Request for Proposal (RFP)

For Electronic Ticketing Machines (ETMs) and Associated Services

(Amended Document)

Date of Issue of Original RFP: May 7, 2010

Date of Issue of Amended RFP: June 1, 2010



Delhi Integrated Multi-Modal Transit System Limited
Ist Floor, ISBT Kashmere Gate
Kashmere Gate, Delhi – 110006
Ph: 011- 43090100; Fax: 011-23860966

Website: <u>www.dimts.in</u>

Cost of RFP Document: INR 10,000/-

Bid Invitation Notice

GOVERNMENT OF N.C.T. OF DELHI TRANSPORT DEPARTMENT

5/9, UNDER HILL ROAD, DELHI - 110 054.

BID INVITATION NOTICE (BIN)

DIMTS, on behalf of Transport Department, Govt. of NCT of Delhi, invites proposals from eligible entities for providing **Electronic Ticketing Machines** (ETMs) and Associated Services, as per the following details:

Item	Description	Bid	Due Date of
No.	of Work	Security	submission of Bids
1	Provide ETMs with accessories and Associated services, as per details given in RFP Document	Rs. 25 lakhs	03 June, 2010 at 1500 hrs.

Notes:

- (i) Interested Bidders may procure the Request for Proposal (RFP) Document from the office of DIMTS Ltd., at the address given below on any working day from May 7, 2010 to June 02, 2010 between 1100 hrs. and 1600 hrs. on submission of written application on the Company's letterhead and upon payment of non-refundable amount of Rs. 10,000/- through Demand Draft in favour of Delhi Integrated Multi-Modal Transit System Limited payable at Delhi. The RFP Document can also be downloaded from Transport Department's or DIMTS' website www.transport.delhi.gov.in or www.dimts.in and Proposal submitted along with the cost of RFP Document, as mentioned above.
- (ii) **Pre-Proposal Meeting:-** A Pre-Proposal meeting will be held at 1130 hrs. on May 17, 2010 at the address given below, with the prospective Bidders for providing clarifications.
- (iii) **Submission of Proposals:-** Proposals must be delivered in the office of DIMTS Ltd., at the address given below on or before June 03, 2010 by 1500 hrs. The Proposals will be opened at 1530 hrs. on the same day at DIMTS Ltd., in the presence of Bidders' representatives who choose to attend.

For more details, log on to website <u>www.dimts.in</u> or <u>www.transport.delhi.gov.in</u>.

Project Advisor:



DIP/0243/2010-11

Delhi Integrated Multi-Modal Transit System Limited 1º Floor, ISBT Building, Kashmere Gate, Delhi –110006 Phone: +91-11-43090100 E-mail: info@dimts.in

E-mail: imo e dimits.in

Project Proponent:



Visit us at: www.transport.delhigovt.nic.in HELPLINE NUMBER - 42-400-400

1. Introduction

- 1.1 Transport Department, Government of National Capital Territory of Delhi (GNCTD) has mandated Delhi Integrated Multi-Modal Transit System Ltd. (DIMTS) to implement the Automatic Fare Collection System (AFCS) in stage carriage buses and other modes of public transport in Delhi. Initially, conductors will be equipped with Smart Card enabled Electronic Ticketing Machines (ETMs) with inbuilt thermal printers for printing and issuing tickets to passengers.
- 1.2 DIMTS, on behalf of Transport Department, GNCTD, seeks proposals from eligible entities for provisioning of ETMs together with associated services ("**Project**") in accordance with the procedure set out in this amended RFP ("**RFP**").

2. Scope of Services

- 2. 1 The Preferred Bidder to be selected through the process outlined in this RFP shall perform the following key scope of services during the contract period:
 - i. Provide ETMs (with complete accessories and charger) as per the minimum technical specifications provided in Annexure A including carrying out the activities incidental and relating thereto.
 - ii. Provide complete Software Development Kit (SDK) of the ETM to enable DIMTS to develop application on the top of ETMs and various sub-components thereof. It should contain APIs, commands, functions to programme smart card reader, thermal printer, display, GPRS, etc. The SDK should meet the minimum requirements specified in Annexure A-1.
 - iii. Provide, operate and maintain ETM charging infrastructure for charging of ETMs at each bus depot.
 - iv. Provide, operate and maintain inverters with minimum three hours backup for charging of ETMs at each bus depot.
 - v. Handle ETMs in depots which includes, inter alia, issue and receipt, maintenance and other activities to keep ETMs in good working condition.
 - vi. Provide one time supply of one lakh thermal paper rolls (minimum 55 GSM, 12 meter length, 55 mm wide), for testing purposes and use during pilot implementation.
 - vii. Undertake maintenance, repair, replacement, keep sufficient spare parts and other incidental activities relating to the ETMs including components, batteries and accessories.

- viii. Undertake installation, configuration, maintenance /replacement of the SIM Cards provided by Transport Department/Delhi Transport Corporation (DTC) through DIMTS and manage the interface with telecom service providers.
- ix. Provide helpdesk and on ground support.

The detailed scope of services is given in Annexure L.

- 2.2 The Preferred Bidder shall be required to adhere to the Standards of Performance as set out in Annexure J.
- 2.3 The number of buses to be covered in the Project is expected to be about 5,000 over one year from date of signing of contract and is likely to increase to 6,000 within two years of signing of contract. The number of depots is expected to be about 50.

3. Bid Process

- 3.1 The Bidders are required to submit their Proposals in three separate parts, each in a separate sealed envelope:
 - Part 1: Qualification Bid;
 - Part 2: Technical Bid; and
 - Part 3: Financial Bid.
- 3.2 In the first stage, the Qualification Bids of the Bidders will be evaluated for assessing the Bidder's technical and financial capabilities vis-à-vis the stipulated Eligibility Criteria in section 4 of this RFP.
- 3.3 In the second stage, Technical Bids of the Bidders emerging qualified from the first stage of evaluation shall be evaluated, as per section 6 of this RFP.
- 3.4 The Financial Bids of only those Bidders who have secured Technical Score equal to or above a minimum threshold shall be considered for evaluation, as per the evaluation method outlined in section 6 of this RFP.
- 3.5 The Preferred Bidder will be the one who quotes the lowest Monthly ETM Charge, in accordance with Annexure E.

4. Eligibility Criteria

4.1 Eligibility of Bidders

Only the entities meeting the criteria provided in this section shall be eligible to submit their Proposal in response to this RFP.

- 4.1.1 The Bidder shall be either:
 - (a) a single business entity incorporated under the Companies Act, 1956 or equivalent law in their country of jurisdiction, or

- (b) a consortium of business entities ("Consortium") subject to the following:
 - (i) The number of members in a Consortium shall not be more than two.
 - (ii) One of the members shall be designated as Lead Member who shall be authorized to deal with Transport Department/DTC/DIMTS for and on behalf of the Consortium by way of a Power of Attorney (POA), as per format at Annexure G.
 - (iii) The Lead member of the Consortium should be a company incorporated under the Companies Act, 1956 or equivalent law in its country of jurisdiction. The other member should be either a Proprietorship, or Partnership, or Limited Liability Partnership or a Company incorporated under the Companies Act, 1956.
 - (iv) A member of any Consortium shall not bid either individually or as a member of another Consortium. Failure to comply with this requirement would result in rejection of all such bids which have been submitted by such member either individually or by the Consortium(s) of which such member is one of the constituent.
 - (v) The Consortium shall submit a Consortium Agreement, as per format at Annexure H, drafted specifically for this Project, as part of its Qualification Bid outlining the role, responsibilities and obligations of each member.

4.1.2 Technical Criteria

The Bidder (in case of a single business entity) or Lead Member of the Consortium shall meet the following criteria:

- (a) Shall be in the business of designing/manufacturing/supply of ETMs and/or handheld Point-of-sale (POS) devices.
- (b) Shall have manufacturing facility or supply arrangement with a manufacturing facility capable of manufacturing more than 1000 ETMs per month. The manufacturing facility for ETMs to be provided for this Project must have ISO 9001 or equivalent certification.
- (c) Shall have supplied at least 1000 ETMs and/or handheld Point-of-sale devices in any one calendar year over last three years.
- (d) Its proposed ETMs shall comply with the minimum specifications pertaining to the ETMs as provided in Annexure A of this RFP.

4.1.3 Financial Criteria

The Bidder (in case of a single business entity) or all members together (in case of Consortium) shall meet the following financial criteria:

- (a) Minimum net worth (NW) of INR 5 crores as on March 31, 2009 or on the basis of latest audited financial statements of the Bidder.
- (b) Minimum average annual sales turnover of INR 15 crores in the three preceding financial years on the basis of audited financial statements of the Bidder.

Bidder must submit certificates from practicing chartered accountant(s) or its/their statutory auditor(s) in support of (a) and (b) above along with supporting documents. In case, the Bidder (or Lead Member in case of Consortium) is a 100% owned subsidiary company of another company, it may use the financial capability of its parent company to meet the Financial Criteria. In such case, it will submit the financial statements of the parent company together with its own financial statements along with the necessary document in support of its relationship with its parent company. The Bidder will also submit a letter of support from its parent company to DIMTS, mentioning their unequivocal commitment to support the Bidder, both technically and financially, in discharging its services in accordance with the RFP.

5. Preparation and Submission of Proposals

5.1 Preparation of Proposals

The Bidders are required to submit their Proposal in three separate parts each sealed in a separate envelope:

Part 1 Qualification Bid: To contain details as per Annexure C bearing the identification – "Qualification Bid for Electronic Ticketing Machines and Associated Services" along with the name of the Bidder.

Part 2 Technical Bid: To contain details as per Annexure D bearing the identification – "Technical Bid for Electronic Ticketing Machines and Associated Services" along with the name of the Bidder.

Part 3 Financial Bid: To contain details as per Annexure E bearing the identification – "Financial Bid for Electronic Ticketing Machines and Associated Services" along with the name of the Bidder.

All the three envelopes along with cover letter as per Annexure B, the Bid Security in a separate envelope and the photocopy of the receipt of the payment towards the cost of RFP Document or Demand Draft towards cost of RFP Document, in case the same is downloaded from website, should be placed inside an outer envelope bearing the identification – "Proposal for Electronic Ticketing Machines and Associated Services" along with the name of the Bidder.

The Proposal shall be typed or printed in indelible ink and the Bidder shall initial each page. All the alterations, omissions, additions, or any other amendments made to the Proposal shall be initialed by the person signing the Proposal.

Each Bidder shall submit only one (1) Proposal in response to this RFP. Any Bidder, who submits more than one Proposal, will be disqualified.

5.2 Language & Currency

The Proposal and all related correspondence and documents should be written in English. Supporting documents and printed literature furnished by Bidder with the Proposal may be in any other language provided that they are accompanied by appropriate translations of the pertinent passages in English. Supporting materials, which are not translated into English, may not be considered. For the purpose of interpretation and evaluation of the Proposal, the English language translation shall prevail.

The currency for the purpose of the Proposal shall be the Indian National Rupee (INR).

5.3 Proposal Validity

Proposals submitted by the Bidders in response to this RFP shall be deemed to have a validity period of 150 days from the Due Date ("Proposal Validity Period") as provided in section 5.5.

In exceptional circumstances, prior to expiry of the original Proposal Validity Period, DIMTS may request Bidders to extend the Proposal Validity Period for a specified additional period.

A Bidder may refuse the request without forfeiting its Bid Security. A Bidder agreeing to the request will not be allowed to modify its Proposal but would be required to extend the validity of its Bid Security for the period of extension.

The Preferred Bidder shall, wherever/whenever needed, be required to extend the Proposal Validity Period till the date of execution of the Service Agreement.

5.4 Bid Security

- 5.4.1 Proposals shall be accompanied by a Bid Security for an amount of INR 25,00,000/- (Rupees Twenty Five Lakhs only) for the Project. No relaxation of any kind in Bid Security shall be given to any Bidder.
- 5.4.2 The Bid Security shall remain valid for a period of 45 days beyond the Proposal Validity Period, and would need to be extended, if so required by the DIMTS, for any extension in Proposal Validity period.
- 5.4.3 The Bid Security shall be in the form of an irrevocable Bank Guarantee issued by a Scheduled Bank in favour of "Delhi Integrated Multi-Modal Transit System Ltd.", as per the format set out in Annexure I or in the form of a demand draft issued by a Scheduled Bank in India, drawn in favour of Delhi Integrated Multi-Modal Transit System Ltd. and payable in Delhi. DIMTS shall not be liable to pay any interest on the Bid Security and the same shall be interest free. For the avoidance of any doubt, 'Scheduled Bank' shall mean a Bank as defined under Section 2(e) of the Reserve Bank of India Act, 1934.

- 5.4.4 The Bid Security shall be returned to unsuccessful Bidders upon signing of the Service Agreement with the Preferred Bidder or within 30 days from the date of expiry of the Bid Security, whichever is earlier.
- 5.4.5 The Bid Security, submitted by the Preferred Bidder, shall be released upon signing of the Service Agreement with the Preferred Bidder and upon it furnishing a Performance Security for an amount mentioned in the Key Service Agreement Terms.
- 5.4.6 The Bid Security shall be liable to be forfeited as mutually agreed genuine pre-estimated compensation and damages to DIMTS in the following cases:
 - a. If the Bidder modifies or withdraws its Proposal during the interval between the Due Date and expiration of the Proposal Validity Period; or
 - b. If the Bidder fails to accept the LOA within the stipulated time period as specified in LOA; or
 - c. In case the Preferred Bidder fails to furnish the Performance Security timely and/or sign the Service Agreement within the specified time limit or any extension thereof; or
 - d. If any information or document furnished by the Bidder turns out to be misleading or untrue in any material respect; or
 - e. If a Bidder engages in a corrupt, fraudulent, coercive, undesirable or restrictive practice in relation to the bid process.

5.5 Submission of Proposals

Proposal prepared in accordance with section 5.1 above should reach not later than **June 21, 2010, 1500 Hrs** ("**Due Date**") at the following address:

Mr. Ajay Gupta

Delhi Integrated Multi-modal Transit System Limited

First Floor, Maharana Pratap ISBT Building,

Kashmere Gate

Delhi 110 006

Tel: 011 4309 0162 (Dir)

Fax: 011-2386 0966

Email: ajay.qupta@dimts.in

5.6 Proposal Preparation Cost and Due Diligence

- 5.6.1 The Bidder shall be responsible and shall pay for all of the costs associated with the preparation of its Proposal and its participation in the bidding process. DIMTS shall not be responsible or in any manner be liable for such costs, regardless of the conduct or outcome of the bidding process.
- 5.6.2 By submission of the Proposal, the Bidder shall be deemed to have:

- a. Made a complete and careful examination of terms & conditions/requirements, and other information set forth in this RFP document; and
- b. received all such relevant information as it has requested from DIMTS; and
- c. made a complete and careful examination of the various aspects of the Project; and
- d. all other matters that might affect the Bidder's performance under the terms of this RFP document.

DIMTS shall not be liable for any mistake, error or omission on the part of the Bidder in respect of the above or otherwise.

5.7 Cost of RFP Document

The RFP Document is priced at Rupees (INR) 10,000 (Rupees Ten Thousand only) payable in the form of a Demand Draft drawn in favour of 'Delhi Integrated Multi-Modal Transit System Limited' payable at Delhi. The Bidders who are downloading the RFP Document from website shall deposit the said cost of the RFP Document (in the form of a Demand Draft only) along with the Proposal. In the event of failure to deposit the requisite cost by such Bidder, his Proposal shall not be processed further. The Bidders, who have purchased the original RFP Document from the office of DIMTS, need not pay the cost again. Such Bidders can collect a copy of amended RFP from the office of DIMTS free of cost, on showing the receipt of previous payment.

6. Opening and Evaluation of Proposals

6.1 Opening of the Proposals

The Proposals (only outer envelope and Bid Security) shall be opened on the Due Date at 15:30 Hrs, at the venue specified in Clause 5.5, in the presence of Bidders' representatives, who choose to attend. Bidders' representatives attending the Proposal opening shall bring an authorisation letter from the Bidder and register to evidence their presence. The names of the Bidders and details of Bid Security shall be announced at the time of opening of the Proposals.

6.2 Tests of Responsiveness

- 6.2.1 Prior to evaluation of Proposals, DIMTS will determine whether each Proposal is responsive to the requirements of the RFP. A Proposal shall be considered responsive if the Proposal:
 - (a) is received before 1500 Hrs on the Due Date.
 - (b) is signed, sealed and marked as stipulated in section 5.1.

- (c) contains the information and documents as requested in the RFP along with the Bid Security as specified.
- (d) contains information in formats specified in the RFP.
- (e) mentions the validity period as set out in section 5.3.
- (f) it provides the information in reasonable detail. ("Reasonable Detail" means that, but for minor deviations, the information can be reviewed and evaluated by DIMTS). DIMTS reserves the right to determine whether the information has been provided in reasonable detail.
- (g) there are no inconsistencies between the Proposal and the supporting documents.
- 6.2.2 A Proposal that is substantially responsive is one that conforms to the preceding requirements without material deviation or reservation. A material deviation or reservation is one which,
 - (a) affects in any substantial way, the scope, quality, or performance of the Project, or
 - (b) limits in any substantial way, inconsistent with the RFP document, DIMTS' rights or the Bidder's obligations under the Service Agreement and/or Support Agreement, or
 - (c) unfairly affects the competitive position of other Bidders presenting substantially responsive bids.
- 6.2.3 DIMTS reserves the right to reject any Proposal, at any stage, which is not substantially responsive and no request for alteration, modification, substitution or withdrawal shall be entertained by DIMTS in respect of such Proposals.

6.3 Clarifications

To assist in the process of evaluation of Proposals, DIMTS may, at its sole discretion, ask any Bidder for clarification on its Proposal or substantiation of any of the submissions made by the Bidder. The request for such clarification or substantiation and the response shall be in writing or by facsimile/e-mail. No material change in the substance of the Proposal would be permitted by way of such clarification/substantiation.

6.4 Evaluation of the Qualification Bids

In the first stage, the Qualification Bids of the Bidders shall be evaluated for assessing the Bidder's technical and financial capabilities vis-à-vis the stipulated Eligibility Criteria in section 4 of this RFP.

6.5 Evaluation of the Technical Bids

6.5.1 In the second stage, the Technical Bids of only those Bidders who have emerged qualified shall be evaluated in accordance with the following:

SI	Evaluation Elements		
1	Proposed Electronic Ticketing Machines - Specifications and		
	Features		
(i)	RAM size MB		
	Flash Memory size MB		
	Expandable Memory size (maximum) GB	18	
	Battery capacity mAH		
	Battery life nos. recharge cycles		
	Recharge time hrs. (from empty to full charge)		
(ii)	Display X pixels		
	Keypad – keys nos., layout of keys, other keypad related features		
	ETM Design – shape conducive for ease of handling, appearance,	18	
	colour		
	ETM Weight with battery and paper roll gms.		
	Design and material of shoulder case		
(iii)	Thermal Printer – printing speed mm/sec,		
	Paper out sensor – yes/no	4	
	Maximum length of thermal paper roll (55 GSM) meter that		
	can be used on the ETMs		
(iv)	Certifications of ETMs (EMV Level 1 & 2, PCI-PED, any other related		
	certification)		
	Robustness of ETM – IP rating		
	Any other robustness related features	10	
	Types of contactless smart cards supported over and above the		
	minimum requirement		
	GPRS class		
	MTBF		
2	Operation and Maintenance Plan	20	
(i)	Organization & key personnel's profile – at depots for operation,	3	
	maintenance & support and at corporate level related to Project		
(ii)	Overall Project implementation and rollout plan detailing ETM	4	
	manufacturing/ sourcing and other key activities, their inter-		
	dependencies, milestones, resource deployment, timelines and		
	relevant details		
(iii)	Operational plan for a depot clearly detailing how the depot team	10	
	will function to ensure smooth operation (assume 100 buses). The		
	plan to cover elements such as no. of ETMs including spares, spare		
	batteries, manpower, charging of ETMs, processes and workflow,		

SI	Evaluation Elements	Maximum Marks
	etc. Include details, drawings, photographs of the charging infrastructure proposed to be created at depots.	
(iv)	Complaint registering, resolution and escalation process	
3	Similar Experience	
(i)	ETMs deployed/supplied in STUs since April 1, 2007 – name of STU, no. of ETMs supplied and supported, period of contract, type of operation (city/ inter-city), outright purchase/BOT, etc. and/or Similar POS devices deployed/supplied in other applications since April 1, 2007 – name of client, details of application, no. of devices supplied and supported, period of contract, etc. - Up to 1500 ETMs/POS devices deployed/supplied – 15 marks - More than 1500 and up to 3000 ETMs/POS devices deployed/ supplied – 22 marks - More than 3000 ETMs/POS devices deployed/supplied – 30 marks	
	Total Maximum Marks	

Note: Enclose supporting documents and write-ups for each detail.

- 6.5.2 Bidders who emerge qualified based on the evaluation of their Qualification Bids would be called upon by DIMTS to make presentation of their Technical Bid and demonstration of the features and capabilities of their ETM, at the address provided in section 5.5 of the RFP, for which the date and time shall be communicated to such Bidders.
- 6.5.3 The marks secured based on evaluation of the Technical Bid as outlined above shall be the technical score of the Bidder ("**Technical Score**"). Only those Bidders who have secured Technical Score of 75 marks or above shall be considered for further evaluation including evaluation of their Financial Bids.

6.6 Opening of the Financial Bids

6.6.1 The Financial Bids of only those Bidders, who have secured Technical Score of 75 marks or above, shall be opened on the date and time to be intimated to the technically qualified Bidders, at the venue specified in section 5.5, in the presence of Bidders' representatives, who choose to attend. Bidders' representatives attending the Proposal opening shall bring an authorisation letter from the Bidder and register to evidence their presence. The names of the Bidders and quoted price shall be announced at the time of opening of Financial Bids.

6.7 Evaluation of the Financial Bid

The Financial Bids shall be evaluated on the basis of Monthly ETM Charge quoted by the Bidder.

6.8 Preferred Bidder

The Bidder who has quoted the least Monthly ETM Charge, for performing the services as defined in this RFP, shall be considered by DIMTS to be the Preferred Bidder.

DIMTS will notify the Preferred Bidder by way of a Letter of Award (LOA) that the Proposal has been accepted.

6.9 Acknowledgement of Letter of Award (LOA) and Execution of Service Agreement and Support Agreement

Within one (1) week from the date of issue of the LOA by DIMTS, the Preferred Bidder shall acknowledge the LOA. The Preferred Bidder shall execute the Service Agreement as per Annexure K-1 within two (2) weeks of the date of issue of LOA or any extension thereof as may be decided by DIMTS and simultaneously furnish Performance Security. The Preferred Bidder, in case DIMTS so desires, may also be required to enter into a Support Agreement with DIMTS and Transport Department/DTC, as per Annexure K-2.

7. Pre-Proposal Meeting

- 7.1 To clarify and discuss issues with respect to the Project and the RFP, a Pre-Proposal meeting was held **on May 17, 2010 at 11:30 Hrs** at the address provided in section 5.5 of the RFP.
- 7.2 Based on inputs provided by Bidders and discussions, the original RFP is hereby amended and issued as this amended RFP.
- 7.3 The Proposals to be submitted by the Bidders would have to be unconditional and unqualified and the Bidders would be deemed to have accepted the terms and conditions of the amended RFP with all its contents including the Key Service and Support Agreements Terms. Any conditional Proposal shall be regarded as non-responsive and would be liable for rejection.
- 7.4 All correspondence in this regard should be addressed to and submitted at the address provided in section 5.5 of the RFP.

8. Right to Accept or Reject Proposals

- 8.1 Notwithstanding anything contained in this RFP, DIMTS reserves the right to accept or reject any Proposal and/or to annul the Bidding Process and reject all Proposals, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons therefor. Without limiting the generality of the foregoing, DIMTS reserves the right to reject any Proposal if:
 - (a) at any time, a material misrepresentation and/or concealment of any facts / materials is made or discovered, or
 - (b) the Bidder does not respond promptly and diligently to requests for supplemental information required for the evaluation of the Proposal.

ANNEXURES TO RFP

Annexure A – Minimum Technical Specifications – Electronic Ticketing Machines

SI. No.	Parameter	Requirement
1	Processor	Minimum 32 bit ARM processor
2	OS	Linux or Win CE or a non-standard OS. The OS should meet the following requirements: (i) The OS should be a stable and proven OS, operating on minimum 1,000 devices, for last more than 1 year. (ii) The Vendor will undertake to provide support for OS throughout the Contract Period including any updates, upgrades, etc., on free-of-cost basis. (iii) The OS should have strong functionalities having at least the following features: a. Capability of multi tasking i.e. forking a child process from main process. b. Capability of multithreading application c. Seizing of a single resource by more than one competing process d. Locking of resource (GPRS modem, file) to prevent
		seizing by another process in case one process is using it. e. Unlocking of resource to allow another process the usage of the resource f. Scheduling to allow the usage of single resource by competing processes. g. Forced unlocking of resource if a process seized it and crashed without freeing it. h. Capability of upgrading application and configuration data over the air, directly from DIMTS' server. (iv) In case, any specific software/application is required to programme/configure/manage the devices, the Vendor will have to provide the same free-of-cost.
3	RAM	Minimum 8 MB
4	FLASH Memory	Minimum 16 MB Capable of storing minimum 800 routes details, with 100 stages each

SI. No.	Parameter	Requirement
		Capable of storing minimum 5 days transaction data (5000 transactions)
5	Extendable Memory	SD/Micro SD card interface (minimum 1 GB)
6	Display	Graphic LCD minimum 128 x 64 Pixels Backlight Capable of displaying graphic images 20 characters by 4 lines and 20 characters by 8 lines
7	Keypad	Minimum 18 keys (Any combination of keys on keypad and soft touch keys on a touch screen display, subject to minimum 14 keys on keypad) Keys in different colours for different functions Large Enter key (minimum 1.5 times the standard keys) in different colour
8	Thermal Printer	57 mm, Minimum 50 mm/sec, easy paper roll loading Should support minimum 12 meter length thermal paper roll (55 GSM) Transparent paper cover Paper cover open sensor
9	SAM slots	Minimum 2 SAM slots
10	RTC	Inbuilt RTC with battery backup
11	GPRS	Yes
12	Battery	Li-ion/Li-polymer, minimum 1800 mAH Over-charge/ over-voltage/ over-current protection Minimum 1000 ticket printing and minimum 14 hours operation in a single charge Quick recharge
13	Weight	Max. 500 g
14	Communication Ports	USB & RS232 – 1 each
15	Security	Should support encryption standards including 3DES and AES for smart card reading/writing as well as communication with Central System
16	Certification	Desirable: EMV Level 1 & 2, PCI-PED
17	Operating temp.	5 – 50 degree C
18	Contactless Smart Card Reader	Inbuilt Contactless Smart Card reader – ISO 14443 Type A & B, entire Mifare family

SI. No.	Parameter	Requirement	
19	Indications on display	Battery charge status	
		GSM Signal strength	
20	Audio	Beeps on key-press and transactions	
21	Others	Remote Administration	
		Over the air upgrade of firmware, application, configuration parameters, master data, etc. should be possible.	
22	Accessories	Shoulder carry bag	
		AC charger (working from 160 V to 250 V)	
		Memory Card – minimum 1 GB	
23	LEDs	Green and Red	

Annexure A-1 – Minimum Requirements from ETM SDK

The Vendor will be required to provide complete Software Development Kit (SDK) of the ETM to enable DIMTS to develop application on the top of ETMs and various sub-components thereof. The SDK should contain APIs, commands and functions to programme smart card reader, thermal printer, display, GPRS, etc.

The SDK should include complete documentation, functions/libraries, sample codes to support the following capabilities, at the minimum:

1. Smart Cards Capabilities:

- (i) The ETM SDK should have APIs to support all types of smart cards according to the ISO 7816 and 14443-A and B standards.
- (ii) The SDK should have APIs for Mifare family Cards (including Mifare Ultralight, Mifare Classic, Mifare Plus, Desfire, etc.), including the support for the following:
 - a. Anti collision and detection of smart cards.
 - b. Diversified key generation and authentication for all Mifare family cards.
 - c. Secure storage (loading) of Keys for different type of card on ETM. Keys can be of variable length depending on the Card Type.
 - d. SAM for Mifare and Desfire cards. Authentication, Key Diversification etc should be implemented using SAM also.
 - e. All Mifare functions, including the APDU level commands for the following functions:
 - i. Read
 - ii. Write
 - iii. Increment
 - iv. Decrement
 - v. Restore
 - vi. Transfer
 - vii. Authenticate
 - viii. Load Key
 - ix. Any other standard functions for DESfire or any other Mifare card.
- (iii) The SDK should contain basic functions to execute APDU level commands including standard ISO 7816 and ISO 14443 commands.
- (iv) The SDK should have APIs to control and manage SAMs, including the following:

- a. The SDK should contain basic functions to execute APDU level commands for SAM, including standard ISO 7816 commands.
- b. The SDK should contain functions to connect to various SAM slots and the User Cards simultaneously.
- (v) The SDK should have software libraries for various standard algorithms, including standard crypto software functions like:
 - i. DES
 - ii. 3-DES
 - iii. AES
 - iv. MAC Generation
 - v. Hash Functions SHA-1 etc
 - vi. CRC generation
 - vii. Any other standard functions.

2. Communication Device (RS232, USB, GPRS modem etc) APIs

The SDK should include complete documentation, functions/libraries, sample codes to support all of the capabilities listed below:

- (i) APIs to initialize and configure communication parameters.
- (ii) APIs to control the communication activities.
- (iii) APIs required for GPRS modem handling (including complete GSM/GPRS AT command Set).
- (iv) APIs required for managing/ configuring the TCP-IP communication parameters in ETM.
- (v) APIs required for performing client-server communication using GPRS module.

3. Inter-process communication (IPC) related APIs

(i) APIs to program standard IPCs like pipes (FIFO), message queues, semaphores, shared memory, and sockets.

4. Multitasking related APIs

- (i) APIs to manage and control multiprocessing and processer management.
- (ii) APIs should support process creation, task switching and task scheduling/management.

5. Multithreading related APIs

- (i) APIs to implement standard multithreading and thread scheduling/management using semaphores and mutex.
- (ii) Desirable: SDK should have libraries for standard POSIX compliant multithreading (As per POSIX 1003.1C standard libraries).

6. Power (Battery) Management APIs

- (i) APIs to handle battery health status, charging status, current, min and max values of battery charge, backlight control, power on/off key control.
- (ii) APIs to control unit shutdown, restart and sleep mode functions.
- (iii) APIs to control power saving mode.

7. Internal Printer Management APIs

- APIs to initialize and configure parameters for printer device, including printer speed, font, etc.
- (ii) APIs to check and control the status of printing activities and paper cover open sensor.
- (iii) APIs to check status and error conditions of printer

8. File System Management APIs

- (i) APIs to handle standard file and directory operations.
- (ii) APIs to provide file locking/ unlocking in a multitasking environment.
- (iii) APIs to control file and directories attributes.
- (iv) APIs to check the available/remaining memory (RAM/FLASH/External memory) for file system operations.
- (v) APIs to handle external memory module for ETM device.

9. Clock/ Timer Management APIs

- (i) APIs to get/set the date/time information for RTC clock.
- (ii) APIs to read real-time date/time information.
- (iii) APIs to set/reset various application timers.
- (iv) APIs to convert/switch among various date/time formats.

10. Beeper/ LEDs/ Buzzer Management APIs

- (i) APIs to enable/disable/configure Beeper/Buzzer, including beep duration, interval, etc.
- (ii) APIs to handle various events/alarms/error tones.
- (iii) APIs to control the LEDs, including on, off, glow time, etc. and colour control for different colours in case of multi-colour LED.

11. Environment Variables related APIs

(i) APIs to access the environment variables.

12. User Interface (UI) Management Related APIs

- (i) APIs to handle various UI events.
- (ii) APIs related to keypad events.
- (iii) APIs related to display screen.
- (iv) APIs related to multi-function keys.
- (v) APIs related to provide hotkey functionality.
- (vi) APIs related to font/graphics designing and management.
- (vii) APIs related to GUI Screens/ Windows designing.
- (viii) APIs to display battery status, GSM signal status, etc.

13. Other APIs

- (i) APIs to check OS and firmware version along with the driver components provided.
- (ii) APIs to get the manufacture's serial number assigned.
- (iii) APIs to check the Hardware modules and their status (peripherals, communication devices, internal printer, battery etc) present in ETM device.
- (iv) APIs to check various memory modules present in ETM device, including their status, error states, etc.
- 14. The Vendor will have to provide any additional APIs, commands, functions, sample codes and technical support as may be required by DIMTS to develop the application on ETM Devices, free of cost, during the Contract Period.

Annexure B – Format for Cover Letter

Dated:

To,

The Managing Director,
Delhi Integrated Multi-modal Transit System Limited,
First Floor, Maharana Pratap ISBT Building,
Kashmere Gate
Delhi 110 006

Sub: Proposal for Electronic Ticketing Machines (ETMs) and Associated Services

Dear Sir,

With reference to your RFP document dated 7th May, 2010, as amended on 1st June, 2010, we, having examined the amended RFP document dated 1st June, 2010 and understood its contents, hereby submit our Proposal for the aforesaid project. The Proposal is unconditional and unqualified.

- 2. We acknowledge that DIMTS will be relying on the information provided in the Proposal and the documents accompanying such Proposal for the aforesaid Project, and we certify that all information provided in the Proposal and in Annexures therto is true and correct; nothing has been omitted which renders such information misleading; and all documents accompanying such Proposal are originals and/or or true copies of their respective originals.
- 3. We shall make available to DIMTS any additional information it may find necessary or require to supplement or authenticate the Proposal.
- 4. We acknowledge the right of DIMTS to reject our Proposal without assigning any reason or otherwise and hereby waive, to the fullest extent permitted by applicable law, our right to challenge the same on any account whatsoever.
- 5. We declare that:

We have examined and have no reservations to the RFP document, including any a.

Addendum issued by DIMTS;

b. We have not directly or indirectly or through an agent engaged or indulged in any corrupt

practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, in

respect of the Bidding Process.

6. We understand that you may cancel the Bidding Process at any time and that you are not

bound to accept any Proposal that you may receive.

7. We believe that we/ our Consortium satisfy the Eligibility Criteria and meet all the

requirements as specified in the RFP document and are qualified to submit a Bid.

8. We declare that we/ any Member of the Consortium, or our/ its Associates are not a

Member of a/ any other Consortium applying for pre-qualification and is not bidding in individual

capacity.

9. We undertake that in case due to any change in facts or circumstances during the Bidding

Process, we are attracted by the provisions of disqualification in terms of the provisions of this RFP,

we shall intimate DIMTS of the same immediately.

10. We hereby irrevocably waive any right or remedy which we may have at any stage at law

or howsoever otherwise arising to challenge or question any decision taken by DIMTS in connection with the selection of the Preferred Bidder, or in connection with the selection/ Bidding

Process itself, in respect of the above mentioned Project and the terms and implementation

thereof.

We confirm that the Proposal submitted by us shall be valid for the period of 150 (One 11.

hundred and Fifty) days from the date of opening of Proposals prescribed by DIMTS.

12. We agree and undertake to abide by all the terms and conditions of the RFP document.

In witness thereof, we submit this Proposal under and in accordance with the terms of the RFP

document.

Yours faithfully,

(Signature, name and designation of the Authorised Signatory) Date:

Place: Name and seal of the Bidder/ Lead Member

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Annexure C - Contents of Qualification Bid

1. Preparation of Qualification Bid

- 1.1. The Qualification Bid needs to contain the information / documents listed hereunder in a sealed envelope bearing the identification "Qualification Bid for Electronic Ticketing Machines and Associated Services" along with the name of the Bidder:
 - (A) Details of the Bidder
 - (i) Name
 - (ii) Legal Status (Company/ Proprietorship/ Partnership/ Limited Liability Partnership (LLP))
 - (iii) Country of incorporation
 - (iv) Date of incorporation and/ or commencement of business
 - (v) Shareholding details (give names of all shareholders holding more than 5% shares and their shareholding) [in case of Proprietorship, give name of proprietor, in case of Partnership or LLP, give names and stakes of all partners]
 - (vi) Address of corporate headquarters (If corporate headquarters is outside India, give address of office in India)
 - (vii) Details of the manufacturing or sourcing facilities
 - (viii) Certification of (a) bidder, (b) manufacturing or sourcing facility and (c) ETMs/devices (ISO, IP etc.)
 - (ix) Brief description of the Bidder including details of its main lines of business
 - (x) Website URL
 - (xi) Particulars of the Authorized Signatory of the Bidder:
 - (a) Name:
 - (b) Designation:
 - (c) Address:
 - (d) Phone Number:
 - (e) Fax Number:
 - (f) Email Address:
 - (xii) In case of the Bidder being a Consortium:
 - (a) The information above [(i) to (x)] should be provided for all the members of the Consortium

(b) Information regarding the role of each member of the Consortium should be provided as per table below:

SI.	Name of Bidder / Consortium Member	Role
1		
2		

(B) Documents in support of compliance of the Bidder with regard to Technical Criteria / other requirements (section 4.1.1 & 4.1.2 of the RFP):

SI.	RFP Section	Supporting Documents
1	4.1.1	Copy of the Certificate of Incorporation/registration
		Power of Attorney:
		 Power of Attorney (POA) in original authorizing the person signing the Proposal for and on behalf of the Bidder / Lead Member (as per format at Annexure F)
		o Power of Attorney (POA) in original authorizing the Lead Member of the Consortium to deal with DIMTS for and behalf of the Consortium (as per format at Annexure G)
		If the Bidder is a Consortium, Consortium Agreement, in original, outlining the role, responsibilities and obligations of each member (as per format at Annexure H)
2	4.1.2 (a)	Copy of the Memorandum and Articles of Association
		Copy of the Certificate for Commencement of Business, as applicable
3	4.1.2 (b)	Details evidencing capacity of manufacturing facility (own/contract) for the past one year (such as excise gate pass or any equivalent document)
		Copy of the relevant certificate(s)
		In case of a tie-up with an ETM manufacturer, letter of tie-up arrangement along with above details in respect of the ETM manufacturer.
4	4.1.2 (c)	Copy of work order/purchase order/contract and copy of completion certificate from client

SI.	RFP Section	Supporting Documents
5	4.1.2 (d)	A compliance statement giving actual specifications of the proposed ETM, against all parameters listed in Annexure A.

(C) Documents in support of compliance of the Bidder with regard to Financial Criteria (section 4.1.3 of the RFP):

SI.	RFP Section	Supporting Documents
1	4.1.3 (a)	Audited Annual Report(s)
		Certificate(s) from the chartered accountant/ statutory auditor
2	4.1.3 (b)	Audited Annual Report(s) Cost:(icosts(s) from the selection of the s
		 Certificate(s) from the chartered accountant/ statutory auditor

(D) Any other details of the past experience (other than those provided as per 1.1 (B) above) of having executed similar projects along with the certificates in support of the same.

Annexure D – Contents of Technical Bid

The Technical Bid needs to contain the information / documents listed hereunder in a sealed envelope bearing the identification – "**Technical Bid for Electronic Ticketing Machines and Associated Services**" along with the name of the Bidder:

SI	Description	
1	Proposed Electronic Ticketing Machines – Specifications and Features	
(i)	RAM size MB Flash Memory size MB	
	Expandable Memory size (maximum) GB	
	Battery capacity mAH	
	Battery life nos. recharge cycles	
(1)	Recharge time hrs. (from empty to full charge)	
(ii)	Display X pixels	
	Keypad – keys nos., layout of keys, other keypad related features ETM Design – shape conducive for ease of handling, appearance, colour	
	ETM Weight with battery and paper roll gms.	
	Design and material of shoulder case	
(:::)		
(iii)	Thermal Printer – printing speed mm/sec,	
	Paper out sensor – yes/no Maximum length of thermal paper roll (55 GSM) that can be used on the ETMs	
	Thermal Paper Security features meters	
(:,)		
(iv)	Certifications of ETMs (EMV Level 1 & 2, PCI-PED, any other related certification) Robustness of ETM – IP rating	
	Any other robustness related features	
	Types of contactless smart cards supported over and above the minimum	
	requirement	
	GPRS class	
	MTBF	
2	Operation and Maintenance Plan	
2	Operation and Maintenance Plan	
(i)	Organization & key personnel's profile – at depots for operation, maintenance &	
	support and at corporate level related to Project	
(ii)	Overall Project implementation and rollout plan detailing ETM manufacturing/	
	sourcing and other key activities, their inter-dependencies, milestones, resource	
	deployment, timelines and relevant details	
(iii)	Operational plan for a depot clearly detailing how the depot team will function to	
	ensure smooth operation (assume 100 buses). The plan to cover elements such	
	as no. of ETMs including spares, spare batteries, manpower, charging of ETMs,	
	processes and workflow, etc. Include details, drawings, photographs of the	

SI	Description	
	charging infrastructure proposed to be created at depots.	
(iv)	Complaint registering, resolution and escalation process	
3	Similar Experience	
(i)	ETMs deployed/supplied in STUs since April 1, 2007 – name of STU, no. of ETMs supplied and supported, period of contract, type of operation (city/ inter-city), outright purchase/BOT, etc.	
	Similar POS devices deployed/supplied in other applications since April 1, 2007 – name of client, details of application, no. of devices supplied and supported, period of contract, etc.	

Notes:

- 1. Please enclose supporting documents and write-ups for each detail.
- 2. Please enclose detailed technical specifications along with brochure/datasheet of the proposed ETM, including all the parameters as per the Annexure A.

Annexure E – Financial Bid

The Financial Bid should contain the information / documents listed hereunder in a sealed envelope bearing the identification – "Financial Bid for Electronic Ticketing Machines and Associated Services" along with the name of the Bidder.

1. The Bidder shall quote Monthly ETM Charge as defined below:

"Monthly ETM Charge": The Monthly ETM Charge shall be the amount in Rupees (INR) to be paid to the ETM Vendor on per ETM per month basis, over the Contract Period. The Monthly ETM Charge shall cover all the costs related to scope of services as defined in the RFP including, but not limited to, providing ETM Devices, accessories, Depot charging infrastructure, inverters and operation and maintenance service components and one time supply of one lakh thermal paper rolls for testing purposes and pilot. The payment of Monthly ETM Charge shall start from the date of acceptance of commissioning of respective ETM. The Monthly ETM Charge shall be paid only for the ETMs commissioned, excluding ETMs provided as float by the Vendor or any spare/additional ETMs provided by the Vendor.

- 2. The Monthly ETM Charge shall be paid to ETM Vendor on monthly basis, upon completion of the month.
- 3. The Bidders are required to quote the Monthly ETM Charge **on "per ETM per month" basis** (**in INR**) in the following format:

SI	Description	Amount (in INR)
1	Monthly ETM Charge per ETM per	
	month (inclusive of all taxes)	
	In figures	
	In words	

4. The Bidders are also required to indicate the costs of various components in the table below. These costs will not be used for evaluation purposes.

SI	Description	Basic Cost (in Rs)	Tax* (in % and in Rs)	Total Cost (in Rs.)
1	Electronic Ticketing Machines (ETM)			
(a)	ETM Cost / Unit (without battery, AC Charger and shoulder carry case)			
(b)	AC Charger Cost / Unit			
(c)	Battery Cost / Unit			
(d)	Shoulder carry case Cost / Unit			

SI	Description	Basic Cost (in Rs)	Tax* (in % and in Rs)	Total Cost (in Rs.)
(e)	Memory Card Cost / Unit			
	Total			
2	Depot Infrastructure (assuming 100 buses in a depot)			
(a)	ETM Charging infrastructure Cost / ETM			
(b)	Inverter Cost per Inverter			
3	Thermal Paper Roll			
(a)	Thermal Paper Roll Cost per paper roll (12 meter, 55 GSM)			
4	Comprehensive Annual Maintenance Contract (AMC)			
(a)	AMC cost / ETM / annum			
(b)	AMC cost for Depot Infrastructure / Depot (assuming 100 ETMs and 1 Inverter) / annum			

^{*} Please specify the nature of tax. If more than one tax is applicable, furnish details in respect of each of the taxes

Annexure F – Format for Power of Attorney for Signing of Proposal

POWER OF ATTORNEY

(On a Rs. 100 Stamp Paper duly attested by Notary Public)

registered office) do hereby constitute, appoint (name and residential address) who is present	and authorise Mr / Msly employed with us and holding the position of lo in our name and on our behalf, all such acts,
Ticketing Machines and Associated Services ("P Modal Transit System Ltd. (hereinafter referred t	ith or incidental to our Proposal for Electronic roject") for submission to Delhi Integrated Multiso as DIMTS) for consideration of DIMTS, including providing information/responses in all matters in
	ngs lawfully done by our said attorney pursuant to nd things done by our aforesaid attorney shall and s.
	Dated this the Day of2010
	For(Name and designation of the person(s) signing on behalf of the Bidder)
AcceptedSignature	
(Name, Title and Address of the Attorney)	
Date:	
Note:	

- 1. 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 executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.
- 2. 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 favour of the Person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.

- 3. In case the Proposal is signed by an authorised Director, a certified copy of the appropriate resolution/ document conveying such authority may be enclosed in lieu of the Power of Attorney.
- 4. This form is to be used by the Bidder (or Lead Member in case of Consortium) for authorising the person signing the Proposal.

Annexure G – Format for Power of Attorney for Designating Lead Member of Consortium

POWER OF ATTORNEY

(On a Rs. 100 Stamp Paper duly attested by Notary Public)

Whereas, Delhi Integrated Multi-Modal Transit System Ltd. ("DIMTS") has invited proposals from interested parties for Electronic Ticketing Machines and Associated Services ("Project").
Whereas,
Whereas, it is necessary for the Members of the Consortium to designate one of them as the Lead Member with all necessary power and authority to do for and on behalf of the Consortium, all acts, deeds and things as may be necessary in connection with the Consortium's Proposal for the Project and its execution.
NOW THIS POWER OF ATTORNEY WITNESSETH THAT;
We, M/s and M/s (the respective names and addresses of the registered offices) do hereby designate M/s being one of the members of the Consortium, as the Lead Member of the Consortium, to do on behalf of the Consortium, all or any of the acts, deeds or things necessary or incidental to the Consortium's Proposal for the Project, including submission of Proposal, participating in conferences, responding to queries, submission of information/ documents, signing of the Service Agreement and Support Agreement for and on behalf of the consortium in the event of consortium being awarded the Project and generally to represent the Consortium in all its dealings with DIMTS, Transport Department/DTC, any other Government Body or any person, in connection with the Project until culmination of the process of bidding and thereafter during the Contract Period.
We hereby agree to ratify all acts, deeds and things lawfully done by the Lead Member and 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/Consortium.
Dated this theDay of 2010
(Executants)
(TO BE EXECUTED BY ALL MEMBERS OF THE CONSORTIUM)

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Note:

- 1. 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 executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure (for a body corporate).
- 2. Also, where required, the executants(s) should submit for verification the extract of the charter documents and documents such as a resolution / power of attorney in favour of the Person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.
- 3. This form is to be used by the Consortium members to authorise the Lead Member.

Annexure H – Format for Consortium Agreement

Consortium Agreement

(To be executed by and between the Consortium Members on Non Judicial Stamp Paper of Rs. 100)

	S AGREEMENT is executed at on this day of 2010 between, a Company registered under the Companies Act 1956 and having its registered Office
	(hereinafter referred to as "the Party of the First Part") and, a
	<legal status=""> and having its registered office at (hereinafter</legal>
refe	rred to as "the Party of the Second Part")
Wŀ	EREAS
A.	Both the Parties of the First Part and Second Part are entitled to enter into joint venture/partnership with any person or persons including a company for carrying on the business authorised by their respective Memorandum of Association/Charter Document.
B.	The Parties hereto propose to form a Consortium for participating in the bidding process relating to Electronic Ticketing Machines and Associated Services ("Project") by pooling together their resources and expertise.
C.	If the Parties hereto succeed and are awarded the Project, they together propose to implement the Project.
D.	The Parties hereto are desirous of recording the broad terms of their understanding as set out here below:
NO	W IT IS AGREED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:-
1.	shall be the Lead Member of the Consortium for the purpose of the bidding and implementation for the Project and for all the purposes of the Project thereafter as its true and lawful Attorney to do and execute all or any of the following acts, deeds and things for the Consortium in its name and on its behalf, that is to say:
	(a) To act as the Lead Member of the Consortium for all the purposes of the Project;
	(b) In such capacity, to act as the Consortium's official representative for submitting the Proposal and other required information including the Technical and Financial Bid for the Project and other relevant documents in connection therewith.
	(c) To sign all the necessary documents for the Proposal, including offers, papers, testimonials statements undertakings applications representations and

correspondence necessary and proper for the purpose aforesaid;

- (d) To tender documents, receive and make inquiries, make the necessary corrections and clarifications to all the documents, as may be necessary;
- (e) To represent the Consortium at meetings, discussions, negotiations and presentations to DIMTS, their advisors and other Project related entities;
- (f) To receive notices, instructions and information for and on behalf of the Consortium;
- (g) To sign the Service Agreement and Support Agreement for and on behalf of the Consortium;
- (h) To do all such acts, deeds and things in the name and on behalf of the Consortium as necessary for the purpose aforesaid.
- 2. In the event the Parties hereto eventually succeed in the RFP process, the Lead Member will sign the Service Agreement and Support Agreement for and on behalf of the Consortium and together with the other consortium member execute the Project in accordance with terms and conditions of this Agreement, RFP document, the Service Agreement and Support Agreement.
- 3. Any change in composition of the Consortium shall be as per the provisions contained in the Service Agreement and/or Support Agreement.
- 4. The roles and responsibilities of the Members of the Consortiums shall be as follow:
 - (a) The Party of the First Part (Lead Member) shall be responsible for: (i)
 - (ii)
 - (iii)
 - (b) The Party of the Second Part shall be responsible for:
 - (i)
 - (ii)
 - (iii)
 - (c) Each of the Parties shall be liable and responsible jointly and severally for:
 - (i) Compliance of all statutory requirements as may be applicable in respect of the Project.
 - (ii) Contribute to the Project all of its management and business experience, expertise, competence and acumen for the success of the Project.
- 5. The responsibility of all the members of the Consortium shall be joint and several at every stage of implementation of the Project.
- 6. In case the Project is awarded to the Consortium, the Consortium will carry out all the responsibilities and will comply with all the terms and conditions of the Service Agreement and Support Agreement.

7.	Nothing in this Agreement shall be construed to prevent or disable any Party hereto to carry
	on any business on their own in terms of their respective Memorandum of Association.

IN WITNESS WHEREOF the parties have put their respective hands the day and year first hereinabove written.

Signed and delivered for and on behalf of the withinnamed M/sby its Director,	
duly authorised in the presence of	
Signed and delivered for and on behalf of the withinnamed M/sby its Director/Proprietor/Partner,	
duly authorised in the presence of	,

Annexure I – Format of Bank Guarantee for Bid Security (To be executed on Non Judicial Stamp Paper of Rs. 100) KNOW ALL MEN by these present that we ______of _____of _____(Name and address of Bank) having our registered office at _____(hereinafter called "the bank") are bound unto Delhi Integrated Multi-Modal Transit System Ltd. (hereinafter called "the Owner") in the sum of Rs. _____ (Rupees ____ only) for which payment truly to be made to the said Owner, the Bank hereby binds itself, its successors and assigns by these present. Whereas...... (NAME OF BIDDER) has submitted its bid dated...... (date of submission of bid) for Electronic Ticketing Machines and Associated Services in terms of the Owner's RFP Due on ------ issued by Delhi Integrated Multi-Modal Transit System Ltd., (hereinafter called "the Bid"). AND WHEREAS the Bidder is required to furnish a Bank Guarantee for the sum of Rs. 25,00,000 (Rs. Twenty Five Lakhs only). AND WHEREAS __(Name of Bank) have, at the request of the Bidder, agreed to give this guarantee as hereinafter contained without demur. We further agree as follows: (a) That the Owner may without affecting this guarantee grant time of or 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. That the guarantee hereinbefore contained shall not be affected by any change in the (b) constitution of our Bank or in the constitution of the Bidder. That any account settled between the Owner and the Bidder shall be conclusive evidence (c) 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:
 - (i) the Bidder, in case his bid is accepted by the Owner, executes a Service Agreement after furnishing the Performance Security as per the provisions of the RFP; or
 - (ii) 195 (One hundred ninety five) 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.

- 2. The Conditions on this obligation are:
 - (a) If the Bidder modifies or withdraws its Proposal during the interval between the Due Date and expiration of the Proposal Validity Period; or
 - (b) If the Bidder fails to accept the LOA within the stipulated time period as specified in LOA; or
 - (c) In case the Preferred Bidder fails to furnish the Performance Security timely and/or sign the Project Agreement within the specified time limit or any extension thereof; or
 - (d) If any information or document furnished by the Bidder turns out to be misleading or untrue in any material respect; or
 - (e) If a Bidder engages in a corrupt, fraudulent, coercive, undesirable or restrictive practice in relation to the bid process.

We undertake 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 owning to the occurrence of any one or more of the above conditions mentioned above, specifying the occurred condition or conditions.

SIGNATURE OF	
AUTHORISED OFFICIAL OF THE BA	ANK
SIGNATURE OF THE WITNESS	NAME OF OFFICIAL
	DESIGNATION
NAME OF THE WITNESS	
ADDRESS OF THE WITNESS	STAMP/SEAL OF THE BANK

Annexure J – Standards of Performance

1. The payment to the Preferred Bidder ("**ETM Vendor**") shall be performance linked such that Default Charges would be levied upon, when the performance is below the Standards of Performance provided herein.

- 2. ETM Vendor shall ensure minimum threshold, as per the clause 3 on monthly basis ("Standards of Performance").
- 3. In case the Standards of Performance are not achieved in respect of certain ETMs, then the following deductions ("**Default Charges**") may be made by DIMTS from payment to the ETM Vendor in respect of such ETMs:

SI	Parameter	Threshold	Conditions	Default Charges
1	ETM Not available for Issue.	Zero Incidents in a month	ETM units can be considered as not available for issue even if ETM units available in stock but not in working conditions.	Default charge equal to 5% of the Monthly ETM Charge for the ETM not available per day.
2	ETM not operational during duty hours	Zero Incidents in a month	ETM units can be considered as non-operational on duty, when tickets could not be issued through ETM, under these conditions: a. Any defect other than due to mishandling/ wrong operation by conductor b. Battery discharged c. Paper jam	Default charge equal to 3% of the Monthly ETM Charge for the ETM not operational per day.
3	Any other defect in ETM, affecting its operation	Zero Incidents in a month	ETM units can be considered as defective, if tickets could be issued through ETM but any one or more of its other desired operations is affected (e.g. the ETM not able to communicate with the Central System due to a defect in ETM, some of the keys of ETM not working, etc.)	Default charge equal to 1% of the Monthly ETM Charge for the defective ETM per day.

Annexure K-1 – Key Service Agreement Terms

SL	Parameter	Description		
1.	Parties	Preferred Bidder ("ETM Vendor")		
		DIMTS		
2.	Contract Period	Start Date – date of issue of Letter of Award		
		 End Date - 5 Years from the date of acceptance of commissioning of first ETM 		
		 Extension for another 5 years on same terms at the discretion of DIMTS 		
3.	Scope of Services of the ETM Vendor	As per RFP		
4.	Payment	As per RFP and Proposal		
		Subject to deductions of Default Charges		
5.	Performance Security	• ETM Vendor to provide Performance Security in the form of Bank Guarantee to DIMTS, which shall be valid from the date of signing of Service Agreement and up to 6 months beyond the end of Contract Period.		
		• Amount – Rs 50 Lakhs for up to 5000 ETMs. For more than 5000 ETMs, additional Rs 5 lakhs per 500 ETMs or part thereof		
		In case of Termination due to ETM Vendor's event of default, the ETM Vendor liable for forfeiture of Performance Security in part or full, as may be decided by DIMTS		
6.	Termination Due	Case 1: DIMTS decides to purchase the ETMs		
	to ETM Vendor's event of default	 ETMs, accessories and charging infrastructure to be transferred to DIMTS 		
		 DIMTS to pay 50% of Buy Out Price for ETMs to the ETM Vendor 		
		Case 2: DIMTS decides not to purchase the ETMs		
		 ETM Vendor to remove the ETMs 		
7.	Termination Due	DIMTS to purchase the ETMs		
	to DIMTS' event of default	 ETMs, accessories and charging infrastructure to be transferred to DIMTS 		
		DIMTS to pay Buy Out Price for ETMs to the ETM Vendor		
8.	Termination Due	DIMTS to purchase the ETMs		
	to Force Majeure	 ETMs, accessories and charging infrastructure to be transferred to DIMTS 		
		o DIMTS to pay 75% of Buy Out Price for ETMs to the ETM		

SL	Parameter	Description	
		Vendor	
9.	Other Terms	Buy Out Price for ETMs to be calculated as [Residual Life (in months)/60] X ETM Price including accessories and charging infrastructure.	
		The ETM Vendor will not have any advertisement rights on tickets printed through the System.	
		 Any service agreement/sub-contract by the ETM Vendor for providing services at depot level/maintenance of ETMs can be entered into by ETM Vendor, only with prior approval of DIMTS. However, the responsibility to meet SLAs will continue to be that of the ETM Vendor. 	
		• In case of delay in provisioning of ETMs with respect to the delivery schedule, Liquidated Damages at the rate of Rs. 50 per ETM per week of delay or part thereof for the ETMs delayed, may be imposed on the Vendor, by DIMTS.	

Annexure K-2 – Key Support Agreement Terms

SL	Parameter	Description	
1.	Parties	Transport Department/DTC	
		Preferred Bidder ("ETM Vendor")	
		• DIMTS	
2.	Contract Period	Start Date – date of issue of Letter of Award	
		End Date – Co-terminus with the Service Agreement	
3.	Payment	As per RFP and Proposal	
		 Payment shall be made by Transport Department/DTC through a Project Account, to be administered by DIMTS 	
		Subject to deductions of Default Charges	
4.	Termination Due	Case 1: Transport Department/DTC decides to purchase the ETMs	
	to ETM Vendor's event of default	 ETMs, accessories and charging infrastructure to be transferred to Transport Department/DTC through DIMTS 	
		 Transport Department/DTC to pay 50% of Buy Out Price for ETMs to the ETM Vendor 	
		 Case 2: Transport Department/DTC decides not to purchase the ETMs 	
		 ETM Vendor to remove the ETMs 	
5.	Termination Due	Transport Department/DTC to purchase the ETMs	
	to Transport Department's/ DTC's event of default	 ETMs, accessories and charging infrastructure to be transferred to Transport Department/DTC through DIMTS Transport Department/DTC to pay Buy Out Price for ETMs to the ETM Vendor 	
6.	Termination Due	Transport Department/DTC to purchase the ETMs	
	to Force Majeure	 ETMs, accessories and charging infrastructure to be transferred to Transport Department/DTC through DIMTS 	
		 Transport Department/DTC to pay 75% of Buy Out Price for ETMs to the ETM Vendor 	
7.	Other Terms	Buy Out Price for ETMs to be calculated as [Residual Life (in months)/60] X ETM Price including accessories and charging infrastructure	

Annexure L - Detailed Scope of Services

1. Introduction

- 1.1. The present ticketing system in stage carriage buses in Delhi is based on pre-printed paper-based tickets, issued by on-board conductors on cash basis. The fare rates are stage-based with 3 fare slabs in non-AC buses and 4 fare slabs in AC buses. The fare on a route changes at pre-specified bus-stops, designated as fare stages. In addition, there are some bus services, which operate on a flat fixed fare like Palam Coach.
- 1.2. With an objective to improve efficiency, reliability and transparency of the ticketing system in stage carriage buses, to make tickets passenger-friendly and to generate rich data for decision support, it has been decided to provide handheld Smart Card enabled Electronic Ticketing Machines with inbuilt printers to conductors to issue tickets to commuters, as the first phase of Automatic Fare Collection System (AFCS Phase 1).
- 1.3. ETM based ticketing system will be deployed in 5,000 DTC buses in about 50 depots. The number of buses is expected to increase to 6,000 in two years.
- 1.4. DTC buses operate in city (municipal limits of Delhi), NCR (satellite towns) and Interstate (Haryana, Punjab, Uttar Pradesh, Uttrakhand, Himachal Pradesh, Rajasthan, J&K, etc.). The buses are operated in city and NCR in two shifts of 8 hours each, with change of crew after 1st shift, in the depot. However, in some buses, the change of crew after 1st shift can be at a bus terminal without the bus coming to depot. Some buses are operated in night shift also. In Interstate operation, the bus may be out of the depot for up to 48 hours.
- 1.5. The average number of buses operated per day (out of a total bus fleet of 3750) and number of tickets sold per bus per day for different types of bus service are (based on one year data):

S. No.	Type of Bus Service	Average Buses Operated per Day	Average Tickets Sold per Bus per Day
1	City (Non-AC buses)	2525	455
2	City (AC buses)	40	320
3	NCR	435	780
4	Interstate	65	220

- 1.6. The current fare structure for different types of bus services is as under:
 - i. City Services (Non-AC Buses)

Sl. No.	Distance Slab	Fare (Rs.)	
		Adult	Child
1	Up to 4 kms.	5	3

Sl. No.	Distance Slab	Fare (Rs.)	
		Adult	Child
2	More than 4 and up to 10 kms.	10	5
3	3 More than 10 kms.		8

ii. City Services (AC Buses)

SI. No.	Distance Slab	Fare (Rs.)	
		Adult	Child
1	1 Up to 4 kms.		5
2	More than 4 and up to 8 kms.	15	8
3 More than 8 and up to 12 kms.		20	10
4	4 More than 12 kms.		13

iii. Special Services (Palam Coach)

SI. No.	Distance Slab	Fare (Rs.)	
		Adult	Child/ Luggage
1	Flat Fare	50	25

iv. NCR and Interstate Services

Destination Based fare which includes basic fare, passenger tax for different states, surcharge, toll tax, etc.

2. Proposed System Flow

- 2.1. As a part of AFCS Phase 1 Project, the conductors will be equipped with handheld Smart Card enabled Electronic Ticketing Machines (ETMs). ETMs will have inbuilt thermal printer and GPRS module. Conductors will be able to issue paper tickets through ETMs, using as few keystrokes as possible.
- 2.2. At start of duty, a conductor will login in the ETM using his badge number or pay token number as user-ID and a numeric pin as password. He will then enter/select key parameters like bus number, driver badge number, duty number, service type, bus type, etc. The conductor will initiate trip, by selecting route number and up/down. He will then be ready to issue tickets to passengers. At the end of trip, conductor will close the trip and initiate a new trip, if required. Conductor will have the facility to generate trip-end and duty-end reports from the ETM.

- 2.3. The ETMs will communicate with the Central System through GPRS to send transaction data and send/receive configuration data.
- 2.4. The authorized depot officials and other users will be able to access reports and change configuration parameters by accessing the Central System over internet after login with their user-ID and password.

3. Technical Description

- 3.1. The ETM System will comprise of the following main components:
 - i. Smart Card enabled Electronic Ticketing Machines (ETMs)
 - ii. Depot System
 - iii. Central System
 - iv. Communication system
- 3.2. The brief features of various components of the ETM System are listed below:
 - i. <u>Smart Card enabled Electronic Ticketing Machines (ETMs)</u>: The Handheld Electronic Ticketing Machines will be used by conductors for issuing tickets against cash. The ETMs will be light weight compact devices having inbuilt contactless smart card module, thermal printer, battery, GPRS module, SAM slots, keypad and LCD display.
 - ii. <u>Depot System</u>: The existing computer infrastructure (PC, printer, internet connectivity, etc.) at depots will be used by depot officials for accessing the Central System for configuring parameters / generating reports. The charging infrastructure will be created at depots, by ETM Vendor, for charging ETMs/ batteries.
 - iii. <u>Central System</u>: The Central System will be a key component of the system, comprising of servers, storage, printers, UPS, networking, connectivity, power backup, third party software (RDBMS, operating system, firewall, antivirus software, etc.) and ETM backend application software. The ETM backend application software will be a scalable, reliable, secure and flexible system. The main functions of the ETM backend application software shall include:
 - (i) receiving transaction data from ETMs through GPRS;
 - (ii) consolidation and processing of transactions data from ETMs;
 - (iii) security audits and logs;
 - (iv) user and role management;
 - (v) management of configuration of parameters;
 - (vi) MIS and reporting;

The Central System hardware including servers, storage, printers, UPS, networking, connectivity, power backup, third party software (RDBMS, operating system, firewall, antivirus software, etc.) and ETM backend application software will be provided by DIMTS. The Central System will be, developed, operated and maintained by DIMTS.

iv. <u>Communication System</u>: ETMs will need to communicate transactions data to the Central System. Similarly, ETMs will need to receive configuration data (route details, fare parameters, business rules, etc.) from the Central System. Two-way data transfer between the ETMs and the Central System will be made using GPRS over GSM network. The GPRS service provider will be selected by DIMTS. The cost of GPRS services will be borne by Transport Department/DTC. ETMs shall also support two-way communication through USB/RS232 ports. The communication through USB/RS232 can be used, to start the pilot in case GPRS system is not ready or in case the GPRS is not available during the operation.

4. Detailed Scope of Services

4.1. Electronic Ticketing Machines

- ii. ETM Vendor shall provide 5,000 Handheld Smart Card enabled Electronic Ticketing Machines with chargers, carry case and other accessories. ETM Vendor shall also provide minimum 5% additional ETM devices with accessories as float. The 5% float is indicative only and Vendor will be required to maintain higher float if required due to operational reasons or ETMs requiring frequent maintenance. The number of ETMs will need to be increased in line with the increase in number of buses, as may be required by DIMTS.
- ii. ETM Vendor will provide five nos. prototype ETMs for testing of ETM Devices and development of ETM software.
- iii. ETM Vendor will provide complete Software Development Kit (SDK) of the ETM (minimum 10 user licenses) to enable DIMTS to develop application on the top of ETMs and various sub-components thereof. It should contain APIs, commands, functions to programme smart card reader, thermal printer, display, GPRS, etc.
- iv. ETM Vendor will install the ETM application software prepared by DIMTS on all ETMs, before deploying the same in depots.
- v. ETM Vendor will provide training to DTC conductors to operate the ETMs, as per the ETM software prepared by DIMTS.
- vi. Provide one time supply of one lakh thermal paper rolls (minimum 55 GSM, 12 meter length, 55 mm wide), for testing purposes and use during pilot implementation.

4.2. Depot System

- i. ETM Vendor will create charging benches/stations for charging of ETMs/batteries at each of the depots. The ETM Vendor will also provide Inverter with minimum 3 hours back-up, of appropriate rating for charging of ETMs, in each depot. The charging infrastructure at depots will be in addition to the AC chargers to be supplied by ETM Vendor with ETM Devices.
- ii. ETM Vendor will be provided one room in each depot with electricity on free-of-cost basis.

4.3. Operation and Maintenance during entire Contract Period

- ETM Vendor will undertake maintenance of the ETMs during the Contract Period. All spares including batteries will be provided by the ETM Vendor, as part of maintenance support.
- ii. ETM Vendor will maintain a helpdesk, to record defects/complaints with respect to the ETMs and associated services. The ETM Vendor will create a maintenance team, with its manpower deployed at depots providing the first level of support.
- iii. ETM Vendor will be required to deploy its manpower in depots to handle ETMs including charging of ETMs/batteries, issuance and receiving ETMs to conductors, through authorized officials of DTC. The manpower will be deployed by the ETM Vendor to cover the entire operational period of buses, as well as charging of ETMs.
- iv. The ETM Vendor will be required to manage installation/replacement of SIMs in the FTMs
- v. ETM Vendor will maintain adequate stock of spare ETMs, batteries and any other spares at each depot, sufficient for at least 15 days of operation.
- vi. ETM Vendor will ensure that the battery charge in the ETM last for the entire operation of bus. The ETM Vendor will provide appropriate solution for smooth functioning of ETMs during all types of operation (City, NCR, Interstate, extraordinary load on festival days, etc.), which may include providing charging facility on some/ all buses, providing spare battery to conductors with easy battery change mechanism, etc.
- vii. The ETMs and related infrastructure shall be transferred to DIMTS, in good working condition, free of cost at the end of the Contract Period.

5. Time Schedule

5.1. The ETM Vendor will adhere to the following time schedule:

SI. No.	Activity	Time
1	Submission of 5 nos. prototype ETMs with SDK	D1 = D0 + 3 weeks
2	Development of ETM software (by DIMTS) and testing of ETM with software	D2 = D1 + 3 weeks
3	Submission of Final ETM	D3 = D2 + 1 week
4	Implementation of pilot in 100 buses in one depot	D4 = D3 + 3 weeks
5	Implementation of system in remaining depots @ minimum 100 ETMs per week during first 3 weeks and thereafter minimum 250 ETMs per week	D5 = D4 + 19 weeks

Note: D0 will be the date of issuance of Letter of Award to the Preferred Bidder.