

AMENDMENT NO.1 TO BIDDING DOCUMENTS – May 18, 2015

Project Title: Design, Supply, Install, Integrate, Commission, Test and Maintain the Intelligent Transportation System for HDBRTSCO in Hubli-Dharwad, Karnataka, India

IFB No.: HDBRTS/ITS/PROC/2014-15/02 Dated 20th February 2015

Subsequent to the pre-bid meeting held on **25th March 2015**, the following amendments are made to the bidding documents for the titled project. These amendments shall form part of the bidding documents. The replies/ clarifications to the queries received from potential bidders and further amendments if any to the bidding documents will be uploaded to www.hdbrts.co.in.

S. NO	Bidding Documents Reference	Corresponding Content of Bidding Documents	Amended/ New Content of Bidding Documents
1.	Pg. 5-6, Para No. 4 of IFB	<p>The Bidder must meet the following qualification criteria as on the last date of submission of this bid:</p> <p>I. <i>Experience in Automatic Fare Collection System (AFCS): The bidder shall have satisfactorily designed and deployed at least two qualifying AFCS Projects of which one is in commercial operation for at least 3 years and any one has been maintained by the bidder for at least one year.</i></p> <p>A qualifying AFCS Project is defined as “An AFCS project consisting of an application for Automatic Fare Collection for public transit, integrated with at least 50 fare gates distributed over a minimum of 20 transit stations. The solution should be supporting at least 10,000 active smart card accounts apart from one of the following payment media: RFID based smart tokens, machine readable bar-coded paper tickets (Magnetic Stripe card or Bar-coded tickets or similar). The AFCS project should have been completed within the past 7 (seven) years from the date of submission of the bid and should have been in commercial operations for at least one year after successful system acceptance.”</p> <p>II. <i>Experience in Automatic Vehicle Location System (AVL): The bidder shall have satisfactorily designed and deployed at least</i></p>	<p>The Bidder must meet the following qualification criteria as on the last date of submission of this bid:</p> <p>I. <i>Experience in Automatic Fare Collection System (AFCS): The bidder shall have satisfactorily designed and deployed at least two qualifying AFCS Projects of which one is in commercial operation for at least 3 years and any one has been maintained by the bidder for at least one year.</i></p> <p>A qualifying AFCS Project is defined as “An AFCS project consisting of an application for Automatic Fare Collection for public transit, integrated with at least 50 fare gates distributed over a minimum of 20 transit stations. The solution should be supporting at least 10,000 active smart card accounts apart from one of the following payment media: RFID based smart tokens, machine readable bar-coded paper tickets (Magnetic Stripe card or Bar-coded tickets or similar). The AFCS project should have been commissioned within the past 7 (seven) years from the date of submission of the bid and should have been in commercial operations for at least one year after successful system acceptance.”</p> <p>II. <i>Experience in Automatic Vehicle Location System (AVL): The bidder shall have satisfactorily designed and deployed at least</i></p>

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		<p>two qualifying AVL Projects of which one is in commercial operation for at least 3 years and any one has been maintained by the bidder for at least one year.</p> <p>A qualifying AVL Project is defined as: “An AVL project for an intra-city public bus transport with a fleet of at least 50 buses integrated with Passenger Display System. The AVL project should have been completed within the past 7 (seven) years from the date of submission of the bid and should have been in commercial operations for at least one year after successful system acceptance.”</p> <p>III. Experience in Depot Management System (DMS): The bidder shall have satisfactorily designed and deployed at least two qualifying DMS Projects of which one is in commercial operation for at least 3 years and any one has been maintained by the bidder for at least one year.</p> <p>A qualifying Depot Management System Project is defined as “A Depot Management System project shall be for a fleet of at least 100 vehicles and involving design and deployment of systems which included at least following four components -- accounting system, crew scheduling, bus scheduling and inventory management. The Depot Management System project should have been completed within the past 7 (seven) years from the date of submission of the bid and should have been in successful commercial operations for at least one year after successful acceptance.”</p> <p>IV. Experience in Incident Management System (IMS): The bidder shall have satisfactorily designed and deployed at least two qualifying IMS Projects of which one is in commercial operation for at least 3 years and any one has been maintained by the bidder for at least one year.</p> <p>A qualifying Incident Management System Project is defined as “An Incident Management System project involving design and deployment of CCTV Surveillance System, along with the required network (OFC/WAN), consisting of at least 150</p>	<p>two qualifying AVL Projects of which one is in commercial operation for at least 3 years and any one has been maintained by the bidder for at least one year.</p> <p>A qualifying AVL Project is defined as: “An AVL project for an intra-city public bus transport with a fleet of at least 50 buses integrated with Passenger Display System. The AVL project should have been commissioned within the past 7 (seven) years from the date of submission of the bid and should have been in commercial operations for at least one year after successful system acceptance.”</p> <p>III. Experience in Depot Management System (DMS): The bidder shall have satisfactorily designed and deployed at least two qualifying DMS Projects of which one is in commercial operation for at least 3 years and any one has been maintained by the bidder for at least one year.</p> <p>A qualifying Depot Management System Project is defined as “A Depot Management System project shall be for a fleet of at least 100 vehicles and involving design and deployment of systems which included at least following four components -- accounting system, crew scheduling, bus scheduling and inventory management. The Depot Management System project should have been commissioned within the past 7 (seven) years from the date of submission of the bid and should have been in successful commercial operations for at least one year after successful acceptance.”</p> <p>IV. Experience in Incident Management System (IMS): The bidder shall have satisfactorily designed and deployed at least two qualifying IMS Projects of which one is in commercial operation for at least 3 years and any one has been maintained by the bidder for at least one year.</p> <p>A qualifying Incident Management System Project is defined as “An Incident Management System project involving design and deployment of CCTV Surveillance System, along with the required network (OFC/WAN), consisting of at least 150</p>

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		<i>cameras for surveillance and incident management; integrated with a Central City Mobility Centre or Control Centre. The Incident Management System project should have been completed within the past 7 (five) years from the date of submission of the bid and should have been in successful commercial operations for at least one year after successful acceptance."</i>	<i>cameras for surveillance and incident management; integrated with a Central City Mobility Centre or Control Centre. The Incident Management System project should have been commissioned within the past 7 (five) years from the date of submission of the bid and should have been in successful commercial operations for at least one year after successful acceptance."</i>
2.	Pg.7, Para No. 7 of IFB	Bids must be delivered to the address below on or before 15:00 hrs (IST) on May 27, 2015. . Bids need to be secured by a bid security. The amount of Bid Security required is INR 10 Million . Late bids will be rejected. The Bids will be opened in the presence of Bidders' representatives who choose to attend at the address below at 15:30 hrs (IST) May 27, 2015.	Bids must be delivered to the address below on or before 15:00 hrs (IST) on July 13, 2015. . Bids need to be secured by a bid security. The amount of Bid Security required is INR 10 Million . Late bids will be rejected. The Bids will be opened in the presence of Bidders' representatives who choose to attend at the address below at 15:30 hrs (IST) July 13, 2015.
3.	Pg. 52, ITB clause 18.1	The bid validity period shall be up to 180 days after the deadline for bid submission, as specified below in reference to ITB Clause 21. Accordingly, each bid shall be valid through November 23, 2015 Accordingly, a bid with a Bid Security that expires before December 21, 2015 i.e., twenty-eight (28) days after the end of the bid validity period shall be rejected as non-responsive.	The bid validity period shall be up to 180 days after the deadline for bid submission, as specified below in reference to ITB Clause 21. Accordingly, each bid shall be valid through January 09, 2016 Accordingly, a bid with a Bid Security that expires before February 06, 2016 i.e., twenty-eight (28) days after the end of the bid validity period shall be rejected as non-responsive.
4.	Pg. 52, ITB Clause 21.1 of BDS	Deadline for bid submission is: 15:00 hrs (IST) on May 27, 2015.	Deadline for bid submission is: 15:00 hrs (IST) on July 13, 2015.
5.	Pg.52, ITB clause 24.1 of BDS	Time, date, and place for bid opening are: 15:30 Hrs on May 27, 2015 at the....	Time, date, and place for bid opening are: 15:30 Hrs on July 13, 2015 at the....
6.	Page 53,	The currency chosen for the purpose of converting to a common currency is:	The currency chosen for the purpose of converting to a common currency is:

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	ITB 27.1	INR. The source of exchange rate is: State Bank of India's Bills Selling Exchange Rate, and, the date of exchange rate determination as the date of bid submission.	INR. The source of exchange rate is: State Bank of India's Bills Selling Exchange Rate, and, the date of exchange rate determination as the last date of bid submission.
7.	Pg. 141, SCC 8.2	<i>Operational Acceptance will occur on or before: T+10 months</i>	<i>Operational Acceptance will occur on or before: T+12 months</i>
8.	Pg. 142, SCC 12.1	<p>I. CAPEX Cost</p> <p>(a) Advance Payment: Ten percent (10%) of the System Supply & Installation Cost (CAPEX) shall be paid against receipt of a claim accompanied by the Advance Payment Security specified in GCC Clause 13.2.</p> <p>(b) Information Technologies, Materials, and other Goods, including application Software, Custom Software and Custom Materials: Thirty percent (30%) of the System Supply Cost against Delivery on actual unit prices quoted – out of this 30% payment, 5% payment of System Supply shall be adjusted against the advance already paid</p> <p>(c) Installation Testing & Commissioning:</p> <p>i. Twenty five percent (25%) of the System Supply Cost against successful Installation, Testing and commissioning – out of this 25% System Supply payment, 5% payment shall be adjusted against the advance already paid</p> <p>ii. Fifty Five percent (55%) of the Installation Cost against successful Installation, Testing and commissioning – out of this 55% Installation payment, 10% payment shall be adjusted against the advance already paid</p> <p>(d) Burn-in Testing & Training: Five percent (5%) of the System Supply & Installation Cost (CAPEX) against Burn-in testing followed by training</p> <p>(e) System Acceptance Testing: Fifteen percent (15%) of the System Supply & Installation Cost (CAPEX) against successful System Acceptance Testing</p> <p>(f) Operational Acceptance: Twenty Five percent (25%) of the System Supply & Installation Cost</p>	<p>II. CAPEX Cost</p> <p>(a) Advance Payment: Ten percent (10%) of the System Supply & Installation Cost (CAPEX) shall be paid against receipt of a claim accompanied by the Advance Payment Security specified in GCC Clause 13.2.</p> <p>(b) Information Technologies, Materials, and other Goods, including application Software, Custom Software and Custom Materials: Twenty Five percent (25%) of the System Supply Cost against Delivery on actual unit prices quoted</p> <p>(c) Installation Testing & Commissioning:</p> <p>iii. Twenty percent (20%) of the System Supply Cost against successful Installation, Testing and commissioning.</p> <p>iv. Forty Five percent (45%) of the Installation Cost against successful Installation, Testing and commissioning</p> <p>(d) Burn-in Testing & Training: Five percent (5%) of the System Supply & Installation Cost (CAPEX) against Burn-in testing followed by training</p> <p>(e) System Acceptance Testing: Fifteen percent (15%) of the System Supply & Installation Cost (CAPEX) against successful System Acceptance Testing.</p> <ul style="list-style-type: none"> • AFCS, AVL, PIS, IMS, TMS, COMM and UPS will receive 10% payment on individual systems acceptance, and the 5% payment will be on the complete system acceptance. • ASD will receive 15% payment on the system acceptance. <p>(f) Operational Acceptance: Twenty Five percent (25%) of the System Supply & Installation Cost (CAPEX) after successful Operational Acceptance of the System</p>

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		(CAPEX) after successful Operational Acceptance of the System	<ul style="list-style-type: none"> AFCS, AVL, PIS, IMS, TMS, COMM and UPS will receive 15% payment on individual operational acceptance, while the 10% payment will be on the complete system's operations acceptance. ASD will receive 25% payment on the operational acceptance. 																																																				
9.	Pg. 144, SCC 13.2.1	<i>The Supplier shall provide within twenty-eight (28) days of the notification of Contract award an Advance Payment Security of 10 percent of the Contract Price in INR in the form of a Bank Guarantee.</i>	<i>The Supplier shall provide within twenty-eight (28) days of the notification of Contract award an Advance Payment Security of 10 percent of the System Supply & Installation Cost (CAPEX) in INR in the form of a Bank Guarantee.</i>																																																				
10.	Pg. 145, SCC 15.4	i. <i>The Supplier shall hand over the source code for software, database, and executables to the purchaser which shall correspond 100% to the operational module and shall be verified and certified by an independent agency as identified by the Purchaser. This is limited to the AFCS and AVL system and its subsystems.</i>	<i>The Supplier shall hand over the source code for software, database, and executables to the purchaser which shall correspond 100% to the operational module and shall be verified and certified by an independent agency as identified by the Purchaser. This is limited to all custom software and its subsystems (AVL, AFCS, TMS, etc.) of the bidder</i>																																																				
11.	Pg. 306, Implementation Schedule	<table border="1" data-bbox="380 865 1083 1308"> <thead> <tr> <th>S. No</th> <th>Mile Stone/ Activity Deadline</th> <th>Maximum allowed Time from Contract Award</th> <th>Liquidated Damages Mile-stone</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Contract Award</td> <td>T</td> <td>---</td> </tr> <tr> <td>2</td> <td>Burn-in Testing commencing</td> <td>T + 8 months</td> <td>Yes</td> </tr> <tr> <td>3</td> <td>System Acceptance</td> <td>T + 9 months</td> <td>Yes</td> </tr> <tr> <td>4</td> <td>Operational Acceptance</td> <td>T + 10 months</td> <td>Yes</td> </tr> <tr> <td>5</td> <td>Maintenance Period</td> <td>T+ 10 months to (T + 10 months + 72 months)</td> <td>SLA's should be adhered to by the Bidder</td> </tr> </tbody> </table> <p>The total contract period shall be for 82 months (including 10 months for system deployment and achieving operational acceptance)</p>	S. No	Mile Stone/ Activity Deadline	Maximum allowed Time from Contract Award	Liquidated Damages Mile-stone	1	Contract Award	T	---	2	Burn-in Testing commencing	T + 8 months	Yes	3	System Acceptance	T + 9 months	Yes	4	Operational Acceptance	T + 10 months	Yes	5	Maintenance Period	T+ 10 months to (T + 10 months + 72 months)	SLA's should be adhered to by the Bidder	<table border="1" data-bbox="1194 865 1898 1396"> <thead> <tr> <th>S. No</th> <th>Mile Stone/ Activity Deadline</th> <th>Maximum allowed Time from Contract Award</th> <th>Liquidated Damages Mile-stone</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Contract Award</td> <td>T</td> <td>---</td> </tr> <tr> <td>2</td> <td>Pilot Testing</td> <td>T + 8 months</td> <td>---</td> </tr> <tr> <td>3</td> <td>Burn-in Testing commencing</td> <td>T + 10 months</td> <td>Yes</td> </tr> <tr> <td>4</td> <td>System Acceptance</td> <td>T + 11 months</td> <td>Yes</td> </tr> <tr> <td>5</td> <td>Operational Acceptance</td> <td>T + 12 months</td> <td>Yes</td> </tr> <tr> <td>6</td> <td>Maintenance Period</td> <td>T+ 12 months to (T + 12</td> <td>SLA's should be adhered to by the Bidder</td> </tr> </tbody> </table>	S. No	Mile Stone/ Activity Deadline	Maximum allowed Time from Contract Award	Liquidated Damages Mile-stone	1	Contract Award	T	---	2	Pilot Testing	T + 8 months	---	3	Burn-in Testing commencing	T + 10 months	Yes	4	System Acceptance	T + 11 months	Yes	5	Operational Acceptance	T + 12 months	Yes	6	Maintenance Period	T+ 12 months to (T + 12	SLA's should be adhered to by the Bidder
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					months + 72 months)	
			The total contract period shall be for 84 months (including 12 months for system deployment and achieving operational acceptance)			
12.	Pg. 1, Project:	Project: Sustainable Urban Transport Project [GEF: SUTP]	Project: Sustainable Urban Transport Project [SUTP]			
13.	Pg. 5, Point No. 2	The Government of India has received loan from the Global Environment Facility [GEF] towards the cost of Sustainable Urban Transport Project [SUTP], and it intends to apply part of the proceeds of this Loan No: 7818-IN to payments under the agreement(s) resulting from this IFB No.: HDBRTS/ITS/PROC/2014-15/02.	The Government of India has received loan from the World Bank towards the cost of Sustainable Urban Transport Project [SUTP], and it intends to apply part of the proceeds of this Loan No: 7818-IN to payments under the agreement(s) resulting from this IFB No.: HDBRTS/ITS/PROC/2014-15/02.			

ATTACHMENT 1

Indicative System Inventory Table (System Supply & Installation Cost Items) & services

System, Subsystem, or lot number: *entire System procurement*

Item Code	Subsystems / Items	Quantity exclusive of spares/ consumables
1.1	Automatic Fare Collection System (AFCS)	
AFCS FR1	AFCS Central System Software inclusive of but not limited to:	
AFCS FR1.1	Database application (Primary Server + DR Server)	1
AFCS FR1.2	AFCS application software (Primary Server + DR Server)	
AFCS FR1.3	Anti-virus software (Primary Server + DR Server)	
AFCS FR1.4	Automatic Back-up\ archiving software	
AFCS FR1.5	Any other COTS software (Primary Server + DR Server)	
AFCS H1	AFCS Central System Hardware inclusive of but not limited to:	
AFCS H1.1	Primary Server	1
AFCS H1.2	DR Server	1
AFCS H1.3	Automatic Back-up devices with media	1
AFCS H1.4	KVM Switch with LCD Monitor	1
AFCS H1.5	Server Rack (includes rack requirements for all systems)	4
AFCS H1.6	Network printer - A3	1
AFCS H2	Smart Card Issuance Work-Station POS inclusive of but not limited to all software and hardware related to:	
AFCS H2.1	Camera	18
AFCS H2.2	Document scanner	18
AFCS H2.3	Smart card revaluing device	18
AFCS H2.4	Workstation	18
AFCS H3	Fare media - Smart Cards	200000
AFCS H4	POS inclusive of but not limited to all software and hardware related to:	
AFCS H4.1	Smart Card revaluing device	75
AFCS H4.2	Ticket Printer	75
AFCS H4.3	Barcode Reader	75
AFCS H4.5	Display system for the user	75
AFCS H4.6	Workstation Type I	75
AFCS H5	Bi-directional Fare-gates (flap barrier type) including all required readers & accessories:	
AFCS H5.1	Bi- Directional Flap Barrier for Normal width fare-gate	147
AFCS H5.2	Bi- Directional Flap Barrier for Wide fare-gate for disabled entry	26
AFCS H6	Handheld ticketing machine inclusive of but not limited to:	
AFCS H6.1	Handheld ticketing machine inclusive of all related accessories, software to meet the requirements	711
AFCS H7	Smart Card Personalisation	
AFCS H7.1	Smart Card Personalisation Printer	5
AFCS H7.2	Camera	5
AFCS H7.3	Document scanner	5
AFCS H7.4	Smart card revaluing device	5
AFCS H7.5	Workstation	5
AFCS H8	Handheld ticketing machine inclusive of all related accessories, software to meet the requirements (for HDBRTSCO Auditors)	5

AFCS H9	Work-station - AFCS at City Mobility Centre Operator	2
AFCS H10	Workstation Type I - AFCS Cashup	15
AFCS H10.1	Printer - Cashup	15
1.2	Automatic Vehicle Location System (AVL)	
AVL FR1	AVL System Software inclusive of but not limited to	
AVL FR1.1	RDBMS Database	1
AVL FR1.2	AVL Central Application software	
AVL FR1.3	Automatic Back-up/ Archiving software	
AVL H1	AVL Hardware inclusive of but not limited to	
AVL H1.1	AVL Server	2
AVL H1.2	Database Server	2
AVL H1.3	Tape Drive	1
AVL H1.4	Tape Data Cartridges	30
AVL H1.5	Communication Server	2
AVL H1.6	Webserver	2
AVL H1.7	Domain Server	1
AVL H1.8	3G/GPRS enabled SIM Cards	448
AVL H2	Workstation Type I - AVL	
AVL H2.1	Workstation Type II - AVL (High end graphics card with additional monitor)	14
AVL H3	EPABX/VoIP/Other	
AVL H3.1	Landline Phones	40
AVL H3.2	Hands free/ Headphone	14
AVL H4	Printers	
AVL H4.1	All in One Printer (Color Print, Copy, FAX)	1
AVL H4.2	Printer Laser - A4	2
AVL H4.3	KVM Switch with LCD Monitor	2
AVL H5	OBITS Hardware as per UBS II	
AVL H5.1	Single Control Unit (SCU) and Bus Driver Console (BDC)	198
AVL H6	Disaster Recovery Service	
AVL H6.1	Disaster Recovery Service for Complete AVL system	1
1.3	Passenger Information System (PIS)	
PIS FR1	Public Address System including:	
PIS FR1.1	PA Speakers	280
PIS FR1.2	Ambient Noise Sensor System	7
PIS FR1.3	Amplifier/VoIP Interface with in-built DSP	
PIS FR1.4	Local Paging Station	
PIS FR1.5	Public Address System operator consoles	8
PIS FR1.6	Public Address System Software	1
PIS FR2	Customized or COTS Software for PIS	1
PIS-FR3	Commuter Website	1
PIS-FR4	Commuter IVR System	1
PIS-FR5	Commuter SMS System	1
PIS-FR6	Commuter Mobile Application	1
PIS H2	32" size of Passenger Information Display at Bus Stations	
PIS H2.1	55" size of Passenger Information Display at Terminal/Interchange	30
1.4	Incident Management System (IMS)	
IMS H1	Video Wall System inclusive of but not limited to:	
IMS H1.1	DLP based rear projection modules (in 70" 3x3 configuration), full HD	2
IMS H1.2	Display Controller Unit	
IMS H1.3	Video Wall Management & Control Application	

IMS H1.4	Video Wall Mounting Mechanism including Accessories	
IMS H2	Network Management System inclusive of but not limited to:	
IMS H2.1	Network Management System Application	1
IMS H2.2	Network Management System Server	1
IMS H2.3	Workstation Type I - Network Management System	1
IMS H3	Video Surveillance System inclusive of but not limited to:	
IMS H3.1	PTZ CCTV Camera	47
IMS H3.2	PTZ CCTV Pole with Foundation (12m)	47
IMS H3.3	Fixed camera	103
IMS H3.4	Workstation Type II - CCTV Monitoring Workstation with Additional Monitor	8
IMS H3.5	CCTV Central Viewing Application	1
IMS H3.6	Network Video Recorder (NVR) Application	
IMS H3.7	NVR Servers (N+1): 64 Channels	4
IMS H5	Automatic Number Plate Recognition System inclusive but not limited to:	
IMS H5.1	ANPR Cameras	20
IMS H5.2	ANPR Central Software	1
IMS H5.3	ANPR Central Server	
IMS H5.4	Workstation Type I - ANPR Operator	1
IMS H5.5	Printer - ANPR Reports	1
1.5	Transit Management System (TMS)	
TMS FR1	TMS Central Application software	1
TMS FR1.1	TMS Application software for workstation	100
TMS FR6	OBITS Storage	
TMS FR6.1	NVR with Connection Management	5
TMS H1.1	Depot-wide WiFi Network	
TMS H1.2	256 GB SD Card for In-bus Camera Storage	250
TMS H2	TMS Server - Primary	1
TMS H2.1	TMS Server - Secondary	1
TMS H3	Workstation Type III - TMS	80
TMS H4	Workstation Type II - for monitoring OBITS cameras	11
TMS H4	Printer Laser - A4	7
TMS H6	Document scanner	7
TMS H7	55" Passenger Information Display at Depot	10
TMS H8	Proximity Reader	26
TMS H8.1	Proximity cards for staffs	4000
TMS H10	Portable Drive - 1TB	10
1.6	Communication System (COMM)	
COMM H1	OFC based Fixed Communication System inclusive but not limited to:	
COMM H1.1	Single Mode 24 Core FOC deployed on both sides of the Corridor	64800
COMM H1.2	Single Mode 6 Core FOC for Drop Cables	10620
COMM H1.3	Outdoor Rated CAT 6 cable or Fibre Optic Cable for Local Distribution	22230
COMM H2	Switches - Field & Core:	
COMM H2.1	Layer 3 Core Switch (For Control Centre, Minimum 48 ports)	1
COMM H2.2	Ruggedized Layer 2 based Switches (minimum 24 Ports) for ITS Devices	44
COMM H2.3	Ruggedized Layer 2 based Switches (minimum 8 Ports) for ITS Devices	25
COMM H3	Media Converters	LS
COMM H4	Fibre Optic accessories inclusive but not limited to:	
COMM H4.1	Fibre Patch panels	69
COMM H4.2	CAT5e Patch panels	69

COMM H4.3	Splice Enclosures	47
COMM H5	Any other actives or passives as required	1
1.7	Uninterrupted Power Supply (UPS)	
UPS 1	n+1 configuration) UPS at bus-stations for at least 4 hours of uninterrupted operations	31
UPS 2	100% parallel redundant UPS at City Mobility Centre for at least 4 hours of uninterrupted operations	1
UPS 3	100% parallel redundant UPS at terminals for at least 4 hours of uninterrupted operations	6
UPS 4	100% parallel redundant UPS at depots/workshop/division for at least 4 hours of uninterrupted operations	8
UPS 5	UPS at the city wide POS stations for at least 4 hours of uninterrupted operations	18
UPS 6	Cabinets for UPS and Batteries at Bus Stops and Terminals	36
1.8	Automatic Sliding Door at BRT Stations (ASD)	
ASD H1	ASD System inclusive of but not limited to	
ASD H1.1	Number of Doors at BRT stations and Accessories	368
ASD H1.2	Door Open Controller, Sensor and Other Accessories	
ASD H1.3	Emergency switch to open door	
ASD H1.4	RFID Reader and Antenna at BRT Stations	
ASD H1.5	RFID Tag and Door Opening Closing Wireless RF Switch	130

ATTACHMENT 2 - Supply and Installation Cost Sub-Table 1

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates						Total Prices						Total Supply + Installation/Services Prices	
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR		INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price	Total Price	Total Price		Total Price
1.1	Automatic Fare Collection System (AFCS)																
AFCS FR1	AFCS Central System Software inclusive of but not limited to:																
AFCS FR1.1	Database application (Primary Server + Secondary Server)		1														
AFCS FR1.2	AFCS application software (Primary Server + Secondary Server)		1														

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices			
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]		[insert: Foreign Currency C]	INR	INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price	Total Price	Total Price
AFCS FR1.3	Anti-virus software (Primary Server + Secondary Server)		1														
AFCS FR1.4	Automatic Back-up\ archiving software		1														
AFCS FR1.5	Any other COTS software (Primary Server + Secondary Server)																
AFCS H1	AFCS Central System Hardware inclusive of but not limited to:																
AFCS H1.1	Primary Server		1														
AFCS H1.2	Secondary Server		1														
AFCS H1.3	Automatic Back-up devices with media		1														

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/ consumables	Unit Prices / Rates						Total Prices						Total Supply + Installation/Services Prices	
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR		INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price	Total Price	Total Price		Total Price
AFCS H1.4	KVM Switch with LCD Monitor		1														
AFCS H1.5	Server Rack (includes rack requirements for all systems)		4														
AFCS H1.6	Network printer - A3		1														
AFCS H2	Smart Card Issuance Work-Station POS inclusive of but not limited to all software and hardware related to:																

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/ consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices			
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]		[insert: Foreign Currency C]	INR	INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price	Total Price	Total Price
AFCS H2.1	Camera		18														
AFCS H2.2	Document scanner		18														
AFCS H2.3	Smart card revaluing device		18														
AFCS H2.4	Workstation		18														
AFCS H3	Fare media - Smart Cards		200000														
AFCS H4	POS inclusive of but not limited to all software and hardware related to:																

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices			
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]		[insert: Foreign Currency C]	INR	INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price	Total Price	Total Price
AFCS H4.1	Smart Card revaluing device		75														
AFCS H4.2	Ticket Printer		75														
AFCS H4.3	Barcode Reader		75														

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/ consumables	Unit Prices / Rates						Total Prices						Total Supply + Installation/Services Prices	
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR		INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price	Total Price	Total Price		Total Price
AFCS H4.5	Display system for the user		75														
AFCS H4.6	Workstation Type I		75														
AFCS H5	Bi-directional Fare-gates (flap barrier type) including all required readers & accessories:																

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates						Total Prices						Total Supply + Installation/Services Prices	
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR		INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price	Total Price	Total Price		Total Price
AFCS H5.1	Bi- Directional Flap Barrier for Normal width fare-gate		0														
AFCS H5.2	Bi- Directional Flap Barrier for Wide fare-gate for disabled entry		0														
AFCS H6	Handheld ticketing machine inclusive of but not limited to:																
AFCS H6.1	Handheld ticketing machine inclusive of all related accessories, software to meet		711														

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices			
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]		[insert: Foreign Currency C]	INR	INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price	Total Price	Total Price
	the requirements																
AFCS H7	Smart Card Personalisation																
AFCS H7.1	Smart Card Personalisation Printer		5														
AFCS H7.2	Camera		5														

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/ consumables	Unit Prices / Rates						Total Prices						Total Supply + Installation/Services Prices
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Total Supply + Installation/Services Prices		
					INR	INR	[insert: Foreign Currency A]			[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR			INR	
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price	Total Price	Total Price	
AFCS H7.3	Document scanner		5													
AFCS H7.4	Smart card revaluing device		5													
AFCS H7.5	Workstation		5													

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices			
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]		[insert: Foreign Currency C]	INR	INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price	Total Price	Total Price
AFCS H8	Handheld ticketing machine inclusive of all related accessories, software to meet the requirements (for HDBRTSCO Auditors)		5														
AFCS H9	Work-station - AFCS at City Mobility Centre Operator		2														
AFCS H10	Workstation Type I - AFCS Cashup		15														
AFCS H10.1	Printer - Cashup		15														
1.2	Automatic Vehicle Location System (AVL)																

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices			
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]		[insert: Foreign Currency C]	INR	INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price	Total Price	Total Price
AVL FR1	AVL System Software inclusive of but not limited to																
AVL FR1.1	RDBMS Database		1														
AVL FR1.2	AVL Central Application software		1														
AVL FR1.3	Automatic Back-up/ Archiving software		1														
AVL H1	AVL Hardware inclusive of but not limited to																
AVL H1.1	AVL Server		2														
AVL H1.2	Database Server		2														
AVL H1.3	Tape Drive		1														
AVL H1.4	Tape Data Cartridges		30														

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices			
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]		[insert: Foreign Currency C]	INR	INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price	Total Price	Total Price
AVL H1.5	Communication Server		2														
AVL H1.6	Webserver		2														
AVL H1.7	Domain Server		1														
AVL H1.8	3G/GPRS enabled SIM Cards		448														
AVL H2	Workstation Type I - AVL																
AVL H2.1	Workstation Type II - AVL (High end graphics card with additional monitor)		14														
AVL H3	EPABX/VOIP/Other																
AVL H3.1	Landline Phones		40														

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/ consumables	Unit Prices / Rates						Total Prices						Total Supply + Installation/Services Prices	
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR		INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price	Total Price	Total Price		Total Price
AVL H3.2	Hands free/ Headphone		14														
AVL H4	Printers																
AVL H4.1	All in One Printer (Color Print, Copy, FAX)		1														
AVL H4.2	Printer Laser - A4		2														
AVL H4.3	KVM Switch with LCD Monitor		2														
AVL H5	OBITS Hardware as per UBS II																

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices			
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]		[insert: Foreign Currency C]	INR	INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price	Total Price	Total Price
AVL H5.1	Single Control Unit (SCU) and Bus Driver Console (BDC)		198														
AVL H6	Disaster Recovery Service																
AVL H6.1	Disaster Recovery Service for Complete AVL system		1														
1.3	Passenger Information System (PIS)																
PIS FR1	Public Address System including:																
PIS FR1.1	PA Speakers		280														
PIS FR1.2	Ambient Noise Sensor System		7														

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/ consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices	
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services		
					INR	INR	[insert: Foreign Currency A]			[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR			INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price
PIS FR1.3	Amplifier/VoIP Interface with in-built DSP														
PIS FR1.4	Local Paging Station														
PIS FR1.5	Public Address System operator consoles		8												
PIS FR1.6	Public Address System Software		1												
PIS FR2	Customized or COTS Software for PIS		1												
PIS-FR3	Commuter Website		1												

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates						Total Prices						Total Supply + Installation/Services Prices	
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR		INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price	Total Price	Total Price		Total Price
PIS-FR4	Commuter IVR System		1														
PIS-FR5	Commuter SMS System		1														

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates						Total Prices						Total Supply + Installation/Services Prices
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Total Supply + Installation/Services Prices		
					INR	INR	[insert: Foreign Currency A]			[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR			INR	
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price	Total Price	Total Price	
PIS-FR6	Commuter Mobile Application		1													
PIS H2	32" size of Passenger Information Display at Bus Stations		64													
PIS H2.1	55" size of Passenger Information Display at Terminal/Interchange		30													
1.4	Incident Management System (IMS)															

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices			
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]		[insert: Foreign Currency C]	INR	INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price	Total Price	Total Price
IMS H1	Video Wall System inclusive of but not limited to:																
IMS H1.1	DLP based rear projection modules (in 70" 3x3 configuration), full HD		2														
IMS H1.2	Display Controller Unit																
IMS H1.3	Video Wall Management & Control Application																

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices			
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]		[insert: Foreign Currency C]	INR	INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price	Total Price	Total Price
IMS H1.4	Video Wall Mounting Mechanism including Accessories																
IMS H2	Network Management System inclusive of but not limited to:																
IMS H2.1	Network Management System Application		1														
IMS H2.2	Network Management System Server		1														
IMS H2.3	Workstation Type I - Network Management System		1														
IMS H3	Video Surveillance System inclusive of but not limited to:																

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/ consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices			
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]		[insert: Foreign Currency C]	INR	INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price	Total Price	Total Price
IMS H3.1	PTZ CCTV Camera		47														
IMS H3.2	PTZ CCTV Pole with Foundation (12m)		47														
IMS H3.3	Fixed camera		103														
IMS H3.4	Workstation Type II - CCTV Monitoring Workstation with Additional Monitor		8														

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices			
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]		[insert: Foreign Currency C]	INR	INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price	Total Price	Total Price
IMS H3.5	CCTV Central Viewing Application		1														
IMS H3.6	Network Video Recorder (NVR) Application																
IMS H3.7	NVR Servers (N+1): 64 Channels		4														
IMS H5	Automatic Number Plate Recognition System inclusive but not limited to:																
IMS H5.1	ANPR Cameras		1														
IMS H5.2	ANPR Central Software																
IMS H5.3	ANPR Central Server																

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates						Total Prices						Total Supply + Installation/Services Prices
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Total Supply + Installation/Services Prices		
					INR	INR	[insert: Foreign Currency A]			[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR			INR	
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price	Total Price	Total Price	
IMS H5.4	Workstation Type I - ANPR Operator		1													
IMS H5.5	Printer - ANPR Reports		1													
1.5	Transit Management System (TMS)															
TMS FR1	TMS Central Application software		1													
TMS FR1.1	TMS Application software for workstation		100													
TMS	OBITS Storage		5													

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/ consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices			
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]		[insert: Foreign Currency C]	INR	INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price	Total Price	Total Price
FR6																	
TMS FR6.1	NVR with Connection Management																
TMS H1.1	Depot-wide WiFi Network																
TMS H1.2	256 GB SD Card for In-bus Camera Storage		250														
TMS H2	TMS Server - Primary		1														
TMS H2.1	TMS Server - Secondary		1														
TMS H3	Workstation Type III - TMS		80														

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices			
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]		[insert: Foreign Currency C]	INR	INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price	Total Price	Total Price
TMS H4	Workstation Type II - for monitoring OBITS cameras		11														
TMS H4	Printer Laser - A4		7														
TMS H6	Document scanner		7														
TMS H7	55" Passenger Information Display at Depot		10														
TMS H8	Proximity Reader		26														

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices			
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]		[insert: Foreign Currency C]	INR	INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price	Total Price	Total Price
TMS H8.1	Proximity cards for staffs		4000														
TMS H10	Portable Drive - 1TB		10														
1.6	Communication System (COMM)																
COMM H1	OFC based Fixed Communication System inclusive but not limited to:																

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices			
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]		[insert: Foreign Currency C]	INR	INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price	Total Price	Total Price
COM M H1.1	Single Mode 24 Core FOC deployed on both sides of the Corridor		64800														
COM M H1.2	Single Mode 6 Core FOC for Drop Cables		10620														
COM M H1.3	Outdoor Rated CAT 6 cable or Fibre Optic Cable for Local Distribution		22230														
COM M H2	Switches - Field & Core:																

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices			
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]		[insert: Foreign Currency C]	INR	INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price	Total Price	Total Price
COM M H2.1	Layer 3 Core Switch (For Control Centre, Minimum 48 ports)		1														
COM M H2.2	Ruggedized Layer 2 based Switches (minimum 24 Ports) for ITS Devices		44														
COM M H2.3	Ruggedized Layer 2 based Switches (minimum 8 Ports) for ITS Devices		25														
COM M H3	Media Converters		LS														
COM M H4	Fibre Optic accessories inclusive but not limited to:																
COM M H4.1	Fibre Patch panels		69														

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/ consumables	Unit Prices / Rates						Total Prices						Total Supply + Installation/Services Prices	
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Total Supply + Installation/Services Prices			
					INR	INR	[insert: Foreign Currency A]			[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR			INR		INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price	Total Price	Total Price		Total Price
COM M H4.2	CAT5e Patch panels		69														
COM M H4.3	Splice Enclosures		47														

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates						Total Prices						Total Supply + Installation/Services Prices	
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR		INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price	Total Price	Total Price		Total Price
COM M H5	Any other actives or passives as required		1														
1.7	Uninterrupted Power Supply (UPS)																

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/ consumables	Unit Prices / Rates						Total Prices						Total Supply + Installation/Services Prices	
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR		INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price	Total Price	Total Price		Total Price
UPS 1	n+1 configuration) UPS at bus-stations for at least 4 hours of uninterrupted operations		31														

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/consumables	Unit Prices / Rates						Total Prices						Total Supply + Installation/Services Prices
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Total Supply + Installation/Services Prices		
					INR	INR	[insert: Foreign Currency A]			[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR			INR	
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price	Total Price	Total Price	
UPS 2	100% parallel redundant UPS at City Mobility Centre for at least 4 hours of uninterrupted operations		1													
UPS 3	100% parallel redundant UPS at terminals for at least 4 hours of uninterrupted operations		6													
UPS 4	100% parallel redundant UPS at depots/workshop/division for at least 4 hours of uninterrupted operations		8													

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/ consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices			
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]		[insert: Foreign Currency C]	INR	INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price	Total Price	Total Price
UPS 5	UPS at the city wide POS stations for at least 4 hours of uninterrupted operations		18														
1.8	Automatic Sliding Door at BRT Stations (ASD)																
ASD H1	ASD System inclusive of but not limited to																
ASD H1.1	Number of Doors at BRT stations and Accessories		0														
ASD H1.2	Door Open Controller, Sensor and Other Accessories																
ASD H1.3	Emergency switch to open door																

Item Code	Subsystems / Items	Country of Origin Code	Quantity exclusive of spares/ consumables	Unit Prices / Rates					Total Prices					Total Supply + Installation/Services Prices			
				Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services	Supplied Locally	Supplied from outside the Purchaser's Country			Installation/Services				
				INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]	[insert: Foreign Currency C]	INR	INR	INR	[insert: Foreign Currency A]	[insert: Foreign Currency B]		[insert: Foreign Currency C]	INR	INR
				Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Unit Price	Total Price	Total Price	Total Price	Total Price		Total Price	Total Price	Total Price
ASD H1.4	RFID Reader and Antenna at BRT Stations																
ASD H1.5	RFID Tag and Door Opening Closing Wireless RF Switch		130														
C8 - Communication System (COMM) – SUBTOTAL (to Supply and Installation Cost Summary Table)																	
Grand Total – Supply and Installation Cost (C1+C2+C3+C4+C5+C6+C7+C8)																	

Notes:

- Any item/ material either hardware or software required to meet the functionality specified in the tender document whose related component is missing in the above table has to be accounted by the Bidder and the cost of the same is assumed to be reflected and taken care in the cost specified to the Purchaser by the Bidder in the financial bid. The Purchaser is liable only to pay the Contract costs as per the payment terms mentioned to the Bidder to meet all the requirements as specified in the bidding documents.
- The Bidder has to modify the above indicative table and make a comprehensive list of System inventory table by including the components which the Bidder might think are relevant based on the Bidders design to meet all the bid requirements indicating the costs of the same in the financial bid.
- The Bidder shall assess the quantity of spares/ consumables to meet the SLA clauses mentioned in the bidding documents and shall quote the cost and quantity of spares/consumables. The evaluation will take the total cost incurred for the Purchaser inclusive of spares/ consumables while evaluating the bids. Any item not quoted by the Bidder, shall be provided free of cost if it is found necessary to fulfill the bidding requirements during the currency of the contract.

4. The evaluation will take the total cost incurred for the Purchaser inclusive of spares/ consumables while evaluating the bids which is to be included by the Bidder in the Contract cost itself.
5. The Contract Cost shall be inclusive of all the installation, commissioning, testing and any other costs that might be incurred by the Bidder during the duration of the contract.

ATTACHMENT 3

Service Level Agreement (SLA's)

Performance Requirements and Penalties

The Exhibit 1 below provides the Service Level's (SLA) to be adhered to by the Bidder during the operational hours of the Project (as defined in Chapter B Section 1). The preventative maintenance and the scheduled down time shall be carried out by the Bidder during the non-operational hours of the project. In case of not meeting the SLA's, the corresponding penalties as defined in the Table 1 shall apply.

S. NO	REQUIREMENT	FALLS BY	PENALTY (INR)	CALCULATION	
				(CURRENCY IN INR)	
TYPE A PARAMETERS: MEASUREMENT & VALIDATION THROUGH AUTOMATED SYSTEM GENERATED REPORTS					
1.	OFC based backbone communications & Central Network Infrastructure availability	99.90%	0.10%	10,000	For every decrease of 0.1% in Network Infrastructure availability over a period of one month, a penalty of 10,000 shall be imposed.
		"OFC based backbone communications & Central Network Infrastructure Availability" is defined as the uptime of OFC backbone & central network infrastructure & its related devices responsible for overall communication between all locations connected with the Control Center using fibre optic backbone (deployed by bidder).			
2.	Internet connection availability at Control Centre	99.90%	0.10%	1,000	For every decrease of 0.1% in internet connection availability with required bandwidth at control centre over a period of one month, a penalty of 1,000 shall be imposed.
		"Internet connection Availability" is defined as the uptime of internet connection with required bandwidth at Control Center using 2 redundant ISP connections.			
3.	Network Management System (NMS) Availability	99.90%	0.10%	10,000	For every 0.1% decrease in availability of NMS over a period of one month, a penalty of 10,000 shall be imposed.
		"NMS Availability" is defined as the proper functioning of the NMS application/module as specified in the functional and technical specifications of the bidding document.			
TYPE B PARAMETERS: MEASUREMENT & VALIDATION THROUGH AUTOMATED SYSTEM GENERATED REPORTS AND MANUAL VERIFICATION BY PURCHASER					

4.	AFCS Central System Availability	99.90%	0.50%	50,000	For every decrease of 0.5% in availability in a period of one month, a penalty of 50,000 shall be imposed.
		"AFCS Central System Availability" is defined as the proper functioning of the AFCS Central System hardware, application & database as per the functional & technical specifications defined in the bidding documents; this shall also include software license validity of any COTS, Database, Software, Anti-virus etc. which is part of the system.			
5.	AVL Central System Availability	99.90%	0.50%	50,000	For every decrease of 0.5% in availability in a period of one month, a penalty of 50,000 shall be imposed.
		"AVL Central System Availability" is defined as the proper functioning of the AVL Central System hardware, application & database as per the functional & technical specifications as defined in the bidding documents; this shall also include software license validity of any COTS, Database, Software, Anti-virus etc. which is part of the system.			
6.	TMS Central System Availability	99.50%	0.50%	50,000	For every decrease of 0.5% in availability in a period of one month, a penalty of 50,000 shall be imposed.
		"TMS Central System Availability" is defined as the proper functioning of the TMS Central System hardware, application & database as per the functional & technical specifications as defined in the bidding documents; this shall also include software license validity of any COTS, Database, Software, Anti-virus etc. which is part of the system.			
7.	Missing transactions (specific to AFCS System)	None	One missing transaction	250	For every missing transaction, a penalty of 250 shall be imposed
		"Missing transactions" is defined as the un-availability of any data or file of any nature or type in the system but is found to have transacted.			
8.	Addressing Software glitches Minor	To be addressed within 7 calendar days after complaint	One day	20,000	For each day of delay in fixing a minor software glitch a penalty of 20,000 for each glitch per day shall be imposed
		"Minor" is defined as: No effect on normal operations			
9.	Addressing Software bugs Major	Restore the previous version of the software within 1 calendar day so that functionality is restored.	One day	50,000	For each day of delay in restoring the previous functional version a penalty of 50,000 per day shall be imposed

		Fix the glitch and release the new version	30 days	50,000	For each day of delay in fixing the major software glitch a penalty of 50,000 per day shall be imposed.
		"Major" is defined as: Noticeable effect affecting normal operations.			
10.	Website, IVRS & SMS System uptime with all the features	98.00%	0.50%	5,000	For every decrease of 0.5% in uptime for each system in a period of one month, a penalty of 5,000 shall be imposed
		"Website, IVRS & SMS Uptime" is defined as: The website, IVRS & SMS System shall be up & running with all its related functionalities & desired performance levels. The performance of the website will be measured with a link of 128kbps internet connection & it should display the full website page within 5 seconds for all 5000 concurrent users.			
11.	Local distribution/Local Communications Network (LAN) Availability at City Mobility Center/ BRT Stations/ City POS/Terminals/Depots /Workshops	99.80%	0.10%	500	For every decrease of 0.1% in Local Network availability for each location in a period of one month, a penalty of 500 shall be imposed
		"Availability" here means the local distribution/network (LAN) including fibre optic drop cable for each location including BRT Stations, City POS, Depots, Workshops, Terminals & City Mobility Center shall be available (up & running) as per the requirements defined in the bidding documents. The availability will be calculated based on each individual sub-area level.			
12.	Wireless Communication Network Availability (via ISP) between City Mobility Center and POS Stations/OBITS and ETM in Buses	98.00%	0.50%	1,000	For every decrease of 0.5% in Network availability between City Mobility Center and each POS Station/Bus in a period of one month, a penalty of 1,000 shall be imposed
		"Availability" means: The point to point (P2P) communication between City Mobility Center & POS stations/buses shall be up & running with required bandwidth to perform all the functional & technical tasks as defined in bidding documents without affecting the performance of the system/ communication/ data transfer. Reduced bandwidth & any other issue related to network resulting in degraded/reduced performance shall also be considered as unavailability.			
13.	UPS Availability at any single location	99.50%	0.50%	1,500	For every decrease of 0.1% in UPS availability in a period of one month, a penalty of 1,500 shall be imposed
		"Availability" is defined as: When UPS is available in full working condition as defined in bidding documents with consideration to main power availability. UPS running in "Bypass" mode shall also be considered as unavailable. Power outages beyond UPS backup time shall be excluded from the SLA calculations.			
14.	All Workstations (excluding POS), Printers, Scanners, Monitor Availability	99.00%	0.50%	500	For every decrease of 0.5% in availability for each device in a period of one month, a penalty of 500 shall be imposed

		"Availability" is defined as: When a device/ equipment is working properly with all its features & functions along with required hardware & software as defined in the bidding documents.			
15.	POS (BRT Station/ City wide/ City Mobility Center) System Availability	99.50%	0.50%	2,500	For every decrease of 0.5% in each POS availability for a period of one month, a penalty of 2,500 shall be imposed
		"POS System Availability" is defined as the proper functioning of the POS with all applicable features & full functionality along with the required applicable hardware associated with POS including but not limited to Workstation, Printer, Smart card Personalization Unit, Document Scanner, Smart Card revaluing device, camera, display unit/system & Monitor.			
16.	Fare Gate Availability	99.50%	0.50%	2,500	For every decrease of 0.5% in availability of each fare gate in a period of one month, a penalty of 2,500 shall be imposed
		"Fare Gate Availability" is defined as the proper functioning of the fare gate & all its related components including but not limited to smart card validators and barcode readers as per the functional & technical specifications as defined in the bidding documents.			
17.	Handheld ETM Machine Availability	99.50%	0.50%	1,000	For every decrease of 0.5% in each ETM availability during operations in a period of one month, a penalty of 1,000 shall be imposed
		"Handheld ETM Machine Availability" is defined as ETM when under operations is fully functional with all its features & functions along with required hardware & software as per the functional & technical specifications defined in the bidding documents. At any given point of time the ETM required for running operations shall be available & in fully functional working condition.			
18.	AVL OBU/SCU Availability (provided by supplier)	99.50%	0.50%	1,000	For every decrease of 0.50% in each OBU/SCU availability for a period of one month, a penalty of 1,000 shall be imposed
		"AVL OBU Availability" is defined as the proper functioning of the AVL OBU with all its features & functions along with required hardware & software as per the functional & technical specifications defined in the bidding documents. 3G/GPRS connection availability is excluded from this.			
19.	ETA Accuracy in BRT (AVL System)	95%	0.50%	200	For each instance of decrease in ETA accuracy by 0.50%, a penalty of 200 shall be imposed
		"ETA Accuracy" is calculated at all BRT shelters/terminals for all the BRT buses as the difference between the expected and actual arrival times. This should be within -1 to 3 minutes, predicted 15 minutes before the actual measured arrival time.			
20.	ETA Accuracy in Non BRT (AVL System)	85.00%	0.50%	200	For each instance of decrease in ETA accuracy by 0.50%, a penalty of 200 shall be imposed

		<p>“ETA Accuracy” is calculated at all bus shelters/terminals for the buses as the difference between the expected and actual arrival times. This should be within - 2 to 7 minutes, predicted 15 minutes before the actual measured arrival time.</p>			
21.	PIS Display Availability (provided by supplier)	99.00%	0.50%	200	For every decrease of 0.5% in each PIS display in a period of one month, a penalty of 200 shall be imposed
		<p>“PIS Display Availability” is defined as the proper functioning of the PIS with all its features & functions along with required hardware & software as defined in the bidding documents. PIS displays showing distorted/ partial/ non-readable messages/ information shall also be considered as unavailable.</p>			
22.	PTZ Cameras, Fixed Cameras, ANPR Cameras & its associated components (hardware & software for individual camera) Availability	99.00%	0.50%	500	For every decrease of 0.50% in availability of each device & its associated component in a period of one month, a penalty of 500 shall be imposed
		<p>“Availability” is defined as: When the system is working properly with all its features & functions as defined in the bidding documents.</p>			
23.	NVR System, ANPR application & CCTV Central Application Availability	99.00%	0.50%	1000	For every decrease of 0.50% in availability for NVR system, ANPR application or CCTV Central application in a period of one month, a penalty of 1000 shall be imposed
		<p>“Availability” is defined as: When the system is working properly with all its features & functions along with required hardware & software as defined in the bidding documents. NVR system not recording video feeds from cameras shall also be considered as non-availability.</p>			
24.	ANPR License Plate Detection Accuracy	95.00%	1%	1,000	For every decrease of 1 % in accuracy for ANPR system for regulated and standard license plates of HD-BRTS authorized buses and emergency vehicles in a period of one month, a penalty of 1,000 shall be imposed
		70.00%	2%	1,000	For every decrease of 2 % in accuracy for ANPR system for any license plates other than HD-BRTS authorized buses in a period of one month, a penalty of 1,000 shall be imposed
		<p>“Accuracy” is defined as: The detection accuracy of a ANPR system is measured against the correct license plates been read by the system. Any license plate not correctly read by ANPR system shall be considered as unreadable and specified penalty is applicable as per the above parameters.</p>			
25.	Barcode Reader Availability	99.00%	0.50%	100	For every decrease of 0.5% in each barcode reader availability in a period of one month, a penalty of 100 shall be imposed

		<p>“Barcode Reader Availability” is defined as the proper functioning with all its features & functions along with required hardware & software as defined in the bidding documents. Barcode reader unable to read readable bar-coded tickets shall be considered as non-availability.</p>			
26.	Proximity Reader Availability	99.50%	0.50%	200	For each instance of decrease in availability by 0.50%, a penalty of 200 shall be imposed
		<p>“Proximity Reader Availability” is defined as the proper functioning with all its features & functions along with required hardware & software as defined in the bidding documents. Reader not reading the registered staff and reading unregistered user also be considered as unavailable.</p>			
<p>TYPE C PARAMETERS: MEASUREMENT & VALIDATION BY MANUAL INSPECTION AND VERIFICATION BY PURCHASER</p>					
27.	Smart Card Reading	99.5%	0.25%	200	For every decrease of 0.25% of smart card reads at a station for a day, a penalty of 200 shall be imposed
		<p>“Smart card reading” is defined as: The read accuracy of a readable smart card when a fully functional validator or revaluing device is used. Any smart card not read by a validator or a POS (independently) within the first 2 attempts will be considered as unreadable and the specified penalty is applicable.</p>			
28.	EPABX/VoIP System Availability	99.50%	0.50%	200	For every decrease of 0.50% in availability of EPABX/VoIP in a period of one month, a penalty of 200 shall be imposed
		<p>“EPABX/VoIP availability” is defined as the proper functioning with all its features & functions along with required hardware & software as defined in the bidding documents.</p>			
29.	Station Doors, RFID sensor & Door Open & Close switch in Bus Availability	99.50%	0.10%	50	For every decrease of 0.10% in availability of each component in a period of one month, a penalty of 50 shall be imposed
		<p>“Availability” is defined as the proper functioning of Station Door with all its features & functions along with required hardware & software as defined in the bidding documents. Any and all components involved in not correctly opening of the sliding door when a bus is properly aligned with the station - shall also be considered as unavailable.</p>			
30.	Emergency switch Availability to open door at station	99.95%	0.10%	200	For every decrease of 0.10% in availability of emergency switch in a period of one month, a penalty of 200 shall be imposed
		<p>“Availability” is defined as the proper functioning with all its features & functions along with required hardware as defined in the bidding documents.</p>			

Exhibit 1 Service Level Agreement Performance Parameters