

**Request for Proposal (RFP) Document
For
Global Positioning System (GPS) Enabled Automatic
Vehicle Tracking & Monitoring System with Passenger
Information System (AVTMPS)
On Build – Operate – Transfer (BOT) Basis
(RFP No. ITD/57/2007)**

September, 2007



**Delhi Transport Corporation
(Govt. of NCT of Delhi)
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(Rupees Twenty Thousand only)

RFP Document No. _____

**REQUEST FOR PROPOSAL (RFP)
FOR
GPS ENABLED AUTOMATIC VEHICLE TRACKING & MONITORING
SYSTEM WITH PASSENGER INFORMATION SYSTEM (AVT MPS)
ON BUILD-OPERATE-TRANSFER (BOT) BASIS**

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A. DISCLAIMER

This RFP is being issued by the Delhi Transport Corporation (DTC) for inviting tenders for the design, development, implementation, operation and facility management of GPS enabled Automatic Vehicle Tracking & Monitoring System with Passenger Information System (AVTMPS) on Build-Operate-Transfer ('BOT') basis ("the AVTMPS Project") on such terms and conditions and for the achievement of the Aims & Objectives of the AVTMPS Project set forth in this RFP or that may subsequently be provided to Bidder(s) whether verbally or in documentary form by or on behalf of DTC or any of it's authorized employees or advisors and all other terms and conditions subject to which such information is provided.

It is hereby clarified that this RFP is not an agreement and is not an offer or invitation by DTC to any parties hereunder. The purpose of this RFP is to provide the Bidder(s) with information to assist in the formulation of their proposals. While the RFP has been prepared in good faith with due care and caution, DTC or any of its employees, advisors or consultants do not accept any liability or responsibility for the accuracy, reasonableness or completeness of the information, or for any errors, omissions or misstatements, negligent or otherwise, relating to any feasibility / detailed project report or any other reference document mentioned, implied or referred herein or pertaining to the AVTMPS Project. This RFP may not be appropriate for all persons. It is not possible for DTC, their employees or advisors to consider the investment objectives, financial situation and particular needs of each Bidder who reads or uses this RFP. Each Bidder should conduct its own investigations and analysis and should check the accuracy, reliability and completeness of the information in this RFP and where necessary obtain independent advice from appropriate sources.

Bidder should carefully examine and analyze the RFP and bring to the notice of DTC any error, omission or inaccuracies therein that are apparent and to carry out its own investigation with respect to all matters related to the AVTMPS Project, seek professional advice on technical, financial, legal, regulatory and taxation matters and satisfy himself of consequences of entering into any agreement and / or arrangement relating to the AVTMPS Project. DTC, its employees and advisors make no representation or warranty, express or implied, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of the information contained in the RFP or in any material on which this RFP is based or with respect to any written or verbal information made available to any Bidder or its representative(s). No representation or warranty is given as to the reasonableness of forecasts or the assumptions on which this RFP may be based. Liability therefore, if any, is hereby expressly disclaimed. DTC may in their absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this RFP as per its requirements.

B. BRIEF OVERVIEW

B1. Brief Background of DTC

- (a) The Government of India ("GOI"), Ministry of Transport took over the local bus services in Delhi in May 1948. The Delhi Road Transport Authority was constituted under the Road Transport Corporation Act, 1950 which became an undertaking of the Municipal Corporation of Delhi ('MCD') by an Act of Parliament in April, 1958.
- (b) The GOI took over the management of the undertaking by enacting the Delhi Road Transport Laws (Amendment) Act, in 1971 and took over the assets and liabilities from the erstwhile Delhi Transport Undertaking ('DTU') operated by the MCD till 2nd Nov, 1971. Thus DTC was set up in 1971. DTC which was earlier functioning under the administrative control of the GOI was taken over by Government of the National Capital Territory ('NCT'), Delhi on 5th August 1996.
- (c) DTC at present has manpower of about 27,000 (twenty seven thousand) employees comprising drivers, conductors, traffic supervisory personnel, repair, maintenance and administration staff. The Corporation runs 34 (thirty four) depots with sufficient parking capacity for approximately 3400 (three thousand four hundred) buses. These depots are involved in the operation and maintenance of buses. Each depot is headed by a Depot Manager with officers in mechanical, traffic and account wings, to assist him in depot functioning.

B2. Future Plans and Estimated Forecasts

- (a) In order to modernize and augment public transport in Delhi, DTC has placed an order of 525 (five hundred and twenty five) new low floor buses for the Delhi City / NCR operations which are expected to start rolling in shortly. The new buses are of international standards being disabled-friendly, having low floor, pneumatically controlled doors and tubeless tyres, run on automatic transmission and have engines at the rear end.
- (b) Separate tenders are also being invited for 300 (three hundred) new diesel buses for operation on interstate routes whose delivery is expected by in the fiscal year beginning 2008-09.

- (c) The bus fleet of DTC is expected to be further augmented during the next 1-2 (one to two) years as per the Government of the National Capital Territory Delhi (“GNCTD”) policy.
- (d) DTC has also set up a Strategic Business Unit (‘SBU’) which is responsible for the procurement, induction and operation of new fleet of buses as a separate entity. Simultaneously DTC has planned to construct about 700 (seven hundred) state-of-the-art bus queue shelters at the various bus stops (“BQS”) in the municipal limits of the Delhi city.

B3. Aims & Objectives

- (a) **Objectives:** With a view to enhance commuter satisfaction, reliability and punctuality of bus operations thereby enhancing the efficiency of DTC’s bus operations and better management of DTC’s fleet of buses and in order to instill confidence in commuters in DTC’s services, DTC is desirous of implementing the AVTMPS Project. To this end, DTC has decided to monitor the movement of its fleet of buses, collect data related to their geographical position, vehicle movement patterns and to provide relevant information to passengers (hereinafter referred to as the “Objectives”).
- (b) **Aims:** It is the understanding and intention of DTC that in addition to achieving the Objectives, the AVTMPS Project shall also aim to:-
 - (i) Assist DTC in obtaining complete details on the movement of buses vis-à-vis their geographical location at different points in time and the speed of the buses at such locations and times;
 - (ii) Provide information to DTC on the movement of buses enabling DTC to monitor adherence of bus time tables
 - (iii) Automate event logging (viz. start and end of trip(s), emergency halts, accidents, breakdown of buses etc.) along with time stamp, i.e. exact time of such activities (hereinafter referred to as “Time Stamp”)
 - (iv) Provide alerts to the Central Control Station on over speeding by buses, unauthorized stoppage and /or non-stoppage of the buses at designated bus stops, the scheduled stoppage point and route deviation by buses etc.

- (v) Establish two way communication links between the Central Control Station with drivers of the buses as well as a provision for real time communication between Central Control Station and drivers of all buses or a group of buses simultaneously.
- (vi) Capture vehicle information such through sensors (if provided by vehicle manufacturer) and communicate the same to Central Control Station.
- (vii) Provide various standard and exceptional reports pertaining to fleet operation as per DTC's requirement(s).
- (viii) Provide basic vehicle tracking services and two-way communication in recovery vehicles @ 1 (one) such vehicle per 100 (hundred) buses in order to provide on-line relief to buses in distress.
- (ix) Generate data for analysis & decision making process involved in route optimization and related software along with provision of training for the same to DTC officials.
- (x) Enable DTC to conduct routine appraisals of drivers' performance in terms of punctuality, safety and adherence to prescribed routes, timing(s) and stoppage(s).
- (xi) Provide PIS at BQS / bus terminals by way of electronic display boards to display expected time of arrival of buses.
- (xii) Provide Passenger Information System (PIS) inside the buses by way of announcements and electronic display of approaching bus stops.
- (xiii) Provide interface compatibility with smart card based integrated fare collection system.
- (xiv) Provide the facility of tracking system in private stage carriage buses / vehicles.

(c) The aims and objectives referred to under this Section above are collectively referred to in this RFP as the "Aims & Objectives of the AVTMPS Project".

C. NOTICE OF INVITATION TO BID & KEY DETAILS

C1. GLOBAL INVITATION TO BID

Delhi Transport Corporation (DTC) invites Bids from National and International Firms/Joint Ventures/Consortium for the Design, Development, Installation, Implementation and Facility Management of GPS enabled Automatic Vehicle Tracking & Monitoring System with Passenger Information System (AVTMPS) on Build-Operate-Transfer (BOT) Basis.

Background:

DTC runs Bus Services in Delhi, parts of National Capital Region Area and on select Inter-State Routes. The DTC's current fleet size, comprising nearly 3,400 Buses, is proposed to be increased to over 6,000 Buses in the next few years. The instant Project, inter alia, is to improve fleet management, generate inputs to facilitate decision making, provide relevant information to commuters and to further improve the Bus Transport System in Delhi.

Features:

- Design, Development, Installation, Implementation and Facility Management of AVTMPS System.
- Generation of data and reports by Vehicle Tracking and Monitoring to be used as an aid to fleet management decisions by DTC.
- Providing information of Bus Arrivals / Bus Stops etc. to the commuters on board the Bus or waiting at the Bus Stop.
- Revenue stream for the vendor to be through advertisements inside designated space in the DTC bus and on the PIS panel on designated BQs / Bus Terminals.
- Sharing of revenue with DTC during the concession period of 6 years.

Brief Scope of Work:

- GPS based real time automated tracking of 2,500 DTC buses with the provision of inclusion of 4,000 private stage carriage buses / vehicles. The Project will have scalability upto 10,000 buses/vehicles (DTC / Private).
- Real time PIS inside DTC Buses using LED display and by way of announcement of approaching bus-stops.
- Real time Passenger Information System (PIS) on minimum 500 Bus Queue Shelters / Bus Terminals identified by DTC, using LED display boards.
- Operation, Maintenance and Facility Management of the System during the entire concession period of 6 years.

- Generating Reports and Data and Analysis of the same.

For detailed Features and Scope of Work, the RFP document be referred to.

Eligibility Criteria:

- The average Annual turnover of the Bidder shall not be less than Rs. 500 Million or 12 Million US dollars for foreign bidder(s) for the preceding three years.
- The Bidder shall have present net-worth (on the last day of the previous financial year) of not less than Rs. 100 Million or 2.4 million US dollars for foreign bidders.
- The Bidder must be well established and must have the experience of executing or having executed similar projects in the field of GPS / Communication / Information Technology for at least the last three years ending on 31st August, 2007.

Bid Process:

- The bidding for this Project would be in a single submission comprising three stage system. First stage would be for pre-qualification of bidders based on eligibility criteria. Second stage would be evaluation of technical bids of the pre-qualified bidders. Third stage would be the evaluation of financial bids of Bidders who qualify second stage.
- Interested bidders may procure the Request for Proposal (RFP) document from the office of Dy.Manager (Tender Cell), Delhi Transport Corporation, at the address given below during office hours on any working day between 26th September, 2007 and 12th November, 2007 on payment of Rs. 20,000/- (Rupees Twenty Thousand Only) through Demand Draft drawn in favour of Delhi Transport Corporation, Delhi payable at Delhi. The RFP document can also be down-loaded from DTC website <http://dtc.nic.in> and the bid submitted along with a demand draft as mentioned above. Interested Bidders are further advised to refer to the RFP Document for more details.

Submission of Bids:

The interested bidders are to submit their bids, in a sealed envelope super-scribed as 'Proposal for DTC AVTMPS Project on BOT Basis' in the form and manner set forth in the RFP Document. The Bids should reach the office of Dy. Manager, (Tender Cell), Room No. 207, Delhi Transport Corporation, I.P. Estate, New Delhi-110002, India on or before 15th November, 2007 by 1500 Hours (IST).

Sd/-
Chief General Manager(SBU)

C 2. KEY DETAILS

Name of the Corporation	Delhi Transport Corporation (DTC), Government of NCT of Delhi
Date of issue of RFP	24 September 2007
Authority and Place for purchase of RFP Document, Submission and Opening of Bids	Dy.Manager(Tender Cell) Delhi Transport Corporation, Room No. 207, Tender Cell, DTC Head Quarters, IP Estate, New Delhi 110002
Authority and Address for seeking clarifications on the RFP	Chief General Manager Strategic Business Unit (SBU) DTC Hauz Khas Terminal, Delhi Transport Corporation, New Delhi 110 016 India Fax No. 91-11-2685 1549 Email address: dtc@bol.net.in Website: http://dtc.nic.in
Last date for submission of queries / clarifications	8 October 2007
Date and Time of Pre-Bid meeting	10 October 2007, 11:00 AM
Venue of Pre-Bid Meeting	Office of Chief General Manager Strategic Business Unit (SBU), DTC Hauz Khas Terminal, Delhi Transport Corporation, New Delhi 110 016, India
Bid Security Amount	Rs. 1,00,00,000/- (Rupees Ten Million)
Last date and time for receipt of Bids	15 November 2007, 3:00 PM
Date & Time of opening of Qualification Bid (RFQ) (Envelope 1)	15 November 2007, 3:30 PM
Date and Time of Opening of Technical Bid (Envelope 2)	To be advised
Date and Time of Opening of Financial Bid	To be advised

Please note carefully the requirements for submitting Bids as set forth in this RFP, and the date and time for submission of Bids. Late or delayed Bids shall not be considered for evaluation and shall either not be received or returned unopened.

THIS RFP COMPRISES OF THE FOLLOWING SECTIONS:

- Section A. Disclaimer
- Section B. Overview
- Section C. Notice of Invitation to Bid
- Section D. Definitions and Abbreviations
- Section E. Instructions to Bidders
- Section F. General Conditions of Contract
- Section G. Scope of Work
- Section H. System Requirement Specifications

Appendices and Forms of Bid (including any applicable Forms / Schedules thereto and draft Concession Agreement):

- Appendix 1 Contents & Format of Qualification Bid
- Appendix 2 Contents & Format of Technical Bid
- Appendix 3 Contents & Format of Financial Bid
- Appendix 4 Service Level Acceptance Metrics
- Appendix 5 Sample Reports Formats
- Appendix 6 Proforma of Bank Guarantee for Earnest Money / Bid Security
- Appendix 7 Independent Engineer's Services - Terms of Reference
- Appendix 8 Draft Concession Agreement

Note: The RFP Document, if procured by the Bidder is not transferable.

D. Definitions & Abbreviations

In this RFP, the following word (s), unless repugnant to the context or meaning thereof, shall have the meaning(s) assigned to them herein below:

1. **“Aims and Objectives of the AVTMPS Project”** has the meaning ascribed to it in Clause B3 (c) of the RFP.
2. **“AVTMPS Project”** has the meaning ascribed to it in the Clause A of the RFP titled “Disclaimer”
3. **“AVTMPS System”** is the system including without limitation the machinery, infrastructure, hardware, software, firmware designed, developed, implemented and maintained for the AVTMPS Project by Vendor on BOT basis as per the Scope of Work and System Requirement Specifications appended hereto.
4. **“Base Station”** means a sub control station located at a DTC bus depot to monitor buses at a particular bus depot and which will have communication links with the Central Control Station for purposes of the AVTMPS Project as required.
5. **“Bid”** means the proposals submitted by the Bidder(s) in response to this RFP in accordance with the provisions hereof including the RFQ, technical proposal and financial proposal along with all other documents forming part and in support thereof.
6. **“Bidder”** means any person(s) including a sole proprietor or a partnership firm or a company or a Joint Venture or a Consortium who submits a Bid along with Bid Security under this RFP within the stipulated time for submission of Bids.
7. **“Bid Security”** shall have the meaning ascribed to it in Section E, Instructions to Bidders
8. **“Bid Process”** means the process of selection of the Successful Bidder through competitive bidding and includes submission of Bids, scrutiny and evaluation of such Bids as set forth in the RFP.

9. **“Bus Stop”** means a place earmarked on the route of buses where buses stop for a short duration for passengers to board or disembark from the buses.

10. **“Bus Terminal”** means the terminals from where the bus(es) start or end their trip(s) under the operational control of DTC.

11. **“BQS”** means bus queue shelters constructed at DTC bus stops.

12. **“Central Control Station”** means the facility used for hosting the central server and components thereof for centrally storing, consolidating, processing the information obtained from various VMUs and Base Station(s) in relation to the AVTMPS Project for use by DTC.

13. **“CMD”** means the Chairman & Managing Director of DTC.

14. **“Concession Fee”** is the amount payable by the Concessionaire to DTC for grant of concession in accordance with the terms of the Concession Agreement.

15. **“Consortium”** shall mean an association of 2 (two) or more corporate entities / firms or a collaborator entity formed specially for the purpose of bidding for this RFP,

16. **“Commencement Date”** means the date prescribed by DTC for commencement of the AVTMPS Project by Vendor under the Concession Agreement.

17. **“Concession Agreement”** means the Agreement including, without limitation, any and all Annexures thereto which will be entered into between DTC and the Successful Bidder through which DTC will grant the rights to the Successful Bidder to develop, finance, design, engineer, procure, construct, operate and maintain the AVTMPS Project on BOT basis during the Concession Period.

18. **“Concessionaire”** means the Successful Bidder with whom DTC shall enter into the Concession Agreement.

19. **“Concession Period”** shall be a period of 6 (six) years commencing from the date of signing of the Concession Agreement by DTC and the Successful Bidder. Provided however that in the event of earlier termination of the Concession Agreement, “Concession Period” shall mean and be limited to the period commencing from the date of signing of the Concession Agreement and ending with the date of termination of the Concession Agreement.

20. **“Deadline for Submission of Bids”** shall mean the last date and time for receipt of Bids as set forth in Section C of this RFP under the heading “Key Details” or such other date / time as may be decided by DTC in its sole discretion and notified to the Bidders by dissemination of requisite information in this behalf on the DTC Website and / or in writing either by email or by facsimile or by registered post.

21. **“DTC”** means the Delhi Transport Corporation and its authorized successors and assigns at all times.

22. **“DTC Representative”** means any person duly authorized by DTC for the purposes of this RFP.

23. **“DTC Website”** means the website of DTC which, at present has the following URL – <http://dct.nic.in>

24. **“Letter of Acceptance”** or **“LOA”** means the letter issued by DTC to the Successful Bidder to undertake and execute the AVTMPS Project in conformity with the terms and conditions set forth in the RFP.

25. **“PIS”** means passenger information system whereby and whereunder passengers shall be informed of (a) at bus stops/BQS: expected route-wise time of arrival of buses (b) inside the bus: approaching bus stops (c) at bus terminals: expected route-wise time of arrival and / or departure of buses with applicable bay number(s) from / at where the bus shall arrive or depart.

26. **“RFP”** and / or **“RFP Document”** means this RFP document which comprises of the following sections: Disclaimer, Definitions and Abbreviations, Notice of Invitation to Bid & Key Details, Instructions to Bidders, General Conditions of Contract, Scope of Work, System Requirement Specification, Forms of Bid which include Appendices 1 to 8 and any applicable Schedules thereto.

27. The terms **“Successful Bidder”**, **“H1 Bidder”**, “and / or” **“Vendor”** shall mean the Bidder who qualifies the RFQ stage, technical proposal stage and the financial proposal stage of this RFP and to whom a Letter of Acceptance is consequently issued by DTC.

28. **“Scope of Work”** shall mean the scope of work for the AVTMPS Project set forth in Section G of this RFP.

29. "**Steering Committee**" shall have the meaning ascribed to it in the Section titled "General Conditions of Contract" of this RFP.

30. "**Vehicle Mounted Unit**" shall have the meaning ascribed to it under Section H of this RFP titled System Requirement Specifications.

31. Any other term(s), not defined herein above but defined elsewhere in this RFP shall have the meaning(s) ascribed to such term(s) therein and shall be deemed to have been included in this Section.

E. INSTRUCTION TO BIDDERS (ITBs)

1. Due Diligence

The Bidder is expected to examine all instructions, forms, terms and specifications in the RFP. The Bid should be precise, complete and in the prescribed format as per the requirement(s) of the RFP. Failure to furnish all information required by the RFP or submission of a Bid not responsive to the RFP in every respect will be at the Bidder's risk and may result in rejection of the Bid.

2. Cost of Bidding

The Bidder shall bear all costs associated with the preparation and submission of its Bid and DTC, will in no case be held responsible or be liable for these costs, regardless of the conduct or outcome of the Bidding Process.

3. Content of Bidding Document

The requirements, bidding procedures and terms are explained in the RFP Document.

4. Cost of Document

The RFP Document would cost Rs. 20,000/- (Rupees Twenty Thousand only) payable in cash or in the form of a Demand Draft drawn in favour of Delhi Transport Corporation, Delhi payable at Delhi. The Bidders who are downloading the RFP Document from DTC Website shall deposit (in the form of a Demand Draft) the said cost of the RFP Document alongwith the Bid. In the event of failure to deposit the requisite cost by such Bidder, his Bid shall not be processed further.

5. Clarification to RFP Documents

In the event that any Bidder requires any clarification on the RFP, such Bidder are expected to send their queries to DTC in writing by post, courier or by facsimile at least 48 (forty eight) hours prior to the time of the Pre Bid Meeting at the following addresses / fax number in order to enable DTC to have adequate notice of the said queries so that the same may be addressed at the Pre Bid Meeting:

Chief General Manager
Strategic Business Unit (SBU)
DTC Hauz Khas Terminal,
Delhi Transport Corporation,

New Delhi 110 016
India
Fax No. +91-11-23370877
Email address: dtc@bol.net.in

Nothing in this section shall be taken to mean or read as compelling or requiring DTC to respond to any questions or to provide any clarification to a query. DTC reserves the right to not respond to questions it perceives as non-relevant which may be raised by a Bidder or not to provide clarifications if DTC in its sole discretion considers that no reply is necessary. No extension of Deadline for Submission of Bids will be granted on the basis or grounds that DTC has not responded to any question or provided any clarification to a query.

6. Amendment of Bidding Documents

At any time before the Deadline for Submission of Bids, DTC may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the RFP by amendment. Any amendments / modifications to the RFP Document, which may become necessary for any reason, shall be through the issue of addendum(s) to the RFP which shall set forth the said amendments / modifications thereto (hereinafter referred to as the "Addendum(s)"). All prospective Bidders who have purchased the RFP Document shall be informed of such Addendum(s) in writing by e-mail and / or registered post, and the contents, terms and conditions of all such Addendums(s) shall be binding on Bidders. If required, in order to allow prospective Bidders reasonable time in which to take the Addendum(s) into account in preparing their respective Bids, DTC, reserves the right to extend the Deadline for the Submission of Bids. However no request from the prospective Bidder(s), shall be binding on DTC for the same. Any Addendum(s) to the RFP will also be posted on the DTC Website. Notwithstanding the foregoing, DTC takes no responsibility for individually intimating the Addendum(s) to the prospective Bidders, who have downloaded the RFP Document from the DTC Website and have not physically purchased the same from the DTC headquarters.

7. Pre-Bid Meeting

7.1 A pre-bid meeting shall be held for any clarifications and replies to the queries raised by prospective Bidders on 10th October, 2007 in New Delhi-110002 at the Office of Chief General Manager, Strategic Business Unit (SBU), DTC Hauz Khas Terminal, Delhi Transport Corporation, New Delhi 110 016, India ("Pre Bid Meeting").

- 7.2 Clarifications, if any, including the text of the relevant questions raised at the Pre Bid Meeting and the responses given thereon shall be displayed on the DTC Website.
- 7.3 Pursuant to the Pre Bid Meeting, the terms and conditions of the RFP Document will be frozen on 25th October, 2007 with or without amendments thereto as applicable which information shall be displayed on the DTC Website on the same day after the freezing of document.
- 7.4 Non-attendance at the Pre-Bid Meeting will not be a cause for disqualification of a Bidder. However, the terms and conditions of the Addendum(s) will be binding on all the Bidders irrespective of their attendance at the Pre-Bid Meeting
- 7.5 DTC may, at its sole discretion, extend the Deadline for Submission of Bids.

8. Documents constituting Bid

The documents constituting the Bid shall be as follows:

8.1 Qualification Bid with Bid Security

In order that Bidder(s) qualify to bid for this RFP, Bidder(s) shall be liable to submit a Qualification Bid in the form and manner set forth in Appendix 1 of the RFP Document along with all documents required to be submitted as per the said Appendix 1 including without limitation any Memorandum of Understanding and the Bid Security. The said RFQ shall be evaluated by DTC in its sole discretion as per the evaluation criteria set forth in this RFP.

8.2 Technical Bid

The Technical Bid should be in the form and manner set forth in Appendix 2 of this RFP and should comprise of all documents required to be submitted as per the said Appendix 2.

8.3 Financial Bid

The Financial Bids should be in the form and manner set forth in Appendix 3 to this RFP and should comprise of all such documents and details mentioned in the said Appendix 3.

9. Preparation of Bids

9.1 Language of Bid

The Bid prepared by the Bidder, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and DTC shall be written in English language only. However, in case Bidder chooses to enclose certain supporting document(s) in any language other than English, then Bidder shall also enclose certified / authentic translated copies of the same in English language. Any document which is not translated into English will not be considered. For the purpose of interpretation and evaluation of the Bids, the English language translation shall prevail.

9.2 Bid Currencies

All prices quoted in the Bid shall be quoted in Indian National Rupee(s) (INR).

9.3 Format of Bid Security or Earnest Money Deposit (“EMD”)

Bid submitted in response to the RFP Document shall be accompanied by a Bid Security of Rs. 1,00,00,000/- (Rupees Ten Millions) (hereinafter referred to as “Bid Security” or “EMD”) in the form of a bank guarantee from a scheduled commercial bank (licensed by the (RBI) (hereinafter referred to as “Scheduled Bank”) in the format as set forth in Appendix 6 hereto or in the form of a Fixed Deposit Receipt (“FDR”) pledged in favour of CMD, DTC or in the form of a bank draft in favour of CMD, DTC payable at Delhi. In case of a bank guarantee of foreign bank(s) not having branch in India, the same should be counter guaranteed by a Scheduled Bank in India. The Bid Security should be valid for a period of 240 (two hundred and forty) days from the Deadline of Submission of Bids.

9.4 Currency of Bid Security

The Bid Security should be furnished in Indian National Rupees (INR)

9.5 Conditions for Consortium of Companies

(a) If and to the extent applicable, Bids shall have notarized copies of unconditional teaming agreement(s) between consortium partners, signed by the authorized signatories of the partner companies of such consortium on stamp paper of Rs. 100/- (Rupees One Hundred only), dated prior to Deadline for Submission of Bid and valid for the Concession Period and any extension thereof.

(b) In the alternative, teaming agreement(s) may be signed on a plain paper. In such a case the lead Bidder would be expected to provide an affidavit regarding the authenticity of the teaming agreement, on stamp paper of Rs. 100/- (Rupees One Hundred only) dated prior to Deadline for Submission of Bids valid for the Concession Period and any extension thereof.

(c) A copy of such teaming agreement shall be attached along with the Bid as required by Appendix 1 hereto.

(d) Any such teaming agreement shall clearly specify the lead bidder and the various consortium partners with their respective roles and responsibilities during the AVTMPS Project.

(e) Any changes and deviation of roles and responsibilities after the submission of Bid and before the execution of the Concession Agreement shall entitle DTC to reject the Bid in its sole discretion.

(f) Prior written consent of DTC is necessary for any change in the constitution, substitution, addition or removal of any of the consortium partners.

(g) DTC reserves the right to reject the Bid in case of change in the constitution of the consortium after the submission of Bid and before the execution of the Concession Agreement.

9.6 Authentication of Bid

The original and the copy of the Bid shall preferably be type written and shall be signed by a person or persons duly authorized by the Bidder in this behalf by way of a Power of Attorney duly executed by the Bidder in the form set forth in Appendix 1 hereto. The person or persons signing the Bid shall initial all pages of the Bid.

9.7 Validation of interlineations in Bid

Any interlineations, erasures or overwriting shall be valid only if the person or persons signing the Bid have authenticated the same with their respective signature alongside such interlineations, erasures or overwriting.

9.8 Number of Copies of Bid

The Bidder shall submit **one original** and **one copy** of the Qualification Bid separately, clearly marking each "**Qualification Bid – Original**" and "**Qualification Bid – Copy**", as

appropriate. In the event of any discrepancy between the original and the copy, the original shall govern. Similarly, one original and one copy of the Technical Bid should be submitted and marked as **“Technical Bid – Original”** and **“Technical Bid – Copy”**. Bidder shall submit **only one original** of the **Financial Bid**, clearly marking the same as **“Financial Bid”**.

9.9 Sealing and Marking of Bids

- (a) The original of the Bid Security of the required value and in approved format shall be sealed separately in an envelope on which the following shall be superscribed:

“Envelope – A1 Bid Security for AVTMPS Project”

- (b) The original and copy of the original of the Qualification Bid shall be sealed separately in an envelope on which the following shall be superscribed:

“Envelope – A2 Qualification Bid for AVTMPS Project on BOT basis”

- (c) The original and copy of the original of the technical proposal shall be sealed separately in an envelope on which the following shall be superscribed:

“Envelope – A3 Technical Proposal for AVTMPS Project on BOT basis”

- (d) The original of the Financial Bid shall be sealed separately in an envelope on which the following shall be superscribed:

“Envelope – B Financial Proposal for AVTMPS Project on BOT basis”

- (e) The original and copy of the Qualification Bid and Technical Bid and the original of the Financial Bid shall also be sealed separately before sealing the same in their respective envelopes of A2, A3 and B respectively.

- (f) All the above envelopes viz. ‘A1’, ‘A2’, A3’ and ‘B’ alongwith the original bid documents issued / downloaded from DTC Website along with updated addendums/amendments thereto, duly signed by the Bidder through its authorized signatory on all pages shall then be sealed in one outer envelope.

- i. The inner and outer envelopes shall be addressed to Delhi Transport Corporation and marked as below:

“Tender for DTC AVTMPS Project on BOT basis”

- ii. The outer as well as inner envelopes shall indicate the name and address of the Bidder to enable the Bid to be returned unopened in case it is received late.
- iii. If the outer envelope is not sealed and marked as above, DTC will assume no responsibility for the misplacement or premature opening of the Bid.

10. Period of Validity of Bids

10.1 Validity Period

Bids shall remain valid for a period of 180 days (one hundred and eighty) after the date of bid opening prescribed by DTC. DTC reserves the right to reject a Bid as non-responsive if such Bid is valid for a period less than 180 (one hundred and eighty) days and DTC shall not be liable to send an intimation of any such rejection to such Bidder.

10.2 Extension of Period of Validity

In exceptional circumstances, DTC may solicit the Bidder's consent for an extension of the period of Bid validity. Any such request by the DTC and the response thereto shall be made in writing and such extension of Bid validity period by the Bidder should be unconditional. A Bidder may refuse DTC's request for such extension without forfeiting the Bid Security. A Bidder accepting the request of DTC shall not be permitted to modify its Bid.

11. Mailing Address for Bids

Bids shall be addressed to DTC and sent at the following address:

**Dy. Manager (Tender Cell)
Delhi Transport Corporation (DTC)
Room no. 207, Tender Cell
DTC Head Quarters,
IP Estate, New Delhi-110002, India**

12. Deadline for Submission for Bids

12.1 Last Date and Time for Submission

The Bids must be received by DTC, at the specified address, latest by the Deadline for Submission of Bids. In the event of the specified date which is stipulated as the Deadline for Submission of Bids is declared as a holiday for DTC, the Bids will be received up to the appointed time on the next working day.

12.2 Extension of Deadline for Submission of Bids

If the need so arises, DTC may, in its sole discretion, extend the Deadline for Submission of Bids by amending the RFP documents in this behalf. In such event, all rights and obligations of DTC and Bidders previously subject to the earlier deadline will thereafter be subject to the deadline as extended. Any such change in the Deadline for Submission of Bids shall be notified to the Bidders by dissemination of requisite information in this behalf on the DTC Website and / or in writing either by email or by facsimile or by registered post.

12.3 Late Bids

Any Bid received by DTC after the Deadline for Submission of Bids prescribed by DTC will be summarily rejected and returned unopened to the Bidder. DTC shall not be responsible for any postal delay or non-receipt / non-delivery of any documents. No further correspondence on this subject shall be entertained by DTC.

13. Modification and Withdrawal of Bids

13.1 Modification of Bid

Bidder may modify any part of its Bid after the Bid submission, provided that such modification(s) is received by DTC in writing from such Bidder in a sealed envelope, before the expiration of Deadline for Submission of Bids. Such modification(s) shall be sent through recognized courier service, registered post or by hand. Any such modification shall comply with the general terms of this RFP.

13.2 Withdrawal of Bid

In order to avoid forfeiture of Bid Security, a Bidder may withdraw his Bid after submission thereof, provided that DTC receives written notice of such withdrawal before the expiration of Deadline for Submission of Bids.

14. Bid Process – Steps & Evaluation

14.1 Opening of Qualification Bids

All Qualification Bids received by DTC in response to this RFP shall be opened by DTC in the presence of Bidders' representatives who choose to attend the opening of Qualification Bids at **15 November 2007 at 3:30 PM** in the Tender Cell, Room no. 207, Head Quarters-Delhi Transport Corporation, IP Estate, and New Delhi-110002. The Bidders' representatives who are present at such opening shall sign a register evidencing their attendance as a witness to the Bids opening process. In the event of the specified date of Bid opening being declared a holiday for DTC, the Bids shall be opened at the appointed time and location on the next working day.

14.2 Announcement of Bids

The Bidder's names, Bid modifications or withdrawals (as applicable) and the presence or absence of requisite Bid Security and such other details as DTC in its sole discretion may consider appropriate, will be announced at the opening of the Qualification Bids.

14.3 Opening of Technical Bids

(a) After the Qualification Bid(s) evaluation process has been completed the Technical Bid(s) of only those Bidders who qualify the prescribed criteria for the Qualification Bid(s) shall be opened. The criterion for qualification in this behalf is set forth in this RFP subsequently.

(b) Technical Bids shall be opened, in the presence of Bidders' representatives who choose to attend the Technical Bid opening on such date and time which shall be communicated to the Bidders who's Qualification Bids are accepted by DTC. The Bidder's representatives who are present at such opening of the Technical Bids shall sign a register evidencing their attendance as a witness to the Bids opening process.

14.4 Opening of Financial Bids

(a) After the evaluation of Technical Bids has been completed, DTC shall open the Financial Bids of only those Bidders who qualify the prescribed criteria for the Technical Bids. Financial Bids of those Bidders whose Technical Bids are rejected shall not be opened and shall be returned to such Bidders as per the procedure set forth in this RFP.

(b) Financial Bids shall be opened, in the presence of Bidders' representatives who choose to attend the Financial Bid opening on such date and time which shall be communicated to the Bidders whose Technical Bids are accepted. The Bidder's representatives who are present at such opening of Financial Bids shall sign a register evidencing their attendance as a witness to the Bids opening process. The name of Bidder, Bid rates, etc. will be announced at such opening.

14.5 Completeness of Bids & Rectification of Errors

DTC will examine the Bids to determine whether these are complete, whether these meet all the conditions of the RFP Document and whether the documents have been properly signed and the Bids are generally in order. If there is a discrepancy between words and figures, the amount in words shall prevail.

14.6 Clarification of Bids

During evaluation of Bids, DTC may, at its discretion, ask the Bidder for a clarification of its Bid. The request for clarification and the response shall be in writing. If the response to the clarification is not received by DTC before the expiration of the deadline prescribed in the written request for clarification, DTC reserves the right to make its own reasonable assumptions at the total risk and cost of the Bidder.

14.7 Rejection of Bid

(a) A Bid is likely to be rejected by DTC without any further correspondence, as non-responsive, if:-

- (i) Bid is not submitted in the manner as prescribed in the Instructions to Bidders Section of this RFP and is otherwise not in conformity with the terms and provisions of this RFP Document; or
- (ii) Bid is not submitted in the bid-forms annexed in the RFP Document; or
- (iii) Bid is submitted by telex, fax or email; or
- (iv) Bid Security does not conform to the provisions set forth in this RFP; or

(b) Failure of any one (or more) of the conditions set forth herein above shall result in rejection of Bid.

(c) In addition to the foregoing, in the event a Bidder makes an effort to influence DTC in its decisions on Bid evaluation, Bid comparison or selection of the Successful Bidder, it may result in rejection of such Bidder's Bid.

15. Criteria for Evaluation of Bids

15.1 Criteria for Evaluation of Qualification Bids

The Qualification Bid (s) shall be evaluated on the following criteria:

(a) Bidding shall be open to all national or international firms (which include companies, partnerships, proprietary concerns etc.) who are interested in bidding for the project either individually or as a Consortium or Joint venture of such firms. In case of Consortium or Joint venture, the lead firm (which shall be single entity) shall be specified and fully empowered to represent the Consortium or Joint venture. The lead firm shall have a minimum stake of 26% in the Consortium or Joint venture. In case the lead firm does not meet the criteria of 3(three) years relevant experience or is not in existence for 3 (three) years, the Consortium / Joint Venture must have a strategic partner with relevant experience of minimum 3 (three) years and this strategic partner should also hold equity / profit sharing (as per MOU) of minimum 26% with a lock-in period of minimum 3 (three) years during the concession period.

(b) The annual turnover of company / Consortium should not have been less than Rs. 500 Millions (Rupees Five hundred million) or 12 (Twelve) Million US dollars for foreign bidder(s)

on an average for the preceding 3 (three) years. The bidder shall have present net-worth (on the last day of the previous financial year) of Rs. 100(hundred) Millions or 2.4 million U S dollars for foreign bidders.(The net worth as indicated in audited annual accounts only shall be considered). In the case of Consortium/Joint Venture the average of annual turnover and net worth shall be calculated by weighted means on the basis of equity / profit sharing participation of its members as indicated in the teaming agreement.

(c) The company / Consortium must be well established and must have the experience of having executed similar projects in the fields of GPS / Communication / IT for at least 3 (three) years in the last 5 (five) years prior to the issuance of this RFP.

(d) Company / Consortium should have sufficient technical skilled manpower who have sufficient experience to develop and implement customized IT applications integrating GPS, Geographical Information System (GIS) and web / internet technologies.

15.2 Criteria for evaluation of Technical Bids

Technical Bids of only those Bidders whose Qualification Bids are accepted shall then be considered and evaluated. Technical Bids shall be evaluated using the following criterion:-

S. No.	Evaluation criteria	Weight age (in Marks)
1.	Vendor Competitiveness	30
1.1	Company or consortium's capabilities including infrastructure	10
1.2	Company or consortium's capabilities in executing similar projects & reference installations	10
1.3	Technical skill sets, assessed on key personnel Curriculum Vitae (CVs)	10
2.	Project Execution methodologies	15
2.1	Project management, System development, implementation and deployment	5
2.2	Facility Management & Operations Management	10
3.	Proposed Technology Solution	55
3.1	On board GPS unit capabilities/features	10
3.2	PIS capabilities in bus, bus stops including through SMS, IVRS, WEB,	10

S. No.	Evaluation criteria	Weight age (in Marks)
	etc	
3.3	IT technology architecture proposed & IT Infrastructure design. Hardware & network sizing.	5
3.4	Disaster recovery & business continuity plan proposed including back up & storage system proposed	5
3.5	Route Planner Software	5
3.6	Application software design	5
3.7	System availability & security features proposed	5
3.8	Compliance to the System Requirements Specifications	5
4.	Revenue Model and Philosophy	5

15.3. Criteria for evaluation of Financial Bids

Only those Technical Bids which score minimum 60 (sixty) marks at the end of the Technical Bid evaluation process (as detailed above) will be considered for the Financial Bid evaluation. The Financial Bids of eligible Bidders shall then be evaluated by using the following evaluation criteria:

S. No.	Evaluation criteria	Weight age
1.	Percentage Concession Fee quoted by the Bidder over and above the Minimum Concession Fee specified by DTC in Table 1 of Appendix 3 for upto 2500 (Two Thousand Five Hundred) DTC Buses	60%
2	The percentage figure quoted by Bidder in point no. 2 of Part I of Appendix 3	30%
3	Percentage monthly rental quoted by the Bidder for private buses (with PIS at bus-stops and without PIS inside the bus) over and above bench mark specified in Table 2 of Appendix 3	10%

Example: In case Bidder quotes percentage from Serial No. 1 to 3 as x, y, & z, then evaluation of financial bid shall be done as per the following formula:

$$\text{Net percentage quoted} = 0.6x + 0.3y - 0.1z$$

16. Determination of Highest Bidder

The highest Bidder (“H1”) shall be determined after the evaluation of the Financial Bids as per the criteria stated above. In case of a tie between 2 (two) or more H1 Bidders, the Financial Bid shall be submitted again by such H1 Bidders for DTC to break the tie. Provided however that, such re-submission of Financial Bid(s) by H1 Bidders shall not, in any event, be lower than their respective original Financial Bid(s). Such subsequent Financial Bid(s) shall also be evaluated on the same criteria as the original Financial Bid(s).

17. Discharge of Bid Security of unsuccessful Bidder(s)

The Bid Security of unsuccessful Bidders will be discharged / returned as promptly as possible after the expiry of Bid validity and latest by the 30th (thirtieth) day of the signing of the Concession Agreement with the Successful Bidder.

18. Discharge of Bid Security of successful Bidder

The Successful Bidder shall be required to furnish a performance guarantee on or before the date of signing the Concession Agreement. The Bid Security of a Successful Bidder shall be discharged only after the Successful Bidder furnishes the performance guarantee as required. The Successful Bidder’s Bid Security shall not be adjusted against the Performance Guarantee.

19. Forfeiture of Bid Security

The Bid Security of a Bidder shall be forfeited in the following events:

- (i) If a Bidder withdraws the proposal during the period of Bid validity.; or

- (ii) In the case of a Successful Bidder, if the Bidder fails to sign the Concession Agreement or fails to furnish the required performance guarantee within stipulated time in accordance with General Conditions of Contract set forth herein.

20. Contacting DTC

Unless specifically requested by DTC for a clarification, no Bidder shall contact DTC on any matter relating to its Bid, from the time of the Qualification Bid opening to the time the Concession Agreement is executed with the Successful Bidder.

21. DTC's right to accept or reject any and/or all Bids

DTC reserves the right to accept or reject any Bid in its sole discretion, and to annul the bidding process and reject all Bids without assigning any reason whatsoever at its sole discretion at any time before issuance of a Letter of Acceptance without incurring any liability.

22. Notification to Successful Bidder

Before the expiry of the period of validity of the Bid, DTC shall notify the Successful Bidder in writing by registered AD that its Bid has been accepted and issue the Letter of Acceptance to such Successful Bidder. The Successful Bidder shall acknowledge in writing receipt of such notice and Letter of Acceptance and in response thereto shall send its acceptance to execute the AVTMPS Project as well as enter into the Concession Agreement with DTC within seven (7) days of receipt of the Letter of Acceptance.

23. Signing of Concession Agreement

Bidders should note that in the event of acceptance of its Bid, the Successful Bidder would be required to execute the Concession Agreement in the form attached hereto in Appendix 8, with such modifications thereto / therein as may be considered necessary by the DTC at the time of finalization of the Concession Agreement. Accordingly, DTC hereby reserves the right to modify the terms of the Draft Concession Agreement. It is clarified that the issuance of the Letter of Acceptance shall be followed by signing of the Concession Agreement (as aforesaid) and thereafter the Successful Bidder shall commence the AVTMPS Project. The signing of the Concession Agreement shall be completed within 1 (one) month of the issuance of the Letter of Acceptance to the Successful Bidder or within such extended time frame as extended by DTC in its sole discretion.

24. Expenses for the Concession Agreement

Any and all incidental expenses of execution of the Concession Agreement shall be borne by the Successful Bidder.

25. Annulment of Award

Failure of the Successful Bidder to comply with the requirements set forth in this RFP Document and /or the provisions of the Concession Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security.

26. Failure to abide by the Concession Agreement

The conditions stipulated in the Concession Agreement shall be strictly adhered to by the Concessionaire and any violation thereof by the Concessionaire may result in termination of the Concession Agreement without prejudice to any rights available to DTC upon such termination as set forth in the Concession Agreement.

F. GENERAL CONDITIONS OF CONTRACT

1. Application

These general conditions shall apply to Vendor to the extent that provisions in the Concession Agreement do not supersede them.

2. Standard of Performance

Vendor shall perform the services and carry out its obligations under the Concession Agreement with due diligence, efficiency and economy, in accordance with generally accepted techniques and practices used in the industry and with professional engineering standards recognized by the international professional bodies and shall observe sound management, technical and engineering practices. Vendor shall deploy appropriate advanced technology and safe and effective equipment, machinery, material and methods for the AVTMPS Project. In the event that DTC requires any interaction and / or arrangement with a third party in relation to the AVTMPS Project, Vendor shall act as a faithful advisors to DTC in such process and shall, at all times, support and safeguard DTC's legitimate interests in this context.

3. Use of Concession Agreement & Information

- a. Vendor shall not, without DTC's prior written consent, disclose the Concession Agreement, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of DTC in connection therewith, to any person outside the scope of the AVTMPS project.
- b. Vendor shall not, without DTC's prior written consent, make use of any document or information, which becomes available to Vendor during the performance of the Concession Agreement, except such use of information for the purpose of performing the Concession Agreement.
- c. All documents other than the Concession Agreement itself, including without limitation any drawings, plans, specifications, charts, etc. shall remain the property of DTC and shall be retained (in all copies) by DTC.

4. Indemnity

Vendor shall at all times, i.e. during the subsistence of the Concession Agreement and any time thereafter, defend, indemnify and hold DTC harmless from and against all claims (including without limitation claims for infringement of intellectual property, breach of contract, death or injury to a person or injury to property, or other tort claims) and expenses (including court costs) arising out of or relating to the breach by Vendor of any covenant, representation or warranty or from any act or omission of the Vendor or his agents, employees or sub contractors. DTC will notify Vendor of any such claim, suit or proceeding and will assist Vendor (at Vendor's expense) in the defense of the same.

5. Performance Guarantee

(a) Within 30 (thirty) days of receipt of Letter of Acceptance by Vendor, Vendor shall furnish a performance guarantee to DTC, **for an amount equal to Rs. 3, 60,00,000/- (Rupees Thirty Six Million)** in the form of a Bank Guarantee from any Scheduled Bank approved by RBI or Demand Draft / Bankers' Cheque drawn in favour of **"CMD, DTC"** payable at Delhi (**"Performance Guarantee"**). However, should Vendor furnish Bank Guarantee of foreign banks, the same should be counter guaranteed by a Scheduled Bank approved by RBI. The Bid Security submitted by the Successful Bidder shall not be adjusted against the Performance Guarantee. The general format of the bank guarantee for Performance Guarantee is set forth in Appendix 6A of this RFP.

(b) In the event of enhancement of the Scope of Work in the AVTMPS Project and services required thereunder, Vendor shall be required to furnish to DTC an additional performance guarantee(s) for an amount equal to Rs. 60,00,000/- (Rupees Six Million) for every lot of 500 (five hundred) additional buses that may be added to the Scope of Work from time to time¹.

(c) Performance Guarantee in the form of a bank guarantee shall be irrevocable and valid for the entire Concession Period and an additional period of 180 (One hundred and eighty) days thereafter.

¹ Example: Performance Guarantee up to 2500 DTC buses will be Rs. 3,60,00,000/- (Rupees Thirty Six Million). On the number of buses touching the figure of 3000 additional Performance Guarantee of Rs. 60,00,000/- (Rupees Six Million) shall be payable [this shall be in addition to Rs. 3,60,00,000/- (Rupees Thirty Six Million) payable for 2500 buses].

6. Representations and Warranties

- a. Vendor hereby represents and warrants that the AVTMPS System as well products and services implemented under the AVTMPS Project shall be:
- (i) specifically designed and developed for DTC for the AVTMPS Project;
 - (ii) based on the most recent and current techniques in the field;
 - (iii) compliant with the System Requirements Specifications set forth in this RFP;
 - (iv) fit and sufficient for the purpose(s) for which they are designed and developed;
 - (v) be new and merchantable;
 - (vi) be free from defects in design, material and workmanship, whether latent or otherwise
- b. Vendor hereby represents and warrants that neither the AVTMPS System nor any use thereof by DTC will infringe any patent, trademark, copyright, trade secret, or other proprietary right of a third party.
- c. Vendor hereby further represents and warrants that any service Vendor provides hereunder shall be performed in a competent manner and be for any purpose for which Vendor knows or has reason to know DTC intends to use such service.
- d. Vendor hereby agrees that the above stated Representations and Warranties (i) shall survive the inspection, acceptance and use of the AVTMPS System by DTC; (ii) are for the benefit of DTC; and (iii) are in addition to any warranties and remedies to which DTC may otherwise agree or which are provided by law.

7. Assignment

Vendor shall not assign, in whole or in part, any right or delegate any duty under the Concession Agreement to any third party, except with DTC's prior written consent in this behalf.

8. Delay in the Vendor's performance

a) Performance of the Concession Agreement shall be made by Vendor in accordance with the time schedule specified in the Scope of Work and / or any amendments thereto. A delay by Vendor in the performance of its obligations under the Concession Agreement shall render Vendor liable to any or all the following sanctions in the sole discretion of DTC:

- (i) Forfeiture of Vendor's Performance Guarantee
- (ii) Imposition of liquidated damages on Vendor in terms of this RFP, and/or
- (iii) Termination of the Concession Agreement

b) If at any time during performance of the Concession Agreement, Vendor or its Consortium partners should encounter conditions impeding the timely completion and / or performance of the services under the Concession Agreement, Vendor shall promptly notify DTC in writing of the fact and reasons for the delay and likely duration of such delay. As soon as practicable after receipt of Vendor's notice in this behalf, DTC shall evaluate the situation and may at its discretion extend Vendor's time for performance of Vendor's obligations under the Agreement. Any such extension shall be valid only if ratified by the parties by way of making appropriate amendment(s) in writing to the Concession Agreement as may be mutually agreed to between the parties.

9. Quality Check & Acceptance Test Plan

Vendor shall submit a Quality Check and Acceptance Test Plan to DTC for review and approval by DTC and after finalization the same shall form an integral part of the Concession Agreement. Testing of the entire setup designed and developed by Vendor for the AVTMPS Project shall be tested for acceptance / rejection (as applicable) in accordance with the Quality Check and Acceptance Test Plan.

10. Payment Terms

a) Payment of Concession Fee (as applicable for each corresponding year of the Concession Agreement) by Vendor to DTC shall be on quarterly basis with effect from the date of completion of Pilot Implementation Phase and till the end of the Concession Agreement on actual number of buses on which the AVTMPS system is implemented.

- b) The aforesaid quarterly payments of Concession Fees by Vendor to DTC shall be made by Vendor in advance for each quarter and not later than the 10th day of the first month of the quarter in which it is due and failure to do so will attract an interest of 18% per annum (1.5% per month) on the entire amount of the outstanding amount for the relevant quarter.
- c) Any and all payment(s) of Concession Fee shall be by way of a Pay Order or Demand Draft of a Scheduled Bank drawn in favor "Delhi Transport Corporation" payable at Delhi.
- d) Any and all applicable taxes including without limitation any and all Service Tax in the performance of the services under the Concession Agreement shall be borne by Vendor.

11. Liquidated Damages

In the event of delay by Vendor to comply with the timeline(s) stipulated for completion of the Pilot Implementation, monthly roll out of the AVTMPS Project and final completion thereof as set forth in the Scope of Work, DTC reserves the option to recover from Vendor liquidated damages (and not by way of penalty) @ Rs. 500/- (Rupees Five Hundred) per bus and Rs. 500 (Rupees Five Hundred) per PIS (at a BQS / Bus Terminal) per week on / at which there is such delay.

12. Implementation

Vendor shall implement the AVTMPS Project as per the schedule set forth in section titled Scope of Work of this RFP.

13. Right to Inspect Development and Support Facilities and Documents / Records

- a) DTC reserves the right to inspect any development and support facility used by Vendor in relation to the implementation of the AVTMPS Project. DTC shall do so after giving prior notice to Vendor and make a visit during the office hours of Vendor. Vendor shall at all times assist DTC in such inspections.

- b) DTC reserves the right to inspect all relevant documents / records including the books of accounts for statutory payments like PF, ESIC, Service Tax, etc. of Vendor at any time to monitor compliance with Vendor's obligations in relation to implementation of the AVTMPS Project. DTC shall do so after giving prior notice to Vendor and make a visit during the office hours of Vendor. Vendor shall at all times assist DTC in such inspections.

14. Ownership & Protection of Property

- a) DTC shall retain the title and ownership of any site allotted by DTC to Vendor for purposes of carrying out Vendor's obligations in relation to the AVTMPS Project. Such title and ownership of DTC in any such site shall not pass to Vendor.
- b) The ownership of the hardware, software, equipments and any other infrastructure created by Vendor for the AVTMPS Project shall be with DTC with effect from the date of the implementation. The possession of the infrastructure shall pass to DTC on the expiry of the Concession Agreement.
- c) DTC shall own any and all data created out of the AVTMPS Project at all the times, i.e. both during and after the expiry / termination of the Concession Agreement. Vendor shall not have any claim on and for such data and shall not for any reason withhold such data from DTC.
- d) Vendor shall exercise all due caution to protect and maintain the data created out of this AVTMPS Project.
- e) Vendor shall not share, sell or in any manner use the data created by Vendor out of this AVTMPS Project otherwise than in accordance with the terms of the Concession Agreement.
- f) Upon expiry or earlier termination of the Concession Agreement, Vendor shall transfer the possession of any and all assets including without limitation any hardware, software etc. designed, created, implemented by Vendor for the AVTMPS Project to DTC.

15. Intellectual Property Rights

- a) Vendor shall acknowledge and agree that any and all hardware, software, and / or firmware designed and developed by Vendor for DTC in relation to the AVTMPS Project and any modifications thereto or works derived therefrom shall be the exclusive property of DTC at all times and DTC shall retain all right, title and interest in and to the same. Provided however that the Vendor shall have the right to possess and use the same during the Concession Period for purposes of effective implementation, operation and maintenance of the AVTMPS Project.
- b) After the expiry or termination of the Concession Agreement Vendor shall have no right, title or interest in or to any work including without limitation the designs, software, programs, modifications or derivative works developed by Vendor for DTC under the AVTMPS Project for any purpose whatsoever.
- c) For purposes of this RFP and the Concession Agreement the terms “software”, “software programs” and “VMU” shall include without limitation the source code, object code, any and all related design concepts and ideas, specifications, documentation, technical information, and all corrections, modifications, additions, improvements and enhancements to any of the foregoing provided to DTC by the Vendor in relation to the AVTMPS Project pursuant to the Concession Agreement. The terms “firmware” and “hardware” shall include without limitation the designs, drawings, specifications, custom designed electronic devices, documentation, technical information and all corrections, modifications, additions, improvements and enhancements to any of the foregoing provided to DTC by Vendor in relation to the AVTMPS Project pursuant to the Concession Agreement.
- d) DTC may in its sole discretion allow the marketing of any and all product(s) developed specifically for DTC in relation to the AVTMPS Project by Vendor to a third party. Provided however that such marketing shall be done only after prior consultation with DTC in which event the parties shall arrive at an understanding which shall be set forth in writing in a Memorandum of Understanding (“MOU”) between DTC and the Vendor before taking up such activity. The MOU shall clearly state the terms of / for such marketing activity, the responsibilities of Vendor and DTC respectively as well as financial implications thereof.

16. Confidentiality Obligations of Vendor

(a) Confidential Information

(i) Vendor shall treat as confidential any information which is clearly described as confidential otherwise clearly marked as confidential or proprietary to DTC ("Confidential Information"). Notwithstanding the generality of the foregoing, Confidential Information shall include any proprietary or confidential information of DTC relating to the AVTMPS Project or services provided under the Concession Agreement in relation thereto and information relating to DTC's business or operations.

(ii) Vendor shall not without DTC's prior written consent use, copy or remove any Confidential Information from DTC's premises, except to the extent necessary to carry out Vendor's obligations hereunder. Upon completion or termination of each assignment hereunder, Vendor shall return to DTC all documents or other materials containing DTC's Confidential Information and shall destroy all copies thereof.

(b) Confidentiality Exceptions

Confidential Information shall not include information which:

- (i) Is or becomes generally available to the public without any act or omission of Vendor
- (ii) Was in Vendor's possession prior to the time it was received from DTC or came into Vendor's possession thereafter, in each case lawfully obtained from a source other than DTC and not subject to any obligation of confidentiality or restriction on use;
- (iii) Is required to be disclosed by court order or operation of law; in such event, Vendor shall so notify DTC before such disclosure; or
- (iv) Is independently developed by or for Vendor by persons not having exposure to DTC's Confidential Information

(c) Period of Confidentiality

Vendor's obligations of confidentiality regarding DTC's Confidential Information shall terminate 5 (five) years after the expiry or earlier termination of the Concession Agreement.

17. Suspension

On the occurrence of any of the following events, DTC shall by a written notice of suspension, suspend any concession(s) as set forth in the Concession Agreement which may have been granted to the Vendor thereunder:

- (i) In the event and to the extent DTC is required to do so by any applicable law(s), rule(s), guideline(s), or court order(s). Any such notice of suspension shall specify the applicable law(s), rule(s), guideline(s), or court order(s).
- (ii) In the event Vendor fails to perform any of its obligations under the Concession Agreement as required (including the carrying out of any services thereunder). Any such notice of suspension issued by DTC to Vendor shall specify the nature of the failure and may request the Vendor to remedy such failure within a specified period, as decided by DTC in its sole discretion, from the date of issue of such notice of suspension.

18. Term of Concession Agreement

The term of the Concession Agreement shall be 6 (six) years commencing from the execution of the Concession Agreement by DTC and Vendor, and such extensions thereof at the sole discretion of DTC, on such terms and conditions as may be mutually agreed to by the parties.

19. Termination for Default

- (a) Without prejudice to any other rights available to DTC for breach of contract or otherwise DTC may in its sole discretion terminate the Concession Agreement in whole or in part if:
 - (i) Vendor fails to perform any of Vendor's obligations set forth in the Concession Agreement; and / or
 - (ii) Vendor fails to adhere to the timelines set forth in the Concession Agreement for performance of Vendor's obligations thereunder; and / or
 - (iii) Vendor fails to comply with the applicable laws, rules, regulations,

- (b) In any of the above mentioned conditions, DTC shall have the right to invoke the Performance Guarantee and / or take the possession of the entirety of the infrastructure of the AVTMPS System or transfer the entire infrastructure or part of the infrastructure to any replacement vendor selected by DTC in its sole discretion.
- (c) If Vendor, having been notified, fails to remedy the defect(s) within a timeframe specified in the Service Level Acceptance (“SLA”) metrics section, DTC may proceed to take such remedial action as may be necessary, at Vendor’s risk and expense and without prejudice to any other rights which DTC may have against the Vendor under the Concession Agreement.

20. Termination for Insolvency, Dissolution etc

DTC may at any time terminate the Agreement by giving written notice to Vendor without any compensation to Vendor, if Vendor becomes bankrupt or otherwise insolvent or in case of dissolution of firm or winding up of the company, provided that such termination will not prejudice any other rights of DTC. Notwithstanding the generality of the foregoing, DTC reserves the right to invoke the Performance Guarantee and / or take over the entire infrastructure designed and developed by Vendor for the AVTMPS Project or any part thereof and / or negotiate with Vendor to transfer the said infrastructure or part thereof to a replacement vendor selected by DTC, in DTC’ sole discretion.

21. Force Majeure

- a) DTC shall not forfeit Vendor’s Performance Guarantee or charge liquidated damages or terminate the Concession Agreement for default, if and to the extent that delay in performance or failure to perform Vendor’s obligations under the Concession Agreement is the result of an event of Force Majeure.
- b) For purposes of this Clause “Force Majeure” means an event beyond the reasonable control of Vendor. Such events may include wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- c) If a Force Majeure situation arises, Vendor shall promptly notify DTC in writing of such conditions and the cause thereof. Unless otherwise directed by DTC in writing, Vendor shall continue to perform its obligations under the Concession Agreement as far as is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

23. Phases of Contract

(a) The AVTMPS Project shall comprise the following phases:

(i) Pilot Implementation in 1 (one) depot of fleet size of about 100 (hundred) buses and PIS at 10 (ten) DTC Bus Terminals / BQS along with operations & facility management

(ii) System Roll out on remaining 2400 (Two thousand four hundred Buses and PIS at remaining about a minimum of 490 (Four hundred and ninety) DTC Bus Terminals / BQS along with operations & facility management as well as Implementation of AVTMPS system on about 4000 (Four thousand) private stage carriage buses along with operations & facility management. It is clarified that these aforesaid activities of System Roll out as well as implementation set forth in this provision can be parallel activities, i.e. undertaken at the same time.

(iii) Provision of scalability of system upto 10,000 (Ten thousand) buses.

24. Steering Committee & Independent Engineer

24.1 Constitution of the AVTMPS Project Steering Committee

(a) Pursuant to the execution of the Concession Agreement, DTC shall nominate members to formulate a steering committee to oversee and monitor the work performed by Vendor under the Concession Agreement ("Steering Committee"). The Steering Committee shall comprise of the following persons:

- (i) 3 (three) representatives of DTC nominated by the CMD, DTC,
- (ii) 1 (one) representative of the Vendor,
- (iii) 1 (one) representative of the State Transport Authority, Delhi (STA),
- (iv) 1 (one) representative from the IT Department, GNCTD, and
- (v) such other experts as deemed necessary to be appointed by DTC in its sole discretion.

(b) Out of the 3 (three) representatives of DTC nominated by the CMD, DTC, 1 (one) shall be appointed as Chairman of the Steering Committee and 1 (one) shall be its Member Secretary.

24.2 Functions Role and Frequency of Steering Committee Meetings

(a) The Steering Committee shall carry out such functions and exercise such powers as are determined by DTC from time to time including without limitation examining the reports submitted by Independent Engineer.

(b) The Steering Committee is expected to hold meetings at least once every month to review the progress made in relation to the AVTMPS Project during the implementation period and once every two months during the operation period. The Independent Engineer may be invited to such meetings as a special invitee. .

24.3 Appointment of Independent Engineer

(a) DTC may, in its sole discretion, appoint an independent engineer (including without limitation a firm / corporation of engineers) having necessary expertise to undertake, perform and carry out such duties, responsibilities, services and activities as set forth in Appendix - 7 hereto to oversee the design, development, implementation and operation of the AVTMPS Project by Vendor for such time as may be necessary ("Independent Engineer"). DTC may appoint such Independent Engineer at / after the execution of the Concession Agreement. The tenure and the scope of work and the reports to be submitted by the Independent Engineer shall be as set forth in Appendix – 7 hereto.

24.4 Roles & Responsibility of Independent Engineer

(a) Any Independent Engineer appointed by DTC shall submit to DTC such reports as set forth in Appendix – 7 hereto or any other reports as may be required by DTC at least once every month or more frequently as the situation may warrant, on the progress of implementation of the AVTMPS Project.

(b) The professional fees payable to the Independent Engineer shall be shared equally between DTC and Vendor and the same shall be payable as per the schedule of payment agreed to with such Independent Engineer in accordance with the terms of its appointment by DTC.

(c) If DTC shall have reason to believe that the Independent Engineer is not discharging it's duties in a fair, appropriate and diligent manner, DTC may terminate the appointment of such Independent Engineer and appoint another Independent Engineer in

accordance with these general terms governing the appointment of an Independent Engineer.

G. SCOPE OF WORK

1. Overview of the Scope of the AVTMPS Project

In order to achieve the Aims and Objectives of the AVTMPS Project, DTC plans to implement the AVTMPS system ("AVTMPS System") on buses operated by DTC in Delhi ("City Operations") and in the satellite towns in the National Capital Region ("NCR Operations") and in neighbouring states ("Interstate Operations"), as specified in the Scope of Work.

Vendor shall ensure that the AVTMPS System broadly covers the following:

- a) GPS based real time automated tracking of 2500 (Two thousand five hundred) DTC buses and about 4000 (Four thousand) private stage carriage buses or any other public service vehicles with scalability as per requirement up to 10,000 (Ten thousand) buses inclusive of private stage carriage buses / vehicles.
- b) Real time Passenger Information System (PIS) at minimum of 500 (Five Hundred) bus stops / bus terminals identified by DTC, using Light Emitting Diodes ("LED") display boards. Liquid Crystal Display ('LCD') in place of LEDs can be installed only at DTC bus terminals.
- c) Real time Passenger Information System (PIS) inside DTC Buses covered under the AVTMPS Project using LED displays and by way of announcements of approaching bus-stops.
- d) Providing information about routes/bus timings through Short Messaging Service ('SMS') provided on mobile phones, through Interactive Voice Response System ('IVRS') and through the medium of the internet.
- e) Recording of locational information of vehicles at different points in time and the speed of the buses at such locations and times in a database.
- f) Geographical Information System ('GIS') maps with customized GIS layer of DTC locations / bus stops / bus routes for tracking geographical positions of vehicles in the City, NCR and inter state regions.

- g) Automate event logging (viz. start and end of trip(s), emergency halts, accidents, breakdown of buses etc.) along with Time Stamp.
- h) Provide alerts to the Central Control Station on over speeding by buses, unauthorized stoppage and /or non-stoppage of the buses at designated bus stops, the scheduled stoppage point and route deviation by buses etc.
- i) Establish two way communication links between the Central Control Station with drivers of the buses as well as a provision for real time communication between Central Control Station and drivers of all buses or a group of buses simultaneously.
- j) Capture vehicle information through sensors (if provided by vehicle manufacturer) and communicate the same to Central Control Station.
- k) Generation of Management Information System ('MIS') (standard & exceptional reports) for fleet operation, trend analysis (both physical and financial trends) & decision making as per DTC's requirements thereby assisting DTC in improving services.
- l) Provide basic vehicle tracking services and two-way communication in recovery vehicles @ 1 (one) such vehicle per 100 (hundred) buses in order to provide on-line relief to buses in distress.
- m) Generate data, carry out broad analysis and provide reports and recommendations to DTC for DTC's decision making process with regard to route optimization and to provide related software along with provision of training for the same to DTC officials.
- n) Enable DTC to conduct routine appraisals of drivers' performance in terms of punctuality, safety and adherence to prescribed routes, timing(s) and stoppage(s).
- o) Provide interface compatibility with Smart Card Based Automatic Fare Collection System (AFC System).
- p) Alert on over speeding, unauthorized stoppage, non stoppage of the bus at the scheduled stoppage point and route deviation etc.

2. IT System design, development and implementation services

a) System Design

- i. Vendor shall finalize the System Requirement Specifications as set forth in **Section H** hereto through on site study.
- ii. Vendor shall develop the technical design specification of the AVTMPS System to deliver the solution envisaged under the AVTMPS Project in order that the same meets with the System Requirements Specifications to achieve the Aims and Objectives of the AVTMPS Project (“Technical Design Specification”). In this Technical Design Specification, Vendor shall detail the following, at the minimum:
 - ✓ Solution architecture overview
 - ✓ Technology options evaluations
 - ✓ Design criteria
 - ✓ Class designs
 - ✓ Component design
 - ✓ Deployment design
 - ✓ Networking design
 - ✓ User interface design
 - ✓ Design issues
 - ✓ Data dictionary
 - ✓ Logical & physical data base design
 - ✓ System interfaces
 - ✓ Development Tools
 - ✓ Development Platform
 - ✓ Delivery Platform
 - ✓ System Performance Benchmarks (response times, etc)
 - ✓ Persistency of the Network Connection.

It is expected that the above specification documents will be revised during the life cycle to reflect changes in requirements and / or upgradation in technology of the AVTMPS Project. All changes are subject to configuration management control and approval by DTC.

- iii. Development of a prototype to progressively demonstrate the user interface to enable the user to evaluate the business system design and the user interface design.
- iv. Design Deliverables shall comprise:
 - ✓ Finalized System Requirements Specification document

- ✓ Technical Design Specification document.
 - ✓ Prototype.
- v. During the process of finalizing the System Requirement Specification document, Technical Design Specification document, and development of Prototype (“Design Phase”), the performance testing benchmark environment, the performance requirements and the method of conducting the performance testing to determine system performance against the response time targets will be specified by the Vendor with the approval of DTC.
- vi. Vendor shall be required to obtain the official sign off from DTC or their representatives on the Deliverables.

b) System Development

- i. The software will be developed in accordance with the latest version of the following specifications:
- ✓ System Requirements Specification
 - ✓ Technical Design Specification
- ii. Vendor shall establish the development environment including all hardware, software and office accommodation.
- iii. Any and all expenditure incurred by Vendor in relation to travel, maintenance of any site where Vendor works for the AVTMPS Project and / or any other expenditure incurred by Vendor in relation to the development of the AVTMPS System shall be borne by Vendor and no contribution or support from DTC will be provided on the same unless subsequently agreed to in writing by DTC.
- iv. The Source code and documentation of and for the AVTMPS System shall be the property of DTC from the start of Concession Agreement.

c) System Testing

- i. Vendor shall perform the comprehensive testing of AVTMPS System at Vendor’s location.
- ii. For purposes of testing the AVTMPS System, Vendor shall set up the testing site / environment at Vendor’s own cost, to undertake the entire AVTMPS System integration testing comprising all components of the systems like mobile unit, application software, IT hardware and networking. Such testing site shall be, to the extent reasonably possible, a replica of the actual production environment which

shall finally be set up by Vendor for the AVTMPS Project.

- iii. Vendor shall also test the various units and modules of the system individually, to assess the functionality and data flow through such units and modules.
- iv. Vendor shall provide various test reports on the current status of testing, as part of the project reporting.
- v. Vendor shall maintain the test defect logs and shall make these available to DTC or their representatives as per mutually decided frequency.
- vi. Vendor shall create the test data for the purpose of various types of testing to be carried out.
- vii. Testing Deliverables shall, inter alia, be
 - ✓ Test plan
 - ✓ Test Report
 - ✓ Test Cases
 - ✓ Test Defect Logs

d) System Configuration Management

- i. Vendor shall ensure that adequate facilities exist for the control of the documentation prepared and consolidated during the life cycle of the AVTMPS Project which documents include without limitation information on the following:
 - ✓ Application program versions
 - ✓ Software Executables
 - ✓ Software Source Code
 - ✓ System Requirements Specifications
 - ✓ Logical Data Base Design and Data Dictionary
 - ✓ Technical Design Document
 - ✓ Test Plan, covering all testing to be performed by the vendor.
 - ✓ Test Cases
 - ✓ Design Standards
 - ✓ AVTMPS Technical Manual
 - ✓ AVTMPS Administration Manual
 - ✓ AVTMPS User Manual
 - ✓ AVTMPS Security Manual

e) System Release

- i. All of the Design Deliverables and Testing Deliverables including without limitation

source code, shall be delivered to DTC on commencement of the User Acceptance Testing by DTC ('UAT') and on the commencement of any subsequent UAT periods following the correction of any non compliances.

- ii. On receipt of Design Deliverables and Testing Deliverables, DTC will review each deliverable after which DTC will issue to vendor a "Permission to Proceed" or "Permission to Proceed subject to certain conditions".
- iii. Vendor shall provide DTC with 2 (two) hard copies and a soft copy of all documentation for the required Design Deliverables and Testing Deliverables specified in this section.

3. Training Services

- a) Vendor shall provide user training to optimal number of personnel identified by DTC ("User(s)") on functional & operational aspects of the entire AVTMPS System, during the Concession Agreement period.
- b) Vendor shall provide hands on training to Users as per the User Training Plan prepared by Vendor in consultation with DTC ("User Training Plan"). DTC will measure the effectiveness of the Users for working on the AVTMPS System after completion of the training.
- c) Vendor shall provide, inter alia, the following types of training
 - ✓ AVTMPS training - To such number of supervisors as required and identified by DTC in its sole discretion
 - ✓ Application software training – To such number of personnel as required and identified by DTC in its sole discretion
 - ✓ System Administration training - To such number of personnel as required and identified by DTC in its sole discretion.
 - ✓ Top Executive Awareness Program – 1 (one) day workshop organized by Vendor at DTC Head quarters or an alternative location with consent of DTC where Vendor shall provide an overview of the working of the AVTMPS System and the training provided by Vendor to Users for effective implementation thereof.
 - ✓ Refresher's Training – once a year or as and when AVTMPS System is upgraded.
- d) The duration of the training and the batch sizes shall be mutually decided by DTC and Vendor as per required.
- e) Training Deliverables shall be
 - ✓ User Training Plan

- ✓ Training Material in English & Hindi
- f) Training shall be organized by Vendor in audio / visual mode.
- g) On receipt of each of the Training Deliverable(s), DTC will review each of these and will issue "Permission to Proceed" or "Permission to Proceed subject to certain conditions" (as applicable).

4. Project Management Services

a) Project Planning, Monitoring and Control

- i. Vendor shall develop a Project Management Plan for the AVTMPS Project. The Project Management Plan at a minimum, shall detail all tasks related to the implementation of AVTMPS System, and for each task, the task / person / effort resource allocation. This information shall be provided in the form of a detailed Gantt Chart. The Project Management Plan shall also detail all milestones and indicate when the required deliverable documentation(s) will be available to DTC.
- ii. Vendor shall identify, analyze and evaluate the project risks, and develop cost effective strategies and action plans to mitigate those risks. Vendor shall monitor report and update the project risk profile to DTC.
- iii. Vendor shall develop a Quality Assurance Plan for the execution of the AVTMPS Project. The Quality Assurance Plan shall address at a minimum, the following project processes:
 - ✓ Document Control
 - ✓ Change Management
 - ✓ Product Review and Approval
 - ✓ Control of third party products
 - ✓ Inspection and Testing
 - ✓ Risk Management
 - ✓ Control of Quality Records
- iv. The Quality Assurance Plan shall define the structure and scope of the required quality objectives.
- v. The progress of AVTMPS Project shall be monitored on regular basis and the deviations, exceptions shall be analyzed and corrective actions to be recommended / suggested.
- vi. The Deliverables at this stage shall include:

- ✓ Project Management Plan
 - ✓ Risk Management Plan
 - ✓ Quality Assurance Plan
- vii. On receipt of each of the Deliverable(s), DTC will review each of these and will issue to Vendor the “Permission to Proceed” or “Permission to Proceed subject to certain conditions” as applicable.

b) Project Reporting and Monitoring

- i. A fortnightly progress report shall be submitted by Vendor to DTC. Vendor shall also report on items which are on critical path and that require management action.
- ii. Steering Committee meetings will be held at periodic intervals at venue decided by DTC and Vendor shall be required, at such meetings, to provide, inter alia report on the following:
 - ✓ Progress Reports (Progress against the Project Management Plan)
 - ✓ Status of all risks and issues
 - ✓ Status of testing
- iii. Ad-hoc requests for information by DTC will be addressed promptly by Concessionaire and Concessionaire shall provide the required information within 48 (Forty eight) hours in normal course..

5. Pilot Implementation

- a) Pilot shall include implementation of the complete AVTMPS System including on-board PIS on all buses, deployed on city operations, at one selected bus depot of DTC having bus fleet of 100 (hundred) buses.
- b) Pilot shall include PIS installations at approximately 10 (ten) bus terminals / BQSS.
- c) Services required of Vendor during Pilot Implementation will include and will not be limited to:
 - i. IT hardware, third party software, application software and network as required for the proper and effective functioning of the AVTMPS System shall be installed & configured at the Central Control Station and the Base Stations identified by DTC.
 - ii. Establish the connectivity with identified Central Control Station, the onboard VMU and the Base Stations.
 - iii. Vendor shall prepare the master data in consultation with DTC officials.
 - iv. Vendor shall assist DTC personnel to execute the User testing as per DTC's test plan and test cases.

- v. Vendor shall record the issues identified during testing, perform analysis, correction of problems and re-testing.
 - vi. Documentation of the problem defect analysis and the solution details.
 - vii. Performance monitoring which will be undertaken jointly with DTC personnel.
 - viii. Any other task assigned as part of the AVTMPS Project.
- d) Vendor shall man the Central Control Station to execute inter alia the following business processes during the Pilot Implementation:
- i. Data download from all onboard VMUs.
 - ii. Feeding of Duty Plans provided by DTC, to monitor operations of buses.
 - iii. Reports generation at Central Control Station
 - iv. Data back ups at the Central Control Station.
 - v. Collation of data at Central Control Station.
 - vi. System Maintenance at Central Control Station & if required, at base stations
 - vii. Physical security of all the assets of the AVTMPS Project.
 - viii. Performance Monitoring which task will be undertaken jointly with DTC personnel.
- e) The successful completion of Pilot Implementation will be based on the SLA and performance monitored during the pilot.

6. Operations & Facility Management Services

- a) Operational services will include inter alia the executing the following business processes for DTC.
- i. Downloading transactional data from VMUs into the AVTMPS System at Base Stations and Central Control Station.
 - ii. Generating various pre-defined as well as ad-hoc query based reports at Base Stations and Central Control Station.
 - iii. Administration of application software at Base Stations and Central Control Station.
 - iv. Data back ups & storage operations at Base Stations and Central Control Station.
 - v. Vendor shall ensure that at all points in time there is strict compliance with the provisions of the Information Technology Act, 2000.
 - vi. Any other task assigned as part of the AVTMPS Project.
- b) Maintenance services will include inter alia the following activities.
- i. Maintenance of VMUs & its software
 - ii. Application software maintenance
 - iii. Application software problem fixes and upgrades. Upgrades to application software

shall be done centrally.

- iv. Software requests for change by DTC shall be handled by Vendor in the following manner.
 - a. Functionality change or enhancement requests shall be assessed and impact analysis shall be performed by Vendor.
 - b. The Change Impact on schedule for implementation shall be agreed between DTC & Vendor on case to case basis.
 - c. All Change requests shall be done by Vendor free of cost.
 - v. Copy of all the transactional data shall be submitted to DTC monthly.
 - vi. Any other task assigned as part of the AVTMPS Project.
- c) Vendor is expected to transfer the knowledge to DTC nominated technical team however shall commit complete facility management of the AVTMPS System during the Concession Period.

7. Schedule

Vendor shall implement the AVTMPS Project as per the schedule specified below:

- a) **Pilot Implementation** – Maximum of 4 (four) months from the execution of the Concession Agreement.
- b) **System Roll Out**
 - (i) System roll out shall commence from the date when DTC's sign off for pilot completion is received by Vendor. Vendor is expected to deploy the AVTMPS System in a phased manner on 2,500 (Two thousand five hundred) City, NCR and Interstate buses at a minimum of 500 (Five hundred) buses per month & 100 (One hundred) PIS at terminals/BQs per month.
 - (ii) Simultaneously, Vendor may be required to deploy the system in a phased manner on Private Stage Carriage buses at a minimum of 500 (Five hundred) buses per month after pilot phase in DTC buses.
 - (iii) Vendor may provide an alternate deployment plan. DTC shall review the same and may agree to such plan submitted by Vendor.
 - (iv) The implementation of the entire system should be completed in all respects within 9 (nine) months of signing of Concession Agreement.

- c) **Operations & Facility Management** – From the roll out phase completion sign off date for the entire contract period.

8. Project Completion

- a) The Project shall be deemed to be complete only when the system has been fully implemented in 2500 (Two Thousand Five Hundred) DTC buses and on 500 (Five Hundred) BQs / Bus Terminals and when DTC issues a certificate to Vendor to this effect after carrying out tests as shall be provided for in the Acceptance Test Plan Document.

9. Responsibilities of DTC

- a) DTC will form a Project Co-Ordination Team, which will be responsible for project management and shall act as the single point of contact between Vendor and DTC on a day to day basis for executing the AVTMPS Project through out the Concession Period. The Project Co-Ordination Team shall be responsible for reviewing the Deliverables of the AVTMPS Project and monitor the progress of the AVTMPS project at every stage. All day to day issues arising out of the execution of the AVTMPS Project shall be resolved by the Project Co-Ordination Team,
- b) Besides the Project Co-Ordination Team, DTC shall also form the Steering Committee to oversee and monitor the work performed by Vendor under the Concession Agreement. All issues arising out of the AVTMPS Project, which can not be resolved by the Project Co-Ordination Team or such issues which in the sole opinion of the Project Co-Ordination Team involve deliberation of a policy decision shall be referred to the Steering Committee, which decision shall be binding upon both Parties.
- c) Without prejudice, if DTC appoints an Independent Engineer in terms of this RFP, then such Independent Engineer will assist the Project Co-Ordination Team.
- d) DTC shall provide 1 (one) room in each DTC bus depot, where a Base Station is to be set up, for setting up a Base Station, along with electric power (raw power 220 V, 50HZs) for which Vendor will have to install the sub-meter and make monthly payments on actual. Vendor will be responsible for arrangement of all necessary furniture, air-conditioning, etc. Vendor shall arrange the necessary infrastructure including UPS, stabilizers etc. to regulate the quality of power and generators for back up in case of power failures.
- e) DTC shall also provide sufficient space to Vendor to set up the Central Control Station, along with electric power (raw power 220 V, 50HZs) for which Vendor will have to install the sub-meter and make monthly payments on actuals. Vendor will be responsible for arrangement of all necessary furniture, air-conditioning, etc. Vendor shall arrange the necessary infrastructure including UPS, stabilizers etc. to regulate the quality of power and generators for back up incase of power failures.

- f) DTC officials shall provide Vendor the duty plan with respective route structure, so that Vendor can monitor the movement of buses for deviations and stray analysis.
- g) DTC personnel at Base Station (s) and at Central Control Station shall be able to generate, view & print the pre-defined as well as ad-hoc query based reports, as per the requirements.
- h) The AVTMPS System for route planning will be developed and maintained by Vendor. Vendor will undertake “what if analysis” as per DTC’s requirements.
- i) DTC officials shall verify the supporting SLA compliance & transaction summary reports and work out legitimate penalties as set forth in the SLA Metrics on quarterly basis. The quarterly bills for these shall be raised by DTC on Vendor and the same shall be payable by Vendor promptly.
- j) DTC personnel shall review the reports of exceptions regarding VMU related issues, VMU malfunctions, AVTMPS System up time, AVTMPS System malfunctions, operational deficiencies, etc.
- k) DTC shall review the daily, weekly, monthly or of any other periodicity, transactions reports, summary reports, cash collection reports, etc.
- l) As a source of revenue, DTC shall offer to Vendor the following revenue generation streams:
 - i. Advertisement rights inside the buses, above the windows (excluding the roof and the back panel behind the driver) and on one separate LCD display panel(s) installed for the exclusive purpose of advertisements, as per size / specifications set forth in the section titled System Requirement Specifications of this RFP. It is clarified that only visual advertisements shall be allowed inside the buses and audio advertisements shall not be permitted.
 - ii. Advertisements on PIS panels to be installed at select terminals / bus-stops as per size / specifications in the section titled System Requirement Specifications of this RFP.
 - iii. Revenue generation through SMS for intimating route specific arrival time of buses at a particular bus-stop, which could include sponsored messages also.

- iv. It shall be Vendor's responsibility to comply with the applicable laws, rules, guidelines or orders issued by the government or by the DTC with respect to the mode, form, duration and content of advertisement(s).
- m) DTC shall endeavor to out-shed minimum 90% (ninety) of the fleet fitted with the AVTMPS System in the morning shift on working days, which shall be reckoned on quarterly average basis. However, the figure of fleet utilization on Sundays / public holidays may be lower and the same shall not be reckoned while working out the quarterly average of fleet utilization.

10. Responsibilities of Vendor

- a) Vendor shall be responsible to design, develop, establish, implement, protect and maintain the entire infrastructure for executing this AVTMPS Project as specified in the Scope of Work in conformity with the standards and timelines stipulated therein.
- b) Without prejudice to the generality of the provisions of the Scope of Work, Vendor shall design, procure, install, protect and maintain the following:
 - I. IT & networking hardware
 - II. IT software licenses
 - III. VMUs
 - IV. PIS equipments – on board & at BQS / bus terminals.
 - V. Connectivity
- c) Vendor shall design, develop, implement, operate, protect and maintain the web based application software at the Central Control Station in the DTC's premises.
- d) It shall be the Vendor's responsibility to create and maintain, at all times, adequate safeguards in order to maintain the security of the AVTMPS System including without limitation the security of any and data in relation thereto and protect the same from any untoward activities such as hacking etc.
- e) Vendor shall customize, maintain and upgrade the embedded software in the VMU as required for the effective working of the system.
- f) Vendor shall integrate the entire IT system including hardware, networking and application software, VMUs for smooth and hassle free operations at the Central Control Station.
- g) Vendor shall provide 1 (one) soft copy and 1 (one) authenticated hard copy of pre-defined reports as and when they fall due, separately for DTC buses and private buses.

- h) Vendor shall provide & operate the helpdesk system and Customer care services for providing support to the Users.
- i) The security of entire infrastructure for AVTMPS System shall be the responsibility of the Vendor.
- j) Vendor shall make adequate arrangements to provide maintenance and support for:
 - i. All the IT hardware
 - ii. VMUs & PIS equipments, including replacements of faulty and / or non-working units / equipments.
 - iii. Network connectivity
 - iv. System Uptime
 - v. Application software problem fixes & upgrades.
 - vi. Transactional data storage & transfers
 - vii. Ensuring that the data provided will not be vulnerable to any form of cyber crime as defined in the Information Technology Act 2000.
- k) Vendor will also be responsible for cleaning of equipments which are part of AVTMPS System in the buses, BQSSs, Bus Terminals and at Central Control Station and Base Station(s). However Vendor may arrange the same in such a manner that there is no dispute with any other contractor(s) who may be responsible for repair and maintenance of bus.
- l) The AVTMPS System for route planning will be developed and maintained by Vendor. The role of DTC personnel shall be limited to performing the “what if analysis” with the help of Vendor.
- m) Vendor shall conform to all the system requirements specified in the section titled System Requirement Specifications in the RFP.
- n) Vendor shall use its own digital maps with customized layer of DTC bus stops and land marks to display vehicle(s) movement.
- o) Vendor will be provided raw power (220 V, 50HZs) to run the entire AVTMPS System for which Vendor will have to install the sub-meter and make monthly payments on actuals. Vendor will be responsible for arrangement of all necessary furniture, air-conditioning, etc. Vendor will also have to arrange for UPS, stabilizers etc to regulate the quality of power and generators as back up incase of power failures.
- p) Vendor will not use this infrastructure (devices, software, control room, communication tower, etc) to extend this service to any other customer without written consent of DTC

in advance. In such cases, DTC may allow outside use of infrastructure on revenue sharing basis as agreed in writing by DTC

- q) Vendor shall ensure that the entire AVTMPS System including hardware, software shall be fully functional, at the time of handover to DTC.
- r) Vendor shall be required to support the AVTMPS System, even after the hand over. DTC may enter into Annual Maintenance Contract (AMC) after the expiration of the Concession Agreement.
- s) Vendor in its sole discretion may get the VMUs, PIS equipments & other infrastructure for the AVTMPS Project insured at its own cost in order to cover Vendor's risks and liabilities under the Concession Agreement.
- t) Vendor will be responsible for payment of all statutory levies including ESIC Contribution, PF, etc. in respect of the staff engaged by him for implementation, operation & maintenance of the AVTMPS System. Notwithstanding the generality of the foregoing, any and all payments to be made to any agency or any other personnel engaged by Vendor and any and all payments to be further made by such agencies to any party / personnel in relation to the AVTMPS Project shall be the sole responsibility of Vendor and DTC shall neither incur any liability in this respect nor entertain any claims in this respect.
- u) Vendor shall develop a transparent and effective Complaint Redressal System for receipt of complaint(s) / grievances / suggestions from DTC / public in relation to the AVTMPS System / AVTMPS Project for redressal of the complaints, and submission of periodical reports of the action taken to DTC. The reports shall clearly state details such as (i) bus-wise / BQS-wise / Bus Terminal-wise nature of complaint(s), (ii) date / time at which a complaint / grievance / suggestion was received, (iii) action taken on the complaint / grievance / suggestion, (iii) time at which such aforesaid action was taken. It shall be the Vendor's responsibility to redress the complaint(s) / grievances received and / or to act upon the suggestions made by DTC / public, and to rectify the defects in a timely and effective manner.
- v) The Vendor shall be required to obtain prior approval in writing from DTC in the event the Vendor and the operator of the Private Bus (having Tracking and Monitoring System installed in the Bus) enter into an agreement / understanding for permitting the Vendor to advertise inside the said Private Stage Carriage Bus in lieu of monthly payment being received by the Vendor for the said Tracking System. Subject to rules / regulations /

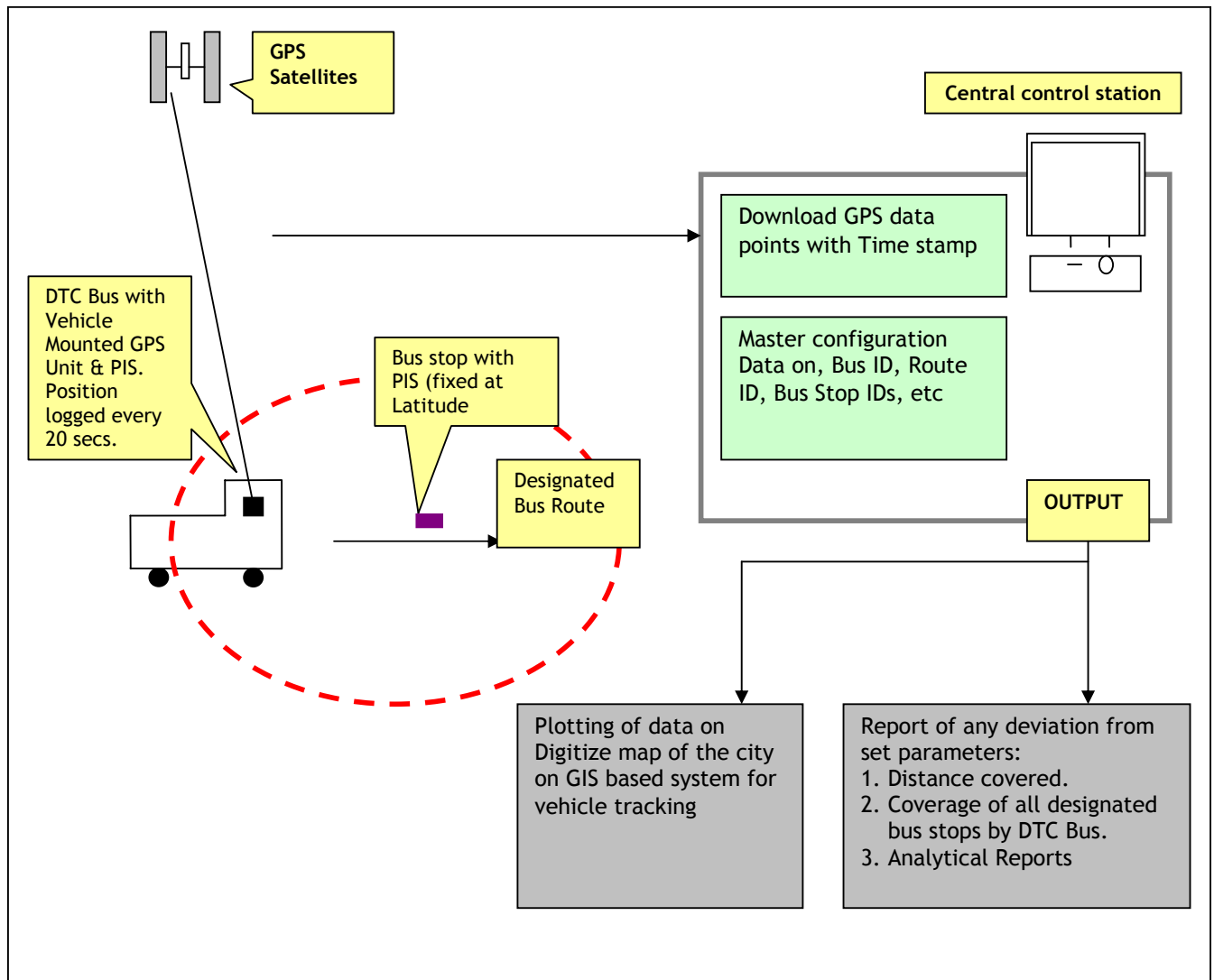
orders passed by the State Transport Authority in this regard, DTC may give the permission in writing and impose such conditions, as necessary, including inter alia:

- (a) installation of PIS inside the bus as per approved design,
 - (b) imposing conditions on the form, content, duration, type of advertisement,
 - (c) sharing of revenue with DTC.
- w) The Vendor shall maintain and store the data / record generated through AVTMPS System for the entire Concession Period. The back-ups on CDs shall be handed over to DTC on monthly basis.
- x) Such other responsibilities as may be assigned by DTC from time to time.

SECTION H: SYSTEM REQUIREMENT SPECIFICATIONS

The following is the overview of requirements of the solution to be provided by Vendor for design, development and implementation of the AVTMPS System in pursuance of the AVTMPS Project. However, Vendor will have to do his due diligence as well as use his own resources to gather the requirements through meetings or interviews with Users to finalize the requirements.

The Schematic Diagram of the AVTMPS System



1. System Overview

The envisaged system shall be broadly categorized into following major blocks.

- **Vehicle Mounted Unit (VMU):** A GPS enabled unit to be mounted on each bus for tracking and transmission of data of vehicles as required under the AVTMPS Project including without limitation logging the vehicle movement on time scale. Such unit shall have adequate memory, battery back up and should also be capable of recording other vehicle related information from all sensors as may be available on the bus as required in pursuance of the AVTMPS Project.
- **Back end - Application Software:** Computer application software for processing the data viz. generation of detailed and exception reports and various other analytical reports with provision of audit trail, separately for DTC buses and private buses. However, there should be a provision of generating certain combined reports for DTC buses and private buses, if required in order to rationalize route timetables of buses.
- **Route planner / optimizer:** Data will be collected by the AVTMPS System, at the Central Control Station and stage wise number of passengers boarded in the bus on each trip/route using the Automatic Ticket Issue System as and when such system comes into operation. The route planner / optimizer software system at the Central Control Station shall transform the transactional data into useful information and feed the same into the decision support engine for route planning & optimization. The route planner / optimizer software shall include optimization of load factor on different routes and differential scheduling based on actual trip completion times. In case, this software does not satisfy DTC efficiency needs (which decision shall be taken by DTC in its sole discretion) Vendor will be responsible for its change / upgradation from time to time upon DTC's request in this behalf. Also recommendations of the route planner / optimizer software shall be calibrated with end-results of change in routes for continuous upgrading of the system.

2. System Description

- Geographical position of each bus stop is identified through survey using a precision GPS device.
- Geographical position of each bus route, land marks on the route is identified through survey using a precision GPS device.
- The route to be taken by each DTC bus shall be predefined along with the number of stoppage points (bus stops / Bus Terminals) on the route.
- The distance between the bus stops on a particular route shall be fixed either through survey using a precision unit or other appropriate means.

- VMU shall be mounted on each bus for logging the vehicle movements together with Time Stamp.
- The data collected by VMU shall be transmitted to Central Control Station in real-time using an appropriate communication back-bone for automatic tracking of vehicles and providing accurate information regarding location, speed, time, distance covered, etc. in a given time frame.
- The data collected by unit shall be transmitted to Central Server hosting the Application Software located at Central Control Station in real-time using an appropriate communication back-bone.
- The data collected at Central Control Station shall then be plotted on GIS Application Software for real time display of vehicle(s) position on GIS map, thus enabling DTC to effectively monitor the fleet.
- The Application Software shall generate all the detailed and exception reports using the stored data of the buses (like deviation from scheduled route, timings, halting at scheduled bus stops etc.) required for monitoring & analysis separately for DTC buses and private buses. However, there should be a provision of generating certain combined reports for DTC buses and private buses, if required.
- The Application Software also provides the facility for playing back the stoppage time at each bus stop and route taken by the particular DTC bus.
- The Application software shall be able to generate various analytical reports as required by DTC.
- Data on bus timings, arrival timings at particular bus stops, routes and land marks on routes, bus stops data, etc shall be fed to the Passenger Information System (PIS) installed in DTC buses and at the identified BQS / bus terminals.
- DTC depot officials shall be able access the system specific to buses of a particular depot over the internet and through User ID, Password authentication / authorization.
- DTC depot officials shall be able to track vehicles specific to that particular depot and shall be able to generate pre-defined reports as well as query based reports specific to these vehicles.
- Help desk facility shall be provided by Vendor at individual depots and at Central Control Station, to provide technical as well as voice support to DTC vehicles & AVTMPS system.

- The data collected at Central Control Station, will then be processed and transformed into useful information and fed to the decision support engine for route planning & optimization.

Note: The System Description as defined above shall also be applicable for private buses / vehicles.

3. Technical Requirements

a) Overall requirements

- I. Application shall be based on 3-tier architecture and developed using the open standards to take care of interoperability issues
- II. The User interface will be web-enabled. The reporting interface should be web enabled, whereby the executives from DTC shall also be able to generate various reports through web enabled application interface, as per the access rights defined.
- III. The presentation logic will be de-coupled from the business components logic.
- IV. The Positional accuracy of vehicle should **be with in +/- (plus/minus) 10 (ten) meters.**
- V. The AVTMPS System shall provide data exchange facilities using standard data formats like XML, ASCII, CSV, etc, compatible to transfer data to/from bus mounted units to PC based systems, etc.
- VI. The GIS based application software shall be installed & maintained centrally by Vendor and shall be accessed by various DTC depots for specific reports generation through web enabled mechanisms. Application master data, configuration settings at central level and transactional data at local level (VMU) shall be in synchronization.
- VII. Any application software upgrades planned due to problem fixes or through change requests, shall be installed by Vendor centrally.
- VIII. The AVTMPS System shall be developed to cater to the data requirements of DTC on 2500 (Two thousand five hundred) DTC buses and 30 (Thirty) DTC depots and around 650 (Six hundred and fifty) city routes and around 120 (One hundred twenty) Interstate/NCR routes, inter alia with about 4000 (Four thousand) private stage carriage buses. In addition there may be any number of shuttle routes, miscellaneous routes, school routes, special trips, etc. The system should be scalable upto 10,000 (Ten thousand) buses to accommodate the requirements arising out of fleet expansion by DTC. DTC reserves the right to increase or decrease the buses and / or number of PIS at BQS / Bus Terminals to be covered in the AVTMPS System at any time. In case of increase in number of buses and / or number of PIS at BQS / Bus Terminals, the AVTMPS System shall be extended to added buses or applicable BQS / Bus Terminals upon DTC's request in this

behalf on such terms and conditions as set forth in the Concession Agreement or any amendments thereto which may be necessary owing to change in circumstances. In case of decrease in fleet size or number of PIS at BQS / Bus Terminals, Vendor will not be liable for any compensation from DTC.

- IX. The AVTMPS System shall be developed to provide online tracking of DTC buses and monitor the position of DTC buses on all routes at any given point of time.
- X. Antivirus software shall be installed, so that the entire system can be protected by virus attacks.
- XI. AVTMPS System is required to be functional 24 X 7 X 365 days. Vendor shall provide adequate resource(s) for system management (backup, recovery, etc), data management and disaster recovery as part of the scope of the AVTMPS Project.
- XII. The AVTMPS System shall be used by such personnel of DTC as identified by DTC in its sole discretion and Vendor shall accordingly provide, as required, training to such personnel.
- XIII. The performance testing benchmark environment, the quantitative response time requirements and the method of conducting the performance testing will be determined by DTC during the design phase. DTC will consult Vendor for the development of the System Performance Testing Benchmark Environment and the Performance Requirements.
- XIV. The system performance must not be degraded by increasing the number of VMUs, number of access nodes on the network or the number of users accessing the system (whether simultaneously or not).
- XV. System Persistency - The system should be designed to ensure that the loss of data is minimized due to the network 'drop outs'.
- XVI. Automatic Refreshing of Data - There are several windows specified in the AVTMPS System that require the data to be automatically refreshed at specified time intervals. The information needs to be refreshed automatically from the database and should not require user intervention.

b) Systems Support Requirements

I. User Access Control

The system provided by Vendor must provide the means to control and restrict the system access for critical and confidential data. Security / User Access Controls are required at the following levels:

- ✓ Sub-system
- ✓ Function
- ✓ Buttons / Hyperlinks on a Window
- ✓ Fields on a Window
- ✓ Data Records

The user access control capability will support the limiting of access to certain objects, and the filtering records of certain objects based on the user role, and the user's attributes, including position of person in the organizational hierarchy.

The system administrator will have the ability to:

- ✓ Create new roles
- ✓ Give a role access to an object, and where applicable define the level of access ('R' – Read, or 'U' – Update)
- ✓ Define the Access Filter that will be used by a particular user role when accessing the object. The Access Filter will limit the user to a subset of records of that object, based on the user's attributes.

II. Audit Trails

An audit trail of changes to data in the system is required. All records that are changed should be time stamped and logged. Transactions modifying critical data must record an audit trail to identify the user responsible for the modification. The audit trail must operate on nominated tables and data items.

There should be a facility to report on audit logs.

III. Data Archiving and Back ups

- a. The AVTMPS System should provide a user driven data archiving capability, with support for flexible archiving periods and selected tables.
- b. Vendor shall retain the transactional data for a minimum of 3 (three) months before archival of the same.

- c. The AVTMPS System shall provide for incremental back ups of transactional data at regular intervals.
- d. The standard data storage & archival procedures shall be followed for effective data management and retrieval for future analysis.

IV. Online Help

Vendor shall provide an adequate and effective online help capability in relation to the AVTMPS System.

c) Requirements specific to VMU

- 1. VMU shall have in-built modem for sending data about status and position of the bus and for receiving configuration changes, software upgrades or changed database information from Central Control Station.
- 2. The following information should be captured/calculated by the onboard VMU:
 - a. Position coordinates of the bus
 - b. Date & time stamp
 - c. Speed
 - d. Distance covered
 - e. Other Optional Information such as error codes, fuel level, oil level, oil temperature, etc. on buses which are equipped with sensors for such purpose(s).
- 3. The embedded software in the VMU shall facilitate the capture of parameters related to bus travel on routes as may be required for analysis in future.
- 4. In case of loss of communication link, the AVTMPS System shall have memory storage to keep the data till the communication link is re-established.
- 5. VMU shall have a battery back up in case the battery of the bus is disconnected or there is a problem with the power of the bus.
- 6. VMU may have to be interfaced with smart card readers in future for providing positional data with regard to bus stops in the smart card readers in order to enable calculation of fare(s).

7. VMU shall be able to receive & transmit voice communication to & from Central Control Station, as well as vehicle related information (e.g. scheduled routes, trips, duty plan, route identification points, land mark identification points, mapping of vehicle position on route points, etc) and other information related to PIS. VMU shall be able to process the above information effectively.
8. The data collected by VMU on a bus, should be transferable to the Central Control Station at pre-defined intervals and otherwise on a need basis as well for the effective functioning of the AVTMPS Project.
9. VMU shall be rigidly mounted on the buses and shall be vibration & shock resistant, heat resistant, dust resistant and water / rain splash resistant and shall be tamper proof. It should not be inferior to relevant industry standards.
10. The emergency button on the VMU shall be easily distinguishable in an appropriate color. For all communication other than emergency there shall be separate button(s). These buttons shall have easily identifiable international signs, like “danger”, etc and shall be in Hindi as well as English.
11. The working status, availability of communication link etc., should be displayed by LEDs on VMUs.

d) Requirements specific to Central Control Station system

1. Vendor shall have to set Central Control Station in one of the DTC bus depot / DTC premises, for which DTC will provide room to Vendor on as is where basis, as per the AVTMPS Project's requirement.
2. GIS based application software / server shall be accessed over internet or DTC intranet through secure log in and VPN connectivity.
3. The system updates / application software changes / configuration changes shall be centrally updated. The working condition of the devices shall be checked regularly. Vendor shall make arrangements to update/upgrade the VMUs, as and when required.

4. Application Software shall provide mechanism to view buses on the map, status changes and emergency alerts in case of breakdown / accidents or any other emergency situation.
5. User(s) should be able to view multiple buses on a single map. However the AVTMPS System should also have the capability to provide one-bus-one screen mode to Users as per their requirement(s).
6. Spatial database shall be present to hold GIS data and made available to mapping engine for displaying on the map.
7. Application Software at Central Control Station should have the capacity to process huge transactional data collected by all the VMUs.
8. Application Software shall be able to capture & process the information related to "Passenger Information System (PIS)". i.e. Bus arrival timings, routes taken, nearest bus stop / location /land mark, etc.
9. Application Software shall be able to generate various reports relating to DTC bus movements including but not limited to the following:
 - ✓ Position of the particular vehicle at any given point of time mapped to the land mark location, area, bus stop, etc.
 - ✓ Tracking the complete route taken by particular vehicle on time scale
 - ✓ Route specific distance traveled by a bus on a given date & time
 - ✓ Monitor start time of the trip, completion of the trip, number of trip(s) completed, etc
 - ✓ Monitor in-shedding /out-shedding of buses from depot automatically without human intervention.
 - ✓ Time taken to complete a trip by specific bus, route based, within specified time slots in a day
 - ✓ Deviations taken by the specific bus during the duty / trip related to routes, stoppages at bus stops, over speeding, distance traveled between stops with in specific time, etc
 - ✓ Bus operations specific (Inter state, NCR, city operations) reports.
10. Reports generated through the Application Software shall be accessed through web. Reports shall have drill down facility to the lowest level of transaction i.e., the summary level report can be drilled down till the lowest possible transaction.

11. GIS based application software shall be able to plot the relevant locational data on the digitized map, to track the moment of the buses online.
12. By default the map shall display the last 10 positions of the vehicle movement. However, vehicle movements along the entire route / time span should be available.
13. The AVTMPS Project shall receive & integrate data from Automatic Ticket issue system (ATIS) as and when the ATIS system becomes operational
14. The system shall be able to generate the analytical reports as per requirements.
15. These reports shall be generated at pre-defined intervals and shall be able to access through Internet / DTC intranet as per the access rights defined.
16. Reports generation mechanism shall provide facility to define filters and views , depot wise, vehicle category wise, time period of the day wise, region wise, range of date & time wise, etc
17. Facility of query based reports shall be provided.
18. AVTMPS system shall be capable of processing the data collected through AVTMPS, ATIS and other systems in future in order to transform the same into relevant information as a feed to route planning & optimization system.

e) Route Planner / Optimizer related requirements

19. The system shall be configurable to DTC requirements and business logic shall be developed keeping in view the scalability & complexity of data processing requirements.
20. The scope of route planner / optimizer system shall incorporate:
 - ✓ Route planning, scheduling and analysis
 - ✓ Para-transit scheduling and routing
 - ✓ Demographic analysis and route restructuring
 - ✓ Passengers travel flow pattern and ridership analysis
 - ✓ Transportation planning & modelling
21. The overview of the functionality to be provided by the proposed route planner / optimizer system.
 - ✓ User friendly, parameter and constraint based, scheduling engine to perform “what if analysis” using all types of attributes / parameters combinations (eg. tickets sold/cash collection, routes, duties / trips, buses, bus categories, location, time period of the day, speed, distance traveled, passengers peak load, type of passengers, fare stages, fare structures, etc) for routes, trips, duty planning for maximum utilization of fleet.

- ✓ The storage and processing of the historical data about vehicle travel pattern (eg. vehicle location during the time period of the day, speed , distance covered, route diversions, time taken to travel the distance planned, etc) to arrive at the conclusions for traffic conditions at particular location at particular time of the day, etc.
- ✓ Facility to perform “What if Analysis” on route scheduling, trip & duty scheduling taking into consideration passenger flow pattern (from ATIS) and vehicle movements pattern from AVTMPS and based on category of buses, depots, routes, time period of the day, buses, trips/ duties planned /actual, passenger peaks, distance to be traveled on the time scale, etc.
- ✓ Provide information through dynamic “ What if analysis” on cost saving, improvements in passenger carrying capacities, improved cash collection through increase in tickets sold relating to more passengers traveling through buses due to, distributed passenger loads through effective trip / routes scheduling.
- ✓ Provide information through dynamic “ What if analysis” impact on cost of operations through fuel saving, oil saving, through selection of routes, trip selection, time periods of the day the trips are planned, etc.
- ✓ The data on tickets sold, cash collection, type of passengers, etc will be provided through Automatic Ticket Issuing system (ATIS). The AVTMPS vendor is expected to provide the analytical tool, in-terms of Route Planner/ Optimizer to perform the “what if Analysis” integrating the ATIS data with the AVTMPS data.
- ✓ The reporting and data analysis will be dependant on availability and quality of ATIS data.

22. The AVTMPS system shall generate the following types of reports.

- ✓ Position of the vehicle at any point of time and the complete route taken by the vehicle along with the time scale.
- ✓ Route wise, time period wise, bus wise, driver wise, conductor wise, trip wise, exception reports (e.g. speed over limit incidents, route diversion incidents).
- ✓ Category of bus wise, depot wise, route wise, time period of the day wise, bus wise, trip wise, duty wise scheduled / actual distance traveled on the time scale, summary as well as detailed reports along-with exceptions (e.g. actual distance traveled due to route diversion because of traffic jams, etc).

- ✓ Category of bus wise, depot wise, route wise, time period of the day wise, trip wise, duty wise actual fuel and oil consumption, summary as well as detailed reports if this information is available on the bus.
 - ✓ Category of bus wise, depot wise, route wise, time period of the day wise, trip wise, duty wise, bus stop wise/ location wise actual passenger flow pattern, summary as well as detailed reports. This information will be available through ATIS as and when the same becomes operational. The passenger count can be computed by analyzing the tickets sold between particular source location and destination. This information can then be further drilled down to various types of passengers like pass holders, ticket holders, free traveler, etc.
 - ✓ Category of bus wise, depot wise, route wise, time period of the day wise, bus stop wise/ location wise scheduled / actual number of buses, summary reports along-with exceptions like cancellation of buses, route diversions due to road works, etc.
 - ✓ Query based reports, as per the user requirements
23. The Central Control Station shall maintain the transaction logs and generate various log reports:
- VMU wise data transfer logs on time scale and with date & time stamps
 - Data logs for PIS unit wise information distributed to various locations.
24. The complete data of AVTMPS system shall be provided to DTC on the media tapes/compact disc on monthly basis.
25. Sample report list & formats are provided in Appendix 5. However Vendor is expected to collect the requirements related to all relevant reports, while finalizing the System specifications.

f) Requirements specific to Base Stations

1. At every Base Station authorized users shall be able to access the AVTMPS System on the internet or using the DTC intranet.
2. Authorized users shall be able to access the AVTMPS System as per the access rights based on user ID & passwords.
3. The AVTMPS System at Base Stations shall allow the authorized user, to upload, bus number wise duty plans, trip plans into the AVTMPS System. The maker & checker facility shall be provided to upload these plans every day per

shift. For this purpose, it is clarified that 'maker' shall upload these plan(s) & 'checker' shall verify the same before these are uploaded. Maker / checker shall be identified by DTC for every shift.

4. DTC officials at Base Station(s) shall be able to track the vehicles belonging to the depot in which the Base Station is located.
5. DTC officials shall be able to generate / download various reports specific to vehicles associated to specific depots such as the following:
 - ✓ Position of the particular vehicle at any given point of time mapped to the land mark location, area, bus stop, etc.
 - ✓ Tracking the complete route taken by a particular vehicle on timescale
 - ✓ Route specific distance traveled by specific DTC bus on a given date & time
 - ✓ Time taken to complete a trip by specific bus, route based, at time slots in a day
 - ✓ Deviations taken by a specific bus during the duty / trip related to routes, stoppages at bus stops, over speeding, distance traveled between stops with in specific time, etc.
 - ✓ Bus operations specifically for NCR, City and Interstate Operations and all of these operations collectively
6. In case DTC wants to transfer some instructions from the Base Stations to vehicle driver(s) appropriate to their depot, then the instructions shall be transmitted to the Central Control Station and from there it will be transmitted to the respective driver(s) of the vehicles. Similarly any message(s) / emergency request(s) from the vehicle driver shall be transmitted to the respective Base Stations / nearest Base station through the Central Control Station for addressing the request / emergency.
7. Sample report list & formats are provided in Appendix-5. However Vendor is expected to collect the requirements related to all relevant reports, while finalizing the AVTMPS System specifications.

g) Requirements specific to Passenger Information System – on the buses.

1. Display of the information on approaching bus stops through LED panels inside of the buses.
2. LED panels inside the new buses shall be located on the grill at the back of the driver's seat which is the dividing line between the driver's seat and the passenger area of the bus. However, in existing buses the LED Panel shall be installed by the Vendor.
3. The AVTMPS System shall provide visual display and audio announcements within the bus regarding the approaching bus stops and route related information.
4. The display of information on the LED panel shall have adequate day time visibility.
5. The visual display on PIS Panel shall be in Hindi and English, on alternate basis.
6. It will be compulsory to have the announcements in Hindi followed by English.
7. PIS data should be refreshed in real time.
8. Vendor shall be allowed to install one LCD Panel inside the bus, at a convenient location other than behind the driver's seat for display of advertisements. Vendor shall ensure that this LCD panel shall not create hindrances to the movements of the commuters within the bus and also shall not block the outside view of the commuters.

h) Requirements specific to Passenger Information System – at select bus terminals/ identified bus stops equipped with Bus Queue Shelters.

1. LED display at select bus terminals/ identified bus stops shall display the information on next bus arrival information (e.g. bus number, bus trip source & destination, scheduled time, etc). Vendor shall be allowed to use LCD display in place of LED display at bus terminals. However, Vendor shall use only LED boards at BQS.

2. The display of information on the LED / LCD panel shall have adequate day time visibility.
3. The visual display on PIS Panel shall be in Hindi and English, on alternate basis.
4. LED display shall present the bus information including bus number and trip destination before its arrival at that particular location. The information should be refreshed regularly. At Bus Terminals, the LED / LCD display board shall also present the bay number(s) for respective bus(es).
5. Information / status on all the buses on which the AVTMPS System is installed, which moves through a particular location (eg. Bus depot, Bus Terminal, bus stop) shall be provided at the said location.
6. LED panel put up at these locations shall not create hindrances to the movements of buses as well as commuters at these locations.
7. The AVTMPS System should have a facility for the passengers to locate route buses / bus timings through SMS and / or IVRS. Passengers would provide route number, bus stop ID and get the details on the estimated time of arrival (ETA) of a bus / next bus timings etc. This could be an alternate revenue generation stream for the Vendor. DTC shall not claim any share from the revenue generated via this stream. In addition to the foregoing, the AVTMPS System should also have a facility for the passengers to locate route buses / bus timings through internet. The Vendor shall develop a facility to find route(s) of buses between any two bus stops on GIS map, which shall be available to passengers on website.
8. PIS data shall be refreshed in real time.
9. PIS would have to be installed at approx 500 (Five hundred) bus-stops. However, Vendor will be required to install PIS at additional locations, subject to payment of additional Concession Fee.

10. The PIS at bus stops / Bus Terminals should be displayed in a manner such that, information of all buses passing through that bus-stop /Bus Terminal is displayed at desired frequency through scrolling, etc.
11. During idle time, Vendor can display advertisements on the LED panel (LCD panel in case of Bus Terminal(s) only), subject to the condition that the total time of advertisement display will not exceed 25% (Twenty five percent) of the total time of operation of the PIS System at the bus stop(s) / Bus Terminal(s). While audio facility may be permitted at Bus Terminals the same will not be allowed at bus-stops.

i) Requirements specific to establishing voice communication with the moving bus.

1. VMU shall be capable of establishing two-way voice communication with the helpdesk facility put up at the Central Control Station.
2. This help desk facility set up shall have trained people from Vendor side as well as from DTC side to provide voice based vehicle movement related support to driver of the buses. The help desk officials shall be able to provide instructions to the drivers on over speeding, non-stoppage of bus at scheduled bus stops and diversion of the routes, etc.
3. The driver of the bus shall be able to send signal / emergency message by pressing a button on the device, to control room in emergency / break down situations.
4. The driver of the bus shall be able to initiate the voice communication only for pre-configured numbers (Central Control Station, Base Station(s) etc.). He will also be able to respond to communication established through Central Control Station and Base Station(s) etc.

4. Requirements specific to private stage carriage buses / vehicles using DTC's AVTMPS System for their tracking.

- a) Delhi Government may bring in the private operators under the AVTMPS umbrella by making tracking mandatory for these operators and may prefer to use the infrastructure created for DTC.

- b) DTC could extend this facility using its own AVTMPS System network to the Transport Department, Delhi Government, to track private stage carriage buses and other public service vehicles. Vendor would be expected to create and customize the service for these departments. Vendor would be entitled to a monthly rental for the tracking services to the private operators for this service as per the rate(s) set forth in the Financial Bid in this context since the advertisement rights for such buses shall not be extended to Vendor. In such case, the information of private stage carriage buses/vehicles would also be included in the real-time PIS at bus-stops, however, there would be no PIS inside these buses. All other terms & conditions including SRS, exceptional reports, etc. would remain the same as in the case of DTC buses.
- c) DTC may approach other State Governments / organizations to create a similar infrastructure. In case of other state governments responding to DTC's request, Vendor would be expected to form a consortium, with DTC for implementing such projects
- d) The modalities / arrangements for offering these AVTMPS System's services to other user departments as mentioned in clauses (a) to (c) above shall be finalized as and when the services are requested.

5. The data requirements from AVTMPS System shall include, inter alia, the following:

- a) Geographical position of the vehicle at pre-defined intervals on time scale with date & Time Stamp.
- b) Stoppage time of a given bus at designated bus stops on the pre-defined routes.
- c) Speed of the vehicle, distance traveled by the vehicle, etc
- d) Any information related to vehicle movement / operation (e.g. fuel consumption, oil consumption, oil temperature, etc) if available on bus.
- e) Route master
- f) Bus master
- g) Depot wise employee master (drivers, conductors, checking staff, etc.)
- h) GIS based digitized maps of Delhi, displaying geographical positions for bus routes, bus stops, bus terminals, depots, other land marks on the way for mapping purpose.

Map resolution shall be at least 1:10,000 or object identification upto 5-10 meters with accuracy of at least +/- 10 meters.

- i) Distances between bus stops for the designated routes, distance between identified land marks and the bus stops, distances for routes, etc
- j) Vehicle identity, route attributes stored in the AVTMPS System.

The under mentioned data / information from ATIS (as and when ATIS becomes operational) shall have to be integrated with the AVTMPS System:

- i) Duty plans including trips, bus numbers, routes, etc
- ii) Type of tickets (including normal tickets, pass tickets, free traveler, etc) and number of tickets (consolidated and denomination wise) sold stage wise, source & destination wise, depot wise, bus wise, route wise, etc
- iii) Cash collection - trip wise, bus wise, duty wise, route wise, time period wise of the day wise, depot wise

6. Specifications of PIS/Advertising rights -

a) General:

1. Vendor shall have to comply with applicable laws, applicable DTC / government guidelines while putting advertisements
2. Advertisements displayed in buses / bus stops / terminals shall be pre-approved by DTC / an agency / department nominated by DTC
3. Audio advertisements shall not be allowed within the bus. However, the same could be allowed at Bus Terminals subject to compliance with the Motor Vehicles Act / other applicable laws rules / regulations / notifications.
4. The advertising rights would be transferred to Vendor progressively as the AVTMPS System is commissioned on DTC buses in a phased manner i.e. advertisements shall be allowed in only those buses / BQS / Bus Terminals on which AVTMPS System has been implemented.
5. The advertising rights provided to Vendor inside the buses shall be on exclusive basis, subject to agreed space. Any other party, which wishes to advertise with in a bus, shall have to approach the Vendor.
6. Vendor is restricted from using paintings / posters for advertising. Vendor, under any circumstances, will not be allowed to deface the bus. While advertising, Vendor is required to comply with any and all applicable laws.

7. The bus mix to be covered under the AVTMPS System would comprise modern low-floor CNG buses, conventional CNG buses and diesel buses. The actual bus-mix will be decided at the sole discretion of DTC.
8. PIS display inside the buses and at Bus stops / Bus Terminals, shall be easily legible to the commuters in daylight also.
9. PIS installed at BQSS / Bus Terminals on the routes, where buses operate in night service, shall be operational at night also.
10. It is clarified that as part of this AVTMPS Project Vendor shall not have any right towards advertisement(s) or otherwise on the exterior portion of the bus(es). DTC hereby reserves the right to grant such advertisement or other rights in relation to the exterior of the bus(es) to any other vendor as DTC in its sole discretion deems fit.

b) Inside of the buses

1. It shall be mandatory for Vendor to use the LED panel behind the driver's seat only to display PIS such as information on approaching bus stop and other route related information. The LED panel is specifically provided for PIS and Vendor shall not be allowed to use the LED panel for any other purpose. It is clarified however that Vendor will be allowed to provide one separate LCD panel inside the bus for the purpose of advertisements during running of the bus. However, in about 525 + 105 (Six hundred and thirty) new low-floor buses and 300 (Three hundred) new Diesel buses, 1 (one) LED panel of size 80 cm x 10 cm will be available as a standard fitment. Vendor will be allowed to put one LCD panel of maximum size 80 cm x 30 cm inside the buses within the space for which advertisement rights are provided to the Vendor. In the remaining buses, the LED panel of size 80 cm x 10 cm will have to be installed by the Vendor for PIS.
2. The tentative space available for advertisements inside the 525 + 105 (Six hundred and thirty) low-floor buses are:
 - i. Behind driver's partition (Driver+ Conductor side) = 1-1.75'x4'x2 : 14.0 Sq.Ft.
 - ii. Above Window fixed glasses (Both sides) = 0.5'x33'x2 : 33.00 "
 - iii. Front Destination Box (inside) = 7.5x10.5=90"x10.5= 945 Sq.Inch : 6.56 "
 - iv. Above front door = 4' x 1' : 4.0 "
 - v. Above rear door = 5.5' x 0.75' : 4.13 "
 - vi. On Rear Destination Box from inside = 3.5 x 0.75 : 2.62 "
 - vii. On Pillar Coverings (4 nos.) = 5"x3'x 4 =720 Sq. Inch : 5 .00 "
 - viii. On Pillar Coverings (8 nos.) = 5"x4'x 8 =1920 Sq. Inch : 13.34 "

The space available for advertisements inside the conventional / interstate diesel buses may differ slightly.

3. Handhold (approximately 40 (forty) in number) for passengers fitted on grab rails provided on roof of the low-floor buses will also be available for display of advertisements. In the remaining buses, Vendor may fit handholds up to 40 (forty) numbers on grab rails for display of advertisements.
4. The PIS on the partition behind the driver's seat shall be easily visible from last seat as well.
5. LCD or any other electronic medium with in the buses can use bus battery as source of power. DTC would make available battery power in the range of 20-30 Ampere-hours subject to control of vehicle manufacturer. However if the same does not suffice, then Vendor shall make his own arrangements.
6. While advertising within the bus, posters should not be pasted. It is mandatory that the side panels be fixed, in which the advertisements can slide-in.
7. Vendor would be free to use any advertising means inside the bus including (1) one LCD Panel, poster panels as described in point no. 6 above, etc.
8. The above sizes are tentative and may vary in some or all buses.

c) At Select terminals/ bus stops

1. The tentative space provided for displaying PIS/Advertisements shall be :
 - Bus Stops – 2 feet X 4 feet
 - Bus Terminals- 4 feet X 6 feet

PIS of the above size with battery back up shall be installed at bus stops & bus terminals, as per Vendor's convenience, without compromising the commuter's interest.
2. Vendor shall be allowed to use LCD display in place of LED display at bus terminals. However, Vendor shall use only LED boards at BQS.
3. Power supply (raw power 220 V, 50HZs) at the bus terminals would be provided by DTC. Vendor would make arrangements to install a sub-meter for measuring power consumption. Vendor would reimburse the energy charges for the power utilized to DTC.
4. Power supply at the bus stops provide with BQS will have to be arranged by Vendor.

7. Amendment in SRS

DTC reserves the right to make such changes in the System Requirement Specifications which may be necessitated on account of an order of a competent court, governmental instructions / orders, administrative orders or for any other such reasons which are beyond the reasonable control of DTC including without limitation reasons such as a clash of interest(s) between the Vendor for the AVTMPS Project and any other vendor / service provider of DTC.

APPENDIX 1: CONTENTS AND FORMAT OF QUALIFICATION BID

(Request for Qualification) Letter of Application

(Letterhead of the Bidder/Lead Partner, including full postal address, telephone, fax, email addresses)

Date.....

Chairman-cum-Managing Director,
Delhi Transport Corporation,
I.P.Estate,
New Delhi-110002
Sir,

1. Being duly authorized to represent and act on behalf of (hereinafter “the Bidder”), and having reviewed and fully understood all the qualification information provided in the RFP No. ITD/57/2007, the undersigned hereby applies to be qualified by you as a Bidder for the AVTMPS Project on BOT basis.
2. Attached to this letter are certified copies of original documents defining:
 - (a) The applicant’s legal status
 - (b) The applicant’s principal place of business; and
 - (c) The place of incorporation (for bidders which are corporations); or the place of registration (or Income Tax registration) and the nationality of the owners (For bidders who are partnerships or individually – owned firms).
 - (d) MOU (in case of consortium/Joint Venture)
 - (e) All documents as specified in RFQ and RFP in respective envelopes.
3. DTC and its authorized representatives are hereby authorized to conduct any inquiries or investigations to verify the statements, documents, and information submitted in connection with this application, and to seek clarification from banker(s) and / or client(s) regarding any financial and technical aspects hereof by way of letters or otherwise from

any such institutions, in order to verify statements and information provided in this application, or with regard to our resources, experience, and competence.

4. This application is made in the full understanding that

:

(a) Our bid and any information submitted for qualification at the time of bidding will be subject to verification by DTC;

(b) DTC has reserved the right to:

- (i) Amend the scope of work for the AVTMPS Project. In such event, bids will only be called from qualified bidders who meet the revised requirements; and
- (ii) Reject or accept any application, cancel the qualification/Bid process, and reject all applications; and

(c) DTC shall not be liable for any such actions and shall be under no obligation to inform us of the grounds for the same.

5. Appended to this application, we give details of the participation of each party, including capital contributions and Profit and Loss arrangements, as per requirements of the RFQ Document.

6. We confirm that in the event of our bid is successful resulting in award of contract, the same will be:

(a) Signed so as to legally bind all partners jointly and severally; and

(b) Submitted with a consortium/joint venture agreement providing the joint and several liability of all partners/Consortium members in the event contract is awarded to us.

7. As a Lead firm, we would have a minimum of 26% equity or profit sharing participation in the Joint venture/Consortium

8. We confirm that we agree with the terms and conditions provided in RFP/RFQ and the Draft Concession Agreement. The RFQ and RFP submitted by us shall be valid for the period of 180 (One hundred and Eighty) days from the date of bid opening prescribed by DTC.

9. The Bid Security of Rs. 10 million in the form ofin favour ofin enclosed vide.....

10. The undersigned declares that the statements made and the information provided in the duly completed application is complete, true and correct in every detail.

Signed
Name
For and on behalf of (name of Bidder) OR For and on behalf of (name of Consortium/Joint venture)

(Request for Qualification)

General & Organizational Information

All individual firms and all members of a Consortium are requested to complete the information in this form.

1. Firm Particulars (for each firm in case of Joint Venture/Consortium)

No.	Particulars
1	Name of Firm
2	Head office address:
3	Contact Person: Telephone
4	Fax: email
5	Place for incorporation/registration: Year of incorporation/registration:

2. A Power of Attorney in the manner set forth in Form 1 hereto authorizing the signatory of the bid to commit the Bidder(s).

3. Applicants shall submit the following information:

- I. Legal Status
- II. Place of registration
- III. Principal business and place for business

4. A certified copy of applicant's current Memorandum and Articles of Association or other relevant constitutional documents and (where relevant) those of its immediate and all superior holding companies.

5. Attach brochure and details of each Firm(s) pertaining to Ownership structure, business areas/activities, business growth revenue details, staff details and capability statement.

(Request for Qualification)

We would like to clearly state that we qualify for this work as our company/Consortium of companies meets all the pre-qualifying criteria indicated by you on the Website. The details are as under:

Pre-qualification Criterion	Details	
1. Turnover of the company/Consortium of companies during the last three financial years (Attach necessary documentary proofs.)	Financial year	Rupees in Crores
	2004-05	
	2005-06 2006-07	
2. Net worth of the company/Consortium of companies as on the last day of the last Financial Year		
3. Attested copy of the Certificate of Incorporation with the copy of Articles and Memorandum of Association	Yes/No	
4. Address and contact numbers of technical support office in Delhi		
5. Number of key persons who have sufficient experience to develop and implement customized GPS, GIS and web-based applications alongwith the Organizational Chart. (Attach separate statement indicating names, qualifications, experience and skills sets and details of projects handled)	(No. of Persons)	
6. Whether successfully implemented similar project(s) during last three years? (Enclose the list of projects and attach necessary documentary proofs alongwith addresses & telephone numbers of clients nationally/globally.)	Yes / No	
7. Whether you have proven experience in the field of development of customized IT applications integrating GPS, GIS and Web technologies? (Enclose the list of projects and attach necessary documentary proofs.)	Yes/No	

We understand that if the details given in support of claims made above are found to be untenable or unverifiable or both our bid may be rejected without any reference to us. We further clearly understand that DTC is not obliged to inform us of the reasons of rejection of our bid.

Note: The bidder shall also enclose supporting documents in respect of information furnished above from S.No. 1 to 7 stipulated under prequalification criteria

Yours sincerely

(Name, designation, contact address and telephone number of the authorized signatory)

Form 1: Format of Power-of-Authority for signing of bid

POWER OF ATTORNEY

(On Stamp Paper of relevant value)

Know all men by these presents, we _____ (name of the company and address of the registered office) do hereby appoint and authorize Mr. _____ (full name and residential address) who is presently employed with us and holding the position of _____ as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our proposal for Development, Implementation, Operation and Facility Management of GPS enabled Automatic Vehicle Tracking & Monitoring System integrated with Passenger Information System (AVTMPS) in response to the tenders invited by the Delhi Transport Corporation (hereinafter referred to as DTC), including signing and submission of all documents and providing information/responses to DTC in all matters in connection with our Bid.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

Dated this _____ day of _____ 2007

For _____

(Signature)

(Name, Designation and Address)

Accepted

(Signature)

(Name, Title and Address of the Attorney)

Date:

Note on Form 1:

1. To be executed by the all members in case of a Consortium.
2. The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants and when it is so required the same should be under common seal affixed in accordance with the required procedure.
3. Also, wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a resolution/power of attorney in favor of the Person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.
4. In case the Application is signed by an authorized Director / Partner or Proprietor of the Applicant, a certified copy of the appropriate resolution / document conveying such authority may be enclosed in lieu of the Power of Attorney.

Form 2 – Undertaking

Undertaking

It is certified that the information furnished in this Qualification Bid and as per the document(s) submitted therewith is true and correct and nothing has been concealed or tampered with. We have gone through all the conditions of RFP and agree to be liable to any punitive action for furnishing false information / documents.

Dated this _____ day of _____ 2007

Signature

(Company Seal)

In the capacity of

Duly authorized to sign bids for and on behalf of:

APPENDIX 2: CONTENTS AND FORMAT OF TECHNICAL BID

The Technical Bid should provide the following information using the attached Standard Forms as detailed below.

1. A cover letter as shown in Form – 1.
2. Consortium agreement listing roles & responsibilities of each partner.
3. A bid proposal sheet as shown in Form – 2 to 6
4. Technical Proposal

In preparing the Technical Bid, Bidders are expected to examine this tender document in detail. The proposal should cover all the aspects of the scope of work mentioned in Sections 5 & 6. Any bid not found responsive with this tender document shall be rejected. Material deficiencies in providing the information requested may also result in rejection of the Proposal.

The Technical Bid is expected to include the following chapter's inter-alia,

S. No.	Parameters	Reference ²
1	Company / Consortium Profile	
2	Development & Facility Management Capability	
3	Case studies of Similar executed Projects & reference installations	
4	Deployment plan	
5	Design, Development & Implementation Methodology	
6	Project management methodology	
7	Risk Management	
8	Data Preparation Plan	
9	User training plan & Training delivery methodology	
10	Post Implementation Operations & Facility Management methodology	
11	GPS unit - Technical Support	

² Provide Technical Bid Document Para References for each of these parameters.

S. No.	Parameters	Reference²
12	Upgrades methodology	
	Proposed Technical Solution	
13	Technical architecture	
14	IT hardware Design	
15	Network Design	
16	Bandwidth design	
17	Vehicle mounted units technology /Features / technical specifications	
18	Security	
	Security levels , Authentication Method	
	Role based Access, Encryption	
	Physical security	
19	Disaster recovery & business continuity plans	
20	Route Planner Software	
21	Application Software	
22	High availability solution	
23	Data Back up & Storage system Design	
24	VMU / PIS system Manual / Route planner manual	
25	Bill of Material	

5. An undertaking as provided in Form – 7.

(Note: The Technical Bid must not include any financial information.)

Form – 1: Format for Cover Letter

To,
The Chairman cum Managing Director,
Tender Cell, Room no. 207,
Head Quarter, Delhi Transport Corporation,
IP Estate, New Delhi-11002

Sub: Technical Bid for Development, Implementation, Operation and Facility Management of Automatic Vehicle Tracking & Monitoring System (AVTMPS)

Dear Sir,

1. Having examined the RFP Document Package for RFP No. ITD/57/2007 for the AVTMPS Project including all Appendices, Forms and Schedules thereto and addenda numbers _____ thereto, we, the undersigned, in conformity with the provisions of the RFP, offer to provide the said services on terms of reference to be signed upon the award of contract for the sum indicated as per financial bid.
2. We acknowledge having received the following addenda to the bid document:

Addendum No.	Dated

3. If our bid is accepted, we hereby undertake, to provide the services comprised in the Concession Agreement within time frame specified, starting from the date of receipt of Letter of Acceptance from Delhi Transport Corporation (DTC).
4. We agree to abide by this proposal for a period of 180 (One Hundred and Eighty) days from the date of bid opening prescribed by DTC and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

5. We agree to execute a contract in the form to be communicated by DTC, incorporating all agreements with such alterations or additions thereto as may be necessary to adapt such agreement to the circumstances of the standard and notice of the award within the time prescribed after notification of your intention to accept this proposal by way of a Letter of Acceptance.
6. Unless and until a formal agreement is prepared and executed this proposal together with your written acceptance thereof shall constitute a binding contract agreement.
7. We understand that you are not bound to accept the highest or any bid you may receive, not to give any reason for rejection of any or all bids and that you will not defray any expenses incurred by us in bidding.

Dated this ____ day of _____ 2007

Signature

(Company Seal)

In the capacity of

Duly authorized to sign bids for and on behalf of:

Form – 2: Bid Proposal Sheet**Bid Proposal Sheet**

Name of the Company:	
-----------------------------	--

Registered Office Address:			
House No.			
Street			
Area / Locality			
City		PIN	
Telephone		Fax	
E-mail			
URL			
Local Office Address:			
House No.			
Street			
Area / Locality			
City		PIN	
Telephone		Fax	
E-mail			
Contact Person:			
Name			
Designation			
Telephone		Fax	
E-mail			

Form – 3: Performance Statement

[Project Title] (Attach separate sheet for each project)			
Project Promoter			
Contact Person			
Address:			
House No.			
Street			
Area / Locality			
City		PIN	
Telephone		Fax	
E-mail			
URL			
Project Brief			
Role of your Organization			
Other particulars of the Project			
Current Status of the Project			

Form – 4: Details of Software Development & Facility Management Facilities

Software Development & Facility Management Facilities <i>(Attach separate sheet for each facility)</i>			
Address:			
House No.			
Street			
Area / Locality			
City		PIN	
Telephone		Fax	
Mobile			
E-mail			
Contact Person / Office In-charge:			
Name			
Designation			
Telephone		Fax	
Mobile			
E-mail			
Working Days & Hours			
Physical Resources			
Human Resources			

Form – 5: Project Team Details

Project Team					
S. No.	Name of the Employee	Designation	Qualifications	Total Experience	Expertise / Skill Set
1.					
2.					
3.					
4.					
5.					

Form – 6: Undertaking

Undertaking

It is certified that the information furnished here in and as per the document submitted is true and correct and nothing has been concealed or tampered with. We have gone through all the conditions of tender and is liable to any punitive action for furnishing false information / documents.

Dated this _____ day of _____ 2007

Signature

(Company Seal)

In the capacity of

Duly authorized to sign bids for and on behalf of:

APPENDIX -3: CONTENTS AND FORMAT OF FINANCIAL BID

Table 1. Minimum Concession Fee.

Year	Minimum Concession Fee (INR) during the Concession Period per Bus, per month
First Year of Operation	600
Second year of Operation	1000
Third year of Operation	1200
Fourth year of Operation	1300
Fifth year of Operation	1400
Sixth year of Operation	1500

The Concession Fee shall be worked out by adding the additional concession fee as % (percentage) of minimum Concession Fee as quoted in Part I of Appendix 3 (see example below).

Example : Say a quote of 10% above is filled in Appendix 3 then the concession fee to be paid in the first year would be Rs. 600x1.1=Rs.660 per bus per month, for 2nd year Rs. 1000x1.1 = Rs.1100 per bus per month & so on in subsequent years for upto 2500 buses.

Table 2. Bench Mark of Monthly Rental per bus under the control of Private Operators

Year	Bench Mark of Monthly Rental (INR) Per Bus Per Month payable to Vendor
First Year of Operation	1000
Second year of Operation	1000
Third year of Operation	1000
Fourth year of Operation	1000
Fifth year of Operation	1000
Sixth year of Operation	1000

The Monthly Rental shall be worked out by adding the additional Monthly Rental % (percentage) of benchmark monthly rental as quoted in Part II Appendix 3 (see example below).

Example : Say a quote of 10% above is filled in Part II Appendix 3 then the payable Monthly Rental shall be worked out as Rs. 1000 x 1.1 = Rs. 1,100/- per bus per month for each year.

(FINANCIAL BID – Part I)

FORMAT FOR CONCESSION FEE FOR DTC BUSES

1. We agree to pay an additional monthly Concession Fee of% (percentage in words also) above the Minimum monthly Concession Fee per bus per month (as indicated in Table 1) upto 2500 buses.
2. Further, in the event the number of DTC buses increases in the actual scope beyond 2500 (Two thousand five hundred) then we agree to pay% (in words also) of the minimum Concession Fee per bus per month (as indicated in Table 1) in addition to what is quoted by us at Serial no. 1 above, payable for all buses (i.e. 2500 buses + additional number of buses). We agree that this percentage quote will be added to the percentage quoted at Serial no. 1 above, for calculation of monthly Concession Fee per bus payable by Vendor to DTC over and above the Minimum monthly Concession Fee per bus (as indicated in Table 1) for all DTC buses.

Authorized Signatory

(With Stamp of the concessionaire)

Note - Please note the following while filling the details herein above:

- a. The figure quoted should be in multiple of 0.5%
- b. The figure quoted should be net of any and all applicable taxes, duties levies including without limitation service tax and any other statutory liability. Bidders may note that any present or future tax liability including without limitation service tax, advertisement tax or any other statutory tax / duty shall be the sole liability of the Bidder and shall not be compensated in any way out of the Concession Fee payable to DTC.
- c. Where scope of work is limited to 2500 DTC buses and x% is quoted at Sl. No. 1 above, the Concession fee payable each bus per month will be minimum Concession fee as per Table 1 + x% of the minimum Concession fee as per Table 1.
- d. Where scope of work increases beyond 2500 DTC buses and x% is quoted at Sl. No. 1 above and y% is quoted at Sl. No. 2 above, the Concession fee payable for each bus per month will be minimum Concession fee as per Table 1 + (x+y)% of the minimum Concession fee as per Table 1.
- e. The Concession Fee quoted upto 2500 buses in Sl. No. 1 will include PIS & its corresponding revenue potential at 500 (Five Hundred) Bus Terminals / BQS. However, in case Vendor implements PIS at more than 500 Bus Terminals / BQSS, then extra Concession Fee would be charged by DTC which would be equivalent to the Concession Fee (as applicable as per the number of buses with Project) for one bus per month per PIS added on Bus Terminals / BQS.

(FINANCIAL BID – Part II)

**FORMAT FOR AVTMPS RENTAL FOR PRIVATE STAGE CARRIAGE BUSES / VEHICLES
UNDER CONTROL OF PRIVATE OPERATORS**

We quote additional monthly rental of % (percentage in words also) per bus / vehicle per month over & above Bench Mark specified in Table-2 of Appendix-3 towards the AVTMPS services & real time Passenger Information System at Bus Terminals / BQS(without PIS inside the bus)provided by us in private stage carriage buses / vehicles which will be payable to us.

We confirm that the above rental charges would include all the services provided under AVTMPS Project and no separate charges shall be leviable towards communication, operation, etc.

**Authorized Signatory
(with Stamp of the concessionaire)**

Note - Please note the following while filling the details herein above:

- a. The figure quoted should be a multiple of 0.5%.
- b. The figure quoted should be net of any and all applicable taxes, duties levies including without limitation service tax and any other statutory liability. Bidders may note that any present or future tax liability including without limitation service tax, advertisement tax or any other statutory tax / duty shall be the sole liability of the Bidder and shall not be compensated in any way out of the Monthly Rental.
- c. The monthly rental quoted above is for the AVTMPS services & real time Passenger Information System at Bus Terminals / BQS only and not for PIS inside the bus.

Table 3. Format for Evaluation of Financial Bids

S. No.	Evaluation criteria	Weight age
1.	Percentage Concession Fee quoted by the Bidder over and above the Minimum Concession Fee specified by DTC in Table 1 of Appendix 3 for upto 2500 (Two Thousand Five Hundred) DTC Buses	60%
2	The percentage figure quoted by Bidder in point no. 2 of Part I of Appendix 3	30%
3	Percentage Monthly rental quoted by the Bidder for private buses (with PIS at bus-stops and without PIS inside the bus) over and above bench mark specified in Table 2 of Appendix 3	10%

Example: In case Bidder quotes percentage from Serial No. 1 to 3 as x, y, & z, then evaluation of financial bid shall be done as per the following formula:

$$\text{Net percentage quoted} = 0.6x + 0.3y - 0.1z$$

Estimates for Expenditure and Revenue

Table 4 : Capital Cost for the AVTMPS Project

Description	Unit Cost (Rs.)	Quantity (Rs.)	Total (Rs.)
Cost of Vehicle Mounted Unit per bus			
Cost of creating AVTMPS/PIS for each bus			
LCD Monitor for advertisements			
Power back up inside the bus			
Control Unit			
Total for each bus			
Capital cost of PIS for the entire fleet			
Depot Infrastructure (Per Location)			
Computers			
Server			
Printer			
UPS			
UPS for Server			
Networking			
Generator			
A/C			
Total Cost per location			
Cost of creating infrastructure at all depots			
Cost of creating infrastructure at Head Quarter			
Servers			
Software for dataware housing/data analysis			
Software for route optimisation			
Computers			
Printers			
UPS for Servers			
UPS for Computers			
Generator			
A/C			
Total			
Total Infrastructure Cost			
PIS at Bus Stops			
Any other Component			
Total Cost (AVTMPS + PIS inside the Bus + PIS at BQS)			

Table 5 : Facility Management for the AVTMPS project

Description	Unit Cost (Rs.)	Quantity (Rs.)	Total (Rs.)
Recurring Costs			
Manpower			
Manpower required at Depot Level			
Machine Operators (Cost to Company, per annum)			
Depot Incharge cum reliever for Machine Operator			
Manpower cost per depot per year			
Manpower cost for all depots per year			
Manpower required at the Head Quarters			
Computer Operator			
Database Administrator			
Software Programmer			
System Administrator			
Project Manager			
Manpower Cost for the Head Quarter per year			
Manpower cost for the entire project per year			
Consumables			
Consumables at the depot level			
Computer Stationary(per year)			
Printer Cartridges(assuming one cartridge suffices for two months)			
Maintenace cost of computers including service and spares(per year charges assuming AMC @ 10%,			
Maintenance cost of generators including Diesel , per year			
Consumables required at depot level per year			
Total consumables required at all depots			
Consumables at Head Quarters			
Computer Stationary(per year)			
Printer Cartridges(assuming one cartridge per month)			
Maintenace cost of computers including service and spares (per year charges assuming AMC			
Maintenance cost of generators including Diesel , per year			
Consumables required at Head Quarters per year			
Total cost of consumable for the project per year			
Maintenance cost of VMU including spares per year			

Maintenance cost of other equipments including spares per year			
Total recurring cost per year			

Table 6 : Revenue Estimates (As per Clause 9 (I) Section 5, read with clause 6 Section 6)

Year	Estimated Revenue (in Rs.)
1st Year	
2nd Year	
3rd Year	
4th Year	
5th Year	
6th Year	

Note to Bidders:

The information included in Tables 4 to 5 of this Financial Bid regarding cost (item-wise and cash flow estimates for executing the work, expenses towards facility management and estimated revenue generation) are for reference purpose only and shall not be used for evaluation of Financial Bids.

Undertaking

It is certified that the information furnished here in and as per the document submitted is true and correct and nothing has been concealed or tampered with. We have gone through all the conditions of tender and are liable to any punitive action for furnishing false information / documents.

Dated this _____ day of _____ 2007

Signature

(Company Seal)

In the capacity of

Duly authorized to sign bids for and on behalf of:

APPENDIX -4: SERVICE LEVELS ACCEPTANCE METRICS

a) Minimum Service levels to be maintained for AVTMPS system operations by the Vendor.

Sr. No	Parameter	Threshold	Conditions	Penalty Amount
VMU - Operations & Facility management				
1	VMU- Non-Operational (The VMU is non-operational when the unit is not able to provide the necessary data at pre-defined intervals)	Not more than 1% of the installed base of devices should be non-operational on any day	This shall be computed as Operational VMUs Vs Total installed VMUs on buses / vehicles operated on a particular day.	Rs. 500 per VMU beyond the threshold limit on a particular day. reported & verified
2	VMU- Repair and Maintenance	With in 2 Hrs of the bus reporting back at the depot.	Non-functional VMUs shall be detected by the control room or reported by the driver. These will have to be rectified/ replaced with in 2 Hrs of the bus reaching the respective depot, provided that the bus is available for the said duration. This shall be tracked through the complaint log books/system.	Rs. 500 per VMU beyond the threshold limit on a particular day. reported & verified
3	Data transfer to/from the VMU	Maximum 60 (sixty) seconds per VMU	This shall be an average time taken to transfer data from individual VMU to & from the Central control station. This shall be recorded through transaction logs captured in the AVTMPS system at Central control station.	Rs.100 per incident beyond the threshold limit , reported & verified
4	VMU data inaccurate or beyond the tolerance limit set for AVTMPS	ZERO Incidents reported per month	Shall be available through transaction logs generated by the system	Rs 500 for each incident reported & verified

Passenger Information System (PIS) - Operations & Facility management				
5	PIS malfunction i.e. PIS data broadcasted is inaccurate.	ZERO Incidents reported per month.	1. PIS malfunctioning with in the bus will be reported by Driver/Conductor. 2. PIS malfunctioning at Bus stops/terminals will be reported by enforcement staff /Drivers/conductors/ Any DTC officials or Commuters	Rs 500 for each issue reported & verified.
IT System Availability - to be computed on 6AM to 11 PM time slot.				
6	System availability at control room	99% reported & verified in a month	a. The hardware, peripherals, software is not in working condition. b. Network for communication is not available for real time /online data availability for processing as well as for reporting. Will be computed as Total Number of working hours (6.00AM to 11.00 PM per day) available in a month Vs hours for which system was not available with in a month.	Rs 500 per hour reported & verified beyond the threshold limit per month

7	System availability for report generation	99% reported & verified in a month	Will be computed as Total Number of working hours (6.00AM to 11.00 PM per day) available in a month Vs hours for which system was not available for report generation with in a month.	Rs 100 per hour reported & verified beyond the threshold limit per month
PIS Display Availability – To be computed on 6AM to 11 PM time slot.				
8	PIS Display availability with in bus and at terminals	99% reported & verified in a month	Will be computed as Total Number of working hours (6.00AM to 11.00 PM per day) available in a month Vs hours for which display system was not functional with in a month.	Rs 100 per hour reported & verified beyond the threshold limit per month

- b) The compliance to the SLA metrics as listed above shall be monitored on the monthly basis.
- c) The compliance report shall be submitted monthly, by the Vendor.
- d) These compliance reports shall be verified by DTC officials or the nominated representatives of DTC. Any disputes on the compliance report shall be escalated to a nominee of the senior management of DTC and the decision of that nominee shall be binding on both the parties.

APPENDIX -5: SAMPLE REPORTS FORMATS

Sample report (standard/exceptional) List is given below:

Sr. No	Report Name (description)
1	Details of Missed trips
2	Details of missed trips & kms – route wise
3	Route wise stop time at stages
4	Travel time analysis (w.r.t Duty)
5	Travel Time analysis (w.r.t Route)
6	Traffic potential (stage-wise stoppage during time interval)
7	Daily Route deviation report
8	Driver wise improper stopping
9	Improper stopping at stops
10	Bus stops skipped
11	Driver wise stages skipped
12	Speed violation
13	Dead kilometers
14	Daily duty wise deviation report for arrival time at land marks
15	Daily out shedding deviation report
16	Driver duty performance daily/weekly/monthly

Sample report Formats is given below:

Details of Missed Trips

From Date :

To Date:

Date	Missed Trips	Break Down	No Bus	No Staff	Late Out shedding	Late running	Short leave	Accidents	Route deviation	Others	Total Missed trips
------	--------------	------------	--------	----------	-------------------	--------------	-------------	-----------	-----------------	--------	--------------------

Depot:

Depot Total

Grand Total

Also exception reports should have the fields of vehicle no./driver batch no./duty no.

Details of Missed Trips & Kms – Route wise

From Date :

To Date:

Date	Missed Kms	Break Down	No Bus	No Staff	Late Out shedding	Late running	Short leave	Accidents	Route deviation	Others	Total Missed trips
------	------------	------------	--------	----------	-------------------	--------------	-------------	-----------	-----------------	--------	--------------------

Depot:

Route No:

Route Total:

Route No:

Route Total:

Route No:

Route Total:

Depot Total

Grand Total

Also exception reports should have the fields of vehicle no./driver batch no./duty no.

Route wise stop time at stages

From Date :

To Date:

S.No	Stage Name	Duty No	Trip No	Stage time & date	Duration of stoppage in sec
------	------------	---------	---------	-------------------	-----------------------------

<u>Route No:</u>	<u>Stage Name</u>
-------------------------	--------------------------

<u>Route No:</u>	<u>Stage Name</u>
-------------------------	--------------------------

Travel Time Analysis (w.r.t Duty)

From Date : To Date:

Duty No:

Trip	Trip dur (In min)	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
------	-------------------	--------	--------	---------	-----------	----------	--------	----------

Act. Dur	Deviat ion	Act. Dur	Deviati on	Act.D ur	Deviati on	Act. Dur	Deviation	Act. Dur	Deviati on	Act.D ur	Deviati on	Act. Dur	Deviati on
----------	------------	----------	------------	----------	------------	----------	-----------	----------	------------	----------	------------	----------	------------

Travel Time Analysis (w.r.t Route)

From Date : To Date:

Route No: (In minutes)

Start Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
	Act. Duration	Deviati on	Act. Duration	Deviati on	Act. Duration	Deviati on	Act. Duration	Deviati on

Traffic Potential

From Date : To Date:

Stoppage time more than : (In seconds)

Stage code	Stage Name	Time Interval	Time stoppage at stage (In seconds)
<u>Route No:</u>			
Dirac DOWN			
Dirac UP			

Daily Route Deviation Report

From Date : To Date:

Duty No:

Trip Nr	Route No:	Scheduled Kms	Actual Kms covered
---------	-----------	---------------	--------------------

Deviated from Stage:

 Missed Stage

 Merged at stage:

Trip Nr	Route No:	Scheduled Kms	Actual Kms covered
---------	-----------	---------------	--------------------

Deviated from Stage:

 Missed Stage

 Merged at stage:

Duty No:

Trip Nr	Route No:	Scheduled Kms	Actual Kms covered
---------	-----------	---------------	--------------------

Deviated from Stage:

 Missed Stage

 Merged at stage:

Improper Stopping - Driver wise

From Date : To Date: Stage Type

Sr.NO Date & time Route No Duty NO Bus Reg. No Conductor No Stage Name

Depot: Depot Name:

Driver No: Driver Name:

Driver Total

Depot Total

Grand Total

Improper Stopping at stops

From Date : To Date: Stage Type

Sr.NO Date & time Fleet Bus No Route Stage Name Depot Code Drive Conductor No

Duty No:

Total No of Improper stopping

Bus Stops skipped

From Date : To Date: Stage Type

Sr.NO Date & time Fleet Bus No Route Stage Name Depot Code Drive Conductor No

Duty No:

Total No of stops skipped

Skipped Stages - Driver wise

From Date : _____ To Date: _____ Stage Type _____

Sr.NO	Date & time	Route No	Duty No	Stage Name	Conductor No
-------	-------------	----------	---------	------------	--------------

Depot: _____ Depot Name: _____

Driver No: _____ Driver Name: _____

Driver Total
 Depot Total
 Grand Total

Speed Violation

From Date : _____ To Date: _____ Duration more than seconds

Duty No: _____ Bus registration No _____

Sr.NO	Date & time	Route No	Location	Driver No	Duration (Sec)	Speed (kmh)
-------	-------------	----------	----------	-----------	----------------	-------------

Dead Kilometers

From Date : _____ To Date: _____

Sr.NO	Date & time	Duty NO	Scheduled Kms	expected kms	actual kms	dead kms
-------	-------------	---------	---------------	--------------	------------	----------

Depot: _____

Daily duty wise deviation report for arrival time at land marks

Date: _____ Duty No _____

Fleet Type	Trip No	Land mark	Scheduled arrival time	Actual arrival time	Deviation time(min)
------------	---------	-----------	------------------------	---------------------	---------------------

Depot: _____

Daily Out shedding deviation report

From Date: _____ To Date: _____

Shift: _____

Sr.No	Duty No	Bus Reg. No	Scheduled Outshed Time	Actual Outshed Time	Deviation time(min)	Reason
-------	---------	-------------	------------------------	---------------------	---------------------	--------

Depot: _____

Fleet: _____

Driver Duty Performance(Daily/Weekly/Monthly)

From Date: _____ To Date: _____

Sr.No	Duty No	MOR/EV	OUTSHEDDED (Y/N)	DUTY STATUS
-------	---------	--------	------------------	-------------

Depot: _____

Driver No: _____

Driver Name: _____

Date: _____

Bank Guarantee Format

PROFORMA OF BANK GUARANTEE FOR EARNEST MONEY/BID SECURITY
(ON BANK'S LETTERHEAD WITH ADHESIVE STAMP)

To
The Chairman cum Managing Director
Delhi Transport Corporation
Government of N.C.T. of Delhi
IP Estate,
Delhi

Bid No. Date of Opening

KNOW ALL MEN by these presents that we _____ of _____ (Name and address of Bank) having our registered office at _____ (hereinafter called "the bank") are bound unto Chairman and Managing Director, Delhi Transport Corporation (hereinafter called "the Owner") in the sum of Rs. 1,00,00,000/- (Rupees Ten Millions) for which payment truly to be made to the said Owner, the Bank hereby binds itself, its successors and assigns by these presents.

Whereas..... (NAME OF BIDDER) (Hereinafter called "the Bidder") has submitted its bid dated..... (date of submission of bid) for execution of AVTMPS Project on Build, Operate and Transfer (BOT) basis for the Automatic Vehicle Tracking & Monitoring System (AVTMPS) in terms of the Owner's RFP No. ITD/57/2007 due on 15th November, 2007 issued by the Chairman cum Managing Director of Delhi Transport Corporation, NCT of Delhi, (hereinafter called "the Bid").

AND WHEREAS the Bidder is required to furnish a Bank Guarantee for the sum of Rs. 10,000,000/- (Rs. Ten Millions only).

AND WHEREAS _____ (Name of Bank) have, at the request of the Bidder, agreed to give this guarantee as hereinafter contained without demur.

5. We further agree as follows:

- (a) That the Owner may without affecting this guarantee grant time of other indulgence to or negotiate further with the Bidder in regard to the conditions contained in the said bid and thereby modify these conditions or add thereto any further conditions as may be mutually agreed upon between the Owner and the Bidder.
- (b) That the guarantee hereinbefore contained shall not be affected by any change in the constitution of our Bank or in the constitution of the Bidder.
- (c) That any account settled between the Owner and the Bidder shall be conclusive evidence against us of the amount due hereunder and shall not be questioned by us.
- (d) That this guarantee commences from the date hereof and shall remain in force till the later of:
 - (i) the Bidder, in case his bid is accepted by the Owner, executes a Concession Agreement after furnishing the Performance Guarantee as per the provisions of the "Instructions to Bidders", section of the RFP; or
 - (ii) 240 (Two hundred and forty) days from the proposal submission due date.
- (e) That the expression 'the Bidder' and 'the Bank' herein used shall, unless such an interpretation is repugnant to the subject or context, include their respective successor and assigns.

6. **The Conditions** on this obligation are:

- (a) if the Bidder withdraws his Bid during the period of Bid validity specified in the RFP, or
- (b) if the Bidder does not accept the correction/s of his bid price in terms of the Instructions to Bidders.
- (c) If the Bidder having been notified of the acceptance of his Bid by the Owner during the period of Bid validity:
 - I. fails or refuses to furnish the Performance Security in accordance with Instructions to Bidders and/or
 - II. fails or refuses to enter into a Concession Agreement within the time limit specified in the Instructions to Bidders.

We under take to immediately pay to the Owner in DELHI the above amount upon receipt of his first written demand, without the Owner having to substantiate his demand provided that in his

demand the Owner will note that the amount claimed by him is due to him owing to the occurrence of any one or more of the conditions (a), (b) & (c) mentioned above, specifying the occurred condition or conditions.

SIGNATURE OF _____
AUTHORISED OFFICIAL OF THE BANK

SIGNATURE OF THE WITNESS

_____ ,

NAME OF THE WITNESS

_____ ,

ADDRESS OF THE WITNESS

NAME OF OFFICIAL _____

DESIGNATION _____

STAMP/SEAL OF THE BANK

Performance Guarantee Format

PROFORMA OF BANK GUARANTEE FOR PERFORMANCE GUARANTEE
(ON BANK'S LETTERHEAD WITH ADHESIVE STAMP)

To
The Chairman cum Managing Director
Delhi Transport Corporation
Government of N.C.T. of Delhi
IP Estate,
Delhi

KNOW ALL MEN by these presents that we _____ of _____ (Name and address of Bank) having our registered office at _____ (hereinafter called "the bank") are bound unto Chairman and Managing Director, Delhi Transport Corporation (hereinafter called "the Owner") in the sum of Rs. 36 Million (Rupees Thirty Six Million only) for which payment will and truly to be made to the said Owner, the Bank binds itself, its successors and assigns by these present.

Whereas a Letter of Acceptance No. _____ dated _____ has been issued by Delhi Transport Corporation (DTC), to (NAME OF CONCESSIONAIRE) (Hereinafter called "the Concessionaire") for execution of the AVTMPS Project on Build, Operate and Transfer (BOT).

AND WHEREAS the Concessionaire is required to furnish a Bank Guarantee for the sum of Rs. 36 Million (Rupees Thirty Six Million only) towards Performance Guarantee for the said AVTMPS Project.

AND WHEREAS _____ (Name of Bank) have, at the request of the Concessionaire, agreed to give this guarantee as hereinafter contained without demur.

7. We further agree as follows:

- (a) That the guarantee hereinbefore contained shall not be affected by any change in the constitution of our Bank or in the constitution of the Concessionaire.

- (b) That any account settled between the Owner and the Concessionaire shall be conclusive evidence against us of the amount due hereunder and shall not be questioned by us.
 - (c) That this guarantee commences from the date hereof and shall remain in force for a period of 6 (six) years and 180 (one hundred and eighty) days.
 - (d) That the expression 'the Concessionaire' and 'the Bank' herein used shall, unless such an interpretation is repugnant to the subject or context, include their respective successor and assigns.
8. The Conditions on this obligation are:
- (i) If the Concessionaire fails or refuses to enter into the Concession Agreement within the time limit specified in the Letter of Acceptance.
 - (ii) If the Concessionaire fails to perform its obligations under the Concession Agreement to be entered into between DTC and the Concessionaire pursuant to issuance of Letter of Acceptance by DTC to Concessionaire

We under take to immediately pay to the Owner in DELHI the above amount upon receipt of his first written demand, without the Owner having to substantiate his demand provided that in his demand the Owner will note that the amount claimed by his is due to him owing to the occurrence of any one or more of the conditions (i) & (ii) mentioned above, specifying the occurred condition or conditions.

SIGNATURE OF _____
AUTHORISED OFFICIAL OF THE BANK

SIGNATURE OF THE WITNESS

_____,

NAME OF THE WITNESS

ADDRESS OF THE WITNESS

NAME OF OFFICIAL_____

DESIGNATION_____

STAMP/SEAL OF THE BANK

**INDEPENDENT ENGINEER'S SERVICES
TERMS OF REFERENCE**

1. OBJECTIVES

The Independent Engineer shall be required to:

- (i) Act independently on behalf of both DTC and the Concessionaire to review and monitor all activities associated with design, construction, operation and maintenance to ensure compliance with provisions of the Concession Agreement.
- (ii) Visit, inspect, and report to DTC / Steering Committee on various aspects of the AVTMS Project and carry out all such activities as are provided in the Concession Agreement. Without prejudice to this, the scope of services of the Independent Engineer shall be as specified in paras 2 to 4 below.

The Independent Engineer shall have no authority to relieve the Concessionaire of any of its duties or to impose additional obligations other than those expressly provided in the Concession Agreement.

2. SCOPE OF SERVICES

2.1 Pre-implementation Period

- (i) Review the Project Report prepared by the Concessionaire.
- (ii) Review the Implementation Schedule submitted by the Concessionaire.
- (iii) Review the proposed quality assurance and quality control procedures during the Implementation Period and Operations Period.
- (iv) Review the safety measures proposed during Implementation Period and Operations Period

2.2 Implementation Period

- (i) Monitor quality assurance and quality control during Implementation period.
- (ii) Ensure that the work is carried out in accordance with the SRS and Standards and Good Industry Practice.
- (iii) Identify delays in completion and recommend to the Steering Group/ Concessionaire the remedial measures to expedite the progress.
- (iv) Review the safety measures provided by the Concessionaire.
- (v) Supervise and monitor various Completion Tests as provided in the Concession Agreement
- (vi) Issue Provisional Acceptance Certificate or the Acceptance Certificate of the system, as the case may be, in accordance with the provisions of the Concession Agreement.

2.3 General

- (i) Design a Management Information System (MIS) for monitoring of the Project by DTC.

- (ii) Determine and recommend changes to the Project Completion Schedule, Scheduled Project Completion Date and the Concession Period in accordance with the Concession Agreement.
- (iii) Mediate and assist in resolving disputes between DTC and Concessionaire.

3. INTERACTION WITH STEERING COMMITTEE

The Independent Engineer shall interact with the Steering Committee / DTC on a regular basis.

4. REPORTING REQUIREMENTS

The Independent Engineer shall prepare and submit to the Steering Committee / DTC three copies and to the Concessionaire two copies each of the following reports.

- (a) Implementation Period
 - Monthly Progress Report
- (b) Various other reports as provided in the Concession Agreement such as Completion Report.

5. PERIOD OF SERVICE

The period of services shall initially be the Implementation Period, extendable during the operational period, at the sole discretion of DTC.

6. FEES OF INDEPENDENT ENGINEER

The fees of the independent Engineer is to be shared equally by DTC and the concessionaire.

APPENDIX 8

DRAFT CONCESSION AGREEMENT

APPENDIX 8

DRAFT CONCESSION AGREEMENT

between

Delhi Transport Corporation

and

(Concessionaire)

for

**Design, Development, Installation, Operation, Maintenance and Transfer of
Automatic Vehicle Tracking and Monitoring System with Passenger Information
System (AVTMPS)**

On

BOT BASIS

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SCHEDULES¹

- 1** Request for Proposal (RFP) No. ITD/57/2007 in its entirety including all its Sections, Appendices and Schedules thereto
- 2** Letter of Acceptance²
- 3** Copy of Performance Guarantee³
- 4** Service Level Acceptance Metrics (SLA Metrics)⁴
- 5** System Requirement Specifications⁵
- 6** Independent Engineer⁶

¹ To be attached once the RFP Bidding Process is completed and a Successful Bidder is identified

² To be attached

³ To be attached

⁴ To be attached

⁵ To be attached

⁶ To be attached

This Concession Agreement is mutually agreed and entered into on this _____ day of _____(Month), Two Thousand and Seven at Delhi,

BETWEEN

Delhi Transport Corporation acting through _____, Delhi Transport Corporation Headquarters, I.P. Estate, New Delhi 110002, India hereinafter referred to as “**the Concessioning Authority**” or “**DTC**” which expression shall unless repugnant to the context include its successors and assigns, OF THE ONE PART,

AND

_____, a company⁷, having its registered office at _____, hereinafter referred to as “**Concessionaire**” which expression shall unless repugnant to the context include its successors and permitted assigns, OF THE OTHER PART.

WHEREAS,

- A. DTC is engaged in the provision of securing and promoting an efficient, economical, reliable and properly coordinated system of road transport to public by its fleet of buses in the Union Territory of Delhi and extended areas.
- B. With a view to enhance commuter satisfaction, service levels and to make DTC’s bus service more efficient, DTC is desirous of implementing AVTMPS System in relation to stage carriage bus operations.
- C. Accordingly, DTC had invited Bids under a three stage process from Bidders for qualification and prescribed the terms and conditions for selection of a Successful Bidder under its Request for Proposal (RFP), inter alia, for design, development, implementation, installation, operation and facility management of a Global Positioning System (GPS)-enabled Automatic Vehicle Tracking & Monitoring System with Passenger Information System (AVTMPS) on Build-

⁷ In the case of a Consortium Joint Venture, the Lead Member would be required to sign the Agreement

Operate-Transfer ('BOT') basis ("the AVTMPS Project") subject to and on the terms and conditions contained in the said RFP.

- D. After evaluating several Bids, DTC has accepted the Bid submitted by M/s _____ (the "Concessionaire") with _____ as its lead member ("Lead Member")⁸ for undertaking, inter alia, the work for and in relation to the AVTMPS Project. The said Lead Member has also got the requisite authority to act as such from other members of the Consortium by way of Affidavit(s) executed by the said other members in favor of the Lead Member.
- E. Accordingly, a Letter of Acceptance No. _____ dated _____ was issued to the Concessionaire for requiring, inter alia, the execution of this Concession Agreement and submission of Performance Guarantee for the performance of its obligations under this Concession Agreement.
- F. Pursuant thereto, the Concessionaire has submitted Performance Guarantee of Rs. 3,60,00,000/- (Rupees Thirty Six Millions) by way of _____⁹ to enter into this Concession Agreement for the AVTMPS Project on BOT basis and has requested DTC to accept the Concessionaire as the entity which shall undertake, fulfill and perform the obligations and exercise the rights of the Concessionaire under the Letter of Acceptance, including the obligation to enter into this Concession Agreement for the AVTMPS Project. A copy of the said Performance Guarantee is annexed as Schedule 3 hereto.
- G. The Concessionaire has also furnished a legal opinion from a legal counsel on its behalf representing that it is duly authorized to enter into this Concession Agreement and fulfill its obligations under this Concession Agreement¹⁰.
- H. Now therefore DTC has agreed to enter into this Agreement with the Concessionaire pursuant to the Letter of Acceptance for the AVTMPS Project.

⁸ To be stated in case of Consortium

⁹ Give details of Performance Guarantee

¹⁰ To be revisited when Concessionaire is identified – in case of Consortium / foreign investment etc.

- I. It is deemed necessary and expedient to enter into this Concession Agreement to record the terms of the said Concession Agreement between the Parties.
- J. Terms and conditions of this Agreement shall supersede any contrary terms and conditions of the RFP and any Appendices and / or Schedule(s) thereto.

NOW THEREFORE, IN CONSIDERATION OF THE PREMISES AND THE MUTUAL COVENANTS HEREINAFTER CONTAINED, THE PARTIES HERETO HEREBY AGREE AND THIS AGREEMENT WITNESSETH AS FOLLOWS:

ARTICLE 1 DEFINITIONS AND INTERPRETATION

1.1 Definitions

In this Agreement, the following words and expressions shall, unless repugnant to the context or meaning thereof, have the meaning hereinafter respectively ascribed to them hereunder:

“Agreement” shall have the meaning ascribed to it in Article 1.3 hereof.

“Applicable Laws” means all statutes and laws promulgated or brought into force and effect by the Central Government of India or any State Government(s) or Local Government(s), including regulations and rules made by them, and judgments, decrees, injunctions, writs and orders of any court of record, as may be in force and effect during the subsistence of this Agreement.

“Applicable Permits” means all clearances, permits, authorizations, consents and approvals required to be obtained or maintained under Applicable Laws in connection with the AVTMPS Project during the subsistence of this Agreement.

“Appointed Date” shall mean the date of this Agreement.

“Arbitration Act” means the Arbitration and Conciliation Act, 1996 as in force today and shall include any and all modifications / amendments thereto or any re-enactment thereof as in force from time to time

“AVTMPS Project” has the meaning ascribed to it in the Clause A of the RFP titled “Disclaimer”

“AVTMPS System” is the system including without limitation the infrastructure, hardware, software, firmware designed, developed, implemented maintained for the AVTMPS Project by Concessionaire on BOT basis as per the Project Implementation Requirements.

“Base Station” means a sub control station located at a DTC bus depot to monitor buses and fleet management of buses specific to such depot and which will have communication links with the Central Control Station for purposes of the AVTMPS Project as required.

“BQS” means bus queue shelters constructed at DTC bus stops

“Central Control Station” means the facility used for hosting the central server and components thereof for centrally storing, consolidating, processing the information obtained from various VMUs and Base Station(s) in relation to the AVTMPS Project for use by DTC.

“CMD” means the Chairman & Managing Director of DTC.

“Concession Fee” is the amount payable by the Concessionaire to DTC for grant of concession under this Agreement as set forth in Article 9.

“Consortium” shall mean an association of 2 (two) or more corporate entities / firms or a collaborator entity formed specially for the purpose of this Concession Agreement,

“Concession Agreement” means this Agreement including, without limitation, any and all Schedules hereto which has been entered into between DTC and Concessionaire on the Appointed Date.

“Concessionaire” means _____ with whom DTC has entered into this Concession Agreement¹¹.

“Concession Period” shall be a period of 6 (six) years commencing from the Appointed Date. Provided however that in the event of earlier termination of the Concession Agreement, “Concession Period” shall mean and be limited to the period commencing from the Appointed Date and ending with the date of termination of the Concession Agreement.

“DTC” means the Delhi Transport Corporation and its authorized successors and assigns at all times.

“DTC Representative” means any person duly authorized by DTC for the purposes of this Concession Agreement.

“DTC Website” means the website of the DTC which at present has the following web address – <http://dct.nic.in>

“Encumbrance” shall mean any encumbrance such as mortgage, charge, pledge, lien, hypothecation, security interest, assignment, privilege or priority of any kind having the effect of security or other such obligations and shall include without limitation any designation of loss payees or beneficiaries or any similar arrangement under any insurance policy pertaining to the AVTMPS Project, physical encumbrances, claims for any amounts due on account of taxes, cesses, electricity, water and other utility charges and encroachments on the Premises.

“Expiry Date” shall mean the date on which the Agreement expires in the normal course with the efflux of time.

¹¹ To be specified when Concessionaire is identified.

“Good Industry Practice” shall mean the exercise of that degree of skill, diligence, prudence and foresight in compliance with the undertakings and obligations under this Agreement which would reasonably and ordinarily be expected of a skilled and an experienced person engaged in the implementation, operation and maintenance or supervision or monitoring thereof of any of them of a project similar to that of the AVTMPS Project.

“Independent Engineer” shall mean a reputed firm or company or body corporate appointed by DTC in accordance with Article 6 to oversee the design, development, installation and implementation of the AVTMPS Project, monitoring of compliance by the Concessionaire with the Project Implementation Requirements, more particularly to undertake, perform, carry out the duties, responsibilities, services and activities set forth in Schedule 6 hereto.

“Letter of Acceptance” means the letter issued by DTC to the Successful Bidder to undertake and execute the AVTMPS Project in conformity with the terms and conditions set forth in the RFP.

“Parties” shall mean the parties to this Agreement and **“Party”** shall mean either of them, as the context may admit or require.

“PIS” means passenger information system whereby and whereunder passengers shall be informed of (a) at bus stops/BQS: expected route-wise time of arrival of buses (b) inside the bus: approaching bus stops (c) at bus terminals: expected route-wise time of arrival and / or departure of buses with applicable bay number(s) from / at where the bus shall arrive or depart.

“System Requirement Specification” shall mean the System Requirement Specifications prepared by the Concessionaire on the basis of the broad System Requirement Specifications set forth in Section H of the RFP, and approved by DTC and any amendments thereto. These System Requirement Specifications are annexed hereto in Schedule 5.

“Project Implementation Requirements” shall mean and include the provisions of the Scope of Work and System Requirement Specifications collectively.

“Quality Check & Acceptance Test Plan” shall mean the quality check and acceptance test plan prepared by the Concessionaire in relation to the AVTMPS Project which is in conformity with the Project Implementation Requirements, for DTC’s review and approved by DTC and which shall after DTC’s approval be appended to this Agreement as a Schedule hereto. .

“RFP” and / or **“RFP Document Package”** means the Request for Proposal documents for the AVTMPS Project annexed hereto as Schedule 1.

“Scope of Work” shall have the meaning ascribed to it in Article 4 of this Agreement.

“Service Level Acceptance” shall have the meaning ascribed to it in Article 5 of this Agreement.

“Termination” shall mean early termination of this Agreement pursuant to Termination Notice or Notice of Termination or otherwise in accordance with the provisions of this Agreement but shall not, unless the context otherwise requires, include expiry of this Agreement due to efflux of time in the normal course.

“Termination Date” shall mean the date specified in the Termination Notice or Notice of Termination as the date on which Termination occurs.

“Vehicle Mounted Unit” shall have the meaning ascribed to it under Section H of the RFP titled System Requirement Specifications.

“Year” - For all legal effects, and in particular for the construction of the contractual provisions where there is a reference to a given number of concession years, a “year” is understood as the twelve month consecutive period counted from the Appointed Date.

Any other term(s), not defined herein above but defined elsewhere in this Concession Agreement shall have the meaning(s) ascribed to such term(s) therein and shall be deemed to have been included in this Section.

1.2 Principles of Interpretation

- a. The Article numbers, headings and marginal headings in this Agreement are solely for the purpose of facilitating reference and shall not impact the construction or interpretation of this Agreement.
- b. Words importing Persons or Parties shall include firms, companies, corporations, trusts, associations and any organizations, having legal capacity to sue and be sued in their names.
- c. Words importing the singular also include the plural and vice versa where the context requires
- d. Words importing one gender also include other gender
- e. In case of ambiguities or discrepancies in this Agreement, the following shall apply:
 - (i) between two Articles of this Agreement, the provisions of specific Articles relevant to the issue under consideration shall prevail over those in other Articles.
 - (ii) Between the Articles and the Schedules, the Articles shall prevail;
 - (iii) Between the written description on the drawings and the System Requirement Specifications, the latter shall prevail
 - (iv) Between any value written in numerals and that in words, the latter shall prevail

1.3 This Agreement comprises of the following and accordingly it shall mean and include the following:

1. This Concession Agreement along with any and all Schedules hereto.
2. **Schedule 1** - Request for Proposal (RFP) ITD/57/2007 in its entirety including all its Sections, Appendices and Schedules thereto
3. **Schedule 2** - Letter of Acceptance
4. **Schedule 3**– Proforma of Performance Guarantee

5. **Schedule 4** – Service Level Acceptance Metrics (SLA Metrics)
6. **Schedule 5** – System Requirement Specifications

In the event of any discrepancy / conflict in the terms of the above referred documents or interpretation thereof, the decision of DTC shall prevail.

ARTICLE 2 CONCESSION

2.1 Grant of Concession

(a) Subject to and in accordance with the terms and conditions set forth in this Agreement, DTC hereby grants and authorizes the Concessionaire to investigate, study, design, develop, procure, finance, construct, operate, maintain and eventually transfer the AVTMPS System for the AVTMPS Project and to exercise and/or enjoy the following rights as to revenue generation after acceptance of the pilot system as set forth in this Agreement:

- i. Advertisement rights inside the DTC buses, above the windows excluding the roof and on one separate LCD display panel installed for the exclusive purpose of advertisements, as per size / specifications set forth in the section titled System Requirement Specifications. It is clarified that only visual advertisements shall be allowed inside the buses and audio advertisements shall not be permitted.
- ii. Advertisements on PIS panel to be installed at select Bus Terminals / Bus-Stops as per size / specifications in the section titled System Requirement Specifications.
- iii. Through SMS for intimating route specific arrival time of buses at a particular bus-stop, which could include sponsored messages also.

The said rights set forth hereinabove at items (i) to (iii) are hereinafter collectively referred to as “the Concession”.

(b) The Concessionaire shall pay prescribed Concession Fee to DTC for grant of the above Concession.

(c) The Concession shall not be available to Concessionaire during the pilot phase of the AVTMPS Project.

(d) It shall be Concessionaire's responsibility to comply with the applicable laws, rules, guidelines or orders issued by the government or by the DTC with respect to the mode, form, duration and content of advertisement(s).

2.2 Concession Period

The Concession hereby granted is for a period of 6 (six) years commencing from the Appointed Date and ending on the Expiry Date ("the Concession Period") during which the Concessionaire is authorized to design, finance, construct, operate and maintain the AVTMPS System in accordance with the provisions hereof. Provided that in the event of Termination, the Concession Period shall mean and be limited to the period commencing from the Appointed Date and ending with the Termination Date.

2.3 Acceptance of Concession

In consideration of the rights, privileges and benefits conferred upon the Concessionaire, and other good and valuable consideration expressed herein, the Concessionaire hereby accepts the Concession and agrees and undertakes to perform/discharge all of its obligations in accordance with the provisions hereof.

ARTICLE 3

ACCESS TO PREMISES / VEHICLES

3.1 Access to Premises & Vehicles

(a) In order for Concessionaire to set up the Central Control Station and Base Station(s) in one DTC depot for pilot implementation and gradually in subsequent depots in order to implement the AVTMPS Project DTC shall allow Concessionaire the use of such

premises (on as is where is basis) at its depots as required (“Premises”). DTC shall not charge any rent for such Premises provided to Concessionaire for setting up the Central Control Station and Base Station(s) for AVTMPS Project.(b) DTC shall also allow access of, as and when required, the vehicles / buses on which VMUs have to be installed by Concessionaire (“Vehicles”) for implementation of the AVTMPS Project upon such terms and conditions and in such phased manner as set forth in the Project Implementation Requirements. Notwithstanding the foregoing, in order to maintain efficiency in operations DTC shall not allow detention of Vehicles by Concessionaire during day time when the Vehicles are to be used for regular day to day DTC operations.

3.2 Rights, Title and Use of the Premises / Vehicles

(a) The Concessionaire shall be allowed the use of the Premises and Vehicles in accordance with the provisions of this Agreement.

(b) The Premises and Vehicles shall be and continue to be the property of DTC.

(c) The Concessionaire shall not part with or create any Encumbrance on the whole or any part of the Premises and Vehicles save and except as set forth and permitted under this Agreement.

(d) Concessionaire shall take the prior written consent of DTC for making any changes / alterations / constructions to, at or on the Premises for purposes of this Agreement.

(e) The Concessionaire shall at all times during the subsistence of this Agreement maintain the Premises and shall not, without the prior written approval of DTC, use the Premises or Vehicles for any purpose other than for the purpose of the AVTMPS Project and purposes incidental or ancillary thereto.

(f) Concessionaire shall ensure that its use of the Premises / Vehicles hereunder shall not result in an adverse effect thereto. In the event of an adverse effect being caused to the Premises / Vehicles it shall be the Concessionaire’s responsibility to restore the said Premises and / or Vehicles (as the case may be) at Concessionaire’s cost and expenses.

3.3 Applicable Permits

The Concessionaire shall obtain and maintain the Applicable Permits in such sequence as is consistent with the requirements of the AVTMPS Project.

ARTICLE 4 SCOPE OF WORK

4.1 Overview

In order for DTC to achieve the Aims and Objectives of the AVTMPS Project, Concessionaire shall implement the AVTMPS system ("AVTMPS System") as set forth in this Agreement.

4.2 Scope of Work for the AVTMPS Project

4.2.1 Concessionaire shall ensure that the AVTMPS System covers the following:

- a) GPS based real time automated tracking of minimum 2,500 (Two thousand five hundred) DTC buses and about 4,000 (Four thousand) private stage carriage buses or any other public service vehicles with scalability as per requirement up to 10,000 (Ten thousand) buses inclusive of private stage carriage buses / vehicles.
- b) Real time Passenger Information System (PIS) at minimum of 500 (Five Hundred) bus stops / bus terminals identified by DTC, using Light Emitting Diodes ("LED") display boards. Liquid Crystal Display ('LCD') in place of LEDs can be installed only at DTC bus terminals.
- c) Real time Passenger Information System (PIS) inside DTC Buses covered under the AVTMPS Project using LED displays and by way of announcements of approaching bus-stops.

- d) Providing information about routes/bus timings through Short Messaging Service ('SMS') provided on mobile phones, through Interactive Voice Response System ('IVRS') and through the medium of the internet.
- e) Recording of locational information of vehicles at different points in time and the speed of the buses at such locations and times in a database.
- f) Geographical Information System ('GIS') maps with customized GIS layer of DTC locations / bus stops / bus routes for tracking geographical positions of vehicles in the City, NCR and inter state regions.
- g) Automate event logging (viz. start and end of trip(s), emergency halts, accidents, breakdown of buses etc.) along with Time Stamp.
- h) Provide alerts to the Central Control Station on over speeding by buses, unauthorized stoppage and /or non-stoppage of the buses at designated bus stops, the scheduled stoppage point and route deviation by buses etc.
- i) Establish two way communication links between the Central Control Station with drivers of the buses as well as a provision for real time communication between Central Control Station and drivers of all buses or a group of buses simultaneously.
- j) Capture vehicle information through sensors (if provided by vehicle manufacturer) and communicate the same to Central Control Station.
- k) Generation of Management Information System ('MIS') (standard & exceptional reports) for fleet operation, trend analysis (both physical and financial trends) & decision making as per DTC's requirements thereby assisting DTC in improving services.
- l) Provide basic vehicle tracking services and two-way communication in recovery vehicles @ 1 (one) such vehicle per 100 (hundred) buses in order to provide on-line relief to buses in distress.

- m) Generate data, carry out broad analysis and provide reports and recommendations to DTC for DTC's decision making process with regard to route optimization and to provide related software along with provision of training for the same to DTC officials.
- n) Enable DTC to conduct routine appraisals of drivers' performance in terms of punctuality, safety and adherence to prescribed routes, timing(s) and stoppage(s).
- o) Provide interface compatibility with Smart Card Based Automatic Fare Collection System (AFC System).
- p) Alert on over speeding, unauthorized stoppage, non stoppage of the bus at the scheduled stoppage point and route deviation etc.

4.2.2 IT System design, development and implementation services

a) System Design

- i. The System Requirement Specifications shall be as set forth in Schedule 5 hereto. In the event that any changes are necessitated / required to be made to the said System Requirement Specifications as a result of on site study by Concessionaire, the Concessionaire shall discuss the same with DTC and upon mutual agreement in this behalf the said proposed changes shall be set forth in writing by way of an Addendum to the Schedule 5 hereto.
- ii. Concessionaire shall develop the technical design specification of the AVTMPS System to deliver the solution envisaged under the AVTMPS Project in order that the same meets with the System Requirements Specifications to achieve the Aims and Objectives of the AVTMPS Project ("Technical Design Specification"). In this Technical Design Specification, Concessionaire shall detail the following, at the minimum:
 - ✓ Solution architecture overview
 - ✓ Technology options evaluations
 - ✓ Design criteria
 - ✓ Class designs
 - ✓ Component design
 - ✓ Deployment design
 - ✓ Networking design

- ✓ User interface design
- ✓ Design issues
- ✓ Data dictionary
- ✓ Logical & physical data base design
- ✓ System interfaces
- ✓ Development Tools
- ✓ Development Platform
- ✓ Delivery Platform
- ✓ System Performance Benchmarks (response times, etc)
- ✓ Persistency of the Network Connection.

It is expected that the above specification documents will be revised during the life cycle of the AVTMPS Project to reflect changes in requirements and / or upgradation in technology. All changes are subject to configuration management control and approval by DTC.

- iii. Development of a prototype to progressively demonstrate the user interface to enable the user to evaluate the business system design and the user interface design.
- iv. Design Deliverables to be delivered by Concessionaire to DTC shall comprise:
 - ✓ Finalized System Requirements Specification document
 - ✓ Technical Design Specification document.
 - ✓ Prototype.
- v. During the process of finalizing the System Requirement Specification document, Technical Design Specification document, and development of Prototype (“Design Phase”), the performance testing benchmark environment, the performance requirements and the method of conducting the performance testing to determine system performance against the response time targets will be specified by the Concessionaire with the written approval of DTC.
- vi. Concessionaire shall be required to obtain the official sign off from DTC or

their representatives on the Design Deliverables.

b) System Development

- i. The software will be developed in accordance with the latest version of the following specifications:
 - ✓ System Requirements Specification
 - ✓ Technical Design Specification
- ii. Concessionaire shall establish the development environment including all hardware, software and office accommodation.
- iii. Any and all expenditure incurred by Concessionaire in relation to travel, maintenance of any site where Concessionaire works for the AVTMPS Project and / or any other expenditure incurred by Concessionaire in relation to the development of the AVTMPS System shall be borne by Concessionaire and no contribution or support from DTC will be provided on the same unless subsequently agreed to in writing by DTC.
- iv. The source code and documentation of and for the AVTMPS System shall be the property of DTC from the Appointed Date.

c) System Testing

- i. Concessionaire shall perform the comprehensive testing of AVTMPS System at Concessionaire's location.
- ii. For purposes of testing the AVTMPS System, Concessionaire shall set up the testing site / environment at Concessionaire's own cost, to undertake the entire AVTMPS System integration testing comprising all components of the systems like mobile unit, application software, IT hardware and networking. Such testing site shall be, to the extent reasonably possible, a replica of the actual production environment which shall finally be set up by Concessionaire for the AVTMPS Project.
- iii. Concessionaire shall also test the various units and modules of the system individually, to assess the functionality and data flow through such units and modules.
- iv. Concessionaire shall provide various test reports on the current status of

testing, as part of the project reporting.

- v. Concessionaire shall maintain the test defect logs and shall make these available to DTC or their representatives as per mutually decided frequency.
- vi. Concessionaire shall create the test data for the purpose of various types of testing to be carried out.
- vii. Testing Deliverables to be provided by Concessionaire to DTC shall, inter alia, be
 - ✓ Test plan
 - ✓ Test Report
 - ✓ Test Cases
 - ✓ Test Defect Logs

d) System Configuration Management

- i. Concessionaire shall ensure that adequate facilities exist for the control of the documentation prepared and consolidated during the life cycle of the AVTMPS Project which documents include without limitation information on the following:
 - ✓ Application program versions
 - ✓ Software Executables
 - ✓ Software Source Code
 - ✓ System Requirements Specifications
 - ✓ Logical Data Base Design and Data Dictionary
 - ✓ Technical Design Document
 - ✓ Test Plan, covering all testing to be performed by the vendor.
 - ✓ Test Cases
 - ✓ Design Standards
 - ✓ AVTMPS Technical Manual
 - ✓ AVTMPS Administration Manual
 - ✓ AVTMPS User Manual
 - ✓ AVTMPS Security Manual

e) System Release

- i. All of the Design Deliverables and Testing Deliverables including without limitation source code, shall be delivered to DTC on commencement of the

User Acceptance Testing by DTC ('UAT') and on the commencement of any subsequent UAT periods following the correction of any non compliances. For purposes of this section it is clarified that Concessionaire shall prepare and submit to DTC for DTC's review and approval a User Acceptance Test Plan (UATP) within 6 (six) weeks from the Appointed Date. The UATP shall be reviewed and finalized by DTC for carrying out UAT.

- ii. On receipt of Design Deliverables and Testing Deliverables, DTC will review each deliverable(s) after which DTC will issue to Concessionaire a "Permission to Proceed" or "Permission to Proceed subject to certain conditions".
- iii. Concessionaire shall provide DTC with 2 (two) hard copies and a soft copy of all documentation for the required Design Deliverables and Testing Deliverables specified in this section.

4.2.3 Training Services

- a) Concessionaire shall provide user training to optimal number of personnel identified by DTC ("User(s)") on functional & operational aspects of the entire AVTMPS System, during the subsistence of this Agreement.
- b) Concessionaire shall provide hands on training to Users as per the User Training Plan prepared by Vendor in consultation with DTC ("User Training Plan"). DTC will measure the effectiveness of the Users for working on the AVTMPS System after completion of the training.
- c) Concessionaire shall provide, inter alia, the following types of training:
 - ✓ AVTMPS training - To such number of supervisors as required and identified by DTC in its sole discretion
 - ✓ Application software training – To such number of personnel as required and identified by DTC in its sole discretion
 - ✓ System Administration training - To such number of personnel as required and identified by DTC in its sole discretion.
 - ✓ Top Executive Awareness Program – 1 (one) day workshop organized by Vendor at DTC Head quarters or an alternative location with consent of DTC where Vendor shall provide an overview of the working of the AVTMPS System and the training provided by Vendor to Users for effective

implementation thereof.

- ✓ Refresher's Training – once a year or as and when AVTMPS System is upgraded.
- d) The duration of the training and the batch sizes shall be mutually decided by DTC and Concessionaire as per required.
- e) Training Deliverables to be provided by Concessionaire to DTC shall be:
 - ✓ User Training Plan
 - ✓ Training Material in English & Hindi
- f) Training shall be organized by Concessionaire in audio - visual mode.
- g) On receipt of each of the Training Deliverable(s), DTC will review each of these and will issue "Permission to Proceed" or "Permission to Proceed subject to certain conditions" (as applicable).

4.2.4 Project Management Services

- a) Project Planning, Monitoring and Control
 - i. Concessionaire shall develop a Project Management Plan for the AVTMPS Project. The Project Management Plan at a minimum, shall detail all tasks related to the implementation of AVTMPS System, and for each task, the task / person / effort resource allocation. This information shall be provided in the form of a detailed Gantt Chart. The Project Management Plan shall also detail all milestones and indicate when the required deliverable documentation(s) will be available to DTC.
 - ii. Concessionaire shall identify, analyze and evaluate the project risks, and develop cost effective strategies and action plans to mitigate those risks. Concessionaire shall monitor report and update the project risk profile to DTC.
 - iii. Concessionaire shall develop a Quality Assurance Plan for the execution of the AVTMPS Project. The Quality Assurance Plan shall address at a minimum, the following project processes:
 - ✓ Document Control

- ✓ Change Management
 - ✓ Product Review and Approval
 - ✓ Control of third party products
 - ✓ Inspection and Testing
 - ✓ Risk Management
 - ✓ Control of Quality Records
- iv. The Quality Assurance Plan shall define the structure and scope of the required quality objectives.
- v. The progress of AVTMPS Project shall be monitored on regular basis and the deviations, exceptions shall be analyzed and corrective actions to be recommended / suggested.
- vi. The Deliverables at this stage shall include:
- ✓ Project Management Plan
 - ✓ Risk Management Plan
 - ✓ Quality Assurance Plan
- vii. On receipt of each of the Deliverable(s), DTC will review each of these and will issue to Concessionaire the “Permission to Proceed” or “Permission to Proceed subject to certain conditions” as applicable.

b) Project Reporting and Monitoring

- i. A fortnightly progress report shall be submitted by Concessionaire to DTC. Concessionaire shall also report on items which are on critical path and that require management action.
- ii. Steering Committee meetings will be held at periodic intervals at a venue decided by DTC and Concessionaire shall be required, at such meetings, to provide inter alia a report on the following:
- ✓ Progress Reports (Progress against the Project Management Plan)
 - ✓ Status of all risks and issues
 - ✓ Status of testing
- iii. Ad-hoc requests for information by DTC will be addressed promptly by Concessionaire and Concessionaire shall provide the required information

within 48 (Forty eight) hours of such request.

4.3 Pilot Implementation

- a) Pilot shall include implementation of the complete AVTMPS System including on-board PIS on all buses, deployed on city operations, at one selected bus depot of DTC having bus fleet of 100 (One hundred) buses.
- b) Pilot shall include PIS installations at approximately 10 (ten) bus terminals / BQSSs.
- c) Services required of Concessionaire during Pilot Implementation shall be as follows:
 - i. IT hardware, third party software, application software and network as required for the proper and effective functioning of the AVTMPS System shall be installed & configured at the Central Control Station and the Base Stations identified by DTC.
 - ii. Establish the connectivity with identified Central Control Station, the onboard VMU and the Base Stations.
 - iii. Concessionaire shall prepare the master data in consultation with DTC officials.
 - iv. Concessionaire shall assist DTC personnel to execute the User testing as per UATP.
 - v. Concessionaire shall record the issues identified during testing, perform analysis, correction of problems and re-testing.
 - vi. Documentation of the problem defect analysis and the solution details.
 - vii. Performance monitoring which will be undertaken jointly with DTC personnel.
 - viii. Any other task assigned as part of the AVTMPS Project.
- d) Concessionaire shall man the Central Control Station to execute inter alia the following business processes during the Pilot Implementation:
 - i. Data download from all onboard VMUs.
 - ii. Feeding of Duty Plans provided by DTC, to monitor operations of buses.
 - iii. Reports generation at Central Control Station
 - iv. Data back ups at the Central Control Station.
 - v. Collation of data at Central Control Station.
 - vi. System Maintenance at Central Control Station & if required, at base stations
 - vii. Physical security of all the assets of the AVTMPS Project.

Performance Monitoring which task will be undertaken jointly with DTC personnel.

- e) The successful completion of Pilot Implementation will be based on the SLA and performance monitored during the pilot.

4.4 Operations & Facility Management Services

a) Operational services will include inter alia the execution by Concessionaire of the following business processes for DTC:

- i. Downloading transactional data from VMUs into the AVTMPS System at Base Stations and Central Control Station.
- ii. Generating various pre-defined as well as ad-hoc query based reports at Base Stations and Central Control Station.
- iii. Administration of application software at Base Stations and Central Control Station.
- iv. Data back ups & storage operations at Base Stations and Central Control Station.
- v. Concessionaire shall ensure that at all points in time there is strict compliance with the provisions of the Information Technology Act, 2000.
- vi. Any other task assigned as part of the AVTMPS Project.

b) Maintenance services will include inter alia the following activities.

- i. Maintenance of VMUs & its software
- ii. Application software maintenance
- iii. Application software problem fixes and upgrades. Upgrades to application software shall be done centrally.
- iv. Software requests for change by DTC shall be handled by Concessionaire in the following manner.
 - a. Functionality change or enhancement requests shall be assessed and impact analysis shall be performed by Concessionaire.
 - b. The change impact on schedule for implementation shall be agreed between DTC & Concessionaire on case to case basis.
 - c. All Change requests shall be done by Concessionaire free of cost.
- v. Copy of all the transactional data shall be submitted by Concessionaire to DTC monthly.

- c) Concessionaire is expected to transfer the knowledge to DTC nominated technical team. However Concessionaire shall commit complete facility management of the AVTMPS System during the Concession Period.

4.5 Schedule

Concessionaire shall implement the AVTMPS Project as per the schedule specified below:

a) Pilot Implementation –

Pilot implementation of the AVTMPS System shall take place within a maximum period of 4 (four) months from the Appointed Date.

b) System Roll Out -

- (i) System roll out shall commence from the date when DTC's sign off for pilot completion is received by Concessionaire. Concessionaire is expected to deploy the AVTMPS System in a phased manner on 2,500 (Two thousand five hundred) City, NCR and Interstate buses at a minimum of 500 (Five hundred) buses per month & 100 (One hundred) PIS at terminals/BQSSs per month.
- (ii) The implementation of the entire AVTMPS System should be completed in all respects within 9 (nine) months from the Appointed Date.
- (iii) Parallel with implementation of the AVTMPS System in DTC buses Concessionaire shall also be required to implement the AVTMPS System in 4,000 (Four thousand) private buses / vehicles, , in such a manner that the implementation of the AVTMPS System in 4,000 (Four thousand) private buses / vehicles is completed within 1 (One) year from the Appointed Date @ a minimum of 500 (Five hundred) buses per month after completion of pilot implementation in DTC buses.

c) Operation & Facility Management –

It shall be the Concessionaire's responsibility to operate & manage the facility / facilities during the entire period of this Agreement with respect to the buses, bus stops, Base Stations, Central Control Station etc. as required for the proper implementation, operation, maintenance and functioning of the AVTMPS System

4.6 Responsibilities of DTC

- a) DTC will form a AVTMPS Project co-ordination team which will be responsible for the management of the AVTMPS Project and shall act as the single point of contact between Concessionaire and DTC on a day to day basis for executing the AVTMPS Project through out the Concession Period ("Project Coordination Team"). The Project Co-Ordination Team shall be responsible for reviewing the deliverables of the AVTMPS Project and monitor the progress of the AVTMPS project at every stage. All day to day issues arising out of the execution of the AVTMPS Project shall be resolved by the Project Co-Ordination Team.
- b) The Project Co-Ordination Team shall be in addition to the Steering Committee formed under this Agreement. All issues arising out of the AVTMPS Project, which can not be resolved by the Project Co-Ordination Team or such issues which in the sole opinion of the Project Co-Ordination Team involve deliberation of a policy decision shall be referred to the Steering Committee, which decision shall be binding upon both Parties.
- c) Without prejudice, the Independent Engineer appointed hereunder shall at all times assist the Project Co-Ordination Team.
- d) DTC shall provide 1 (one) room in each DTC bus depot, where a Base Station is to be set up, for setting up a Base Station, along with electric power (raw power 220 V, 50HZs) for which Vendor will have to install the sub-meter and make monthly payments on actual. Vendor will be responsible for arrangement of all necessary furniture, air-conditioning, etc. Vendor shall arrange the necessary infrastructure including UPS, stabilizers etc. to regulate the quality of power and generators for back up in case of power failures.
- e) DTC shall also provide sufficient space to Concessionaire to set up the Central Control Station, along with electric power (raw power 220 V, 50HZs) for which Concessionaire will have to install the sub-meter and make monthly payments on actuals. Concessionaire will be responsible for arrangement of all necessary

furniture, air-conditioning, etc. Concessionaire shall arrange the necessary infrastructure including UPS, stabilizers etc. to regulate the quality of power and generators for back up in case of power failures.

- f) DTC officials shall provide Concessionaire the duty plan with respective route structure, so that Concessionaire can monitor the movement of buses for deviations and stray analysis.
- g) DTC personnel at Base Station (s) and at Central Control Station shall also be able to generate, view & print the pre-defined as well as ad-hoc query based reports, as per the requirements.
- h) The AVTMPS System for route planning will be developed and maintained by Concessionaire. Concessionaire will undertake “what if analysis” as per DTC’s requirements.
- i) DTC officials shall verify the supporting SLA compliance & transaction summary reports and work out legitimate penalties as set forth in the SLA Metrics on quarterly basis. The quarterly bills for these shall be raised by DTC on Concessionaire and the same shall be payable by Concessionaire promptly.
- j) DTC personnel shall review the reports of exceptions regarding VMU related issues, VMU malfunctions, AVTMPS System up time, AVTMPS System malfunctions, operational deficiencies, etc.
- k) DTC shall review the daily, weekly, monthly or of any other periodicity, transactions reports, summary reports, cash collection reports, etc.
- l) DTC shall endeavor to out-shed minimum 90% (ninety) of the fleet fitted with the AVTMPS System in the morning shift on working days, which shall be reckoned on quarterly average basis. However, the figure of fleet utilization on Sundays / public holidays may be lower and the same shall not be reckoned while working out the quarterly average of fleet utilization.

4.7 Responsibilities of Concessionaire

- a) Concessionaire shall be responsible to design, develop, install, establish, implement, protect and maintain the entire infrastructure for executing this

AVTMPS Project as specified in the Scope of Work in conformity with the standards and timelines stipulated herein.

- b) Without prejudice to the generality of the provisions of the Scope of Work, Concessionaire shall design, procure, install, protect and maintain the following:
 - I. IT & networking hardware
 - II. IT software licenses
 - III. VMUs
 - IV. PIS equipments – on board & at BQS / bus terminals.
 - V. Connectivity
- c) Concessionaire shall design, develop, implement, operate, protect and maintain the web based application software at the Central Control Station.
- d) It shall be the Vendor's responsibility to create and maintain, at all times, adequate safeguards in order to maintain the security of the AVTMPS System including without limitation the security of any and data in relation thereto and protect the same from any untoward activities such as hacking etc.
- e) Concessionaire shall customize, maintain and upgrade the embedded software in the VMU as required for the effective working of the system.
- f) Concessionaire shall integrate the entire IT system including hardware, networking and application software, VMUs for smooth and hassle free operations at the Central Control Station.
- g) Concessionaire shall provide 1 (one) soft copy and 1 (one) authenticated hard copy of pre-defined reports as and when they fall due, separately for DTC buses and private buses.
- h) Concessionaire shall provide & operate the helpdesk system and Customer care services for providing support to the Users.
- i) The security of entire infrastructure for AVTMPS System shall be the responsibility of the Concessionaire.
- j) Concessionaire shall make adequate arrangements to provide maintenance and support for:

- i. All the IT hardware
 - ii. VMUs & PIS equipments, including replacements of faulty and / or non-working units / equipments.
 - iii. Network connectivity
 - iv. System Uptime
 - v. Application software problem fixes & upgrades.
 - vi. Transactional data storage & transfers
 - vii. Ensuring that the data provided will not be vulnerable to any form of cyber crime as defined in the Information Technology Act 2000.
- k) Concessionaire will also be responsible for cleaning of equipments, which are part of AVTMPS System, in the buses, BQSSs, Bus Terminals and at Central Control Station and Base Station(s). However Concessionaire may arrange the same in such a manner that there is no dispute with any other contractor(s) who may be responsible for repair and maintenance of bus.
- l) The AVTMPS System for route planning will be developed and maintained by Concessionaire. The role of DTC personnel shall be limited to performing the “what if analysis” with the help of Concessionaire.
- m) Concessionaire shall conform to all the system requirements specified in the section titled System Requirement Specifications.
- n) Concessionaire shall use its own digital maps with customized layer of DTC bus stops and land marks to display vehicle(s) movement.
- o) Concessionaire will be provided raw power (220 V, 50HZs) to run the entire AVTMPS System for which Concessionaire will have to install the sub-meter and make monthly payments on actuals. Concessionaire will be responsible for arrangement of all necessary furniture, air-conditioning, etc. Concessionaire will also have to arrange for UPS, stabilizers etc to regulate the quality of power and generators as back up incase of power failures.
- p) Concessionaire will not use this infrastructure (devices, software, control room, communication tower, etc) to extend this service to any other customer without written consent of DTC in advance. In such cases, DTC may allow outside use of infrastructure on revenue sharing basis as agreed in writing by DTC

- q) Concessionaire shall ensure that the entire AVTMPS System including hardware, software shall be fully functional, at the time of handover to DTC.
- r) Concessionaire shall be required to support the AVTMPS System, even after the hand over. DTC may enter into Annual Maintenance Contract (AMC) after the expiration of this Agreement.
- s) Concessionaire in its sole discretion may get the VMUs, PIS equipments & other infrastructure for the AVTMPS Project insured at its own cost in order to cover Concessionaire's risks and liabilities under this Agreement.
- t) Concessionaire will be responsible for payment of all statutory levies including ESIC Contribution, PF etc. in respect of the staff engaged by him for implementation, operation & maintenance of the AVTMPS System. Notwithstanding the generality of the foregoing, any and all payments to be made to any Contractors, sub-contractors or any other personnel engaged by Concessionaire and any and all payments to be further made by such contractors, sub-contractors to any party / personnel in relation to the AVTMPS Project shall be the sole responsibility of Concessionaire and DTC shall neither incur any liability in this respect nor entertain any claims in this respect.
- u) Concessionaire shall develop a transparent and effective system for receipt of complaint(s) / grievances / suggestions from DTC / public in relation to the AVTMPS System / AVTMPS Project, and submission of periodical reports of such complaints to DTC which reports shall clearly state details such as (i) bus-wise / BQS-wise / Bus Terminal-wise nature of complaint(s), (ii) date / time at which a complaint / grievance / suggestion was received, (iii) action taken on the complaint / grievance / suggestion, (iii) time at which such aforesaid action was taken. It shall be the Concessionaire's responsibility to redress the complaint(s) / grievances received and / or to act upon the suggestions made by DTC / public, rectify the defects in a timely and effective manner.
- v) The Concessionaire shall be required to obtain prior approval in writing from DTC in the event the Concessionaire and the operator of the private bus (having tracking and monitoring system installed in the bus) enter into an agreement / understanding for permitting the Concessionaire to advertise inside the said private stage carriage bus in lieu of monthly payment being received by the

Concessionaire for the said tracking system. Subject to rules / regulations / orders passed by the State Transport Authority in this regard, DTC may give the permission in writing and impose such conditions, as necessary, including inter alia:

- i. installation of PIS inside the bus as per approved design,
 - ii. imposing conditions on the form, content, duration, type of advertisement,
 - iii. sharing of revenue with DTC.
- w) Concessionaire shall maintain and store the data / record generated through AVTMPS System for the entire Concession Period. Concessionaire shall take a back-up of such data on CDs and shall hand over the same to DTC on a monthly basis.
- x) Such other responsibilities as may be assigned by DTC from time to time.

ARTICLE 5

SERVICE LEVEL ACCEPTANCE METRICS, COMPLIANCE & DEFAULT

5.1 Service Level Acceptance Metrics

The minimum service levels to be maintained by Concessionaire for the AVTMPS System and operations in relation thereto shall be as set forth in Schedule 4 hereto titled "Service Level Acceptance Metrics" ("SLA Metrics").

5.2 Compliance with SLA Metrics & Remedy for Breach of SLA Compliance

- a) Concessionaire shall submit monthly SLA compliance report(s) to DTC for DTC's review.
- b) DTC shall, on a monthly basis, monitor the Concessionaire's compliance with the SLA metrics.

- c) Any disputes arising out of the compliance report(s) submitted by the Concessionaire shall be escalated to a nominee of the senior management of DTC and the decision of such nominee shall be final and binding on the Parties.
- d) In the event of default / breach by Concessionaire to comply with the SLA Metrics DTC shall have the right to impose penalties on the Concessionaire as set forth in the SLA Metrics. The monthly bills for these penalty amounts shall be raised by DTC on Concessionaire and the same shall be payable by Concessionaire promptly.
- e) DTC shall notify the Concessionaire of any failure / breach / default by Concessionaire to meet the SLA Metrics. In the event that the Concessionaire, having been notified by DTC in this behalf, fails to remedy the defect(s) within a timeframe specified in the SLA Metrics, DTC may proceed to take such remedial action as may be necessary, at Concessionaire's risk and expense and without prejudice to any other rights which DTC may have against the Concessionaire under this Agreement.
- f) If DTC finds that Concessionaire has breached any of the SLA Metrics more than three (3) times in a year then DTC, in its sole discretion, may terminate this Agreement in accordance with the provisions hereof. Such termination of the Agreement shall be without prejudice to any other rights available to DTC.

ARTICLE 6¹²

INDEPENDENT ENGINEER & STEERING COMMITTEE

6.1 Constitution of the AVTMPS Project Steering Committee

(a) To oversee and monitor the work performed by the Concessionaire, DTC has constituted a steering committee for the AVTMPS Project ("Steering Committee"), the constitution whereof is as follows: :

- (i) _____ are the 3 (three) representatives of DTC nominated by the CMD, DTC. Out of these _____ is the Chairman of the Steering Committee and _____ is its Member Secretary.

¹² This section shall be revised / finalized before signing this Agreement. Insofar as the duties etc. of an Independent Engineer are concerned, reference shall be made to Appendix 7 of the RFP.

- (ii) _____ is the representative of the Concessionaire,
- (iii) _____ if the representative of the State Transport Authority, Delhi (STA)
- (iv) _____ is the representative from the IT Department, GNCTD and
- (v) _____ have been appointed as experts.

(b) DTC reserves right to change, in its sole discretion, at any point of time during the Concession Period, the constitution of the Steering Committee by removing / replacing any of the members of the Steering Committee which are appointed by DTC.

6.2 Functions, Role and Frequency of Steering Committee Meetings

(a) The Steering Committee shall carry out such functions and exercise such powers as are determined by DTC from time to time including without limitation examining the reports submitted by Independent Engineer.

(b) The Steering Committee is expected to hold meetings at least once every month to review the progress made in relation to the AVTMPS Project during the implementation period and once every two months during the operation period. The Independent Engineer may be a special invitee to such meetings of the Steering Committee.

6.3 Appointment of Independent Engineer

(a) DTC has appointed _____ as an independent engineer having necessary expertise to undertake, perform and carry out such duties, responsibilities, services and activities as set forth in Schedule _____ hereto to oversee the design, development, installation, implementation and operation of the AVTMPS Project by Concessionaire for an initial period of _____ (“Independent Engineer”). The said period may be extended in the sole discretion of DTC if required.

6.4 Roles & Responsibility of Independent Engineer

(a) The Independent Engineer shall submit to DTC such reports as set forth in Schedule 6 hereto or any other reports as may be required by DTC at least once every month or more frequently as the situation may warrant, on the progress of implementation of the AVTMPS Project.

(b) The professional fees payable to the Independent Engineer shall be shared equally between DTC and Concessionaire and the same shall be payable as per the schedule of payment agreed to with such Independent Engineer in accordance with the terms of its appointment by DTC and as set forth in Schedule 6 hereto.

(c) If DTC shall have reason to believe that the Independent Engineer is not discharging it's duties in a fair, appropriate and diligent manner, DTC may terminate the appointment of such Independent Engineer and appoint another Independent Engineer in accordance with these general terms governing the appointment of an Independent Engineer.

ARTICLE 7

CONCESSIONAIRE'S OBLIGATIONS

In addition to and not in derogation or substitution of any of its other obligations mentioned in the RFP, the Concessionaire shall have the following obligations:

7.1 Performance Guarantee

(a) The Concessionaire has, for due and punctual performance of its obligations hereunder relating to the AVTMPS Project, delivered to DTC, simultaneously with the execution of this Agreement, a performance guarantee from _____¹³, for a sum of Rs. 3,60,00,000/- (Rupees Thirty Six Millions only) in the form of a

¹³ To include name of the Bank

_____ ¹⁴ in favor of "CMD, DTC" payable at Delhi ("Performance Guarantee").¹⁵ A copy of the said Performance Guarantee is Schedule 3 hereto.

(b) The Performance Guarantee is irrevocable and the Performance Guarantee is valid for the entire Concession Period and an additional period of 180 (one hundred and eighty) days thereafter.¹⁶

7.2 Fresh Performance Guarantee

In the event of the encashment of the Performance Guarantee by DTC during the Concession Period pursuant to an encashment notice, the Concessionaire shall within 30 (thirty) days of the encashment notice furnish to DTC a fresh Performance Guarantee in such sum as required by DTC failing which DTC shall be entitled to terminate this Agreement. The provisions set forth in Clause Article 7.1 above shall apply mutatis mutandis to such fresh Performance Guarantee.

7.3 Financing Arrangement

(a) The Concessionaire shall at its cost, expenses and risk make such financing arrangements as would be necessary to implement the AVTMPS Project and to meet all of its obligations under this Agreement, in a timely manner.

7.4 Project Implementation

- (i) The Concessionaire shall adhere to the Project Implementation Requirements including without limitation adherence to the timelines stipulated for the same and complete the installation of the AVTMPS System and make it operational upon the terms and in the manner stipulated in this Agreement.

¹⁴ To state here whether this is in the form of a demand draft / banker's cheque / bank guarantee

¹⁵ In the event the Performance Guarantee is in the form of a bank guarantee from a foreign bank the same should be counter guaranteed by a scheduled bank approved by RBI. If applicable, this fact has to be stated here.

¹⁶ To be included if the Performance Guarantee is in the form of a Bank Guarantee

- (ii) The Concessionaire shall undertake any and all work(s) in relation to the AVTMPS Project by itself and shall remain solely responsible to meet the Project Implementation Requirements hereunder.
- (iii) The Concessionaire shall, before commencement of the work under the AVTMPS Project have requisite organization and designate and appoint suitable officers / representatives as it may deem appropriate to supervise the AVTMPS Project, to deal with the Independent Engineer / DTC and to be responsible for all necessary exchange of information required pursuant to this Agreement. Concessionaire shall promptly notify the names of these officers / representatives to DTC.
- (iv) For the purposes of determining that any and all work in relation to the AVTMPS Project is being undertaken in accordance with the Project Implementation Requirements, the Concessionaire shall with due diligence carry out all necessary and periodical tests as required under the Project Implementation Requirements and the Quality Check and Acceptance Test Plan (“Tests”). The Concessionaire shall maintain proper record of such Tests and the remedial measures taken to cure the defects or deficiencies, if any, indicated by the Test results.
- (v) All work in relation to the AVTMPS Project including without limitation all Tests shall be carried out in accordance with Project Implementation Requirements and all other provisions of this Agreement.
- (vi) DTC, may, by written notice, require the Concessionaire to suspend forthwith the whole or any part of any work in relation to the AVTMPS Project, if in DTC’s reasonable opinion the same is being carried on in a manner that is not in conformity with the provisions of this Agreement.
- (vii) Concessionaire shall submit periodic reports including standard reports and exceptional reports in relation to the AVTMPS Project in terms of this Agreement. The format for reporting requirements is set forth in Appendix 5 of the RFP titled “Sample Reports Formats” and it shall be the Concessionaire’s responsibility to furnish such periodic reports to DTC.

7.5 Project Implementation : Operation and Maintenance

(a) The Concessionaire shall operate and maintain the AVTMPS System in accordance with the Project Implementation Requirements.

(c) The Concessionaire shall, during the entire period of implementation of the AVTMPS Project

- (i) have requisite organization and designate and appoint suitable officers / representatives as it may deem appropriate to supervise the AVTMPS Project, to deal with the Independent Engineer / DTC and to be responsible for all necessary exchange of information required pursuant to this Agreement;
- (ii) conduct all Tests to ascertain compliance with Project Implementation Requirements.
- (iii) suspend forthwith the whole or any part of the work(s) under the AVTMPS Project upon receiving a written notice from DTC / Independent Engineer, who may require the Concessionaire to suspend the activities in whole or part if in the reasonable opinion of DTC, the operations are being carried on in a manner that is not in conformity with the Project Implementation Requirements.

(d) In the event the Concessionaire has failed to operate and maintain the AVTMPS System in accordance with the Project Implementation Requirements, and such failure has not been remedied despite a notice to that effect issued by DTC or the Independent Project Engineer or (“Notice to Remedy”), DTC may, without prejudice to any of its other rights/remedies under this Agreement, be entitled to cause the repair and maintenance of the AVTMPS System at the risk and cost of the Concessionaire. The Concessionaire shall reimburse 150% of the costs incurred by DTC on account of such repair and maintenance within 7 (seven) days of receipt of DTC’s claim therefor.

(e) In addition to any other provisions of this Agreement, the Concessionaire shall be deemed to be in material breach of Project Implementation Requirements if DTC in

accordance with the provisions of this Agreement, has determined that due to breach of its obligations by the Concessionaire:

- (i) there has been failure / undue delay in carrying out scheduled / planned implementation / maintenance or the scheduled / planned maintenance has not been carried out in accordance with the Project Implementation Requirements;
 - (ii) the maintenance of the AVTMPS System or any part thereof has deteriorated to a level which is below the acceptance level prescribed by the Project Implementation Requirements;
 - (iii) the AVTMPS System or any part thereof is not safe for operations;
 - (iv) there has been a serious or persistent let up in adhering to the Project Implementation Requirements and thereby there has been persistent breach of Project Implementation Requirements. For avoidance of doubt, persistent breach shall mean: (a) any breach of Project Implementation Requirements by the Concessionaire which has not been remedied by the Concessionaire despite a Notice to Remedy in respect thereof issued by DTC / Independent Engineer; (b) recurrence of a breach by the Concessionaire, during the pendency of Notice to Remedy by DTC / Independent Engineer requiring the Concessionaire to remedy a breach, and; (c) repeated occurrence of a breach notwithstanding that earlier breaches have been remedied pursuant to Notice to Remedy or otherwise.
- (f) Upon occurrence of a material breach of Project Implementation Requirements, DTC shall, without prejudice to and notwithstanding any other consequences provided therefor under this Agreement, be entitled to terminate this Agreement.

7.6 General Obligations

7.6.1 The Concessionaire shall at its own cost and expense:

- (a) study, design, develop, operate and maintain the AVTMPS System in accordance with the provisions hereof;

(b) comply with Applicable Laws in relation to the AVTMPS Project at all times during the Concession Period;

(c) procure and maintain in full force and effect, as necessary, appropriate proprietary rights, licenses, agreements and permissions for materials, methods, processes and systems used in or incorporated into the AVTMPS Project;

(d) make efforts to maintain harmony and good industrial relations among the personnel employed in connection with the performance of its obligations under this Agreement and shall be solely responsible for compliance with all labour laws and solely liable for all possible claims and employment related liabilities of its staff employed in relation with the AVTMPS Project and Concessionaire hereby indemnifies DTC against any claims, damages, expenses or losses in this regard and agrees that in no case and for no purpose shall DTC be treated as an employer in this regard;

(e) be responsible for all the health, security, environment and safety aspects of the AVTMPS Project at all times during the Concession Period.

(f) be responsible for payment of all statutory levies including ESIC Contribution, PF etc. in respect of the staff engaged by Concessionaire for implementation, operation & maintenance of the AVTMPS System. Notwithstanding the generality of the foregoing, any and all payments to be made to any contractors, sub-contractors or any other personnel engaged by Concessionaire and any and all payments to be further made by such contractors, sub-contractors to any party / personnel in relation to the AVTMPS Project shall be the sole responsibility of Concessionaire and DTC shall neither incur any liability in this respect nor entertain any claims in this respect.

7.6.2 The Concessionaire shall ensure optimum utilization of the Premises and shall not use the same for any purpose unconnected or which is not incidental to the AVTMPS Project or related activities.

7.7 No Breach of Obligations

The Concessionaire shall not be considered to be in breach of its obligations under this Agreement nor shall it incur or suffer any liability if and to the extent performance of any of its obligations under this Agreement is affected by or on account of any of the following:

- (i) Force Majeure Event, subject to Article 8.3;
- (ii) Compliance with the instructions of the DTC / Independent Engineer or the directions of any Government Agency other than instructions issued as a consequence of a breach by the Concessionaire of any of its obligations hereunder;

7.8 Confidentiality obligations of Concessionaire

(a) Confidential Information

(i) Concessionaire shall treat as confidential any information which is clearly described as confidential otherwise clearly marked as confidential or proprietary to DTC ("Confidential Information"). Notwithstanding the generality of the foregoing, Confidential Information shall include any proprietary or confidential information of DTC relating to the AVTMPS Project or services provided under the Concession Agreement in relation thereto and information relating to DTC's business or operations or any other information of DTC acquired during the course of implementation and operation of the AVTMPS System during the Concession Period.

(ii) Concessionaire shall not without DTC's prior written consent use, copy or remove any Confidential Information from DTC's premises, except to the extent necessary to carry out Concessionaire's obligations hereunder. Upon completion or termination of each assignment hereunder, Concessionaire shall return to DTC all documents or other materials containing DTC's Confidential Information and shall destroy all copies thereof.

(b) Confidentiality Exceptions

Confidential Information shall not include information which:

- (i) Is or becomes generally available to the public without any act or omission of Concessionaire
- (ii) Was in Concessionaire's possession prior to the time it was received from DTC or came into Concessionaire's possession thereafter, in each case lawfully obtained from a source other than DTC and not subject to any obligation of confidentiality or restriction on use;
- (iii) Is required to be disclosed by court order or operation of law; in such event, Concessionaire shall so notify DTC before such disclosure; or
- (iv) Is independently developed by or for Concessionaire by persons not having exposure to DTC's Confidential Information

(c) Period of Confidentiality

Concessionaire's obligations of confidentiality regarding DTC's Confidential Information shall cease 5 (five) years after the expiry or earlier termination of the Concession Agreement.

ARTICLE 8 DTC's OBLIGATIONS

In addition to and not in derogation or substitution of any of its other obligations under this Agreement, DTC shall have the following obligations:

8.1 Specific Obligations

(a) DTC will grant in a timely manner all such approvals, permissions and authorizations which the Concessionaire may require or is obliged to seek from DTC under this Agreement, in connection with implementation of the AVTMPS Project and the performance of its obligations. .

8.2 General Obligations

DTC shall where appropriate provide necessary assistance to the Concessionaire in securing Applicable Permits and observe and comply with all its obligations set forth in this Agreement.

ARTICLE 9 CONCESSION FEE

9.1 Concession Fee

Concession Fee payable by Concessionaire to DTC shall be as follows¹⁷:

Rates applicable in case the number of buses covered under the AVTMPS Project are upto 2,500 (Two thousand five hundred) in number:

Year	Concession Fee (INR) during the Concession Period per Bus, per month
First Year of Operation	
Second year of Operation	
Third year of Operation	
Forth year of Operation	
Fifth year of Operation	
Sixth year of Operation	

Rates applicable in case the number of buses covered under the AVTMPS Project are more than 2,500 (Two thousand five hundred) in number:

Year	Concession Fee (INR) during the Concession Period per Bus, per month
First Year of Operation	
Second year of Operation	
Third year of Operation	
Forth year of Operation	
Fifth year of Operation	
Sixth year of Operation	

¹⁷ To be included after Concessionaire is identified and the rates in this behalf are finalized between the parties

9.2 Payment Terms

- a) Payment of Concession Fee (as applicable for each corresponding year of the Concession Agreement) by Concessionaire to DTC shall be on quarterly basis with effect from the date of completion of Pilot Implementation Phase and till the end of the Concession Agreement on actual number of buses / vehicles on which the AVTMPS system is implemented.

- b) The aforesaid quarterly payments of Concession Fees by Concessionaire to DTC shall be made by Concessionaire in advance for each quarter and not later than the 10th day of the first month of the quarter in which it is due and failure to do so will attract an interest of 18% per annum (1.5% per month) on the entire amount of the outstanding amount for the relevant quarter

- c) Any and all payment(s) of Concession Fee shall be by way of a Pay Order or Demand Draft of a Scheduled Commercial Bank drawn in favor “Delhi Transport Corporation” payable at Delhi.

- d) Concessionaire will deduct appropriate TDS as required under the Income Tax Act 1961 from all the payments to be made to DTC unless exemption certificate is provided by DTC. TDS certificates shall be issued for such deductions.

- e) Any and all applicable taxes, statutory duties / levies including without limitation any and all Service Tax, advertisement tax, dues payable to MCD in the performance of the services under the Concession Agreement shall be borne by Concessionaire.

- f) Concessionaire specifically agrees that the Concession Fee shall be paid notwithstanding any cause whatsoever and shall not be withheld on any ground whatsoever.

ARTICLE 10
CHANGE OF SCOPE & CAPACITY AUGMENTATION

10.1 Change of Scope & Capacity Augmentation

During the implementation period, the number of buses / Vehicles to be included in the AVTMPS Project can be increased by a maximum of 25% upon the terms set forth in the Agreement without any change in conditions of this Agreement. The Concession Fee shall be increased proportionately for the change of scope as required as per the applicable slab for payment of Concession Fee. Any such change in scope shall be set forth in writing and appended to this Agreement. DTC, at its sole discretion, may withdraw any bus(es) from AVTMPS System and ask the Concessionaire to shift the VMU(s) and other equipment(s) from such bus(es) to another bus(es) at any point of time during the Concession Period, subject to overall number of buses under AVTMPS System remaining the same. In such case, Concessionaire shall have to comply with such directions of DTC within 3 (three) days of DTC's direction in this behalf.

ARTICLE 11
FORCE MAJEURE AND CHANGE IN LAW

11.1 Force Majeure Event

Any of the following events which is beyond the control of the Party claiming to be affected thereby ("Affected Party") and which the Affected Party has been unable to overcome or prevent despite exercise of due care and diligence, and which results in a material adverse effect shall constitute a Force Majeure Event:

- (a) earthquake, flood, inundation and landslide, cyclone
- (b) fire caused by reasons not attributable to the Concessionaire;
- (c) acts of terrorism;
- (d) strikes, labour disruptions or any other industrial disturbances not arising on account of the acts or omissions of the Concessionaire

(e) action of a Government Agency having a material adverse effect including but not limited to (i) acts of expropriation, compulsory acquisition or takeover by any Government Agency of the Premises or any part thereof or of the Concessionaire's rights in relation to the AVTMPS Project, (ii) any judgment or order of a court of competent jurisdiction or statutory authority in India made against the Concessionaire in any proceedings which is non-collusive and duly prosecuted by the Concessionaire, and (iii) any unlawful, unauthorized or without jurisdiction refusal to issue or to renew or the revocation of any Applicable Permits, in each case, for reasons other than Concessionaire's breach or failure in complying with the AVTMPS Project requirements, Applicable Laws, Applicable Permits, any judgment or order of a Governmental Agency or of any contract by which the Concessionaire is bound.

(f) early determination of this Agreement by DTC for reasons of national emergency or national security.

(g) War, hostilities (whether declared or not), invasion, act of foreign enemy, rebellion, riots, weapon conflict or military actions, civil war, ionising radiation, contamination by radioactivity from nuclear fuel, any nuclear waste, radioactive toxic explosion, volcanic eruptions.

11.2 Notice of Force Majeure Event

(a) As soon as practicable and in any case within 7 (seven) days of the date of occurrence of a Force Majeure Event or the date of knowledge thereof, the Affected Party shall notify the other Party of the same setting out, inter alia, the following in reasonable detail:

- (i) the nature and extent of the Force Majeure Event;
- (ii) the estimated Force Majeure Period;
- (iii) the nature of and the extent to which, performance of any of its obligations under this Agreement is affected by the Force Majeure Event;

- (iv) the measures which the Affected Party has taken or proposes to take to alleviate / mitigate the impact of the Force Majeure Event and to resume performance of such of its obligations affected thereby; and
- (v) any other relevant information concerning the Force Majeure Event, and /or the rights and obligations of the Parties under this Agreement.

(b) As soon as practicable and in any case within 5 (five) days of notification by the Affected Party in accordance with the preceding clause (a), the Parties shall meet, hold discussions in good faith in order to:

- (i) assess the impact of the underlying Force Majeure Event,
- (ii) to determine the likely duration of Force Majeure Period and,
- (iii) to formulate damage mitigation measures and steps to be undertaken by the Parties for resumption of obligations the performance of which shall have been affected by the underlying Force Majeure Event.

(c) The Affected Party shall during the Force Majeure Period provide to the other Party and the Independent Engineer regular (not less than weekly) reports concerning the matters set out in the preceding clause (b) as also any information, details or document, which the other Party may reasonably require.

11.3 Performance of Obligations

If the Affected Party is rendered wholly or partially unable to perform any of its obligations under this Agreement because of a Force Majeure Event, it shall be excused from performance of such obligations to the extent it is unable to perform the same on account of such Force Majeure Event provided that:

(a) due notice of the Force Majeure Event has been given as required by the preceding Clause 11.2;

(b) the excuse from performance shall be of no greater scope and of no longer duration than is necessitated by the Force Majeure Event;

(c) the Affected Party has taken all reasonable efforts to avoid, prevent, mitigate and limit damage, if any, caused or likely to be caused to the AVTMPS System and /or the Premises as a result of the Force Majeure Event and to restore the AVTMPS System

and Premises, in accordance with the Good Industry Practice and its relative obligations under this Agreement;

(d) when the Affected Party is able to resume performance of its obligations under this Agreement, it shall give to the other Party and the Independent Engineer written notice to that effect and shall promptly resume performance of its obligations hereunder, the non issue of such notice being no excuse for any delay for resuming such performance;

(e) the Affected Party shall continue to perform such of its obligations which are not affected by the Force Majeure Event and which are capable of being performed in accordance with this Agreement;

11.4 Termination due to Force Majeure Event

(a) Termination

(i) If a Force Majeure Event, excluding events described under Clauses 11.1(f), 11.1(g) and 11.1(h), continues or is in the reasonable judgment of the Parties likely to continue beyond a period of 120 (One hundred and twenty) days, the Parties may mutually decide to terminate this Agreement or continue this Agreement on mutually agreed revised terms. If the Parties are unable to reach an agreement in this regard, the Affected Party shall after the expiry of the said period of 120 (One Hundred and Twenty) days, be entitled to terminate this Agreement. Notwithstanding anything inconsistent contained in this Agreement, if a Force Majeure Event is an event described under Clauses 11.1(f), or 11.1(h), and the same subsists for a period exceeding 365 (Three Hundred and Sixty Five) days, then either Party shall be entitled to terminate this Agreement. Provided that DTC may at its sole discretion have the option to terminate this Agreement any time after the occurrence of any Force Majeure Event described under Section 11.1.

(b) Termination Notice

If either Party, having become entitled to do so, decides to terminate this Agreement pursuant to the preceding clause (a), it shall issue Termination Notice setting out: (i) in sufficient detail, the underlying Force Majeure Event; (ii) the Termination Date which shall be a date occurring not earlier than 60 (Sixty) days from the date of Termination

Notice; (iii) if and to the extent applicable the estimated money payable by / to the Affected Party including the details of computation thereof and; (iv) any other relevant information.

(c) Obligation of Parties

Following issue of Termination Notice by either Party, the Parties shall promptly take all such steps as may be necessary or required to ensure that the Premises and AVTMPS System (as then existing) are handed over by Concessionaire to DTC peacefully and free from all Encumbrance on the Termination Date.

11.5 Liability for other losses, damages etc.

Save and except as expressly provided in this Article 8, neither Party hereto shall be liable in any manner whatsoever to the other Party in respect of any loss, damage, cost, expense, claims, demands and proceedings relating to or arising out of occurrence or existence of any Force Majeure Event.

11.6 Change in Law

The Agreement shall be in force and binding on both the parties hereto till the expiry of the Concession Period and no change in law or other circumstances shall affect the respective rights and obligations of the Parties. No claim of whatsoever nature shall be made by one party on to the other on account of any such change in law or other circumstances.

ARTICLE 12

EVENTS OF DEFAULT AND TERMINATION

12.1 Termination for Default

(a) Without prejudice to any other rights available to DTC for breach of contract or otherwise DTC may in its sole discretion terminate the Agreement in whole or in part by issuing a Notice of Termination to Concessionaire in writing if:

- (i) Concessionaire fails to perform any of Concessionaire's obligations set forth in the Agreement; and / or
- (ii) Concessionaire fails to adhere to the timelines set forth in the Agreement for performance of Concessionaire's obligations thereunder; and / or
- (iii) Concessionaire fails to comply with the applicable laws, rules, regulations,

(b) In any of the above mentioned conditions, DTC shall have the right to invoke the Performance Guarantee and / or take over the infrastructure of the Concessionaire or ask the Concessionaire to transfer upon DTC's direction the entire infrastructure or part of the infrastructure to any replacement vendor selected by DTC in its sole discretion.

(c) If Concessionaire, having been notified, fails to remedy the defect(s) within a timeframe specified in the Service Level Acceptance ("SLA") metrics section of the RFP, DTC may proceed to take such remedial action as may be necessary, at Concessionaire's risk and expense and without prejudice to any other rights which DTC may have against the Concessionaire under the Agreement.

12.2 Termination for Insolvency, Dissolution etc.

DTC may at any time terminate the Agreement by giving written notice to Concessionaire without any compensation to Concessionaire, if Concessionaire becomes bankrupt or otherwise insolvent or in case of dissolution of firm or winding up of the company, provided that such termination will not prejudice any other rights of DTC. Notwithstanding the generality of the foregoing, DTC reserves the right to invoke the Performance Guarantee and / or take over the entire infrastructure designed and developed by Concessionaire for the AVTMPS Project or any part thereof and / or ask the Concessionaire to transfer the said infrastructure or part thereof to a replacement vendor selected by DTC, in DTC's sole discretion.

12.3 Accrued Rights of Parties

Notwithstanding anything to the contrary contained in this Agreement, termination pursuant to any of the provisions of this Agreement shall be without prejudice to accrued rights of either Party including its right to claim and recover money damages and other rights and remedies which it may have in law or contract. The rights and obligations of either Party under this Agreement shall survive the termination but only to the extent such survival is necessary for giving effect to such rights and obligations.

ARTICLE 13 HANDOVER & DEFECT LIABILITY PERIOD

13.1 Handing Over of Project Assets

Upon the expiry of the Concession Period by efflux of time and in the normal course, the Concessionaire shall at the end of the Concession Period or prior termination of this Agreement, as the case may be, hand over free from Encumbrances the peaceful possession of the Premises, any all VMUs installed on the Vehicles and any other assets installed or developed by Concessionaire by way of this Agreement for the AVTMPS Project including without limitation any and all hardware, software, firmware, deliverables etc. in sound condition.

13.2 Joint Inspection and Removal of Deficiency

The handing over process shall be initiated at least 6 (six) months before the actual date of expiry of the Concession Period by joint inspection by the Independent Engineer / DTC and the Concessionaire. DTC shall within 15 (fifteen) days of such inspection prepare and furnish to the Concessionaire a list of works / jobs / additions / alterations, if any, to be carried out to bring the AVTMPS Project to the prescribed level of services condition at least 2 (two) months prior to the date of the expiry of the Concession Period. In case the Concessionaire fails to carry out the above works, within the stipulated time period the DTC shall be at liberty to have these works executed by another agency or on its own at the risk and cost of the Concessionaire. Any cost incurred by DTC in this regard shall be reimbursed by the Concessionaire to DTC within 7 (seven) days of receipt of demand. For this purpose, DTC shall without prejudice to any other right /

remedy available to it, under this Agreement, have the right to appropriate the Performance Guarantee and / or to set off any amounts due, if any and payable by DTC to the Concessionaire to the extent required / available and to recover deficit amount, if any, from the Concessionaire.

13.3 Recovery of Balance Concession Fee

The Concession Fee due, if any, at the end of the Concession Period shall be recovered by DTC from the Performance Guarantee.

ARTICLE 14 DISPUTE RESOLUTION

14.1 AMICABLE RESOLUTION

(a) Save where expressly stated otherwise in this Agreement, any dispute, difference or controversy of whatever nature howsoever arising under, out of or in relation to this Agreement including non-completion of the AVTMPS Project between the Parties and so notified in writing by either Party to the other (the "Dispute") in the first instance shall be attempted to be resolved amicably by the Parties and failing such resolution of the same, in accordance with the procedure set forth in sub-article (b) below.

(b) Either Party may require the Dispute to be referred to Chairman, DTC for amicable settlement. Upon such reference, both the Parties and the Chairman or his nominee (who can be an employee of DTC dealing the AVTMPS Project or otherwise) shall meet at the earliest mutual convenience and in any event within 15 (fifteen) days of such reference to discuss and attempt to amicably resolve the Dispute. If the Dispute is not amicably resolved within 15 (fifteen) days of such meeting, either Party may refer the Dispute to arbitration in accordance with the provisions of Article 14.2 below.

14.2 ARBITRATION

(a) Arbitrators

Any Dispute which is not resolved amicably as provided in Article 14.1(a) shall be finally settled by binding arbitration under the Arbitration and Conciliation Act, 1996. The arbitration shall be by a committee of 3 (three) arbitrators chosen from a panel of arbitrators on the list of arbitrators available or furnished by DTC. 1 (One) arbitrator is to be chosen by each Party and the third to be appointed by the 2 (two) arbitrators chosen by the Parties. If either Party fails to choose its arbitrator, the other Party shall take steps in accordance with Arbitration and Conciliation Act, 1996.

(b) Place of Arbitration

The place of arbitration shall be New Delhi.

(c) Language

The request for arbitration, the answer to the request, the terms of reference, any written submissions, any orders and rulings shall be in English and, if oral hearings take place, English shall be the language to be used in the hearings.

(d) Procedure

The procedure to be followed within the arbitration, / arbitral tribunal and the rules of evidence which are to apply shall be in accordance with the Arbitration and Conciliation Act, 1996.

(e) Enforcement of Award

Any decision or award resulting from arbitration shall be final and binding upon the Parties. The Parties hereto hereby waive, to the extent permitted by law, any rights to appeal or to review of such award by any Court or Tribunal. The Parties hereto agree that the arbitral award may be enforced against the Parties to the arbitration

proceedings or their assets wherever they may be found and that a judgment upon the arbitral award may be entered in any Court having jurisdiction thereof.

(f) Fees and Expenses

The fees and expenses of the arbitrators and all other expenses of the arbitration shall be initially borne and paid by respective Parties equally subject to determination by the arbitrators. The arbitrators may provide in the arbitral award for the reimbursement to the prevailing party of its costs and expenses in bringing or defending the arbitration claim, including legal fees and expenses incurred by the said Party.

(g) Performance during Arbitration

Pending the submission of and/or decision on a Dispute, difference or claim or until the arbitral award is published, the Parties shall continue to perform all of their obligations under this Agreement without prejudice to a final adjustment in accordance with such award

**ARTICLE 15
REPRESENTATIONS AND WARRANTIES**

15.1 Representations and Warranties of the Concessionaire

The Concessionaire represents and warrants to DTC that:

- (a) it is duly organised, validly existing and in good standing under the laws of India;
- (b) it has full power and authority to execute, deliver and perform its obligations under this Agreement and to carry out the transactions contemplated hereby;
- (c) it has taken all necessary corporate and other action under Applicable Laws and its constitutional documents to authorise the execution, delivery and performance of this Agreement;

- (d) it has the financial standing and capacity to undertake the AVTMPS Project;
- (e) this Agreement constitutes its legal, valid and binding obligation enforceable against it in accordance with the terms hereof;
- (f) the execution, delivery and performance of this Agreement will not conflict with, result in the breach of, constitute a default under or accelerate performance required by any of the terms of the Concessionaire's Memorandum and Articles of Association or any Applicable Laws or any covenant, agreement, understanding, decree or order to which it is a party or by which it or any of its properties or assets are bound or affected;
- (g) there are no actions, suits, proceedings or investigations pending or to the Concessionaire's knowledge threatened against it at law or in equity before any court or before any other judicial, quasi judicial or other authority, the outcome of which may constitute an event of default on the part of the Concessionaire or which individually or in the aggregate may result in material adverse effect;
- (h) it has no knowledge of any violation or default with respect to any order, writ, injunction or any decree of any court or any legally binding order of any Government Agency which may result in Material adverse effect;
- (i) it has complied with all Applicable Laws and has not been subject to any fines, penalties, injunctive relief or any other civil or criminal liabilities which in the aggregate have or may have Material adverse effect;
- (j) no representation or warranty by the Concessionaire contained herein or in any other document furnished by it to DTC or to any Government Agency in relation to Applicable Permits contains or will contain any untrue statement of material fact or omits or will omit to state a material fact necessary to make such representation or warranty not misleading;
- (k) no bribe or illegal gratification has been paid or will be paid in cash or kind by or on behalf of the Concessionaire to any person to procure the Concession.

(l) Without prejudice to any express provision contained in this Agreement, the Concessionaire acknowledges that prior to the execution of this Agreement, the Concessionaire has after a complete and careful examination made an independent evaluation of all aspects of the AVTMPS Project, and the information provided by DTC, and has determined to its satisfaction the nature and extent of risks and hazards as are likely to arise or may be faced by the Concessionaire in the course of performance of its obligations hereunder.

(m) The Concessionaire also acknowledges and hereby accepts the risk of inadequacy, mistake or error in or relating to any of the matters set forth above and hereby confirms that DTC shall not be liable for the same in any manner whatsoever to the Concessionaire.

15.2 Representations and Warranties of DTC

DTC represents and warrants to the Concessionaire that:

- (a) DTC has full power and authority to grant the Concession;
- (b) DTC has taken all necessary action to authorise the execution, delivery and performance of this Agreement;
- (c) This Agreement constitutes DTC's legal, valid and binding obligation enforceable against it in accordance with the terms hereof;
- (d) There are no suits or other legal proceedings pending or threatened against DTC in respect of the AVTMPS Project.

15.3 Obligation to Notify Change

In the event that any of the representations or warranties made/given by a Party ceases to be true or stands changed, the Party who had made such representation or given such warranty shall promptly notify the other of the same.

15.4 Indemnification

Concessionaire shall at all times, i.e. during the subsistence of this Agreement and any time thereafter, defend, indemnify and hold DTC harmless from and against all claims (including without limitation claims for infringement of intellectual property, breach of contract, death or injury to a person or injury to property, or other tort claims) and expenses (including court costs) arising out of or relating to the breach by Concessionaire of any covenant, representation or warranty or from any act or omission of the Concessionaire or his agents / employees. DTC will notify Concessionaire of any such claim, suit or proceeding and will assist Concessionaire (at Concessionaire's expense) in the defense of the same.

ARTICLE 16 MISCELLANEOUS

16.1 Assignment and Charges

(a) The Concessionaire shall not assign in favor of any person this Agreement or the rights, benefits and obligations hereunder save and except with prior consent of DTC.

(b) The Concessionaire shall not create nor permit to subsist any Encumbrance over the Premises except with prior consent in writing of DTC, which consent DTC shall be entitled to decline without assigning any reason whatsoever.

(c) Restraint set forth in clauses (a) and (b) above shall not apply to liens/encumbrances arising by operation of law (or by an agreement evidencing the same) in the ordinary course of business of the Concessionaire;

16.2 Interest and Right of Set Off

Any sum which becomes payable under any of the provisions of this Agreement by one Party to the other Party shall, if the same be not paid within the time allowed for payment thereof, shall be deemed to be a debt owed by the Party responsible for payment thereof

to the Party entitled to receive the same. Such sum shall until payment thereof carry interest at 15% (Fifteen) per annum from the due date for payment thereof until the same is paid to or otherwise realised by the Party entitled to the same. Without prejudice to any other right or remedy that may be available under this Agreement or otherwise under law, the Party entitled to receive such amount shall also have the right of set off. Provided the stipulation regarding interest for delayed payments contained in this Article shall neither be deemed or construed to authorize any delay in payment of any amount due by a Party nor be deemed or construed to be a waiver of the underlying breach of payment obligations.

16.3 Liquidated Damages

In the event of delay by Concessionaire to comply with the timeline(s) stipulated for completion of the Pilot Implementation, monthly roll out of the AVTMPS Project and final completion thereof as set forth in the Scope of Work, DTC reserves the option to recover from Concessionaire liquidated damages (and not by way of penalty) @ Rs. 500/- (Rupees Five Hundred) per bus / PIS (at a BQS / Bus Terminal) per week on / at which there is such delay. Concessionaire agrees and accepts that these amounts represent a fair and reasonable pre-estimate of the likely damages to be suffered by DTC and shall not dispute the same in any manner.

16.4 Governing Law and Jurisdiction

This Agreement shall be governed by the laws of India. The Courts at Delhi shall have jurisdiction over all matters arising out of or relating to this Agreement.

16.5 Waiver

(a) Waiver by either Party of any default by the other Party in the observance and performance of any provision of or obligations under this Agreement: (i) shall not operate or be construed as a waiver of any other or subsequent default hereof or of other provisions or obligations under this Agreement; (ii) shall not be effective unless it is in writing and executed by a duly authorized representative of such Party; and (iii) shall not affect the validity or enforceability of this Agreement in any manner.

(b) Neither the failure by either Party to insist on any occasion upon the performance of the terms, conditions and provisions of this Agreement or any obligation hereunder nor time or other indulgence granted by a Party to the other Party shall be treated or deemed as waiver / breach of any terms, conditions or provisions of this Agreement.

16.6 Survival

Termination of this Agreement (a) shall not relieve the Concessionaire or DTC of any obligations already incurred hereunder which expressly or by implication survives Termination hereof, and (b) except as otherwise provided in any provision of this Agreement expressly limiting the liability of either Party, shall not relieve either Party of any obligations or liabilities for loss or damage to the other Party arising out of or caused by acts or omissions of such Party prior to the effectiveness of such Termination or arising out of such Termination.

16.7 Amendments

This Agreement and the Schedules together constitute a complete and exclusive understanding of the terms of the Agreement between the Parties on the subject hereof and no amendment or modification hereto shall be valid and effective unless agreed to by all the Parties hereto and evidenced in writing.

16.8 Notices

Unless otherwise stated, notices to be given under this Agreement including but not limited to a notice of waiver of any term, breach of any term of this Agreement and termination of this Agreement, shall be in writing and shall be given by hand delivery, recognised international courier, mail, telex or facsimile transmission and delivered or transmitted to the Parties at their respective addresses set forth below :

If to DTC:

[Designation] ,

Delhi Transport Corporation (DTC)

DTC Headquarters
I.P. Estate
New Delhi 110002, India
Fax No. 91 11 2337 0877

If to the Concessionaire :

The Managing Director,
----- Limited,

-----.
Fax No. -----

Or such address, telex number, or facsimile number as may be duly notified by the respective Parties from time to time, and shall be deemed to have been made or delivered (i) in the case of any communication made by letter, when delivered by hand, by recognized international courier or by mail (registered, return receipt requested) at that address, and (ii) in the case of any communication made by telex or facsimile, when transmitted properly addressed to such telex number or facsimile number.

16.9 Severability

If for any reason whatsoever any provision of this Agreement is or becomes invalid, illegal or unenforceable or is declared by any court of competent jurisdiction or any other instrumentality to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions shall not be affected in any manner, and the Parties shall negotiate in good faith with a view to agreeing upon one or more provisions which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable. Provided failure to agree upon any such provisions shall not be subject to dispute resolution under this Agreement or otherwise.

16.10 No Partnership

Nothing contained in this Agreement shall be construed or interpreted as constituting a partnership between the Parties. Neither Party shall have any authority to bind the other in any manner whatsoever.

16.11 Language

All notices required to be given under this Agreement and all communications, documentation and proceedings which are in any way relevant to this Agreement shall be in writing and in English language.

16.12 Ownership & Protection of Property And Intellectual Property Rights

16.12.1 Ownership & Protection of Property

- a) DTC shall retain the title and ownership of any Premises allowed for use by DTC to Concessionaire for purposes of carrying out Concessionaire's obligations in relation to the AVTMPS Project. Such title and ownership of DTC in any such site shall not pass to Concessionaire.
- b) The ownership of the hardware, software, equipments and any other infrastructure created by Concessionaire for the AVTMPS Project shall be with DTC from the date of implementation of the AVTMPS Project. The possession of all the infrastructure shall pass to DTC after the expiry of the Concession Agreement.
- c) DTC shall own any and all data created out of the AVTMPS Project at all the times, i.e. both during and after the expiry / termination of the Concession Agreement. Concessionaire shall not have any claim on and for such data and shall not for any reason withhold such data from DTC.
- d) Concessionaire shall exercise all due caution to protect and maintain the data created out of this AVTMPS Project.

- e) Concessionaire shall not share, sell or in any manner use the data created by Concessionaire out of this AVTMPS Project otherwise than in accordance with the terms of the Concession Agreement.
- f) Upon expiry or earlier termination of the Concession Agreement, Concessionaire shall transfer possession of any and all assets including without limitation any hardware, software etc. designed, created, implemented by Concessionaire for the AVTMPS Project to DTC.

16.12.2 Intellectual Property Rights

- a) Concessionaire, hereby acknowledges and agrees that any and all hardware, software, and / or firmware designed and developed by Concessionaire for AVTMPS Project pursuant to this Concession Agreement and any modifications thereto or works derived there from shall be the exclusive property of DTC at all times and DTC shall retain all right, title and interest in and to the same.
- b) After the expiry or termination of the Concession Agreement Concessionaire shall have no right, title or interest in or to such designs, programs, modifications or derivative works as developed by Concessionaire for DTC under the AVTMPS Project for any purpose whatsoever.
- c) For purposes of this Concession Agreement the terms “software”, “software programs” and “VMU” shall include without limitation the source code, object code, any and all related design concepts and ideas, specifications, documentation, technical information, and all corrections, modifications, additions, improvements and enhancements to any of the foregoing provided to DTC by the Concessionaire in relation to the AVTMPS Project pursuant to this Concession Agreement. The terms “firmware” and “hardware” shall include without limitation the designs, drawings, specifications, custom designed electronic devices, documentation, technical information and all corrections, modifications, additions, improvements and enhancements to any of the foregoing provided to DTC by Concessionaire in relation to the AVTMPS Project pursuant to the Concession Agreement.

d) DTC may in its sole discretion allow the marketing of any and all product(s) developed specifically for DTC in relation to the AVTMPS Project by Concessionaire to a third party. Provided however that such marketing shall be done only after prior consultation with DTC in which event the parties shall arrive at an understanding which shall be set forth in writing in a Memorandum of Understanding (“MOU”) between DTC and the Concessionaire before taking up such activity. The MOU shall clearly state the terms of / for such marketing activity, the responsibilities of Concessionaire and DTC respectively as well as financial implications thereof.

16.13 Counterparts

This Agreement may be executed in two counterparts, each of which when executed and delivered shall constitute an original of this Agreement but shall together constitute one and only the Agreement.

IN WITNESS WHEREOF THE, PARTIES HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED SEALED AND DELIVERED:

<p>For and on behalf of DTC by:</p> <p>(Signature)</p> <p>(Name)</p> <p>(Designation)</p>	<p>For and on behalf of CONCESSIONAIRE by:</p> <p>(Signature)</p>
<p>In the presence of :</p> <p>1)</p> <p>2)</p>	