Bids, PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD. shall announce a list of qualified System Integrators those may be eligible for participating in further financial bidding process for selection of System Integrator for the Implementation of HETC system at NH toll plazas.

1.3 PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD. reserves the right to accept or reject any or all Applications before issuance of letter for shortlisted/Empanelled System Integrator without thereby incurring any financial or other liability to the affected Applicants.

Address for communication:

ELSAMEX MAINTENANCE SERVICES LTD

25th Floor, Gift One Building, Gift City, Gandhinagar

Phone:

email:

web site: www.itnlindia.com

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INSTRUCTIONS TO APPLICANTS

1. Eligibility to Apply: -

Applicants who fulfil the following eligibility criteria are eligible to apply-

Sr. No.	Parameter	Eligibility Conditions
1	Legal Entity	The Sole Bidder /Applicant must be a business entity incorporated in India under the Companies Act, 1956/2013 The Sole Bidder should be registered with GST in India.
2	Net worth	The Sole Bidder/Applicant shall have positive net worth in each of the last three consecutive financial years, the last financial year being taken as financial year ended on 31st March 2021. For this criterion, net-worth of only the bidding entity will be considered. Net-Worth of any parent, subsidiary, associated or other related entity will not be considered.
3	Relevant Experience	The Sole Bidder /Applicant should be an entity operating in the field of Tolling Systems for Highways and should have successfully executed the supply, installation, commission & maintenance of Toll Management System for at least 100 Electronic Toll Collection (ETC) Lanes with RFID transceivers across one or more projects at National Highway of India. AVC Sensors shall be only of Profiler type and AVC accuracy should be min 96% to qualify. The Sole Bidder /Applicant should have successfully implemented HQMS (Head Quarter Monitoring System / Dashboard) for accessing Toll Data /MIS remotely via VPN / Internet Port. The Sole Bidder /Applicant must have fully integrated and automated MS WIM (for all major and NHAI approved WIM OEM, both Load Cell & Vending Plate) in their TMS Software. The Bidder/ Applicant must have successfully implemented Pre-integrated MS WIM as above in at least 5 Toll plazas having min 10 Lanes at each Toll plazas.

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Sr. No.	Parameter	Eligibility Conditions
		The Sole Bidder /Applicant should have executed and successfully implemented ETC / TMS at minimum 5 toll plazas having min 10 lanes at each toll plaza meeting the criteria and specification of Supplementary Agreement & ICD 2.5.
4	Other Parameters	The Sole Bidder /Applicant shall submit an 'Undertaking' for confirming Software Scalability Support for at 10 years from the date of Commissioning/SAT
		The Sole Bidder /Applicant should not have been sanctioned or blacklisted or debarred by any government department/agency/PSU for non-performance or contractual non-compliance in the last 3 years. (Undertaking to be provided by the Authorized Signatory of the Bidder on its letterhead

2. Technical Evaluation Criteria

The eligible bidders will be evaluated under the following Technical Evaluation Criteria:

Sr. No.	Criteria	Sr. No	Sub-Criteria	Maximum Marks
A	Financial Strength	A1	Bidder's Average Annual Turnover over the last 3 Financial years (FY 2018-19, 2019-20 and 2020-21). <ul style="list-style-type: none"> • INR 15 Cr to 30 Cr : 10 Marks • > INR 30 Cr to 50 Cr : 15 Marks • > INR 50 Cr : 20 Marks 	20

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B	Technical Strength	B1	<p>Bidders Experience in implementing & operationalising ETC Lanes using RFID transceivers as per the requirements mandated in the Supplementary Agreement & ICD 2.5</p> <ul style="list-style-type: none"> • 100 to 150 Lanes : 10 Marks • 151 to 250 Lanes : 20 Marks • 251 Lanes : 30 Marks <p>Bidder must provide client's documentary proof in support of experience for successful implementation, commissioning, and operations of toll lanes as per ICD 2.5 and Supplementary Agreement (in the form of copy of work order and completion certificate from its clients indicating the names of projects undertaken, scope of work of each project, name of client, start date, date of completion, value of the project etc.) shall be submitted as part of the eligibility documents.</p>	30
		B2	<p>Overall daily and monthly AVC Accuracy for all Lanes.</p> <ul style="list-style-type: none"> • 97% to 98% : 10 Marks • > 98% : 20 Marks <p>(Note: If AVC Count is less than 99.99%, then no mark will be given and liable to disqualify)</p> <p>Bidder must submit Client's Certificate for Month Wise, Plaza wise Average AVC Accuracy & Count for last 6 months.</p> <p>Bidder must submit detailed description of the AVC System Proposed as a part of the technical submission.</p>	20
		B3	<p>Type of back-end Database</p> <ul style="list-style-type: none"> • MS-SQL : 5 Marks • Oracle : 10 Marks <p>Bidder must mention type of back-end database as a part of their technical submission</p> <p>Database structure, design, security parameters etc will be examined by our Internal IT Team or/ and by an external Expert hired by us for this purpose. Non-Conformity / Non-compliance if any will disqualify the Bidder.</p>	10

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		B4	MS WIM Integration & Automation: Bidder must have fully integrated and automated MS WIM (with our existing OEM Vendor Essay & Ashbee and other leading OEM of WIM, both Load Cell & Vending Plate) in TMS. Only overweighted vehicle must give 'Popup' and stop at booth for penalty in Cash. 0% deviation in Weight captured in WIM indicator and in TMS database.	10
		B5	SWB Integration & Automation: Bidder must have integrated and automated SWB in TMS. 0% deviation in Weight captured in SWB Indicator and in TMS database.	5
		B6	Tag Reading Accuracy: <ul style="list-style-type: none"> • Tag Reading & Acceptance Accuracy: > 99.9% • Cross & Back Reading : < 0.1 % 	5
		Total		100

- Only Bidders (System Instigator) scoring at least **Total Score of 80** will be considered as responsive and are eligible for the Financial Bid.
- The Bidder must provide all supporting documents specified above in support of each technical requirement on respective letter head with authorized Signature.
- The Bidder shall also submit technical details of the proposed Toll Management system/ Equipment conforming to Supplementary Agreement and as per BOQ mentioned in the bid documents along with its datasheets as a part of the technical submission.
- All data, technical detail, datasheets, certificates etc. submitted by Bidders/ applicants shall be verified by our Technical Team or by an external Agencies hired by us for this purpose if necessary.

COST OF BIDDING:

The Applicant shall bear all costs associated with the preparation and submission of the Application and **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.** will in no case, be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

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CLARIFICATION ON RFQ

- a) All Applicants are required to go through the RFQ document and submit their queries/ clarifications to **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.** at [email: itnl.projectbids@itnlindia.com](mailto:itnl.projectbids@itnlindia.com), or in writing within **10-Nov-21** (shall be received by **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.**) from the date of publication of this RFQ. **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.** will neither acknowledge nor respond to any queries received after this date.
- b) **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.** will publish the clarifications to the Applicants' queries on e-tender portal and **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.** website only. No separate information or communication will be sent to any Applicant in this regard.
- c) Save and except as provided in this RFQ, ELSAMEX shall not entertain any correspondence with any Applicant in relation to acceptance or rejection of any Application.

AMENDMENT OF RFQ

At any time prior to the closure of time for submission of Applications, **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.**, for any reason, whether at its own initiative or in response to the clarifications requested by prospective Applicants may modify the RFQ by issuing amendment(s) or Corrigendum.

APPLICATION VALIDITY

- a) Applications shall remain valid for a period of 120 days from the last date of Application submission. Any Application valid for a shorter period shall be rejected as non-responsive.
- b) In exceptional circumstances, **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.** may solicit Applicant's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing; however, no modification to such Application shall be permitted.

KEY DATES

Sl. No.	Event Description	Date
1	Invitation of RFQ (NIT)	08-11-2021
2	Last date for receiving queries	13-11-2021

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3	PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.'s response to queries latest by	15-11-2021
4	Application Due Date	18-11-2021 (Up to 12:00 Hrs. IST)
5	Submission of documents	20-11-2021 (Up to 15:30 Hrs. IST)
6	Declaration eligible / qualified Applicants	Within 15 days from Application Due Date

EXAMINATION AND EVALUATION OF APPLICATIONS

- a) Any time during the process of evaluation, **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.** may seek for clarifications from any or all Applicants. Failure of any Applicant to provide the required clarifications within the stipulated timeline may result in rejection of its application, at the sole discretion of **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.**.
- b) **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.** reserves the right to reject any Application which is non-responsive and no request for alteration, modification, substitution, or withdrawal shall be entertained by **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.** in respect thereof.
- c) Evaluation of Technical Proposals by **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.** shall not be questioned by any of the Applicants. **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.** may ask Applicant(s) for additional information.

PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.'S RIGHT TO REJECT ANY OR ALL APPLICATIONS

Notwithstanding anything contained herein, **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.** reserves the right to reject any Application, and to annul the bidding process and reject all Applications at any time before signing of Contract Agreement, without thereby incurring any liability to the affected Applicant(s) or any obligation to inform the affected Applicant(s) of the grounds for such decision.

CONFIDENTIALITY

The Applicant shall keep confidential any information related to this RFQ with the same degree of care as it would treat its own confidential information. The Applicants shall note that the confidential information will be used only for the purposes of this tender and shall not be disclosed to any third party for any reason whatsoever.

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CORRUPT OR FRAUDULENT PRACTICES

PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD. will reject a proposal for award and appropriate the Performance Security, if it determines that the Applicant recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.

PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD. will declare the Applicant ineligible, either indefinitely or for a stated period of time, to be awarded a contract by **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.** if it at any time determines that the Applicant has engaged in corrupt or fraudulent practices in competing for the contract, or during execution.

“Corrupt practice” means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official or employee of **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.** in the procurement process or in Contract execution.

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

MISCELLANEOUS

PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD., in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, to:

- a) Suspend and/ or cancel the Application Process and/ or amend and/ or supplement the Bidding Process or modify the dates or other terms and conditions relating thereto.
- b) Consult with any Applicant in order to receive clarification or further information.
- c) Retain any information and/ or evidence submitted to **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.** by, on behalf of, and/ or in relation to any Applicant; and/ or

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- d) Independently verify, disqualify, reject and/ or accept any or all submissions or other information and/ or evidence submitted by or on behalf of any Applicant.
- e) It shall be deemed that by submitting the Application, the Applicant agrees and releases **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.**, its employees, agents and advisers, irrevocably, unconditionally, fully and finally from any and all liability for claims, losses, damages, costs, expenses or liabilities in any way related to or arising from the exercise of any rights and/ or performance of any obligations hereunder, pursuant hereto and/ or in connection with the Bidding Process and waives, to the fullest extent permitted by applicable laws, any and all rights and/ or claims it may have in this respect, whether actual or contingent, whether present or in future.
- f) If the Applicant has committed a transgression under this RFQ such as to put its reliability or credibility into question, **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.** shall be entitled to blacklist and debar such Applicant for any future tenders/contract award process in its sole and absolute discretion.

Detailed Scope of Work:

The subsequent sections capture details regarding potential work that may be awarded to shortlisted Applicants by **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.**. **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.** reserves the right to reduce/add details to the scope to better satisfy the requirements.

SPECIAL CONDITIONS OF THE BID

The Scope of Works to be executed under this Bids includes Design, Supply, Installation and Commissioning of Complete Toll System as per Specifications and Standards provided in **Supplementary Agreement (NHAI) / ICD2.5 or latest notices / circulars and the Specifications and Standards applicable to the Concession Agreement or any latest notification / circular published by NHAI / IHMCL / Instructions by the client so as to meet the RFP Specifications and the minimum quantities specified in the Bill of Quantities.**

The Toll Collection System as per the Scope of works defined herein shall be installed at the Site with all necessary services to be provided during the currency of this Bids. Presently there are two Toll Plaza's being operated at the Project Site at the following locations.

1. Warwade- Toll Plaza at Km 178+570 equipped with Fourteen (14) Lanes
2. Sawleshwar - Toll Plaza at Km 229+350 equipped with Fourteen (14) Lanes

The System integrator shall carry out the following works as part of the Scope of works to be executed by the System integrator as per Bid

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The System integrator shall provide a fool proof system integrated software for checking and preventing overloading of vehicles at toll plaza. For this purpose, weigh in motion systems (MSWIM- EASSEA) at each toll lane are installed . Static weigh bridge is also installed by the concessionaire after the toll barriers for each direction of travel and the system should be having provisions to integrate the Static Weigh bridge to the Toll Lanes and the back office.

Any civil work related to the installation of the Toll System shall be included in the scope of works of the System Integrator.

Any item not considered in the BOQ but is required to make the system functional as per the requirements of the Concession Agreement and also to attain the optimum levels shall be deemed as the part of scope of works and supply by the System Integrator.

The toll plaza shall have toll audit system and fraud protection measures. The operations for toll collection, supervision, auditing and money handling shall be done through the Toll Management System to handle the operations in an efficient manner. The TMS shall generate the record of trail of events affecting the toll collection for future audit i.e. Log of each login/ logoff, lane / system shutdown, Maintenance Mode logins for performing preventive maintenance, incident logs of all events including all key presses in the lane keyboard, record of all TMS hardware status at each transaction or in idle mode. The TMS should keep track of all transactions / vital tables upload and download from the lanes to the server (to and fro) and display live on the dashboard application. The TMS should allow to generate all types of audit trail reports including AVC performance, violations, TC performance reports etc. any report which may not be listed above but is required to track each hardware (connected with TLC / AVC) / transaction status from lane to the server (Application / Db / Video) / backoffice etc.

The System integrator shall select / integrate the Toll hardware from the list of vendors provided at Annex... in consultation with the Concessionaire. Prior approval shall be taken from the Concessionaire, if the System integrator wishes to select any vendor outside the list which can provide value added services to the Concessionaire.

The hardware selected from the list of vendors shall be the state of the art equipment and shall have the support period for the entire life cycle of the project from the date of installation along with the spare availability till that period.

In any circumstance, if the said hardware becomes obsolete before the agreed lifecycle, the System integrator shall integrate the next available upgrade to the existing solution without compromising the stability of the system as per the agreed standards but not limited to the URS or any addendum issued on the later date. Hardware cost shall be chargeable after DLP. Software shall be free of cost including all its upgrades uptill the project lifecycle i.e., 7 years from the date of commissioning.

The System integrator shall engage the Concessionaire's technical team along with their experts for the installation of the Toll equipment.

The System integrator shall impart the full training to the Concessionaire's staff available at site during installation for installation, configuration, troubleshooting and maintenance aspects for the entire Tolling Solution along with Hardware and Software during the defect liability period.

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The training shall not be rendered complete till the time the Concessionaire's technical team is fully confident to handle all the aspects of Hardware and Software installation, configuration, troubleshooting and maintenance till the Lane, Application and Database levels. There shall be few aspects which shall not be under the training scope from the System integrator's side as they would be confidential in nature.

The System integrator shall continue providing the software support for the entire lifecycle of the project provided AMC contract is given to them.

The software support can be done through remote maintenance by the System integrator's designated competent personal only after taking due approval from the Concessionaire's designated representative on-site on case to case basis.

The System integrator shall mandatorily visit the site once in a year for the period of two weeks to do a full site inspection with respect to the installed hardware and software and resolve all the possible defects arisen due to any fault on account of Concessionaire or System integrator or possible end of life on the equipment. The period of stay can be extended as on need basis provided AMC contract is given to them.

If the System integrator feels that the visit has to be more frequent, then it can be discussed and mutually agreed.

During the complete support cycle, the System integrator shall provide support with the agreed timelines as per the defined SLA, which shall become the part of this contract and signed.

The System integrator is liable to provide all the software and hardware upgrades for the entire lifecycle of the project for enhancing the performance of the Hardware and Software and also liable to prevent the Server / Application and lanes from any possible internal or external threats like viruses, malwares, Trojan horses, hacking attempts etc. Hardware upgrades shall be only for existing equipment and no new equipment has been considered under this scope.

The System integrator shall certify that the computer used for performing the remote maintenance tasks is not connected to their internal network and free from all viruses, malwares, Trojan horses etc.

The System integrator shall establish the secured VPN tunnel to perform any maintenance tasks on our network with due permission from our designated representative on-site.

- System integrator shall provide necessary software licenses including those for operating Toll systems for effective system operations.
- Concessionaire shall be responsible for civil works design and construction of the Toll Control Rooms, including but not limited to control rooms and ducts.
- System integrator shall provide required Accessories for connectivity of equipments in the Toll Control room, which includes related cables, Cable Trays and there installation as stated in BOQ and agree.
- For installation and operations of Toll equipments, Concessionaire shall be responsible for the following:
 - Electrical and Mechanical work, inter alias Toll Control Rooms, Ventilation, Air Conditioning, High mast lighting, Plaza general lighting, UPS, Diesel Generator etc.

Supply, Installation & Integration

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- i)** The service provider shall supply, install, integrate, test, commission and configure all required hardware & software systems & sub-systems for Hybrid ETC and Toll Management System at the designated Toll Plazas upon instructions from **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.**
- ii)** Technical Specification” shall be meet to the relevant technical specifications applicable to the Supplementary Agreement (NHAI) with respect to the design, supply, installation and commissioning of the Toll Plazas and Toll Management/ Toll Collection System.
- iii)** The System integrator undertakes and shall ensure that all the systems and processes of the system are comprehensively and fully auditable. In case any process/operation is found to be not auditable or inadequately auditable, the same shall be notified to the System integrator, who shall carryout all that is necessary to ensure compliance with the audit ability requirement
- iv)** The period for completion of the Work in all respects shall be 45 days from the date of signing of Agreement
- v)** Service provider shall ensure to supply items as per BOQ items at toll plazas as per direction from **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.** and get them verified by CLIENT/PIU during Site Acceptance Test. Prior to site acceptance test, the responsibility of providing storage and security for supplied material shall be in the scope of service provider.
- vi)** Service Provider shall be fully responsible for the safety of equipment which shall be delivered or installed at site before commencing SAT by respective PIU. Prior to SAT, if any equipment/sub-equipment/consumable gets non- functional/damaged due to any reason whatsoever, excluding scenarios covered under force majeure, then service provider will be liable for replacing of damaged item without imposing any extra charges to **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.**
- vii)** For each toll plaza, **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.** shall invite bids from the shortlisted Service Provider(s) to commence work on the specified Toll Plazas as per instructions/timelines received from NHAI for installation of Hybrid ETC System and Toll Management System.
- viii)** Service provider shall complete the Installation, Integration, Commissioning of Hybrid ETC system and sub systems as specified in Annexure-A at specified toll plazas within 45 days of the receipt of notification. The service provider shall be responsible for system integration so that the Hybrid ETC System and Toll Management System including the sub-system(s) work coherently and are able to exchange data/information electronically, among themselves (if applicable), as well as

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with the acquirer bank and central clearing house for ETC program without any financial implication to Toll Operating Agency and CLIENT/NHAI.

- ix)** Service provider shall ensure to complete all pre-requisite minor civil works i.e. pole foundation/ sensor foundation/ cabling chamber/lane ducting, plaza to Lane connectivity, etc. pertaining to hybrid ETC system and Toll Management System. Major civil works i.e. PQC work, toll plaza canopy, permanent toll booth structure, Plaza building, Median Extension etc. are not in the scope of service provider.
- x)** Service provide shall provide and install valid antivirus and operating System licenses at lanes as well as plaza level in the system highlighted in BOQ items of this document throughout the period of contract Agreement.
- xi)** Service Provider shall implement online equipment performance monitoring tool for calculating uptime of equipment and provide necessary access to CLIENT/NHAI for each toll plaza.
- xii)** Service Provider shall provide requisite support for equipment integration in case ETC/TMS system software is changed by **PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.**. The integration of equipment with new TMS software shall be provided by Service Provider without any cost to CLIENT/NHAI, whatsoever.
- xiii)** Service Provider shall be fully responsible in case of any rejection of ETC transactions due to any issue in HETC system and internet service and all such losses of ETC Transactions to Toll Agency shall be borne by Service Provider.
- xiv)** Service Provider shall ensure to install Servo Stabilizer/UPS at each toll plaza to protect equipment from unstable voltage and post installation of Servo Stabilizer, the safety of equipment from unstable voltage shall be under the liability of Service Provider.
- xv)** ETC Transaction reconciliation should be provided by TMS-System and final figure of Traffic & revenue should be matched with Portal as well as bank settlement. Each and every transaction history should be captured and display in report as well as settlement against AVC/ SVC/Mapper Class, in case of violation Class, Backlist, Duplicate & Mal-tag. Auto process of violation transaction mechanism should be available.

Defect Liability Period (DLP)-Services to be rendered during DLP.

The Defect Liability Period (DLP) for the complete tolling solution shall be Twelve (12) months starting from the first ticket printing date from the equipment for commercial operations, the confirmation for which shall be given to the System integrator in writing by the Concessionaire. For avoidance of doubt, the date of DLP shall start from the date all lanes are made operational and are ready for handover, partial handover is not allowed for any Toll Plaza.

This bid is being made with the understanding that the Defect Liability Period for all Hardware and Software is Twelve (12) months and lifecycle of the system is Seven (7) years. The System integrator will design,

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integrate, supply, install, commission, and impart training to the designated personnel of the Concessionaire in such a manner that the Concessionaire shall be capable of carrying out any hardware and software installations and maintenance till the end of the project lifecycle. However, training shall be given initially when the system gets installed and commissioned and thereafter it shall be continued at the discretion of the Concessionaire at mutually agreed charges.

The System integrator after the DLP, will support the Concessionaire with anything related to software design, integration, maintenance, trouble shooting etc. and all the hardware support will be undertaken directly by Concessionaire's technical staff.

The System integrator shall provide all kinds of software support for the entire project lifecycle, provided the AMC contract has been given to the System integrator.

The System integrator shall provide the necessary upgrades of the software to rectify any kind of known bugs / defects in the Toll Management Software including the base software like operating systems etc and data protection software like anti-virus.

The System integrator shall integrate the latest hardware available in the local market in India or abroad on the Concessionaire's instruction without compromising on the specifications & standards, quality of works and functionality of the software.

Whenever found necessary by the Concessionaire, the System integrator shall re-train the Concessionaire's technical staff on the existing or the newly added hardware on all installation, maintenance and troubleshooting aspects through the available System integrator's technical staff at site.

Statutory Clearances

List of clearances to be obtained by the Concessionaire and the System integrator are given below. It may be noted that the list below may not be exhaustive and in case any additional clearances are required, the same shall be procured by the System integrator , unless otherwise specified in the Law / guidelines of statutory agencies.

- a) Concessionaire's Responsibility: Permission for shifting of utilities; any legal clearance required for execution of project as per the Concession Agreement.
- b) System integrator's Responsibility: Any clearance/s that is not specifically included in Concessionaire's list and may be required according to prudent utility practices or instructed by Engineer except physical removal of any civil/electrical work/machinery.

Revision of Quality Control Plan

The Concessionaire/Engineer shall instruct the System integrator to revise and/or resubmit his Quality Control Plan, if required before giving approval. The System integrator shall implement any required changes to improve the Quality Control Plan. The approval of the Concessionaire/Engineer shall not absolve.

Measuring / Monitoring Equipments

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The System integrator's shall ensure properly calibrated and functional measuring/ monitoring equipment, to the satisfaction of the Concessionaire/Engineer.

System Uptime

During the Defect Liability Period, the System integrator has to maintain more than 99% uptime overall and for each toll lane every month for the entire Toll Systems.

Document & Training

The System integrator shall supply the following sets of documents. All documents shall be in English language. An index of all hand books, drawing etc. shall be available with each set:

- a. Equipment layout drawings
- b. Cabling and wiring diagrams
- c. Overall system specification and description of hardware, software, explaining facilities, functions and principles
- d. Installation instructions and testing procedures
- e. Fault location/troubleshooting/Maintenance instructions
- f. Operation Manual
- g. As Built Drawings of the complete system in detail
- h. Hardware and Software Installation Manuals
- i. Hardware and Software Configuration Manuals
- j. Hardware and Software Troubleshooting Manuals
- k. Maintenance Manuals with defined frequencies for each Hardware and Software component
- l. Disaster Recovery Process
- m. Backup Process
- n. Data Archiving and deletion Process
- o. Recovery of Archived and Deleted Data

All the above documents are required before the commissioning and shall be supplied with colour prints in 3 (Three) separate sets.

Documents to be Submitted

All drawings and documents to be submitted by the System integrator shall be in THREE sets duly placed in plastic folders/laminated and in CDs/DVDs. The quantity of the documentation shall be assessed on the type and variety of the systems used and not on the number of such modules used. Approval of the Concessionaire/Engineer shall be obtained for the same.

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Other Specifications

- a) System integrator shall be responsible for the Quality of the material used for the throughout the defect liability period.
- b) System integrator shall provide necessary brochures and technical description and methodology of the proposed system in support of their technical Specifications.
- c) System integrator shall have to submit the relevant Manufacturer Certificate for the material incorporated in the work as per relevant Codal Provisions.

The System integrator shall submit original invoices for all the equipment which is bought for our project with complete serial nos. and warranty certificates for each equipment. The material delivery inspection shall not be rendered complete without the submission of these invoices.

All software should be licensed in the client's name and no workstation / system / server shall be installed with trial / un-licensed copies of the software. All licenses shall be handed over to the client before raising the invoice.

Guarantees

Guarantee required to be provided by the System Integrator includes

- a) Engineering Guarantee
- b) Workmanship Guarantee
- c) Performance Guarantee.

Engineering Guarantee

Since the detailed design of the Tolling System is in the System integrator 's Scope, it is the prime responsibility of the System integrator to carryout sound engineering as per ISO standards, CE norms and good engineering practice. In case of any errors/omissions/ left outs which may call for reengineering and result in new requirements for equipment, materials, the same will have to be carried by the System integrator within the Contractual period without any extra cost to the Concessionaire.

Workmanship Guarantee

Workmanship for manufacturing, assembly, installation shall be the responsibility of the System integrator. The same shall be carried out in line with stipulations laid in Contract documents. Any defects/rectification, if required, due to poor workmanship shall be made good without any extra cost and time extension to the Concessionaire or shall be replaced by new equipment. The System integrator shall guarantee and accept full responsibility for all components/ parts in System integrator's scope:

- In regard to selection
- Material as per Contract and Site requirements Acceptable /fabrication /manufacturing workmanship
- Also, the workmanship shall be entrusted to highly experienced and reliable party in that field.

Performance Guarantee

System integrator shall be responsible for the Tolling System Performance Guarantee in terms of specified

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capacities, ratings, performance criteria, efficiencies etc. for the individual equipment as well as the complete system. Under performance of any equipment shall have to be made good by replacement, repair, and alteration of defective equipment/part including its transportation, re-designing, and reinstallation at no additional cost or time to the Concessionaire by the System integrator.

The System integrator should select equipment considering economical power consumption.

The AVC accuracy performance tests shall be started three months from the date of issuance of the Certificate by the Engineer evidencing the date on which the system became stable and operational as per criteria specified in technical specifications.

The test shall be carried out for a period of three days during which time the accuracy of the AVC shall be determined and the AVC shall be deemed to have passed the specified criteria if the average of the AVC results over the three month period are more than 98.0% accurate. AVC performance tests shall take into account any abnormal alteration in the profile of the vehicle.

System integrator shall submit to the Engineer a list of test procedures and the frequencies thereof required for validating and establishing the performance criteria specified in the Contract 30 days prior to performing the tests. The Engineer may at its discretion modify/amend the test criteria and/or add more tests so as to establish the accuracy level of the Tolling Equipment including AVC's.

In case the actual performance /efficiency/accuracy of any equipment is determined to be (less than the specified value, then the System integrator shall carryout all the repairs/replacement/modifications required to bring the equipment/system in exact conformity with the specified performance criteria without any extra cost to the client.

Penalties

System integrator will provide the milestone and timeline to complete installation witing 45 Days .

System integrator agrees to adhere Penalties (As they provided) if they did not follow Timeline.

The system integrator selection is based on its past performance and is expected to comply with all the agreed timelines during the time of bidding and subsequent discussions.

To summarize, the system integrator agrees to adhere to the timelines as per the milestones specified for different activities in various sections of this bid.

The system integrator shall be charged .5% of the total contract value for SITC on default as per activity and it is up to a maximum of 10% of the total contract value.

The material delivery will be rejected and ABG will be forfeited, if the supplier does not comply with the specifications already mentioned in the contract.

If the supplier at any stage refuses to cooperate with the client's TMS development team for integration of the already installed hardware and creates a dispute.

If the resolution of defects is not provided in a timely manner as per this contract terms after successful commissioning.

Default in any terms of during DLP and AMC.

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Payment Timelines:

Milestone	Activity	Timeline	Payment Terms
I	Submission of Advance Bank Guarantee	Before the release of 30% Advance	20% Advance of base price of material with Civil Works
II	Successful FAT	3 Weeks after making necessary changes suggested during the FAT	10% Advance of base price of material with Civil works.
III	Upon Delivery 100% of Material at site	2 weeks after raising the invoice	50% of base price of material+Freight Charges+GST upon submission of tax Invoice.
IV	Successful SAT and Commissioning	2 weeks after delivery of material at site	10% after successful SAT and Commissioning of all lanes Plaza wise.
V	Submission of Performance Bank Guarantee (PBG) 25% of the Contract Value valid till the entire AMC period.	After commissioning and upon submission of PBG starting from the DLP and valid till the end of AMC period.	10 % after close all punch point of SAT & Commissioning.

TMS-BOQ Item

A	Lane Level Equipment	WGEL -Qty.	Equipment/Software Specification
1	Toll Lane Controller	28	Industrial Grade Mother Board-i-5,8GB DDR-04, 1 TB, Win-10-64- Bit, Dual redundant power supply, Surge protector, Original Intel NUC Fanless & meet specification of Supplementary Agreement as well as ICD-2.5.
2	AVC System including Independent AVC Computer	28	Make- BEA, Laser based AVC Profiler Sensors with independent AVC Processor, SSD Technology with Linux OS (software customization option should be available as per Indian- vehicle Size standard)
3	Automatic Barrier with Loop	28	Make- Wejoin/equivalent (Meet specification of supplementary agreement as well as ICD-2.5.)
4	Traffic Light - (Superior Design)	28	Make- Envoys/Photonplay/Traffitronics /Crystal/& meet specification of supplementary agreement as well as ICD-2.5.

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5	Overhead Lane Signal- (Superior Design)	28	Make- Envoys/Photonplay/Traffitronics /Crystal & meet specification of supplementary agreement as well as ICD-2.5.
6	Customized Keyboard	28	Make- Possiflex (Meet specification of supplementary agreement as well as ICD-2.5), user friendly layout and special bigger keys for quick and easy operations.
7	User Fare Display (Canopy Based & Superior Design)	28	Make- Envoys/Photonplay/Traffitronics /Crystal (meet specification of supplementary agreement as well as ICD-2.5)
8	Violation alarm With hooter , Rotating light and panic switch	28	Make- Brisk or IDEAL (meet specification of supplementary agreement as well as ICD-2.5)
9	TFT Monitor	28	Make- LG/Samsung/equivalent (meet specification of supplementary agreement as well as ICD-2.5)
10	Thermal Receipt Printer	28	Make- Epson- with latest Model (meet specification of supplementary agreement as well as ICD-2.5)
11	RFID Reader with Antenna & Mounting Accessories.	28	Make-Zebra with latest Model- (Meet specification of supplementary agreement as well as ICD-2.5)
12	Lane Intercom Slave Unit	28	Make- AI-Phone (meet specification of supplementary agreement as well as ICD-2.5)
13	10 KVA UPS for Lane (04 hours Backup)	4	Make- APC / Emmerson (meet specification of supplementary agreement as well as ICD-2.5) (hot standby ups configuration)
B	PLAZA EQUIPMENT		
1	24 Port Network Switch (L3)	4	Make- Cisco (meet specification of supplementary agreement as well as ICD-2.5)
2	Intercom Master Unit (20 Channel)	2	Make- Aiphone (meet specification of supplementary agreement as well as ICD-2.5)
3	TMS Server with Hot standby Config.	2	Make- HP/Dell (meet specification of supplementary agreement as well as ICD-2.5)
4	Database Licence	4	Make- Oracle Std.-12C with 25 User licenses Per Plaza (meet specification of supplementary agreement as well as ICD-2.5)
5	Plaza Monitoring Camera (PTZ Camera)	2	Make-Hikvision/ Equivalent (meet specification of

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			supplementary agreement as well as ICD-2.5)
6	55" LED For Lane & Plaza Monitoring	2	Make- Samsung/equivalent (meet specification of supplementary agreement as well as ICD-2.5)
7	Desktop System for Cashup, LSDU, Admin, POS, Reports & Validation	12	Make- HP/Dell-i5, 08-GB,1-TB, Win-10 64 Bit, 18" TFT and Keyboard-Mouse (meet specification of supplementary agreement as well as ICD-2.5)
C	Software Part		
1	Lane Software	28	Meet specification of supplementary agreement as well as ICD-2.5
2	Plaza Software	2	Meet specification of supplementary agreement as well as ICD-2.5
3	Antivirus	60	Make- Quick-heal Admin
D	SPARE		
1	RFID Reader with Antenna	4	Make-Zebra with latest Model- (Meet specification of supplementary agreement as well as ICD-2.5)
2	Toll Lane Controller	4	Industrial Grade Mother Board- i-5,8GB DDR-04, 1 TB, Win-10-64- Bit, Dual redundant power supply, Surge protector, Original Intel NUC Fanless & meet specification of Supplementary Agreement as well as ICD-2.5.
3	AVC System including Independent AVC Computer	4	Make- BEA, Laser based AVC Profiler Sensors with independent AVC Processor, SSD Technology with Linux OS (software customization option should be available as per Indian- vehicle Size standard)
4	User Fare Display (Canopy Based & Superior Design)	4	Make- Envoys/Photonplay/Traffitronic s/Crystal & meet specification of supplementary agreement as well as ICD-2.5.
5	Overhead Lane Signal- (Superior Design)	4	Make- Envoys/Photonplay/Traffitronic s/Crystal & meet specification

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			of supplementary agreement as well as ICD-2.5.
6	Traffic Light	4	Make- Envoys/Photonplay/Traffitronic s/Crystal (meet specification of supplementary agreement as well as ICD-2.5)
7	ALB with Loop	4	Make- Wejoin/equivalent (Meet specification of supplementary agreement as well as ICD-2.5.)
8	Incident Capture Camera	4	Make- Hikvision (meet specification of supplementary agreement as well as ICD-2.5)
9	IR Lane Surveillance Camera	4	Make- Hikvision (meet specification of supplementary agreement as well as ICD-2.5)
10	TFT Monitor	4	Make- LG/Samsung/equivalent (meet specification of supplementary agreement as well as ICD-2.5)
11	Customized Keyboard	4	Make- Possiflex (Meet specification of supplementary agreement as well as ICD-2.5), user friendly layout and special bigger keys for quick and easy operations.
12	Thermal Receipt Printer	4	Make- Epson- with latest Model (meet specification of supplementary agreement as well as ICD-2.5)
13	Violation alarm With hooter , Rotating light and panic switch	4	Make- Brisk or IDEAL (meet specification of supplementary agreement as well as ICD-2.5)
14	Intercom Slave unit	4	Make- AI-Phone (meet specification of supplementary agreement as well as ICD-2.5)
E	Cabling/ Networking		
1	Cabling/ Networking	28	Make- Reputed (Agency shall replace old cables of equipment power, data and networking. For connectivity between toll lanes and server room, armoured OFC is proposed) and other networking shall be done as per structured cabling work for easy maintenance.)

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2	Electrical Cabling & DB Box, MCB etc. for TMS equipment and 10 Kva UPS	28	Make- Reputed & as per industrial practice.
F	Project Management Services		
1	Design/Documentation & Project management	2	As per industrial practice.
2	FAT for 03 Person	1	As per industrial practice
G	Installation/Testing/Commissioning		
1	Hardware	28	The Hardware of the agency should be stable, user friendly and is being used by many infrastructure major companies like L&T IDPL, Oriental Structural Engineers, GMR, MEP Infrastructure Developers, Essel Infra Projects, IJM India Infrastructure, etc. As per industrial practice & meet specification of supplementary agreement as well as ICD-2.5
2	Software	28	The Software of the agency should be stable, user friendly and is being used by many infrastructure major companies like L&T IDPL, Oriental Structural Engineers, GMR, MEP Infrastructure Developers, Essel Infra Projects, IJM India Infrastructure, etc. As per industrial practice & meet specification of supplementary agreement as well as ICD-2.5
H	Integration with 3rd Party Equipment		
1	MSWIM Integration	28	Overload penalty amount should be collected from TMS-Lane application on both Case i.e., Cash & ETC transaction. In ETC transaction Scenario Weight calculation should be link with TAG Class and weight pop should be display on lane application without any TC's Input. TMS system Should be capable to integration of all types MSWIM, SSWIM along with various WIM's make i.e., Essae, Viswakarma, Eagle,

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			Ashbee etc. & meet specification of supplementary agreement as well as ICD-2.5
2	SWB Integration	4	Fully integrated with Lane Application and every SWBs transaction details Should be reflect with TMS data base & meet specification of supplementary agreement as well as ICD-2.5.
I	CIVIL WORKS		
1	Civil Work of TMS Equipments	2	As per industrial practice & meet specification of supplementary agreement as well as ICD-2.5
J	Transportation & Insurance		
1	Transportation, Insurance (till commissioning), Packing and forwarding, Administrative expenses	2	As per industrial practice & meet specification of supplementary agreement as well as ICD-2.5
K	DLP & Comprehensive AMC (with 03 Manpower)		
1	1st Year DLP Charges with 3 Manpower at site level support	2	As per industrial practice & adhere our SLA.
2	Resident Engineer Charges (For One Year) 3 Resources per plaza	6	Engineer should be B.E & B.Tech with 03 years toll Experience.
3	Comprehensive AMC 1st Year after 1 year DLP (On- Site 03 Eng.)	2	As per industrial practice & adhere our SLA.
4	Resident Engineer Charges (For Two Year) 3 Resources per plaza	6	Engineer should be B. E, B. Tech & Diploma. 03 year Work experience of TMS-Systems for B.E & B.Tech and 05 year for Diploma.
5	Comprehensive AMC 2nd Year after 1 year DLP (On Site 03 Engineer)	2	As per industrial practice & adhere our SLA.
6	Resident Engineer Charges (For Three Year) 3 Resources per plaza	6	Engineer should be B. E, B. Tech & Diploma. 03 year Work experience of TMS-Systems for B.E & B.Tech and 05 year for Diploma.
7	Comprehensive AMC 3rd Year after 1 year DLP (On Site 03 Engineers)	2	As per industrial practice & adhere our SLA.
8	Resident Engineer Charges (For Four Year) 3 Resources per plaza	6	Engineer should be B. E, B. Tech & Diploma. 03 year Work experience of TMS-Systems for B.E & B.Tech and 05 year for Diploma.

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9	Comprehensive AMC 4th Year after 1 year DLP	2	As per industrial practice & adhere our SLA.
10	Resident Engineer Charges (For Five Year) 3 Resources per plaza	6	Engineer should be B. E, B. Tech & Diploma. 03 year Work experience of TMS-Systems for B.E & B.Tech and 05 year for Diploma.

** Equipment's Make & model as mentioned in above BoQ List are freezed.*

** All hardware & Software specification should be meet with supplementary agreement as well as ICD-2.5.*

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Service Level Agreement

This Service Level Agreement is made and entered on this day off _____ 2021 between M/s xxx, a company incorporated under Companies Act 1956, having its registered Office at Pune, thereafter referred as VENDOR) which has refurbished the fully auditable toll management systems to **M/s PUNE SOLAPUR ROAD DEVELOPMENT COMPANY LTD.**, a company incorporated under the Companies Act 1956 (hereafter referred as CLIENT) as per BOQ , Serviceable equipment of the existing tolling for toll plazas at Plaza 1: Warwade (In the state of Maharashtra) and Plaza 2: Saleswar (In the state of Maharashtra).

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1. Scope and Service

VENDOR will provide one stop solution to CLIENT for maintenance & support services of Hardware & Software for complete Toll systems and sub systems installed by the VENDOR, except Weigh In Motion & Static Weigh Bridge at the Toll Plazas of the CLIENT located on i.e. **Plaza 1: Warwade Toll Plaza** and **Plaza 2: Sawleshwar Toll Plaza**. To ensure 99% uptime of individual lanes and back-office Software and hardware including Servers and network as agreed during the time of refurbishment of the Toll Systems to the CLIENT.

VENDOR will ensure that sufficient suitably trained staff (approved by the concessionaire before deployment) are on site for the warranty/ defect liability periodic maintenance and shall ensure 24x7 physical presences during all days (7 days in a week) for support, “round the clock physical presence during all 7 days in a week for support at site.”

There shall be an attendance register for Vendor Staff and shall be strictly followed. There shall be penalty for not providing onsite physical support 24 X 7.

Approval of Site Technical Head is required before deployment of manpower at site. VENDOR will provide an ORG Chart with all staff to be deployed.

Vendor must ensure that the site deployed staff is sufficient suitable trained and if required **PSRDCL** to interview and assess the candidate’s competency level and recommend to be deployed / removed at / from site respectively. The personnel deployed should not be a fresher and should possess relevant experience. Approval of site head is required before any deployment at site.

The following aspects of the maintenance for the DLP/AMC period shall be defined. VENDOR has already provided Maintenance Manual, Specification Manual and User Manual at the time of signing of this documents, the manual should be complete and in line with the equipment being provided.

All faulty equipment handed over for repair / replacements should be returned back before the start of AMC.

Vendor to take cognizance of all the verbal and written complaints (email) given to them from time to time.

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1.1. Preventive Maintenance

Preventive Maintenance is defined as any works carried out in the lane area, plaza area, POS area that is continuous and planned in nature. The VENDOR shall at the beginning of SLA contract submit the yearly plan of PM and shall further provide a date wise schedule of PM each month with tentative time period required for each set of activity in the schedule, no later than the 3rd working day provide a Weekly Preventive Maintenance Schedule to the Systems Manager, a copy shall be sent to the Sr. Manager/AGM/GM-Toll Systems as well. The schedule shall be required to be signed as the activities are executed by the Maintenance Engineer and the Systems Manager / Site In-Charge of the VENDOR and an approval shall be sought by the site Technical In charge of the concessionaire along with the Plaza Manager / Project Head.

The intent of the Preventive Maintenance is to arrest the issue before it is beginning to reduce the desired system efficiency / functionality. The periodicity of the PMS shall be revised based on the ageing / fault frequency.

The frequency of the faults have to be analysed on periodic basis and if it is showing an increase then the said equipment has to be sent for repairs or necessarily replaced to meet the SLA requirements.

The faulty parts which were originally installed and cannot be repaired and replaced by vendor shall remain the property of the Client.

Preventive maintenance reports to be submitted before the first day i.e. start of a month reports to be submitted next month Completed reports shall be sent to the Systems Manager/Sr. Manager /AGM / GM Toll Systems on as per defined frequencies.

1.2. Corrective Maintenance

Corrective Maintenance is defined as works carried out in the lane area, plaza area, POS area that aims to rectify/repair a fault or problem that may be causing the toll systems or other equipment to function in a manner that creates operational problems, may result in the loss of revenue. This may be done as on need basis. The categories of corrective maintenance are narrated in clause 5.5 in the subsequent Pages below with response times to repair the fault.

The intent of corrective maintenance is to rectify the fault in a manner to avoid a repetitive fault. The efficacy of the Preventive and Corrective Maintenance shall be ascertained by analysing the number, type and repetitiveness of faults.

1.3. Tools for maintenance

The Vendor shall provide and keep sufficient tools to perform the tasks as required on a day to day basis for preventive & corrective maintenance.

1.4. Reports

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1.4.1. Daily Inspection Report

The maintenance engineer of the VENDOR shall on a daily basis inspect the equipment at the toll plaza as per the maintenance schedule and shall be required to log all inspections in Daily Inspection Report (Equipment) as per **Annexure - 1**, and will send the DIR to system manager on weekly basis, also a regular monitoring activity to be carried out by Vendor staff to ensure early identification of a faults. In case there is delay in identification of a faults by plaza staff, DIR shall go daily to the systems manager from vendor and not weekly.

The maintenance engineer of the VENDOR shall on a daily basis submit a report of all incident logs of service Request and closure of all incidents as per **Annexure -2**

1.4.2. Monthly Reports

The Monthly report shall be provided by VENDOR as **Annexure - 3** which fully covers all the following points by 3rd of Next Month.

- i. Consolidated Daily activities
- ii. Daily fault log/ Log for software access
- iii. Repairs completed
- iv. Repairs pending
- v. AVC Accuracy per lane for the Month
- vi. Preventive Maintenance Report
- vii. Spares Consumption Report

1.5. Spares

Vendor & Client has discussed mutually and fixed the quantity of various spares required to keep uptime of the system as per supplementary agreement followed in general. These spares will be part of refurbishment PO/WO, and the Vendor shall supply the spares as per the respective PO/WO. Further the vendor shall maintain the spares and replenish them in case of consumption in time as per the allowed timelines as per this contract. Comprehensive warranty on all items at the toll plazas which have been supplied during refurbishment of System plus existing equipment which are retained by the vendor for refurbishment of TMS. The equipment shall perform as per the desired levels acceptable as per the best industry practice. . The signing of the SAT does not absolve the VENDOR's liability for any corrective measures / action on their account to bring the system as per the agreed levels while agreed at the time of the signing of this SLA.

The spares shall be used for the replacement of the items that have become faulty during the DLP/ AMC period to maintain the system uptime. These spares used shall be replenished by the 'vendor within 30 days. The vendor shall supply all new spares under the refurbishment PO, before start of DLP/AMC Period. The equipment which got faulty during AMC period shall be repaired or replaced.. If there is any delay beyond 30 days, VENDOR shall inform the CLIENT about the delay

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in replacement of the faulty spares due to unavailability or longer lead time well in advance. In such cases with valid reasons the replacement period shall be extended by CLIENT.

1.6. Accident Damage

The maintenance engineer of the VENDOR is responsible to inspect, suggest and give the estimate of repairs to be carried out by them within the time frames defined in clause 5.5 of this document in the subsequent pages. The repair time of the same clause is applicable after the necessary approvals granted by the CLIENT.

The Client shall be required to provide the items that have become damaged due to vehicle impact or any other act of accident or vandalism or also due to any improper power supply or natural calamities or riots.

VENDOR no later than the 3rd of each month will provide a list of equipment required to be procured by the Client. Long lead items should be clearly marked/indicated by the VENDOR.

The VENDOR shall provide all necessary assistance to the Client in providing all necessary documentation for timely filing the insurance claims.

1.7. Logging of Faults

VENDOR will maintain call/fault register at site with all records of the faulty equipment. The fault register shall be provided by VENDOR and shall be finalized in consultation with the client Engineer. If the VENDOR is having any online fault logging system, then he must provide access to all the relevant persons at the site to raise the fault tickets and monitor closures / rectification analysis. This will be applicable to all hardware and software issues w.r.t. faults, new requirements, modifications / enhancements in the existing TMS

1.8. AVC Accuracy

The AVC accuracy of the toll systems is critical aspect of toll operations and shall meet 98% post audit accuracy (Vehicle Class include Standard/Non-Standard) irrespective of vehicle profile as per the guidelines agreed in the SLA. However below conditions shall not be counted as misclassification on account of vendor for calculating AVC accuracy. Avc Count should be 100%.

- i. Wrongly issued RFID tags i.e., different class tags pasted on some other vehicle class.
- ii. Vehicles standing on Loop/ AVC area for long time.
- iii. Manual intervention in AVC area by the concessionaire staff.
- iv. Supervisor/TC Mistake i.e. wrong class correction while doing the transaction correction / validation.
- v. Sensors submerged in water due to excessive rains. Light Rains should not be considered as causing adverse effect in the AVC Accuracy.
- vi. Any force majeure reasons.

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2. Maintenance Levels

2.1. Maintenance of Hardware and Software

- i. Onsite support service and on site first and second Level hardware and software support for maintenance of Toll equipment & SSWIM integration (Hardware maintenance of Weigh In Motion & Static Weigh Bridge is not scope of Vendor), includes regular and periodic Preventive Maintenance, Corrective Maintenance, Software Maintenance & Remote software support for Toll System.
- ii. VENDOR will provide the READ ONLY password for the database.
- iii. VENDOR will provide minimum of 3 (Three) resources, qualified & competent, to maintain the complete system installed at each plaza, one in each shift.
- iv. This staff would be appropriately rotated to ensure 24 hours x7 days support during DLP and AMC. The schedule of deployment / duty roster for the same to be provided after signing of this contract. The costs for the stay of the personnel including lodging, boarding and other expenses e.g. housing, mobile and local travel etc. will be borne by VENDOR.
- v. CLIENT holds right to ask VENDOR to replace the staff if found and proved unsuitable/ indulged in unwarranted activities.
- vi. The appointed team will be at site from day one of start of the DLP / AMC/ COD.
- vii. This SLA contract is valid from -----to-----for all the Two Toll Plazas including TMS systems in plaza building and lanes at the respective locations. This SLA will valid till the tenure of DLP and also during the AMC period.
- viii. The Escalation Matrix shall be provided by VENDOR before signing of this contract.
- ix. There shall be a weekly day off to VENDOR employee and it shall be decided mutually with CLIENT staff.
- x. Service Level for this has been attached in clause 5.5 of this agreement.
- xi. Vendor will provide structured networking at the plaza i.e. networking with proper tagging & labelling for ease of identification and maintenance.
- xii. Vendor will provide software modification required at plaza as per the business exigency/ Audit/ NHA1 Requirement during AMC / DLP period at no extra cost.
- xiii. Vendor will integrate any hardware directly bought by client, subject it is of same make available at plaza, at no extra cost.

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xiv. Vendor will provide guidance & assistance required at acquirer bank level, in this process the vendor shall provide co-ordination required in between earlier SI, acquirer bank and new SI. Below facts need to be considered for this process.

xiv.1 Currently ICD 2.5 is running at plaza

xiv.2 Client will downgrade the existing system to ICD 2.4

xiv.3 Vendor will initially migrate the system on ICD 2.4, after successful migration the vendor shall upgrade it to ICD 2.5.

xiv.4 The responsibility of migration will lie with vendor.

xiv.5 Any losses during this process will be borne by vendor to maximum cap of 50% of monthly DLP/AMC amount.

2.2. First, Second & Third Level Support

2.2.1. First Level:

After receipt of Service Request from Client, Vendor's site staff responds for the closure of the call in the event of not able to close the call, it would be escalated to next Level in the support chain.

2.2.2 Second Level:

Escalated calls are received by Second Level for coordination with their software and hardware team (as recurred) and assistance is given over call/web for onsite rectification.

2.2.3 Third level Support

Third Level support for software Maintenance will be through remote support by the global support team of the VENDOR for Toll software, also the Software support shall be available from Local team on remote in case any critical software fault which force closure of TMS lane/s or MCS/BO applications/servers happens at site. Vendor shall provide 24 X 7 software support.

All Software (Third level) related snags which cannot be catered on site, will be addressed by VENDOR's team from the Head Quarters in Pune or elsewhere. Prior written information will be given to the client about what is the purpose of RDP and Time Span, also confirmation shall be sent to the CLIENT once the job is completed for that period.

Regular Backup - Weekly schedule to be made for backup testing as a disaster recovery management practice. Client will provide the hardware required to take the backup and will suggest and make necessary arrangement for the disaster recovery location.

2.3. Service Request procedure

Attending to Service requests raised by the Authorized Personnel in the Plaza

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- i. CLIENT shall provide a Service Request from authorized personnel for all hardware and software related faults, without which no corrective support shall be rendered at site.
- ii. Once fault report is raised by CLINET, VENDOR employee present at site will attend to if as per service levels defined **clause 5.5**.
- iii. VENDOR shall provide closure report for each and every reported support request.
- iv. This will cover all the corrective maintenance required in the specified time limit for the works attributing to VENDOR's scope.

2.4. Power Supply

CLIENT shall ensure power supply of 220V-240V to all systems & subsystems. Copper Earthing (< 2 ohm) shall be provided.

2.5. Visit of HQ Staff

Quarterly visit by VENDOR HQ team to site shall be on as and when required basis with no extra cost to the CLIENT.

2.6. Statutory obligations

All statutory requirement related to employee of VENDOR will be on VENDOR's scope. Like ESIC, PF, Insurance etc.

3. Scope of CLIENT

- i. Pest control on a regular basis at plaza level and also at the lane Level.
- ii. Spares Stocks will be stacked at CLIENT site. CLIENT shall be fully responsible for safety and security of the same including Insurance cover.
- iii. To handle traffic diversion in case the lane is not operational and under maintenance.
- iv. Office space to be provided for VENDOR employees for day to day activities and repair works to carry out routine works. Vendor's employees shall also be allowed to use other office facilities strictly for official work.
- v. Internet facility shall be provided by client at plaza location for remote software support.
- vi. Permission for partial or complete system shutdown in case of any requirement in coordination with CLIENT representative.
- vii. CLIENT will not involve in any kinds of trouble shooting of the system without VENDOR's knowledge.
- viii. CLIENT on request from VENDOR shall provide critical equipment needed to do maintenance works that includes cutting machines, Cranes (As and when required).

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- ix. All third party vendor's liaison for maintenance or replacements for goods not procured by VENDOR.
- x. **CLIENT shall also assign at least two persons per plaza to undergo training on complete Hardware and Software installations.**

4. Spare Management during DLP and AMC

The procurement of spares for DLP and AMC will be done by CLIENT and stocked at plaza premises.

- i. VENDOR will share DLP spare inventory to CLIENT at the time of signing of this agreement and will maintain DLP and AMC spares inventory at CLIENT's location within 4 weeks from start of DLP/AMC period at additional cost to the CLIENT.
- ii. For any other material other than the listed items which is required to make the system functional VENDOR needs to procure at their own cost to fulfil the warranty / DLP / AMC/Compliance. (for only the equipment/item installed by the VENDOR)
- iii. VENDOR shall not be held responsible for the warranty or functionality of any equipment procured directly by CLIENT.
- iv. VENDOR shall not be held responsible for warranty claims for any equipment which has been damaged due to operational issues and mishandling by CLIENT team or due to acts of nature/force majeure clause.
- v. Any new material which is directly affecting the performance of the Toll Systems which is been purchased by CLIENT directly from the open market and is different in specifications given by VENDOR, needs to be recommended by the Design team of VENDOR and CLIENT shall make all necessary arrangement to send the material to VENDOR Head Office.
- vi. Any damage due to mishandling of installed / stored equipment by VENDOR employees shall be borne by the vendor e.g. if a camera requires 12 VDC input current and Vendor engineer give supply of 230 VAC then it is responsibility of vendor to repair/replace the specific equipment. If the burning cases were due to voltage fluctuations or reasons not attributable to Vendor the same shall be borne by the client. If the installed and stored equipment has a specific IP rating, the same shall be handled by the VENDOR engineer to avoid any damage to the equipment.
- vii. During the refurbishment of TMS some of the equipment are going to be retained by the vendor, based on survey done by them. There is time gap between survey and commissioning of new TMS System, if any equipment found faulty during this period i.e. before commissioning, the same shall be provided by the client or to be replaced at cost vendor.
- viii. The existing equipment which are retained by Vendor during refurbishment of TMS will be covered under comprehensive AMC, if any existing equipment become faulty after DLP/AMC period starts, it will be responsibility of vendor to repair the same, if vendor fails to repair the same then the same shall be replaced by the vendor.

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- ix. If any of equipment gets faulty and is not repairable due to any reason i.e. unavailability or parts from OEM, Unviable cost of repair etc, then Vendor (SI) will replace the faulty unit, with new equipment of latest/equivalent specifications which are compatible from both the technical and operational point of view, the equipment that shall be covered during entire DLP/AMC Period are listed below:

S. No.	Equipment	Priority
1	Toll Lane Controller	Include all hardware
2	AVC System	Include all hardware
3	Traffic Light	Include all hardware
4	OHLS	Only Electrical and electronic parts.
5	UFD	Include all Electrical and electronic parts. Excluding Pole.
6	Violation alarm System	Include all Electrical and electronic parts. Excluding Pole.
7	Panic Button	Include all Electrical and electronic parts.
8	10 KVA UPS- APC	Include all Electrical and electronic parts. Excluding Battery.
9	Loop Detector	Include Loop base and Loop cable installation including all materials i.e. Cable/epoxy/Cutter machine etc.
10	Barrier Loop related to Electrical,	Include all electrical/electronic/mechanical parts.
11	LC and AVC	Include all Electrical and electronic/IT parts.
12	LC and AVC Cabinet	Include all Electrical and electronic/IT parts.
13	Cable Terminations (LC)	Include all Electrical and electronic parts.
14	Cable Terminations (AVC)	Include all Electrical and electronic parts.
15	AVC Sensor	Include all Electrical and electronic parts.
16	RFID Reader	Include all Parts i.e. Antenna, Cable & Accessories etc
17	Exit Barrier	Include all electrical/electronic/machinal parts.
18	TMS Server	Include Main TMS Server/Backup Server/Video or Image Server etc
19	Workstations	All Plaza System (LSDU/Validation/Cashup/ETC reconciliation system/POS/ etc.)
20	TCT Keyboard	Include all Electrical and electronic/IT parts.
21	LPIC Camera	Include all Electrical and electronic/IT parts.
22	Incident Camera	Include all Electrical and electronic/IT parts.
23	Receipt Printer	Include all Electrical and electronic/IT parts.
24	Toll Collector Display	Include all Electrical and electronic/IT parts.
25	Network Switches	Include all electrical and electronic parts.

5. Terms and Conditions VENDOR

5.1. General

- i. CLIENT would be required to provide all critical items like man hoist, cranes, etc. to ensure the Preventive maintenance activity.

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- ii. A report of all Preventive Works carried out shall be duly signed and submitted to CLIENT's HO for their record purposes on weekly bases. The same must be verified and signed by the client's representative at site before submission.
- iii. CLIENT will have to provide all support with their civil and electrical support team for this activity.
- iv. All penalties shall be levied on vendor only if even after reasonable time as specified in this contract has been given but no corrective action has been taken by the vendor.
- v. The CLIENT will send a monthly report on the penalties imposed due to non-compliance as per the agreed terms of the contract, which needs to be responded, discussed and closed within the next week by the VENDOR, failing which the penalties are deemed to be imposed.

5.2. Breach and Termination

- A. Without prejudice to any other remedies which either of the Parties may otherwise have in terms of the Agreement or in law, either of the Parties shall be entitled to terminate the Agreement, by Notice to the other, in the event that:
 - i. CLIENT infringes the intellectual property rights, including copyright, trade secrets or patent of any third party in order to meet all or some of its obligations contained in the Agreement;
 - ii. Either of the parties are in the process of final liquidation;
 - iii. The controlling interest or ownership in either of the Parties becomes vested in a competitor of either of the Parties. For the purpose of this clause, the party who makes this allegation shall carry the burden to prove same;
 - iv. Either of the Parties commits a material breach of the terms and conditions of the Agreement, and fails to remedy such breach, within 21 (twenty-one) calendar days after receiving Notice from the other party to the Agreement to remedy such defect.
- B. The termination of the Agreement, for whatever reason, shall not affect the rights of either of the parties:
 - i. That may have accrued before the termination of this Agreement;
 - ii. Or which specifically, or by their nature survives the termination of this agreement.

5.3. Intellectual Property Rights

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CLINENT 's access to and use of the Toll software and the system Interfaces, including any new developments, enhancement, upgrades and/or modifications relating thereto, is and will continue to be regulated by this Agreement.

The Intellectual property rights of the TMS Solution including software, hardware & solution architecture will be with vendor all the time during and after the contract.

5.4. Performance Bank Guarantee

This Clause will comply as set forth in the initial contract dated **YYY**. For clarification of doubt, VENDOR will furnish the Bank Guarantee expire date. If the expiry date falls before the expiry of SLA, VENDOR will extend up expiry of this SLA.

5.5. Hardware and Software Repair time

The list of hardware below and related software including: operating system/patched/device drivers etc. and any other customized software affecting the smooth functioning of the toll collection and it's report generation for audit and MIS purpose:

S. No.	Equipment	Priority	Response Time	Repair/Replacement time
1	Toll Lane Controller	A+	Immediate	Within 4 Hrs.
2	AVC System	A+	Immediate	Within 4 Hrs.
3	Traffic Light	B+	1 hour	Within 8 Hrs.
4	OHLS	B	1 hour	Within 8 Hrs.*
5	UFD	A+	Immediate	Within 4 Hrs.
6	Violation alarm	B	1 hour	Within 4 Hrs.
7	Panic Button	B	30 Min	Within 4 Hrs.
8	10 KVA UPS- APC	A+	Immediate	Within 4 Hrs.**
9	Loop Detector	A+	Immediate	Within 4 Hrs.
10	Barrier Loop related to Electrical,	A+	10 Min	Within 4 Hrs *
11	LC and AVC	A+	30 Min	Within 4 Hrs.
12	LC and AVC Cabinet	A+	30 Min	Within 4 Hrs.
13	Cable Terminations (LC)	A+	Immediate	Within 4 Hrs.
14	Cable Terminations (AVC)	A+	Immediate	Within 4 Hrs.
15	AVC Sensor	A+	Immediate	Within 4 Hrs.
16	RFID Reader	A+	Immediate	Within 4 Hrs.*
17	Exit Barrier	A+	Immediate	Within 4 Hrs.
18	TMS Server	A+	Immediate	Within 4 Hrs.**
19	Workstations	A+	Immediate	Within 4 Hrs.
20	TCT Keyboard	A+	Immediate	Within 4 Hrs.
21	LPIC Camera	A+	Immediate	Within 4 Hrs.

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22	Incident Camera	A+	Immediate	Within 4 Hrs.
23	Receipt Printer	A+	Immediate	Within 4 Hrs.
24	Toll Collector Display	A+	Immediate	Within 4 Hrs.
S. No.	Sub Systems	Priority	Response Time	Repair/Replacement time
1	Validation Module	A+	Immediate	Within 4 Hrs.
2	Cashup Module	A	30 Min	Within 4 Hrs.
3	LSDU Module	A	30 Min	Within 4 Hrs.
4	Server Systems	A+	Immediate	Within 4 Hrs.
5	POS Module	A	30 Min	Within 4 Hrs.
6	Data corruption / Software bug resulting in disruption in Toll Collection / Reporting e.g. Shift End Process of any kind.	A+	Immediate	Within 4 Hrs.
7	Data communication errors between lanes and Servers (Local / Remote) Plaza / Host / Fastag / Central Control Room / TMCC due to any reason	A+	Immediate	Within 4 Hrs.
8	Data Reconciliation errors	A+	Immediate	Within 4 Hrs.
9	Any other issue affecting the toll collection process in any lane or all the lanes or TMS sub-systems	A+	Immediate	Within 4 Hrs.

- Where * applies to requirement of crane/man hoist such things required for replacement from client. In such cases the time shall be calculated from availability of above mentioned machines.
- Where ** applies to dependency on third party to resolve the issue, i.e. in case of 10 KVA UPS & Server in case of any issue the time shall be calculated for logging the call with the OEM Service provider and not for issue resolution.
- Subject to fault type and availability of equipment to be provided by the Client.
- No downtime will be applicable for a new requirement raised by the Client for which Vendor will have to do the software development.
- The repair time will vary for any fault which will have third party dependency and accordingly the downtime will be calculated for the servers.
- Wherever the equipments repair / replacement need lane closer shall not take more than 1 hour.

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Penalties Schedule

Penalties if Rs.2000/- per day will be imposed in case of non-availability of spares due to delay in repairing/ replacement. All spares should be available at site before start of AMC/ DLP.

The above penalty will be beyond cap value.

SI (System Integrator) needs to ensure that No Revenue loss is suffered by the concessionaire due to rejection of FASTAG transactions (Blacklist rejection, Maltag Rejection, duplicate Tag rejection, invalid TAG rejection), unable to collect toll fee and penalty of any type. If losses are observed attributable to systems fault (Specific to scope of SI) except WIM & SWB hardware fault, shall be recovered from the monthly AMC/DLP Contract value, subject to maximum 10% of AMC/ DLP fees of for respective month and shall be adjusted in the monthly fixed fee.

6.1 Operation of Lanes in Manual mode or individual Lane Closure:

Parties recognize that Manual mode is an extreme, alternate method of operating toll plazas and in the context of the client's environment, it arises only when there is continuous interruption in power supply, due to technical snags in power supply mechanism or shortage of power due to break-down of both, purchased power as well as in house power utility, there will not be any penalty on vendor account.

In cases where Manual Mode operation becomes inevitable for reasons relating to Hardware/Firmware failure or slowing down of transaction execution speed, due to vendor's fault the following deductions apply:

6.1.1 Operation of Toll Lanes in Manual mode

S. No.	Duration of Manual Mode beyond time limit Specified in SLA	No. of times Plaza in Manual Mode	Deduction per incident	Total deduction
1	< 30 Minutes	A	(Rs. 1000)	A x Rs. 1000
2	>30 & < 60 Min	B	(Rs. 2000)	B x Rs. 2000
3	> 60 & < 120 Min	C	(Rs. 3000)	C x Rs. 3000
4	>120 & < 240 Min	D	(Rs. 4000)	D x Rs. 4000
5	>240 Min	E	(Rs. 5000)	E x Rs. 5000

The above penalty will be under penalty capping of 10% of monthly AMC/DLP amount which is mentioned in clause number 6 above.

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Individual Lane Closure:

S. No.	Duration of Lane Closure	No. of Lane Closed	Deduction per incident	Total deduction
1	< 30 Minutes	A	(Rs. 1000)	A x Rs. 1000
2	>30 & < 60 Min	B	(Rs. 2000)	B x Rs. 2000
3	> 60 & < 120 Min	C	(Rs. 3000)	C x Rs. 3000
4	>120 & < 240 Min	D	(Rs. 4000)	D x Rs. 4000
5	>240 Min	E	(Rs. 5000)	E x Rs. 5000

***Or the time mutually agreed between the Vendor and Client, whichever is higher**

Note 1: The penalties will not be applicable in case of any downtime due to any accident/incident not attributed to the vendor.

But the vendor on receipt of the WO/PO for repair / replacement of the said equipment has to comply with the timelines and terms of the WO / PO.

Note 2: The referred in clause 6 above the max cap for penalties is 10% of monthly AMC/ DLP Charges, this applies collectively for all types of penalties. (Except penalty for availability of spares before start of AMC/DLP Period)

For avoidance of doubt please find below example as follows:

Monthly AMC Fees is 1,00,000/-

Penalty for Revenue Loss as per clause 7 is Rs 2500/-

Penalty as per clause 7.1.1. is Rs 2000/-

Penalty as per clause 7.1. 2. is Rs. 2000/-

Penalty as per clause 7.2. is Rs. 2000/-

Penalty as per clause 7.3. is Rs. 2000/-

Penalty as per other clauses is Rs. 2000/-

Thus total Penalty comes at Rs. 12500/- ; but due to collective capping of 10%, actual penalty deduction will limit to Rs. 10,000/- only.

7.2 Back-office

All Lanes at each Plaza have to be on Network mode to facilitate smooth back-office operations-cash up, Supervisor's validation etc. - In case a Lane works on Stand-alone mode during a shift and there is a network issue, it should be treated as a critical fault and all efforts to be made to restore the network connections much before end of the shift, facilitating validation and transfer of data for the shift end closing without affecting the shift closure timings. If it does not happen, Back-office operations are held up. To take care of exceptions, 1 time each plaza in six months is permissible, if the delay does not exceed two hours beyond TC shift closing. All such instances

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which do not meet this criterion, given that the network is up and working, are subject to deduction at the following rates:

S. No.	No. of times Admin Subsystem non-functional (A)	No. of Hours in Non Functional (B)	Deduction per incident (C)	Total deduction
1	< or = 2 times	< 4 Hours	(Rs. 1000)	A x C
2	< or = 2 times	> 4 Hours	(Rs. 2000)	A x C
3	> 2 times	< 4 Hours	(Rs. 3000)	A x C
4	> 2 times	> 4 Hours	(Rs. 4000)	A x C

The above penalty will be under penalty capping of 10% of monthly AMC/DLP amount which is mentioned in clause number 6 above.

6.2 Pending Faults:

All faults should be attended and resolved within stipulated time period as mentioned in Response and restoration section. All such instances which do not meet this criterion are subject to deduction at the following rates: (which does not fall under Standalone mode, manual mode, back office, Revenue leakages) and applicable for Category B faults.

S. No.	No. of Pending Faults (A)	No. of Hours in Pending (B)	Deduction per incident (C)	Total deduction
1	< = 2	< 24 Hours	(Rs. 1000)	A x C
2	< = 2	> 24 Hours	(Rs. 2000)	A x C
3	> 2	> 48 Hrs & < 96	(Rs. 3000)	A x C
4	> 2	> 96 Hours	(Rs. 4000)	A x C

Not applicable of new requirement raised by the Client

The above penalty will be under penalty capping of 10% of monthly AMC/DLP amount which is mentioned in clause number 6 above.

6.3 ACTIVITIES WITHOUT THE KNOWLEDGE OF CLIENT

6.3.1 TECHNICAL

Performing any unplanned maintenance activities remotely or onsite without client knowledge will attract penalty of INR 5000/- (Five Thousand only) and multiple of INR 5000/- thereafter. For clarification of doubt for the first time occurrence of such incident the penalty would be INR 5000/- and second incident INR 10,000/-. On third time the penalty would be INR 15,000/- and so on.

Note: The penalty explained above in 6.3.1 is beyond cap value.

Non-compliance to Deliverables will result in maximum 1% deduction of total contract value.

6.3.2 AVC Accuracy

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Non-achievement of 98% AVC accuracy per month or quarter (as per billing cycle) shall attract a penalty equivalent to X %age of total billing value for that period, where X is $((98 - \text{Actual AVC acc.}) \times 98/100)$

There will be a colling period of 3 months for coming to 98% AVC Accuracy (Post Audit), i.e. for first 3 months after migration of System there will not any penalty for AVC Accuracy.

The above penalty will be under penalty capping of 10% of monthly AMC/DLP amount which is mentioned in clause number 6 above.

6.3.3 ADMINISTRATIVE

- i. Late reporting to duties will not be permissible for more than 2 times every month and client may ask for the replacement of manpower from site if found beyond permissible times.
- ii. Absenteeism without prior information to the client shall not be acceptable.
- iii. Under no circumstances, the VENDOR shall accept any verbal demand of any change in any software or hardware.
 - a. In case one of the resources deployed at site is not available at site for three consecutive days without any intimation, such absenteeism shall attract a penalty of 1000/- per day starting from 4th day onwards for the number of days per resource is absent from site.
 - b. This penalty will be beyond cap value and will be deducted from manpower support charges.

6.3.4 UNAUTHORISED ACCESS

The VENDOR in no case can take an un-authorized access of our site and expose our Toll Systems / Operations / plaza network for any promotional / commercial activity or showcasing of it's features or toll collection details of whatsoever nature either physically / remotely to anyone without taking a prior written consent by the CLIENT's authorised personnel. In the event of any breach, the client reserves all rights to take appropriate legal action.

6.4 Abnormal Condition

List of conditions & situations wherein the service is likely to be affected in terms of repair time however the same will not be considered for evaluating down time and performance audit. Faults reported under such condition & situation will be marked separately in the register for exclusion during evaluation process.

- i. Non availability of site, access, permission to work, road closure, unsuitable climatic conditions, accidents, theft, misuse and any reason beyond control.

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- ii. Non availability of power and a digital support line for 24-hour basis. However, the general quality (a) of power supplied by the Utility Agency and (b) of link provided by the bandwidth provider is, considered normal.

6.5 VENDOR Service level for Remote Support

- i. The Response time is the taken to revert, verbal or written (email), at site when an incident happens and Rectification time will be the time taken from the Response time to complete activity
- ii. Repair time for these defects is dependent on field cabling and nature of the defect and therefore repair time cannot be quantified.

The SLA shall be applicable starting from _____, vendor shall repair / replace / resolve all hardware's and software faults.

7 Classification of type of problems reported on site for Toll Systems

Item	Category	Remote Response and repair time	Examples for errors
1	Category A+ /A: Critical errors: Errors that severely hampers the functionality of the systems such as forcing the plaza to operate in manual mode, adversely affecting the road users or creating delays in sending of debit orders etc.	Response Time: Immediate during office hours After Hours: 2Hours Repair time: Office hours: 4 Hours maximum Note: Repair time will not be applicable if the error is attributable to third parties not under Vendor' Control	i) Server failure resulting in whole plaza going on manual mode. ii) Any software issues which leads to manual mode operations of the complete toll plaza. iii) AVC Failure of any lane
2	Category B: Serious Errors: Errors that have a serious operational impact and are of an urgent nature.	Response Time: Immediate during office hours After Hours: 4 Hours (On Call Basis) ** Repair time: With in next 8 hours for site works. Repair time for remote works: With in next 8 hours for site works in working days.	i) Lane to plaza communication failure ii) Control building software failure iii) Server application failure.
3	Category C: Not-urgent errors that do not have	Response Time: office hours: Immediate	In case of minor problems where the

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	serious impact on the efficiency of the operation	After Hours: Remote response next working days Repair time: No later than 24 hours	equipments is still operational but not fully functional.
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If the resolution time is affected by the following reasons, then it cannot be attributed levels of VENDOR.

- i. Failure due to force majeure*
- ii. Failure due to any other party.
- iii. Non availability of site access, permission to work, road closure, accident, misuse of equipment, theft, power failure, natural calamity and any other reasons beyond anyone's control.
- iv. Any new requirement for which software development will be required.
- v. Damage due to spikes, lightening, overload of power.
- vi. Mishandling of the installed equipment's by CLIENT team.
- vii. Any faults arising due to operational errors.

(*) Act of God, Riots, Floods, Political/Economic instability.

This agreement is effective from the date of commencement and both the parties have signed the same by giving their acceptance for the above mentioned terms & Conditions.

For M/S xxxxxx.

**For M/s. PUNE SOLAPUR ROAD DEVELOPMENT
COMPANY LTD**

Sign

Sign

Seal

Seal

Date

Date

Place

Place

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8. Following format to be follow day to day routine work.

Annexure 1 - Daily Inspection Report Format

Annexure 2 - Daily Support Request and Closure Log

Annexure 3 - Monthly Report Format

Annexure 4 - Preventive Maintenance Format — Lanes / Plaza / SSWIM

Annexure 4 - Support Request Format - H/W

Annexure 5 - Support Request Format - S/W

Annexure 6 - Service Report Format H/W

Annexure 7 - Service Report Format S/W

Annexure 8 - Material Requisition Slip

Annexure 9 - Material Return Slip

Annexure 10 – Lane-wise / Class-wise AVC Accuracy Report with Under classifications / Over classifications and Unconfirmed transactions. (The report shall include all Toll able and Non-Toll able class of vehicles).