

Tender Document

OPERATIONS AND MAINTENANCE SERVICES OF AUTOMATED FARE COLLECTION AND BUS SCHEDULING SYSTEM (AFC-BSS) FOR LAHORE METROBUS SYSTEM (LMBS) (GAJJUMATA TO SHAHDARA)



THE PUNJAB MASS TRANSIT AUTHORITY Government of the Punjab

5th Floor, Arfa Software Technology Park (ASTP)

346-B, Main Ferozpur Road, Lahore, Pakistan.

Phone: +92 42 99028000 Fax: +92 42 9923 2541

URL: www.pma.punjab.gov.pk



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Important Note

Registered companies and Joint ventures complying with criteria given in this document are eligible for this tender, hereafter referred to as Bidders.

There are two components to be assumed by bidders:

- 1. Operate and Maintain the entire AFC-BSS solution already procured, deployed and in operation at Lahore Metrobus System (LMBS) since February 2013 such that for the Contract period i.e. three years, the Contractor has to align AFC-BSS software support from the AFC-BSS-Manufacturer. The software support shall include software updates and any software changes required due to operational needs of the Client in relation to AFC-BSS.**
- 2. Manage ticketing operations at PMA stations by utilizing the deployed AFC-BSS solution. This includes bank transactions, ticket sales, refunds and add fares, customer facilitation at Turnstiles as per defined scope of services.**

For a more elaborate list of roles and responsibilities in each case above, please refer to Clause 9 (“Services Required”) in this document.

Client reserves exclusive rights to cancel/annul or reject all bids submitted at any time without giving any reason thereof.

Bidders must ensure that they submit all the required documents indicated in the Bidding Documents without fail. Bids received without, undertakings, valid documentary evidence, supporting documents and various requirements mentioned in the Bidding Documents or test certificates are liable to be rejected at the initial stage itself. The data sheets, valid documentary evidences for the critical components as detailed hereinafter should be submitted by the Bidder for scrutiny. It is intimated that no objection/revisions/supplement shall be entertained regarding the terms and conditions of the Bidding Document submitted by the bidder.

Applicability of Punjab Procurement Rules, 2014

This Bidding Process will be governed under Punjab Procurement Rules, 2014, as amended from time to time and instructions of the Government of the Punjab received during the completion of the project

Important Dates

- 1. Last date of Bid Submission: July 27, 2020 (3pm) – 5th floor Arfa Software Technology Park, Ferozpur Road, Lahore.**
- 2. Clarification meeting: Monday, July 17, 2020 (3pm) – 5th floor Arfa Software Technology Park, Ferozpur Road, Lahore.**

1. Invitation to Bid

Punjab Masstransit Authority (PMA), Government of the Punjab (The Client), invites bids for the National Tender of **“Operations Maintenance Services of Automated Fare Collection and Bus Scheduling System (AFC-BSS) for Lahore Metrobus System (LMBS) (Gajjumata to Shahdara)”**.

1.1 PPRA Rules to be followed

Punjab Procurement Rules 2014 will be strictly followed. These may be obtained from PPRA’s website:

<http://ppra.punjab.gov.pk/downloads>

In this document, unless otherwise mentioned to the contrary, "Rule" means a Rule under the Punjab Procurement Rules 2014.

1.2 Mode of Advertisement(s)

As per Rule 12, this Tender is being placed online at PPRA's website, as well as being advertised in print media. The bidding document carrying all details can be downloaded from PPRA’s website www.ppra.punjab.gov.pk, PMA’s website <http://www.pma.punjab.gov.pk>.

As per Rule 12(2), this Tender is being placed online at PPRA's website, as well as being advertised in print media.

1.3 Type of Open Competitive Bidding

As per Rule 38(2)(a), Single Stage - Two Envelope Procedure shall be followed such that Technical and Financial Proposals are submitted separately. This is as follows:

- i. The bid shall comprise of a single package containing two separate envelopes. Each envelope shall contain separately the financial proposal and the technical proposal;
- ii. The envelopes shall be marked as **“FINANCIAL PROPOSAL”** and **“TECHNICAL PROPOSAL”** in bold and legible letters to avoid confusion;
- iii. Initially, only the envelope marked **“TECHNICAL PROPOSAL”** shall be opened;
- iv. The envelope marked as **“FINANCIAL PROPOSAL”** shall be retained in the custody of the Client without being opened;
- v. The technical proposal will be evaluated in a manner as per the clauses mentioned in this document; and proposals which do not conform to the specified requirements as listed in said document will be rejected.

- vi. During the technical evaluation no amendments in the technical proposal shall be permitted;
- vii. The financial proposals of technically qualified bidders shall be opened publicly at a time, date and venue announced and communicated to the bidders in advance;
- viii. After the evaluation and approval of the technical proposal the Client, shall at a time within the bid validity period, publicly open the financial proposals of the technically accepted and qualified bids only. The financial proposal of bids found technically non-responsive shall be returned un-opened to the respective bidders.
- ix. The technically qualified bidder with lowest financial bid will be the successful bidder.

2. Bidding Details (Instruction to Bidders)

All bids must be accompanied by tender security as part of financial proposal (with a copy in technical proposal) in favor of “**Punjab Masstransit Authority**” (As per provisions of Tender Security clause 22 of this document).

The bids along with the Tender Security, Tender Forms, Affidavits, etc., must reach PMA’s office located at 5th floor, Arfa Software Technology Park, 346-B, Ferozpur Road, Lahore, PAKISTAN, on or before **1500 hours on July 27, 2020**. The Technical bids will be publicly opened in the Committee Room of Punjab Masstransit Authority, 5th Floor, Arfa Software Technology Park, 346-B, Main Ferozpur Road, Lahore, at **1530 hours on July 27, 2020**.

Queries of the Bidders (if any) for seeking clarifications regarding the specifications of the services must be received in writing by the PMA by **17th July 2020**. All queries shall be responded to within due time.

The bidder must submit bids in full conformity of the requirements mentioned vide this document. Failure to meet this condition will cause disqualification of the bidder and subsequent rejection of the relevant bid. The attention of bidders is drawn to the provisions of Clauses 20, 27 & 29 on “**Preparation / Submission of Bid**”, “**Determination of Responsiveness of Bid**” and “**Rejection & Acceptance of Tender/Bids**” respectively before preparing and submitting their bids.

The contact detail for all correspondence in relation to this bid is as follows:

Email: afc.bss@pma.punjab.gov.pk
Punjab Masstransit Authority (PMA)
5th Floor, Arfa Software Technology Park,
346-B, Ferozpur Road, Lahore, Pakistan.

Bidders should note that during the period from the advertisement of the tender till the receipt of the bid, all queries should be communicated in writing via e-mail at the above contact detail.

Bidders are also required to state, in their proposals, the name, title, fax number and e-mail address of the bidder’s authorized representative through whom all communications shall be directed until the process has been completed or terminated.

Client will not be responsible for any costs or expenses incurred by bidders in connection with the preparation or delivery of bids.

As authority competent to accept the tender, Client reserves the right to cancel the tender or reject all bids without assigning any reason thereof.

3. Definitions

- 3.1 "PMA" is Punjab Masstransit Authority, Government of Punjab.
- 3.2 "LMBS" is Lahore Metrobus System
- 3.3 "AFC-BSS" Automated Fare Collection and Bus Scheduling System, as asked for in the Tender Document. Initial phase is for AFC-BSS implementation for 27 Metrobus stations in Lahore.
- 3.4 "Client" means Punjab Masstransit Authority (PMA), Government of the Punjab or any other person/entity for the time being or from time to time duly appointed in writing by the Client to act as Client.
- 3.5 "AFC-BSS Service Provider" or "Successful Bidder": The technically qualified bidder with lowest financial bid, who has the probability of award of contract for AFC-BSS Project, subject to necessary approvals and applicable policies.
- 3.6 "Confirmation" means confirmation in writing.
- 3.7 "Bidder/Tenderer" means a registered company or joint venture that has submitted its bid as per the criteria/specifications listed.
- 3.8 "Contractor" means successful Bidder/Tenderer.
- 3.9 "Contract" means the contract proposed to be entered into between the Client and the Bidder, including all attachments, appendices, and all documents incorporated by reference therein.
- 3.10 "Contract Price" means the price payable to the Contractor under the Contract for the full and proper performance of its contractual obligations.
- 3.11 "Clarification Meeting" means the meeting conducted by the Client on given date and time prior to actual date of bid opening.
- 3.12 "Procurement Methods" means any one of the procurement modes / methods as provided in the Punjab Procurement Rules 2014 published by the Punjab Procurement Regulatory Authority (PPRA), Government of Punjab.
- 3.13 "RFP" means Request for Proposals, including any amendments that may be made by the Client for the selection of bidder.
- 3.14 "Proposal" means the Technical Proposal and the Financial Proposal for the provision of the Services submitted by a bidder in response to RFP.
- 3.15 "SBD" means Standard Bidding Documents.
- 3.16 "SCC" means the Special Conditions of Contract.
- 3.17 "Services" means the tasks to be performed by the bidder pursuant to the Contract as mentioned vide this document.
- 3.18 "TEC" means the Technical Evaluation Committee, constituted for the purpose of evaluating the Proposals received.
- 3.19 "Terms of Reference" or "TOR" means the document which explains the objectives, scope of work, activities, task to be performed, respective responsibilities of the Client and the bidder, and expected results and deliverables of the assignment.
- 3.20 "Works" means work to be done by the Contractor under the Contract.
- 3.21 "GoPb" means Government of the Punjab
- 3.22 "Outgoing-AFC-BSS-Contractor" means the existing AFC-BSS Contractor
- 3.23 "AFC-BSS-Manufacturer" means M/s Kentkart Ege Elektronik San. Ve Tic. A.S

website: www.kentkart.com email: info@kentkart.com

4. Headings and Titles

In this document, headings and titles shall not be construed to be part thereof or be taken into consideration in the interpretation of the document and words importing the singular only shall also include the plural and vice versa where the context so requires.

5. Notice

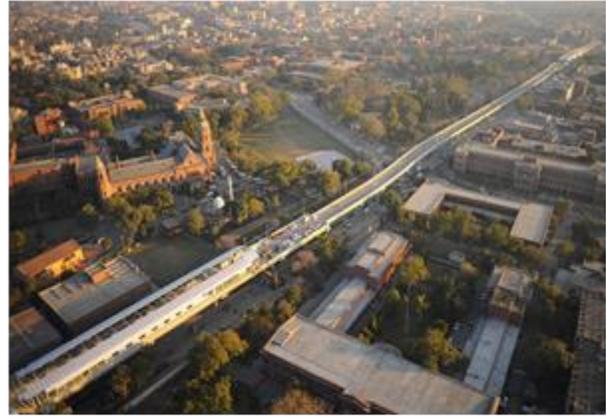
- 5.1 In this document, unless otherwise specified, wherever provision is made for exchanging notice, certificate, order, consent, approval or instructions amongst the Contractor and the Client, the same shall be:
- 5.1.1 in writing;
 - 5.1.2 issued within reasonable time;
 - 5.1.3 served by sending the same by courier or registered post to their principal office in Pakistan or such other address as they shall notify for the purpose; and
 - 5.1.4 The words "notify", "certify", "order", "consent", "approve", "instruct", shall be construed accordingly.

6. Tender Scope

- 6.1 Punjab Masstransit Authority (PMA), Government of the Punjab (The Client), invites/requests Proposals (hereinafter referred to as "the Tenders") for the Operations and Maintenance (on turnkey basis) of Automated Fare Collection and Bus Scheduling System (AFC-BSS) as defined in this document.
- 6.2 In the first phase, the operations and maintenance services for AFC-BSS solution will be provided for 27 stations of Lahore Metrobus System (LMBS) having off-board ticketing.
- 6.3 The AFC-BSS software comprises of Automated Fare Collection System, Bus Scheduling and Vehicle Location system and Passenger Information System and its associated equipment and services.
- 6.4 High-level requirements for these systems are outlined in relevant sections in this document.

7. Overview and Objectives

PMA realizes the importance of providing safe, efficient, comfortable, and affordable Transport to the public and commissioned the MetroBus Corridor in Lahore in 2013. The Client seeks to induct O&M services for AFC-BSS for Metrobus System in Lahore (Gajjumatta to Shahdara). The Service Provider will provide services for 3 years. MBS initially spans over approximately 27 KM running from Gajjumatta to Shahdara through Ferozpur Road named as Green Line. Key locations are targeted to maximize ridership from all surrounding areas. 27 stations are built throughout the entire route of MBS. The pictures below highlights general station layout and its perspective view.



SALIENT FEATURES OF THE PROJECT

- Total length of the corridor from Gajjumata to Shahdara is approximately 27 Km.
- Two lane - limited access corridor (10m wide). Access is controlled by Fenced barrier along the curb sides. Intersections at Nishter, Gulabdevi, Kalma Chowk and Timber market.
- Portion from Canal to Bhati Station is elevated (8.3 Km)
- Portion from Niazi Station till start of Ravi Bridge is Mixed traffic zone.
- Total 27 Stations having average inter-distance of 1 km. Each station has two platforms each with three (03) docking bays except MAO College station which has five (05) docking bays. 18 numbers of stations are at-grade while 9 stations are elevated.
- The access to the stations is grade-separated. Pedestrian bridge is used for station access except Kalma, Canal, Qartaba and Azadi Stations where station access is through pedestrian underpasses.
- MAO, Qartaba and Canal stations have multiple accesses (at least four).
- There are 39 ticket offices/booths such that MAO has four (04) ticket booths, Bhatti, Katchery, Civil, Janazgah, Qartaba, Shama, Ichra, Canal and Gajjumata has two (02) ticket booths while remaining have only one (01).
- The pedestrian bridges and underpasses are used for stations access as well as road crossing.

- Station power is backed up by 100 KVA and 200 KVA gensets whose fueling is done during non-operational hours (11:00 PM – 5:30 AM).
- Bus Operational hours are from 6:15 AM to 11:00 PM according to the prevalent schedule and is subjected to change when desired by the Authority.
- Automated Fare Collection (AFC): Two types of electronic fare media are used i.e. token and smart card which are validated at turnstiles before entering into the platforms
- 64 Articulated air conditioned buses (seating capacity 38+1, total capacity 160 per bus). Depot is located near Nishter Metrobus Station, Ferozepur Road, Lahore.
- Terminal stations i.e. Shahdara and Gajjumatta have bus turnarounds and bus parking space
- Operations is monitored and controlled through Command & Control Center located in Arfa Karim Software Technology Park (ASTP), 5th Floor, Ferozpur Road, Lahore
- The average ridership details are as follows;

AVERAGE DAILY RIDERSHIP (2015-2019)

STATIONS	2019	2018	2017	2016	2015	maximum
Shahdara	20610	22934	25218	23505	21741	25218
Niazi Chowk	4320	4553	4831	4797	4972	4972
Timber Market	2117	1941	1913	1952	2507	2507
Azadi Chowk	4661	4615	4473	3940	3815	4661
Bhatti Chowk	7055	7394	8331	7406	8522	8522
Katchery	3131	3813	3645	4003	3913	4003
Civil Secretariat	3386	3520	3975	3680	3768	3975
MAO College	4329	5872	5376	5288	6662	6662
Janazgah	1344	1124	1133	1163	1446	1446
Qartaba Chowk	3436	4819	4603	3950	4406	4819
Shama	1795	2556	2638	2476	2893	2893
Ichra	4281	4538	4810	4380	5622	5622
Canal	6252	6481	5383	7470	7549	7549
Qaddafi Stadium	2921	2932	2773	1719	2147	2932
Kalma Chowk	7592	7562	8101	7364	7458	8101
Model Town	2152	2226	2508	2198	2593	2593
Naseerabad	1420	1413	1434	1393	1855	1855
Ittefaq Hospital	5868	5689	5901	6210	6634	6634
Qainchi	4383	5130	5236	4352	4918	5236
Ghazi Chowk	5244	5439	5714	5219	5739	5739
Chungi Amar Sidu	5135	5513	5490	5402	6136	6136
Kamahan	3104	3092	3022	2886	3378	3378
Attari Saroba	2089	2054	2013	1907	2476	2476
Nishter Colony	2925	2928	3029	3011	3877	3877
Youhanabad	2063	2128	2391	2032	1631	2391

Dulu Khurd	1313	1043	394	1310	1813	1813
Gajju Matta	10456	10338	11035	9945	9973	11035
	123381	131648	135370	128958	138444	147046

Automated Fare Collection and Bus Scheduling System (AFC-BSS) serves as an information system coupled with necessary hardware and software to authenticate entry/exit of passengers into bus stations/buses, and to monitor adherence to bus schedules. The system is based on two types of fare media including reusable RFID tokens and smart cards. Smart cards may be recharged to a stated, agreed upon max limit, for travel onto metro stations.

The AFC-BSS system have the capability to handle flat rate, staged/zone based and distance based fare policies, and is scalable/expandable to any number of stations, vehicles, cities, and passenger volumes.

Following are the key objectives of the project

- To capture ridership and revenue data which can be used in better scheduling and service planning provide accurate data for federal reporting.
- To create a platform based on industry standard technology which can provide a basis for extension and integration.
- Transparent and reliable mechanism of reporting payments due to bus operators - based on agreed upon and approved payment formulas and policies.
- Online secure dashboards, accessible by all stakeholders, via centralized system in order to facilitate timely and informed decisions.
- To Provide better customer experience and convenience through increased reliability, efficiency, and flexibility

To accomplish this, The Client will receive live passenger data and financial data in PMA Command and control center. The whole operation will be monitored and controlled by Punjab Masstransit Authority from PMA Command and Control Centre that is established at Arfa Software Technology Park (ASTP), Lahore.

8. Contract type and duration

Contract period is (03) three years, extendable with mutual consent of both parties based on needs, compliance to defined Service Level Agreement (SLA), audit reports, and other requirements stated in this Tender Document, and formal contract.

9. Services Required

Contractual obligations of the successful bidder's (AFC-BSS Service Provider's roles and Responsibilities):

Contractor's roles, responsibilities and onsite technical support:

1. Maintain and administer all AFC-BSS components - including all related equipment and software necessary for the smooth running of the system., with provisions of this tender document, good industry practices, applicable laws, and technical specifications of components stated in this document.
2. Contractor is responsible to align the support of AFC-BSS-Manufacturer for AFC-BSS software maintenance and updates and any software changes required due to operational needs of the Client in relation to AFC-BSS.
3. Maintain and operate a robust, scalable, secure, and efficient data communications network connecting PMA stations and other designated network points, to the datacenter/hosting site as well as the central PMA control center.
4. Deploy suitably skilled personnel (dedicated team) for configuration/customization, installation, and prompt and efficient technical support/maintenance of all AFC-BSS components.
5. Adequate spare parts must be in place in order to ensure uptime defined in the Service Level Agreements. Timely maintenance and repair/replacement of the spare parts of the equipment installed must be ensured. Cost to be borne by the Contractor.
6. Adhere to timelines of the AFC-BSS project implementation specified in this RFP.
7. Ensure quality, robustness, security, and functionality of all hardware, software components associated with AFC-BSS.
8. Implement a secure and protected access control system to control access to AFC-BSS software application systems and databases, limiting access to authorized personnel only. Also maintain primary and secondary (disaster recovery) hosting sites and ensure regular and tested data backup.
9. Implement appropriate security measures for the information and data generated from operations of AFC-BSS, and deploy standard disaster management procedures,

contingency plans, and back-up plans to cope with any system failure.

10. Undertake a comprehensive training program, regarding AFC-BSS software and hardware, and ensure that its staff acquires a good working knowledge of supply of such Services to be supplied under the Contract.
11. Undertake taking over of all AFC-BSS equipment and components from the Client in fully operational and good working condition.
12. Prepare and implement detailed preventive and break-down maintenance plan for all AFC-BSS equipment and components to be handed over by the Client to the Contractor. Also update the maintenance plan through maintenance review procedures.
13. Guarantee up-time and adequate performance of AFC-BSS components at Bus Stations, on the buses, Control Center, Central Datacenter.
14. Guarantee smooth operations and functioning of all AFC-BSS components during the entire contract period.
15. Plan and conduct regular disaster recovery drills, security audits, and performance tuning activities. Timely submit associated plans, schedules, and results for review.
16. Coordinate all equipment and software maintenance activities well in advance with authorized/designated personnel at PMA.
17. Regularly check, and timely upgrade and maintain all possible ICT infrastructure including hardware, software, and network infrastructure and ensure adherence to stated service-level parameters.
18. Integrate with other Intelligent Transport Systems (ITS) add-ons, if any.
19. Facilitate and operate integration of AFC-BSS system with banking software system of the Bank of Punjab, in an efficient and secure manner.
20. Ensure that only authorized personnel of PMA should have secure access to add or change key configuration parameters (related but not limited to smart-card parameters, fare rates/policies etc).
21. Provide authorized PMA staff (and other authorized Government personnel) secure, 24x7 online access to updated Management Information System reports and features -covering all critical aspects of AFC-BSS operations, alerts, faults, and audit logs.
22. The validators shall reduce / cancel the value of a card / token to cause deduction of fare, and all real-time scanned information shall be stored.

23. Obtain all necessary permits under all applicable Laws required to proceed with AFC-BSS Project implementation, and comply with applicable laws, regulations, and permits during the contract period.
24. Cooperate with all other service providers and facilitate their operations in the PMA system. In case of damages to PMA or other Service Provider property on the part of the AFC-BSS Service Provider the damages shall be recovered from the AFC-BSS Service Provider by the Client.
25. Be responsible for the conduct and functioning of all staff employed on the AFC-BSS project towards passengers and PMA staff as well as authorized staff of other relevant government agencies. The service provider shall ensure efficient services, polite and courteous behavior of its employees. The Service Provider shall be liable for any misconduct or unreasonable offense of its employees and shall take prompt and appropriate action.
26. Participate in all meetings, committees, etc, as directed by PMA from time to time.
27. Ensure smooth transfer of all hardware, software, and equipment forming the part of AFC-BSS to PMA, upon contract completion/termination – in good running condition.
28. Operate ticket office terminals at all metro stations under PMA. Non-A/C lockable cabin will be provided by PMA and handover to service provider for its maintenance and management throughout the currency of the contract.
29. In-order to ensure there are no ticketless travelers within the system, the bidder shall also provide manpower at turnstiles.
30. Deploy suitably skilled personnel at PMA metro stations to efficiently manage ticket sales (using the implemented AFC-BSS solution interfaces), and to facilitate passengers at turnstiles.
31. Ticket offices (metro stations) must operate during operations of the PMA buses – tentatively decided as 18 hours a day.
32. Ensure prompt and efficient response time related to all service delivery aspects associated with ticket sales/refunds, turnstile entry/exit process, etc.
33. Timely raise alerts to the PMA control center staff in case of issues with equipment or system functioning.
34. Facilitate scalability of the AFC-BSS Project to cater to the future requirements and needs.
35. Engage and deploy suitably skilled personnel for operation and maintenance of the AFC-BSS project, and maintenance of all related equipment/component in a timely

manner and at its own cost.

36. Take prompt and reasonable action for resolution of each complaint – including complaints received from passengers as well as from PMA related to AFC-BSS operations e.g ticket sales, turnstiles facilitation etc and generate log of each complaint along with the details of the resolution.
37. Agree to and abide by the “Revenue Collection and Payment Mechanism” stated in this document.
38. Ensure integrity of cash collection and reconcile with sales/transaction reports daily to ensure there is no differences.
39. Adequate resources from the contractor’s side must be available to ensure smooth operations of AFC-BSS.
40. Cards/Tokens used in AFC-BSS corridor must also work with existing and future AFC-BSS systems in other AFC-BSS corridors and feeder route systems and vice versa (Fare Integration).
41. The Contractor is liable to cooperate fully with the assigned Information System Auditor’s and shall extend all necessary access, support & cooperation for the completion of said audits (as and when required).
42. The Contractor is responsible for operating the entire AFC-BSS system including all its components and peripherals, reliably and securely at all times during the course of the contract. The Contractor shall not make any changes to the system configuration parameters and security settings without prior written approval of the Client in a timely manner.
43. At no time or under any circumstances what so ever shall the Contractor ever make direct changes to the databases. It shall always be ensured that all changes in the database (if and when required/approved by the Client) shall be done through the application interface(s). The database audit logs shall always remain in enabled mode.
44. Contractor must hand over hardware/software in fully operational condition upon expiry of contract. The clearance will be dependent upon seeking Taking Over Certificate (TOC) from concerned authorities. Detailed trainings must be imparted by the Contractor to the staff of incoming Contractor as well as staff of PMA, before expiry of the contract which will have direct implications on issuance of TOC.
45. The Contractor is responsible for operating the entire AFC-BSS system including all its components and peripherals, reliably and securely at all times during the course of the contract. The Contractor shall not make any changes to the system configuration parameters and security settings without prior written approval of the Client in a

timely manner.

46. In case of failure of all entry or exit turnstiles at a particular platform the Contractor shall deploy 27 handheld ticket validators i.e. one (01) per station using turnstile controllers, to process entry / exit of passengers so as to avoid unprocessed travelling. The Contractor will be responsible to arrange and maintain necessary power backup so that these handheld validators may be utilized for 18 hours a day operations.
47. In case new busses are procured by the Client, the Contractor will be required to ensure compatibility of equipment in coordination with the Bus Service Provider and/or the bus manufacturer. The Contractor is also responsible for the deployment of equipment from old buses to new buses in coordination with AFC-BSS manufacturer. In this respect, the Contractor shall bear all expenses for deployment of AFC-BSS equipment in up to 64 new buses.

Clarifications Related to Services Required:

It is clarified that:-

- I. Cables which need replacement on stations will be provided and replaced by the Contractor at its own cost. However, in case new path / conduit is required for the cabling due to any infrastructural issue the conduit / duct will be provided by the Client.
- II. In case of extreme emergencies like fire, short circuiting, rain water infestation etc, Contractor will be allowed to turn off any equipment, with intimation to the Client, that can be damaged or cause damage to personnel due to any infrastructure issues to be handled by the Client at stations. No deductions will be imposed on Contractor under such circumstances. However, Contractor shall be responsible to take all necessary measures for protection of such equipment and accordingly will be responsible for any damage to such equipment except those which have been damaged by reasons not attributable to the Contractor, in which case the Client will be responsible for such equipment. It is however clarified that prior approval of PMA shall be obtained by the Contractor before shutting down equipment except in case of emergencies in which human lives and/or damage to equipment and allied infrastructure is imminent.
- III. There will be a dedicated security operator for LMBS, on 24/7/365 basis, who will be responsible for the security of equipment after operations hours. However, security of equipment locked by the Contractor shall be to the extent of protection of breakage of locks and theft thereafter.

10. Key Service-level parameters

Any breach of defined service levels will entail penalties. Service level parameters are outlined in Annexure-J.

11. Revenue collection and payment mechanism

1. A Designated account shall be opened by the PMA in the Bank of Punjab.
2. The contractor shall arrange printing of the cards/tokens, based on card/token design specified by PMA
3. Sale of tickets (cards/tokens) shall be the responsibility of the contractor.
4. For activation and subsequent recharging of cards (Smart cards) and tokens, the contractor shall use "Bulk Initialization Machines (BIM)", placed at PMA Command and Control Center.
5. BIMs, and/or top-up/Point of Sale (POS) machines will only initialize/top-up media if there is sufficient balance available. Contractor must first transfer sufficient balance amount into the Government Designated Account, and the Bank of Punjab will subsequently notify e-credit to be made available to the AFC-BSS service provider for charging of BIM/POS machine.
6. Payments from the Designated Account will be made to Bus Operator based upon agreed policies, formulas, and reconciliation reports from AFC-BSS.
7. Payments from the Designated Account will also be made to AFC-BSS Service Provider.
8. If there is surplus balance in the Designated Account, the amount will be retained by PMA. If there is deficit in the Designated Account (that is, the two service providers cannot be paid) then PMA will pay the deficit amount from its own account.
9. Regular third-party audit (financial as well as technical) to be made an integral part of the project

12. Other Parties Responsibilities

12.1. PMA Responsibilities

1. Provide fare structure, user roles, and business rules to AFC-BSS service provider
2. Provide AFC-BSS service provider necessary project site so that AFC-BSS service provider can perform its obligations in a timely manner
3. Attempt to grant timely approvals and make timely payments
4. Contract signing, Contract Payments and monitoring project operations

13. Key components of the solution

13.1 Station Level Equipment (SLE)

The details of SLE AFC-BSS equipment installed at metro station is attached at Annexure-K. The Contractor shall be responsible for operations and maintenance of all SLE including cabling for networks.

13.1.1 Station Passenger Area AFC-BSS Equipment

13.1.1.1 Turnstiles

All PMA stations have guarded entry and exit enforced via turnstiles.

AGMs have been deployed on every station, on boundary of paid area and un-paid area, which makes the total of 240 operational turnstiles at any given time. Each station have two

platforms, each having 4 turnstiles 2 each for entry and exit. Exit turnstiles have RFID token collector unit that collects the RFID token at exit from the passengers.

In-order to ensure there are no ticketless travelers within the system, the bidder shall provide manpower at turnstiles at all times during operations.

13.1.1.2 Validators

All the turnstile are equipped with validator(s) i.e. fare media readers / writers.

13.1.1.3 Ticket Offices for Top Ups/Printing Tickets/Allotting Tickets and Refunds

All PMA stations have Ticket Office Machines (TOM) i.e. PDA such that each ticket office is equipped with at least one TOM, which makes the total of 62 operational TOMs at any given time, for issuing charged tokens and charge cards with the desired amount paid by the passenger. TOM is manually operated and has ticket selling and supplementing function.

TOMs will only work if they contain balance amount that can be transferred onto the fare media. TOMs must reliably transmit transactional data to any intermediary system and/or central database. Ticket Office must be able to refund any reported incidents of overcharging after due diligence to passenger, if it is agreed that such reimbursements are to be adopted as policy. Every platform must have at least one top up machine available in fully functional condition at any point of time.

13.1.1.4 Ticket Vending Machines (TVM)

TVMs, 39 in number, are deployed in unpaid area of station for passenger to carry out self service. TVM accepts cash (notes and coins) and dispenses fare media i.e. tokens accordingly. TVM also has the facility to charge smart cards against the cash submitted. TVM has the function of processing, storage and changing of coin/paper money. It is clarified that TVMs has automated mechanism for detection of counterfeit or fake currency.

13.1.2 Station Control Area AFC-BSS Equipment

13.1.2.1 Data Cabin

The network equipment including switches, communication devices etc are placed in data cabin. Besides, UPS is also installed in data cabin to ensure backup power supply for all AFC-BSS SLE deployed at each station. The data cabin will be handed over to the Contractor and accordingly managed by the Contractor for the period of the Contract.

13.1.2.2 Power Backup

UPS are installed in data cabin, to ensure backup power supply for all AFC-BSS equipment/components deployed at each station as well as other IT equipment like CCTV surveillance system already connected with UPS. UPS backup should last for at least 4 hours at any given time except in cases where charging time of up to 4 hours is not provisioned. This does not apply power outages in case of hurricane, flood, earthquake and/or any other extenuating circumstances.

13.2 Fare Media / Tickets

There are two (02) types of fare media i.e. RFID Smart Cards (stored value) and RFID tokens. RFID Smarts Cards are used for long term planned repeated journeys whereas for short/occasional or single journeys on masstransit system re-usable RFID tokens are used.

Required number of cards/tokens necessary to efficiently serve passenger volumes must be in stock with the Contractor at all points of time – this is must to ensure that no shortages of fare media occur at any given time. At no point should the tickets/tokens be short at any PMA station. Contractor will be provided with 120,000 RFID tokens that will be maintained and replenished for any losses. However, Contractor shall arrange / supply all RFID smart cards as required during the course of the Contract.

The type of RFID tokens in use are Mifare Ultralight/Ultralight-C that is ISO 14443 compliant. The type of smart cards in use are Mifare Plus S2K having operating frequency of 13.56 MHz that is also ISO 14443 complaint. The dimensions of the smart cards comply with ISO 7810. The resistance of the smart cards to mechanical stress and chemicals comply with ISO 10373. All smart cards have a unique external identification number that is linked to the card's manufacturer supplied internal identification number which will not be erasable or changeable.

Note: Fare rates will be determined by Government of Punjab and cost of media will not be transferrable to passengers purchasing tickets for single or daily journey. However the smart cards will be refundable and issued to the general public against a security deposit which is fixed at Rs 130/- per smart card and will have to be deposited to PMA on monthly basis that will be refunded to the Contractor on monthly basis. It is clarified that the Contractor will be responsible to arrange/supply the smart cards as required.

13.3 Automated Fare Collection and Fare Policy

Passengers will be charged flat fare as per prevailing fare policy. However, AFC-BSS is able to handle fare policies based on flat rate, zones/stages, as well as distance travelled. AFC-BSS is also able to handle the full fare, concessional fare and free fare policies. AFC-BSS also caters to on-board as well as off-board ticketing modes and is able to handle transfers across on-board and off-board ticketing modes.

13.4 Bus Scheduling and Vehicle Location System

Concerned authority of the PMA will share bus schedule with the Contractor for updates into the system. The Bus Scheduling System have flexibility to plan different travel time for same route within single day. All buses are equipped with GPS enabled trackers in On-board unit (OBU) i.e. Driver Console Unit that integrate with the relevant software. The OBU shows plan scheduling time on OBU for driver adherence. AFC-BSS will generate reports that will form a basis for payments to operators - based on agreed formula (determined by scheduled trips/kilometers, distance travelled as fetched via Vehicle Location System).

Every bus is equipped with GPS devices and relevant components (on bus and off bus), that can gather location wise data and transmit to central servers and related software modules. Data gathered in this fashion will help monitor movement of the bus via GIS interface, in real time against bus schedule defined in the relevant software module. Distance travelled, and number of trips made by every bus, must be reported via AFC-BSS.

The Vehicle Location System enables operations team to monitor vehicle movement in real-time and synthesizes the field data to deliver the same on the public information system devices installed on Bus Stations, Buses, customer portal etc.

The Driver Console Unit/OBU is to provide vehicle tracking accurately and reliably. The back end system shall be able to produce MIS reports of vehicle schedule adherence report and kilometers travelled by each bus, by route and by fleet of each operator.

The Driver Console/OBU is capable of display messages and play voice recordings accordingly to timely inform passengers of the next approaching station as well as to make any other critical announcements. The Driver Console/OBU is also capable of storing other critical announcements of atleast one(01) hour duration and playing some prescribed voice recordings through driver OBU interface.

13.5 Passenger Information System

13.5.1 Passenger Information System for Bus

Available buses have display unit(s) to disseminate messages etc, these units are outside the scope of this tender document. The Passenger Information System is able to gather information from Vehicle Location system installed in the bus and display messages and play voice recordings accordingly to timely inform passengers of the next approaching station as well as to make any other critical announcements. There is provision to display text messages and play voice messages in English/Urdu. Buses are equipped with necessary speakers to ensure audible transmission of voice.

13.5.2 Passenger Information System for Station

Stations have 52 vandal-proof signboards one each at each platform, showing bus schedules and/or other necessary information in English/Urdu.

13.6 Reports

All AFC-BSS components are equipped with standard reports typically expected from an Automated Fare Collection and Bus Scheduling System like Fare Media Utilization Report (including time and location of entry and exit of each passenger), Origin-Destination Matrix Report, Ridership Report (for user selected time duration), TOM/TVM fare media charge report, Card initialization Report, Card usage report, Driver Card log Report, Vehicle tracking report (including time, geo coordinates and speed of each vehicle), Time, Event and Location based vehicle speed monitoring report, trip status reports by route, etc - with the provision of additional reports that may be required based on data stored in the relevant databases. Daily Trip based Time-Space Diagram are available in real time. Reports/summaries of incidents subject to which the penalty clauses may be invoked on bus operator are also available. System have alarms as well like speed violations, unplanned stoppage, duplicate trip etc.

13.7 System availability and data backup

AFC-BSS solution (including station components as well as back-office systems) must be able to function on a 24x7x365 basis. Data backups are critical features of the overall solution. Regular data backups must be maintained.

13.8 Data Centers/Hosting Sites

Currently, the AFC-BSS System for LMBS, Pakistan Metrobus System (PMBS) and Lahore Feeder Routes are hosted by the Outgoing-AFC-BSS-Contractor such that the primary hosting site is PTCL data center in Wafaqi colony Lahore and secondary (backup) hosting site is PITB data center in ASTP Lahore, providing high availability access. The details of AFC-BSS equipment

installed at above mentioned hosting sites is listed in Clause 72 i.e. Equipment List. The Contractor will make necessary arrangements for these two hosting sites at its own cost. The Contractor will exclusively manage the data center equipment. The Contractor will also facilitate AFC-BSS contractors for PMBS and Lahore Feeder Routes (if required).

13.9 Connectivity

The primary medium for connectivity for stations is GPON based Fiber optic network aggregating at ASTP Lahore that is to be maintained by the Contractor. The secondary medium of connectivity for stations is wireless solution. The details of connectivity equipment installed at metro station is attached at Annexure-L. 24/7 connectivity to all stations must be ensured at all points of time to all stations and data transmission to central data center must also be ensured on 24/7 basis. The Contractor will facilitate other service providers for transmission of their data through primary fiber optic network.

13.10 Servers/Storage

The Contractor shall be responsible for the O&M of servers, storage devices, network devices and any other hardware/software deployed for the AFC-BSS solution to work efficiently. It is clarified that database at server end is Oracle Enterprise Edition and OS is Microsoft Windows Server.

13.11 Manning Ticket Sales Office

PMA stations will be manned with professional sales staff; tentative hours of operation initially are 18 hours a day, seven days a week. Subject to change depending upon need and requirements as illustrated by Client.

13.12 Designated Account

All revenue earned from activation and recharging of cards/tokens will be deposited into DESIGNATED Account in the Bank of Punjab, and revenue collected will be disbursed to all concerned parties via agreed formula.

13.13 Call Center

PMA has setup a call center/helpline for passengers to call into for information on metro bus routes and schedules as well as for any issues on fare. Call center shall be able to log in complaints through call-center operator or via IVR. AFC-BSS solution/Contractor will provide call center personnel access to related information.

13.14 PMA Control Center

PMA has set-up a central control center for authorized PMA staff allocated to the AFC-BSS project in Lahore at ASTP.

All data collected via AFC-BSS components (including audit data, statistical, and operational information) shall be maintained to remain accessible via secure interface to authorized PMA staff on real-time basis, by the Contractor/Service Provider.

Bus Scheduling, bus tracking, and bus alert-management, as well as Passenger Information System shall be managed / monitored via the Control Center.

Card/Token initialization i.e BIM and personalization devices are centrally located at the PMA

Control Center that will be operated by the Contractor. PMA authorized personnel must be able to control all operations performed by these centrally located devices. Personalization devices are used for printing of personalized cards for bus drivers only.

Contractor/Service Provider is responsible to provide adequate AFC-BSS support staff at the PMA Control Center. The support staff / representative will act as a liaison for coordination between PMA and Contractor for effective monitoring and control of AFC-BSS operations.

13.15 Portable Validators (as backup)

Portable validators i.e. handheld ticket validators will be used by turnstile controllers as backup medium to validate entry/exit of passengers to/from paid area of the platform, in case of failure of all entry/exit turnstiles at any platform. The Contractor will be responsible to make all necessary provisions so that portable validators can be used under such circumstances.

14. Other high-level requirements

14.1 Automated Fare Collection Application have following features:

14.1.1 Provision to specify and compute user-defined distance based, zone based, stage based and flat rate based fare.

14.1.2 Provision to handle the full fare, concessional fare and free fare policies.

14.1.3 Provision to manage refunds and top up fare media on stations.

14.1.4 Ability to produce Inventory report of stock in hand of cards/RFID tokens (fare media) and cards in use/circulation.

14.1.5 Online dashboard having ability to produce various critical reports including but not limited to sales report, cash in hand report by station and analytical passenger turn over trends by station, origin-destination reports, ridership reports, revenue reports etc.

14.1.6 Ability to assign different roles to users based on user security roles definition.

14.1.7 Secure, reliable and password protected system.

14.2 Vehicle Location System

14.2.1 Operation & Maintenance of GPS based devices to track location of the PMA buses and to send location coordinates to centralized system for view via GIS / mapping interface, and to see real-time adherence to defined bus schedules and routes.

14.2.2 Computation and tabulation of reports that will form a basis to disburse trips/distance based compensation to operators accordingly.

14.3 Passenger Information System and Scheduler

14.3.1 Provision to make automated voice announcements (in English and Urdu) inside the bus, regarding approaching station and next station

14.3.2 Broadcast schedule and any other information onto Passenger Information System display units available in bus and at stations.

14.4 Networks & Data Connectivity

14.4.1 Maintaining the AFC-BSS related components on each PMA station/platform/bus, including the data network, so as to ensure timely, un-interrupted transmission of data between AFC-BSS equipment at stations and at central datacenter.

14.4.2 Primary medium for internet connectivity must be Fiber optic; however for redundant connection wireless medium will be used.

14.4.3 Reliable/redundant network availability onto the stations.

14.4.4 Linking any network equipment etc to UPS, with at least 4 hours of backup power supply.

14.5 Centralized/Back-office systems and reliable hosting

14.5.1 Operations and maintenance of AFC-BSS data center equipment in hosting sites. The AFC-BSS solution must be able to comply with service level agreement.

14.5.2 All transactional data will remain property of the Client and may not be shared with anyone without written consent of the Client.

14.5.3 Client will have access to all transactional data and audit logs, logged into the system for at least the past twelve months, at all times. And will be provided regular data backups by the contractor for long-term storage and archival purposes on reliable storage media.

14.6 Equipment Maintenance and Software Support

14.6.1 Maintenance and operations of all equipment as listed in relevant sections of this tender document.

14.6.2 Continuous support of all software and hardware components associated with AFC-BSS solution - via dedicated support staff accessible via help desk, all services must be provided based on the service-level parameters defined in this document.

14.7 Human Resources

14.7.1 The successful bidder must employ adequate, well-trained staff to perform all duties and responsibilities stated in this tender document – including all roles/duties to be performed at the stations, the central datacenter, and to support PMA authorized staff on AFC-BSS solution.

- i. One (01) Operations Supervisor is required per shift per station.
- ii. Adequate team of System Engineers are required along with any other associated staff for timely resolution of issues.
- iii. TOM Operators and Turnstile Controllers are required in below mentioned quantities in each shift at stations. It is clarified that any change in the quantities of defined human resources will be subject to Client instructions only and payments shall be adjusted accordingly.

Station Wise / Shift AFC HR Requirement For TOM & TURNSTILE					
St. no.	Station Name	TOM		TURNSTILE	
		Ticket Offices	TOM Operator	Turnstile Points	Turnstile Controller
1	Shahdara	1	5	2	4
2	Niazi Chowk	1	3	2	2
3	Timber Market	1	2	2	2
4	Azadi Chowk	1	2	2	2
5	Bhatti Chowk	2	3	2	2
6	Katchery	2	2	2	2
7	Civil	2	2	2	2
8	Mao College	4	4	4	4
9	Janazgah	2	2	2	2
10	Qartaba	2	2	4	4
11	Shama	2	2	2	2
12	Ichara	2	2	2	2
13	Canal	2	4	4	4
14	Qaddafi	1	2	2	2
15	Kalma	1	3	2	2
16	Modeltown	1	2	2	2
17	Naseerabad	1	1	2	2
18	Ittefaq	1	3	2	2
19	Qainchi	1	2	2	2
20	Ghazi Road	1	2	2	2
21	Chungi	1	2	2	2
22	Kamahan	1	1	2	2
23	Atari Saroba	1	1	2	2
24	Nishtar	1	2	2	2
25	Youhanabad	1	2	2	2
26	Dulu Khurd	1	1	2	2
27	Gajjumata	2	3	4	4
Total			62		64

15. Tender/Bidder Eligibility

15.1 An eligible Tenderer/Bidder is a Tenderer/Bidder who:

15.1.1 is a provider of Services and Equipment as outlined in the document

15.1.2 Services can only be supplied / sourced / routed from “origin” in “eligible” member countries.

- “Eligible” is defined as any country or region that is allowed to do business in Pakistan by the law of Government of Pakistan.
- “Origin” shall be considered to be the place where the company / firm is incorporated

15.1.3 has a registered office in the respective country of origin

15.1.4 has been registered for at least 5 years in country of origin (applicable for all members of JV).

- 15.1.5 has the required relevant qualified personnel and enough financial and technical strength to fulfill the requirements.
- 15.1.6 Conforms to the clause of “Responsiveness of Bid” and “Preparation/Submission of Tender” given herein this tender document.
- 15.1.7 Verifiable proof for all the above shall be required.
- 15.1.8 Local companies forming part of the joint venture must be registered under the prevailing related rules or Companies Ordinance and Punjab Revenue Authority(PRA).
- 15.1.9 has not been blacklisted by any of Provincial or Federal Government Department, Agency, Organization or autonomous body anywhere in Pakistan and country of origin (Submission of undertaking (Annexure-M)), failing which will cause rejection of the bid.
- 15.2 The Successful Bidder shall be required to open an office in Lahore upon award of the Contract in case it has no office in Lahore.

16. Tender Cost

The Tenderer/bidder shall bear all costs / expenses associated with the preparation and submission of the bid and the Client shall in no case be responsible / liable for those costs / expenses.

17. Joint Venture / Consortium

Joint ventures or Consortium are also eligible for this tender, as long as the joint venture complies with the following conditions:

- a. The Tenderers may form a joint venture of maximum four Tenderers/bidders. An Agreement Deed legally executed to that effect, or a Memorandum of Understanding (MOU), signed by all the partners shall be submitted with the bid.
- b. One partner of formulated joint venture will be designated the lead partner and would be get into legal contract with Client and would be liable to incur liabilities, receive payments and receive instructions for and on behalf of any or all partners. A power of attorney to that effect, legally executed, signed by all the partners shall be submitted with the Tender/bid.
- c. There must be at least one locally registered company (Partner) of good repute, with relevant experience and proven track record, in the joint venture.
- d. All the partners shall be jointly and severally liable for the execution of the Contract in accordance with the terms and conditions of the Contract. The Tender, and in case of successfully qualifying both technical and financial evaluation, the Contract Deed, to that effect, shall be signed by the lead partner.
- e. Partners other than the lead would also be bound by the terms and conditions of the contract.
- f. No partner of the formulated Joint Venture can be replaced or removed without the prior approval of the Client. The Client shall perform proper due diligence before granting any such approval/permission.
- g. Specific information about each member of consortium / JV is required on the following format.

Sr. No.	Name of Member / Partner	Lead Member / Associate Member	Short Description of Role of Member
1			

N			
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18. Examination of the Tender Document

The Tenderer is expected to examine the Tender Document, including all instructions and terms and conditions thereof.

19. Amendment of the Tender Document

19.1 The Client may, at any time prior to the deadline for submission of the Tender, at its own initiative or in response to a clarification requested by the Bidder(s), amend the Tender Document, on any account, for any reason. All amendment(s) shall be part of the Tender Document and binding on the Bidder(s).

19.2 The Client shall advertise the amendment(s) in the manner as was originally done in line with PPRA Rule 25(4).

19.3 The Client may, at its exclusive discretion, amend the Tender Document to extend the deadline for the submission of the Tender, in which case all rights and obligations of the Client and the Tenderers previously subject to the deadline shall thereafter be subject to the deadline as extended.

20. Preparation / Submission of Tender

20.1 The Tenderer is allowed to bid for complete services only.

20.2 The Tenderer is not allowed to bid for partial services.

20.3 The Tender and all documents relating to the Tender, exchanged between the Tenderer/bidder and the Client, shall be in English. Any printed literature furnished by the Tenderer/bidder in another language shall be accompanied by an English translation, duly verified/Attested from a reputable organization, which shall govern for purposes of interpretation of the Tender.

20.4 The Tender shall be submitted accompanied by the prescribed Forms, Annexes, Schedules, Charts, Drawings, Documents, Brochures, Literature, detailed design, operations and maintenance plan and detailed project plans with milestones etc. which shall be typed, completely filled in, stamped and signed by the Tenderer or his Authorized Representative. In case of copies, signed and stamped photocopies may be submitted.

20.5 Further required information as part of the bid is listed below, as in continuation to other requirements listed in the document:

20.5.1 List of firm's major international and national clientele.

20.5.2 Details related to experience in implementing, maintaining and supporting such solutions with all supporting documents and documented proofs.

20.5.3 Complete details of all the projects being carried out by the bidder with all supporting documents and documented proofs.

20.5.4 Details of similar type of projects executed by the Bidder with all supporting documents and documented proof.

20.5.5 Valid Sales Tax, Income Tax and Company Registration certificates for local company (and the same prevalent documents as applicable in the region/origin of operations of enterprise operating outside Pakistan).

20.5.6 SECP Registration Certificate or registration with registrar of firms.

20.5.7 Registered Service Provider with Punjab Revenue Authority(PRA).

20.5.8 Detailed Project Plan highlighting timelines, resource allocations and deliverables for each milestone leading to solution roll out.

20.6 The Technical and Financial proposals shall be submitted in different envelopes, the envelopes will be clearly marked 'Technical Proposal' and 'Financial Proposal'. Each proposal shall be in two sets bid i.e. the original and the copy.

20.7 In the event of any discrepancy between the original and the duplicate, the original shall govern.

20.8 The **Technical Proposal** shall contain following, without quoting the price:

20.8.1 Technical Proposal Form (Annexure-A)

20.8.2 Affidavit and Undertaking (All terms & conditions and qualifications listed anywhere in the RFP have been satisfactorily vetted) (Annexure-E&F)

20.8.3 Covering letter duly signed and stamped by authorized representative. (Annexure-C)

20.8.4 Evidence of eligibility of the Tenderer and the Services

20.8.5 Evidence of conformity of the Services to the Tender Document

20.8.6 The statement must be signed by the authorized representative of the Bidder

20.8.7 Financial Capacity as per Annexure-I

20.8.8 Valid Registration Certificate for Income Tax, Sales Tax and / or other allied agencies / organizations / regulatory authorities (Principal, Local Representative Company).

20.8.9 Income Tax & Sales Tax Returns for the last three tax years

20.8.10 Power of Attorney, if an authorized representative is appointed (Annexure-D)

20.8.11 Copy of Tender Security **(as mentioned vide clause 22 regarding Tender Security of this document)**.

20.8.12 Submission of undertaking on legal valid and attested stamp paper that the firm is not blacklisted by any of Provincial or Federal Government Department, Agency, Organization or autonomous body anywhere in Pakistan and in Country of origin (Annexure-M).

20.9 The **Financial Proposal** shall comprise the following:

20.9.1 Financial Proposal Form (Annexure-B)

20.9.2 Tender Security **(as mentioned vide clause 22 regarding Tender Security of this document)**.

20.9.3 Price Schedule

20.10 The Tenderer shall seal the Original Technical Proposal in an envelope duly marked as under:

Original Technical Tender for

Tender Name. [Number/Name of Tender]

[Name of the Client]

[Address of the Client]

[Name of the Tenderer/Bidder]

[Address of the Tenderer/Bidder]

[Phone No. of the Tenderer/Bidder]

20.11 The Tenderer shall seal the Duplicate Technical Tender in an envelope duly marked as under:

Duplicate Technical Proposal for
Tender Name. [Name of Tender]

[Name of the Client]
[Address of the Client]

[Name of the Tenderer/Bidder]
[Address of the Tenderer/Bidder]
[Phone No. of the Tenderer/Bidder]

20.12 The Tenderer shall follow the same process for the Financial Tender.

20.13 The Tenderer shall again seal the sealed envelopes of Original Technical Proposal and the Original Financial Proposal in an outer envelope, duly marking the envelope as under:

Original Tender for
Tender Name. [Name of Tender]

Strictly Confidential
Open on [Last Date of submission of the Tender]

[Name of the Client]
[Address of the Client]

[Name of the Tenderer/Bidder]
[Address of the Tenderer/Bidder]
[Phone No. of the Tenderer/Bidder]

20.14 The Tenderer shall again seal the sealed envelopes of Duplicate Technical Proposal and the Duplicate Financial Proposal in an outer envelope, duly marking the envelope as under:

Duplicate Tender for
Tender Name. [Name of Tender]

Strictly Confidential

Open on [Last Date of submission of the Tender]

[Name of the Client]

[Address of the Client]

[Name of the Tenderer/Bidder]

[Address of the Tenderer/Bidder]

[Phone No. of the Tenderer/Bidder]

- 20.15** The Tenderer shall enclose soft copy of the Technical Proposal, including all Forms, Annexes, Schedules, Charts, Drawings, Documents, Brochures, Literature, etc., in the form of MS Word Documents, MS Excel Worksheets and Scanned images, with the hard copies.
- 20.16** This is made obligatory to affix authorized signatures with official seal on all original and duplicate (copies) documents, annexures, copies, certificates, brochures, literature, drawings, letters, forms and all relevant documents as part of the bids submitted by the tenderer.

21. Tender Price

21.1 The quoted price shall be:

- 21.1.1 best / final / fixed and valid until completion of all obligations under the Contract i.e. not subject to variation / escalation other than as specified in Clause 40;
- 21.1.2 Inclusive of all charges up to the delivery point at the Punjab Government's facility for AFC-BSS related components;
- 21.1.3 in Pak Rupees (PKR);
- 21.1.4 is inclusive of all applicable taxes, duties, levies, insurance, freight, etc., as per Laws of the Government of Pakistan, but shall be exclusive of Sales Tax on Services which shall be added by the Client over and above the quoted amount, as applicable/required under the relevant Tax Laws, to arrive at the Contract Price. Accordingly, the Contract Price shall be subject to adjustments for change in rate of Sales Tax on Services.
- 21.2** If not specifically mentioned in the Tender(s), it shall be presumed that the quoted price is as per the above requirements.
- 21.3** Where no prices are entered against any item(s), the price of that item shall be deemed to have been distributed among the prices of other items, and no separate payment shall be made for that item(s).
- 21.4** The price hereby quoted by the Bidders would cover the whole scope of services for the contract period.

22. Tender Security

22.1 The Tenderer shall furnish the Tender Security failing which will cause rejection of bid; the

original tender security should be submitted **as part of financial bid envelope** (and a copy with technical proposal).

- 22.2** Tender security, would be submitted by the Bidder;
- 22.2.1 in the form of Demand Draft / Pay Order / Bank Guarantee, issued by a scheduled bank operating in Pakistan, in the name of the Client, as per the format provided in the Tender Document[Annexure-G];
- 22.2.2 A sum of PKR Nine Hundred Fifty Two Thousand Five Hundred Only (PKR 952,500/-);
- 22.2.3 denominated in Pak Rupees;
- 22.2.4 have a minimum validity period of **180 days** from the last date for submission of the Tender or until furnishing of the Performance Security, whichever is earlier.
- 22.3** The proceeds of the Tender Security shall be payable to the Client, on the occurrence of any / all of the following conditions:
- 22.3.1 If the Tenderer withdraws the Tender during the period of the Tender validity specified by the Tenderer on the Tender Form; or
- 22.3.2 If the Tenderer does not accept the corrections of his Total Tender Price; or
- 22.3.3 If the Tenderer, having been notified of the acceptance of the Tender by the Client during the period of the Tender validity, fails or refuses to furnish the Performance Security, in accordance with the Tender Document.
- 22.3.4 If the tenderer fails to provide the performance security in stipulated timeframe, format, amount and currency.
- 22.3.5 The Tenderer refuses or fails to submit the Performance Security as per agreed timelines, amount and format.
- 22.3.6 If the Tenderer submits any forged/fake/false information or document to qualify for the bid.
- 22.3.7 If the Tenderer or any of its JV partner is blacklisted in the Country of Origin.
- 22.4** The Tender security shall be returned to the technically unsuccessful Tenderer with unopened/sealed financial bid while the unsuccessful bidders of financial bid opening procedure will be returned the tender security only. The Tender Security shall be returned to the successful Tenderer on furnishing the Performance Security.

23. Tender Validity

The Tender shall have a minimum validity period of one hundred and eighty days (180) days from the last date for submission of the Tender. Any extension in the Tender validity period shall be carried out in compliance to PPRA Rule 28.

24. Modification / Withdrawal of the Tender

- 24.1** The Tenderer may, by written notice served on the Client, modify or withdraw the Tender after submission of the Tender, prior to the deadline for submission of the Tender.
- 24.2** The Tender, withdrawn after the deadline for submission of the Tender and prior to the expiration of the period of the Tender validity, shall result in forfeiture of the Tender Security.

25. Opening of the Tender

- 25.1** Tenders shall be opened, at the given place, time and date, in the presence of the Tenderer(s), if available, for which they shall ensure their presence without further invitation.

- 25.2** The Tenderer's name, modifications, withdrawal, security, attendance of the Tenderer and such other details as the Client may, at its exclusive discretion, consider appropriate, shall be announced and recorded.

No tenderer or its representative will be allowed to keep any digital device (camera, audio recorder, cell phone etc.) during tender opening meeting at given time and location.

26. Clarification of the Tender by the Client

The Client shall have the right, at his exclusive discretion, to require, in writing, further information or clarification of the Tender, from any or all the Tenderer(s). No change in the price or substance of the Tender shall be sought, offered or permitted except as required to confirm the corrections of arithmetical errors discovered in the Tender. Acceptance of any such correction is solid discretion of the Client

27. Determination of Responsiveness of the Bid (Tender)

- 27.1** The Client shall determine the substantial responsiveness of the Tender to the Tender Document, prior to the Tender evaluation, on the basis of the contents of the Tender itself without recourse to extrinsic evidence. A substantially responsive Tender is one which:

- 27.1.1 meets the eligibility criteria for the Tenderer for the Services;
- 27.1.2 meets the Technical Specifications for the Services;
- 27.1.3 meets the delivery period / point for the Services;
- 27.1.4 meets the rate and limit of liquidated damages;
- 27.1.5 offers fixed price quotations for the Services;
- 27.1.6 is accompanied by the required Tender Security;
- 27.1.7 is otherwise complete and generally in order;
- 27.1.8 Conforms to all terms and conditions of the Tender Document, without material deviation or reservation.

- 27.2** A material deviation or reservation is one which affects the scope, quality or performance of the Services or limits the Client's rights or the Tenderer's obligations under the Contract.

- 27.3** The Tender determined as not substantially responsive shall not subsequently be made responsive by the Bidder by correction or withdrawal of the material deviation or reservation.

28. Correction of errors / Amendment of Tender

- 28.1** The Tender shall be checked for any arithmetic errors which shall be rectified, as follows:

- 28.1.1 if there is a discrepancy between the unit rate and the total price entered in the price Schedule, resulting from incorrect multiplication of the unit rate by the quantity, the unit rate as quoted shall govern and the total price shall be corrected, unless there is an obvious and gross misplacement of the decimal point in the unit rate, in which case the total price as quoted shall govern and the unit rate shall be corrected.

- 28.1.2 if there is a discrepancy in the actual sum of the itemized total prices and the total tender price quoted in the Price Schedule, the actual sum of the itemized total prices shall govern.

- 28.2** The Tender price as determined after arithmetic corrections shall be termed as the Corrected Total Tender Price which shall be binding upon the Tenderer.

- 28.3** Adjustment shall be based on corrected Tender Prices. The price determined after making such adjustments shall be termed as Evaluated Total Tender Price.
- 28.4** No credit shall be given for offering delivery period earlier than the specified period.
- 28.5** The Tenderer shall state the Tender Price for the payment terms outlined in the Conditions of Contract which will be considered for the evaluation of the Tender.

29. Rejection & Acceptance of Tender/Bids

- 29.1** The Client shall have the right, at his exclusive discretion, to increase / decrease the quantity of any or all item(s) of services required without any change in unit prices or other terms and conditions, accept a Tender, reject any or all tender(s), cancel / annul the Tendering process at any time prior to award of formal Contract, without assigning any reason or any obligation to inform the Tenderer of the grounds for the Client's action, and without thereby incurring any liability to the Tenderer and the decision of the Client shall be final.
- 29.2** The Tender shall be rejected if it is:
- 29.2.1 substantially non-responsive; or
 - 29.2.2 submitted in other than prescribed forms, annexes, schedules, charts, drawings, documents / by other than specified mode; or
 - 29.2.3 incomplete, un-sealed, un-signed, printed (hand written), partial, conditional, alternative, late; or
 - 29.2.4 subjected to interlineations / cuttings / corrections / erasures / overwriting; or
 - 29.2.5 the Tenderer submits more than one Tenders; or
 - 29.2.6 the Tenderer fails to meet the minimum passing score of 65% i.e. 49 in the Technical Evaluation Criteria (Clause 70); or
 - 29.2.7 the Tenderer refuses to accept the corrected Total Tender Price; or
 - 29.2.8 the Tenderer has conflict of interest with the Client; or
 - 29.2.9 the Tenderer tries to influence the Tender evaluation / Contract award; or
 - 29.2.10 the Tenderer engages in corrupt or fraudulent practices in competing for the Contract award.
 - 29.2.11 there is any discrepancy between bidding documents and bidder's proposal i.e. any non-conformity or inconsistency or informality or irregularity in the submitted bid.
 - 29.2.12 the Tenderer submits any financial conditions as part of its bid which are not in conformity with tender document.
 - 29.2.13 the Tenderer refuses or fails to submit the Performance Security as per agreed timelines, amount, currency and format.
 - 29.2.14 the tenderer including any of its JV/Consortium partner has been blacklisted by any public sector organization in Pakistan or Country of origin.

30. Acceptance Letter (LOA)

The Client shall, send the Acceptance Letter (LOA) to the successful Tenderer, prior to the expiry of the validity period of the Tender, which shall constitute a contract, until execution of the formal Contract.

31. Performance Security

- 31.1** The successful Tenderer shall furnish Performance Security as under:
- 31.1.1 within ten (10) working days of the receipt of the Acceptance Letter from the Client;
 - 31.1.2 in the form of a Bank Guarantee, issued by a scheduled bank operating in Pakistan, as per the format provided in the Tender Document[Annexure-H];
 - 31.1.3 denominated in Pak Rupees;
 - 31.1.4 Have a minimum validity period of one year from the date of Award Notification or until the date of expiry of yearly support period.
 - 31.1.5 The technically and financially successful tenderer submits a sum equivalent to 10% of the one (01) year contract value, on a yearly basis, with an undertaking to renew the Bank Guarantee before the end of each year, one month before the expiry period of the submitted bank guarantee.
- 31.2** The proceeds of the Performance Security shall be payable to the Client, on occurrence of any / all of the following conditions:
- 31.2.1 If the Contractor commits a default under the Contract;
 - 31.2.2 If the Contractor fails to submit the bank guarantee for the next year one month before the expiry of already submitted bank guarantee.
 - 31.2.3 If the Contractor fails to fulfill any of the obligations under the Contract
 - 31.2.4 If the Contractor violates any of the terms and conditions of the Contract.
 - 31.2.5 If the Tenderer refuses or fails to submit the Performance Security as per agreed timelines, amount and format.
- 31.3** The Contractor shall cause the validity period of the performance security to be extended for such period(s) as the contract performance may be extended. The Performance Security shall be returned to the Tenderer within thirty working days after the expiry of its validity on written request from the Contractor.

32. Redressal of Grievances

- 32.1** The Client shall constitute a committee comprising of odd number of persons, with proper powers and authorizations, to address the complaints of bidders that may occur prior to the entry into force of the procurement contract.
- 32.2** Any bidder feeling aggrieved by any act of the Client after the submission of his bid may lodge a written complaint concerning his grievances not later than ten days after the announcement of the bid evaluation report.
- 32.3** The committee shall investigate and decide upon the complaint within fifteen days of the receipt of the complaint.
- 32.4** Mere fact of lodging of a complaint shall not warrant suspension of the procurement process.
- 32.5** Any bidder not satisfied with the decision of the committee of the Client may follow the process mentioned vide Statutes and Regulations.

TERMS & CONDITIONS OF THE DRAFT CONTRACT

Draft Contract for

**Operations and Maintenance Services of
Automated Fare Collection and Bus Scheduling System
(AFC-BSS) For Lahore Metrobus System (LMBS)**

(Gajjumata to Shahdara)

between

[Client]

and

[Contractor]

Dated:

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I. Agreement

This CONTRACT AGREEMENT (this “Contract”) made as of the [day] of [month], [year], between [full legal name of the Client] (the “Client”), on the one part,

and

[full legal name of Contractor], on the other part severally liable to the Client for all of the Contractor’s obligations under this Contract and is deemed to be included in any reference to the term “Contractor”.

RECITALS

WHEREAS,

- (a) The Government through the Client intends to spend a part of its budget / funds for making eligible payments under this contract. Payments made under this contract will be subject, in all respects, to the terms and conditions of the Contract in lieu of procurement of services as described in the contract.
- (b) The Client has requested the Contractor to provide certain services as described in Tender Document; and
- (c) The Contractor, having represented to the Client that it has the required professional skills, and personnel and technical resources, has agreed to provide such services on the terms and conditions set forth in this Contract.

NOW THEREFORE, the Parties to this Contract agree as follows:

1. The Contractor hereby covenants with the Client to supply the services, in conformity in all respects with the provisions of the Contract, in consideration of the payments to be made by the Client to the Contractor.
2. The Client hereby covenants with the Contractor to pay the Contractor, the Contract Price or such other sum as may become payable, at the times and in the manner, in conformity in all respects with the provisions of the Contract, in consideration of supply of the Services.
3. The following shall be deemed to form and be read and construct as part of this Contract:
 - a. The Tender Document
 - b. Bidder’s Proposal
 - c. Terms and Conditions of the Contract
 - d. Special Stipulations
 - e. The Technical bid / Specifications
 - f. Tender Form

- g. Price Schedule
- h. Affidavit(s)
- i. Authorized Dealership / Agency Certificate
- j. Performance Security
- k. Service Level Agreement (SLA),
- l. Non-Disclosure Agreement (NDA), if required
- m. Any Standard Clause acceptable for Client

4. This Contract shall prevail over all other documents. In the event of any discrepancy / inconsistency within the Contract, the above Documents shall prevail in the order listed above.

Draft Service Level Agreement is elaborated in Annexure-J.

IN WITNESS whereof the Parties hereto have caused this Contract to be executed in accordance with the laws of **Pakistan** as of the day, month and year first indicated above.

For **[full legal name of the Client]:**

For **[full legal name of the Contractor]:**

Signature

Signature

Name

Name

Witnessed By:

Witnessed By:

WITNESSES

Signature _____
 CNIC # _____
 Name _____
 Designation _____
 Address _____

Signature _____
 CNIC # _____
 Name _____
 Designation _____
 Address _____

II General Conditions of Contract

33. Contract

The Client shall, after receipt of the Performance Security from the successful Tenderer, send the Contract provided in the Tender Document with any modification mutually agreed between the Client & successful tenderer, to the successful Tenderer. Within ten working days of the receipt of such Contract, the Tenderer shall sign and date the Contract and return it to the Client.

34. Contract Documents and Information

The Contractor shall not, without the Client's prior written consent, make use of the Contract, or any provision thereof, or any document(s), specifications, drawing(s), pattern(s), sample(s) or information furnished by or on behalf of the Client in connection therewith, except for purposes of performing the Contract or disclose the same to any person other than a person employed by the Contractor in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only as far as may be necessary for purposes of such performance.

35. Contract Language

The Contract and all documents relating to the Contract, exchanged between the Contractor and the Client, shall be in English. The Contractor shall bear all costs of translation to English and all risks of the accuracy of such translation.

36. Patent Rights and Rights to the Contents of the Program

The Contractor shall indemnify and hold the Client harmless against all third party claims of infringement of patent, trademark or industrial design rights arising from use of the Service or any part thereof. The Client will hold the exclusive rights to the contents of this program.

37. Execution Schedule

The Contractor shall submit an Execution Schedule, giving details of services rendered, as required under the Contract, to the Client, within five (5) days of the signing of the Contract.

38. Payment

38.1 The Contractor shall submit an Application for Payment (Invoice), in the prescribed form, to the Client. The Application for Payment shall: be accompanied by such invoices, receipts or other documentary evidence as the Client may require; state the amount claimed; and set forth in detail, in the order of the Price Schedule, particulars of the Services provided, up to the date of the Application for Payment and subsequent to the period covered by the last preceding Certificate of Payment, if any.

38.2 The Client shall issue a Certificate of Payment, in the prescribed form, with a copy to the Contractor, verifying the amount due, within fifteen days of receipt of an Application for Payment. The Client shall deduct the amount of penalties that may be levied in accordance with the SLA (Annexure-J), against the exclusive of Sales Tax amount mentioned in the Invoice and recalculate Sales Tax amount, while issuing the Certificate of Payment. The Client may withhold a Certificate of Payment on account of defect(s) / short coming(s) in the services provided. The Client may make any correction or modification in a Certificate of Payment that properly be made in respect of any previous certificate.

38.3 The Client shall pay the amount verified in the Certificate of Payment within twenty one (21) days of receipt of a Certificate of Payment. Payment shall not be made in advance. The Client shall make payment for the Services provided, to the Contractor, as per payment schedule through crossed cheque.

38.4 Payments shall be made against successful delivery of services per each Phase of the Program

38.5 No advance payments will be made. Monthly payments will be made on a prorated basis by the Client, taking into account the number of stations etc for which AFC-BSS has been successfully provisioned. However, it is clarified that if a station is closed by the Client, not because of the fault of Contractor but, due to riots, strikes, natural calamities or by the action of law or government etc. the Client shall make the prorated deductions in the invoice processing. Subsequently, the Contractor shall submit its separate invoice for incurred costs during such instance of closure and the Client shall evaluate the invoice and pay such agreed costs; however, the Client shall not pay any profits in such instances.

39. Contract Price

The Contractor shall not charge prices for the equipment and services provided and for other obligations discharged, under the Contract, varying from the prices quoted by the Contractor in the Financial Proposal (Form of Bid/Financial Proposal Submission Form) or not agreed by the Client as per this Contract. The quoted price, in the financial bid, is inclusive of all applicable taxes, as per Laws of the Government of Pakistan, except Sales Tax on Services which shall be added by the Client over and above the quoted amount, as applicable/required under the relevant Tax Laws, to arrive at the Contract Price. **Accordingly, the Contract Price shall be subject to adjustments for change in rate of Sales Tax on Services as and when applicable.**

The bidder need not include escalation in cost for the contract period because the bid price is completely indexed with minimum wage and consumer price index (CPI). All changes in minimum wage and CPI will be passed on the bidder as per the mechanism given below.

Component prices P_5 and P_6 of the bid price P shall be adjusted for minimum wage whenever a new minimum wage rate affecting the city of operations is notified.

Component prices P_1 , P_2 , P_3 and P_4 of the bid price P shall be adjusted at the end of each fiscal year for the change in consumer price index (CPI) since the bid submission date.

The monthly gross amount (exclusive of sales tax on services) P_n shall be as follows:

$$P_n = P + E_n$$

Where

$$E_n = (P_1 + P_2 + P_3 + P_4) \times \left(\frac{CPI_n}{CPI_0} - 1 \right) + (MW_n - MW_0) \times SS \times \frac{365}{(365 - 52^* - 14^{**})}$$

Where

E_n is the cumulative escalation in monthly price in PKR since the bid submission date.

MW_n is the notified minimum wage for the invoice period.

MW_0 is the notified minimum wage on the date of bid submission.

SS is the total number of **defined** human resources in Component P_5 and P_6 .

CPI_n is the value of consumer price index (CPI) on the last date of the previous fiscal year as published by Pakistan Bureau of Statistics, i.e. 30th June 2020 for invoices submitted for the period of 1st July 2020 and onwards and 30th June 2021 for invoices submitted for the period 1st July 2021 and so on.

CPI₀ is the value of consumer price index on the date of bid submission.

*Represents 52 Sundays in a year

**Represents other leaves and relievers, if any.

Accordingly, the Contract Price shall be subject to adjustments for changes in:-

- i. Sales Tax on Services rate as and when applicable
- ii. Minimum wage rate as and when applicable for Sr No 5-6 of Price table
- iii. CPI from every new financial year for Sr No 1-4 of Price Table

40. Contract Amendment

- 40.1** The Client may, at any time, by written notice served on the Contractor, alter, amend, omit, increase, decrease quantity and scope, of all / any of the Services / the Works, in whole or in part.
- 40.2** The Contractor shall, within ten working days of receipt of such notice, submit a cost estimate and execution schedule of the proposed change (hereinafter referred to as the Change), to the Client.
- 40.3** The Contractor shall not execute the Change until and unless the Client has allowed the said Change, by written order served on the Contractor.
- 40.4** The Change, mutually agreed upon, shall constitute part of the obligations under this Contract, and the provisions of the Contract shall apply to the said Change.
- 40.5** No variation in or modification in the Contract shall be made, except by written amendment signed by both the Client and the Contractor.

41. Assignment / Subcontract

- 41.1** The Contractor will not assign or sub-contract its obligations under the Contract, in whole or in part, except with the Client's prior written consent. The Client shall perform proper due diligence before granting any such consent/permission.
- 41.2** The Contractor shall guarantee that any and all assignees / subcontractors of the Contractor shall, for performance of any part / whole of the work under the contract, comply fully with the terms and conditions of the Contract applicable to such part / whole of the work under the contract.

42. Extensions in time for performance of obligations under the Contract

If the Contractor encounters conditions impeding timely performance of any of the obligations, under the Contract, at any time, the Contractor shall, by written notice served on the Client, promptly indicate the facts of the delay, its likely duration and its cause(s). As soon as practicable after receipt of such notice, the Client shall evaluate the situation and may, at its exclusive discretion, without prejudice to any other remedy it may have, by written order served on the Contractor, extend the Contractor's time for performance of its obligations under the Contract.

43. Liquidated Damages

If and when applicable, liquidated damages (LD) shall be levied for delay in start date of complete services as directed by the Client as below:-

- i. Incomplete number of defined resource (TOM Operators and Turnstile Controllers)

- deployment at Stations = 0.25 % of the annual contract value per day per station
- ii. Other services as required in this RFP = 0.25 % of the annual contract value per day

However, the amount so deducted shall not exceed, in the aggregate, the value of the performance security. The Liquidated Damages are attributable to such part of the Services as cannot, in consequence of the failure / delay, be put to the intended use, for every day between the scheduled delivery date(s), with any extension of time thereof granted by the Client, and the actual delivery date(s).

44. Forfeiture of Performance Security

- 44.1** If the Contractor fails / delays in performance of any of the obligations, under the Contract / violates any of the provisions of the Contract / commits breach of any of the terms and conditions of the Contract the Client may, without prejudice to any other right of action / remedy it may have, forfeit Performance Security of the Contractor.
- 44.2** Failure to supply required items/services within the specified time period will invoke penalty as specified in this document. In addition to that, Performance Security amount will be forfeited and the company will not be allowed to participate in future tenders as well.

45. Termination for Default

- 45.1** If the Contractor fails / delays in performance of any of the obligations, under the Contract / violates any of the provisions of the Contract / commits breach of any of the terms and conditions of the Contract, or engages in any illegal activities, the Client may, at any time, without prejudice to any other right of action / remedy it may have, by written notice served on the Contractor, indicate the nature of the default(s) and terminate the Contract, in whole or in part, without any compensation to the Contractor. Provided that the termination of the Contract shall be resorted to only if the Contractor does not cure its failure / delay, within fifteen working days (or such longer period as the Client may allow in writing), after receipt of such notice.
- 45.2** If the Client terminates the Contract for default, in whole or in part, the Client may procure, upon such terms and conditions and in such manner as it deems appropriate, Services / Works, similar to those undelivered, and the Contractor shall be liable to the Client for any excess costs for such similar Services / Works. However, the Contractor shall continue performance of the Contract to the extent not terminated.

46. Termination for Insolvency

If the Contractor becomes bankrupt or otherwise insolvent, the Client may, at any time, without prejudice to any other right of action / remedy it may have, by written notice served on the Contractor, indicate the nature of the insolvency and terminate the Contract, in whole or in part, without any compensation to the Contractor.

47. Termination for Convenience

- 47.1** The Client may, at any time, by written notice of thirty (30) days served on the Contractor, terminate the Contract, in whole or in part, for its convenience, without any compensation to the Contractor.
- 47.2** The Services which are complete or to be completed by the Contractor, within thirty working

days after the receipt of such notice, shall be accepted by the Client. For the remaining services, the Client may elect:

- 47.2.1 to have any portion thereof completed and delivered; and
- 47.2.2 to cancel the remainder and pay the Contractor by Making payments for services already rendered (if any are outstanding).

48. Termination

- 48.1 The Contractor may, at any time, through six (06) month written notice served upon the Client, shall terminate the Contract in whole, for its convenience. The amount due till the notice period will be paid by the Client.
- 48.2 The Contractor is bound to serve written notice to the Client at least six (06) months prior to the expiry of the Contract if the Contractor is not interested in contract extension. Mere expiry of the contract without explicit declaration of intension to disengage or terminate the Contract shall not be admissible.
- 48.3 In case of termination of Contract, the Contractor is bound to render the services till the hiring of new Contractor. The amount due for the services rendered by the Contractor till the hiring of the new Contractor will be paid by the Client.

49. Force Majeure

- 49.1 Force majeure shall mean any event, act or other circumstances not being an event, act or circumstance under the control of the Client or of the contractor. Non-availability of materials/supplies or of import license or of export permit shall not constitute Force majeure. If by reasons of Force Majeure supplies or services cannot be delivered by the due delivery date then the delivery date may be extended appropriately by the Client keeping in view all the circumstances and requirements of the Client.
- 49.2 The Contractor shall not be liable for liquidated damages, forfeiture of its Performance Security, blacklisting for future tenders, termination for default, if and to the extent of his failure / delay in performance /discharge of obligations under the Contract is the result of an event of Force Majeure.
- 49.3 If a Force Majeure situation arises, the Contractor shall, by written notice served on the Client, indicate such condition and the cause thereof. Unless otherwise directed by the Client in writing, the Contractor shall continue to perform under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
- 49.4 Force Majeure shall not include (i) any event which is caused by the negligence or intentional action of a Party or Agents or Employees, nor (ii) any event which a diligent Party could reasonably have been expected to both (A) take into account at the time of the conclusion of this Contract and (B) avoid or overcome in the carrying out of its obligations here under.
- 49.5 Force Majeure shall not include insufficiency of funds or failure to make any payment required hereunder.

50. Dispute Resolution

- 50.1 The Client and the Contractor shall make every effort to amicably resolve, by direct informal negotiation, any disagreement or dispute arising between them under or in connection with the Contract.
- 50.2 If, after thirty working days, from the commencement of such informal negotiations, the Client and the Contractor have been unable to amicably resolve a Contract dispute, either party may,

require that the dispute be referred for resolution by arbitration under the Pakistan Arbitration Act, 1940, as amended, by one or more arbitrators selected in accordance with said Law. The place for arbitration shall be Lahore, Pakistan. The award shall be final and binding on the parties.

51. Statutes and Regulations

- 51.1** The Contract shall be governed by and interpreted in accordance with the laws of Pakistan. The Contractor shall, in all matters arising in the performance of the Contract, conform, in all respects, with the provisions of all Central, Provincial and Local Laws, Statutes, Regulations and By-Laws in force in Pakistan, and shall give all notices and pay all fees required to be given or paid and shall keep the Client indemnified against all penalties and liability of any kind for breach of any of the same.
- 51.2** The Courts at Lahore shall have the exclusive territorial jurisdiction in respect of any dispute or difference of any kind arising out of or in connection with the Contract.

52. Taxes and Duties

The Contractor shall be responsible for the payment, if any is required, of all Pakistani Income Tax, Duties any other taxes on income arising out of the Contract, and the financial bid mentioned in Financial Proposal Submission Form/Form of Bid shall be deemed to cover all such taxes.

53. Bidder to inform himself

The Bidder is advised to obtain for himself, at his own cost and responsibility, all information that may be necessary for preparing the Bid and entering into a Contract for execution of the Works/facility. This shall include but not be limited to the health of equipment, software applications, relevant laws, rules, and regulations of Pakistan including Income Tax and Sales Tax laws/rules.

54. Contract Cost

The Contractor shall bear all costs / expenses associated with the preparation of the Contract and the Client shall in no case be responsible / liable for those costs / expenses e.g. Contract Stamp duty charges etc.

55. Authorized Representative

The Client, or the Contractor may, at their exclusive discretion, appoint their Authorized Representative and may, from time to time, delegate any / all of the duties / authority, vested in them, to their authorized Representative(s), including but not limited to, signing on their behalf to legally bind them, and may, at any time, revoke such delegation.

- 55.1** The Authorized Representative shall only carry out such duties and exercise such authority as may be delegated to him, by the Client, or the Contractor.
- 55.2** Any such delegation or revocation shall be in writing and shall not take effect until notified to the other parties to the Contract.
- 55.3** Any decision, instruction or approval given by the Authorized Representative, in accordance with such delegation, shall have the same effect as though it had been given by the Principal.
- 55.4** Notwithstanding above Clause, any failure of the Authorized Representative to disapprove

Services or Works shall not prejudice the right of the Client to disapprove such Services or Works and to give instructions for the rectification thereof.

55.5 If the Contractor questions any decision or instruction of the Authorized Representative of the Client, the Contractor may refer the matter to the Client who shall confirm, reverse or vary such decision or instruction.

56. Waiver

Failure of either party to insist upon strict performance of the obligations of the other party, under the Contract, shall in no way be deemed or construed to affect in any way the right of that party to require such performance.

57. Training

57.1 The Contractor shall arrange and undertake a detailed training program for its own staff as well as the staff nominated by the Client to ensure that they shall acquire a good working knowledge of supply of such Services to be supplied under the Contract.

57.2 In case of non-compliance with instructions, non-cooperation or other difficulties experienced by the Contractor with regard to any of these personnel, the Contractor shall apprise Client and proceed to implement suitable remedial measures after consultation with them.

58. Standards

The Goods and the Services supplied under this Contract shall conform to the authoritative latest/leading industry standards and best practices.

59. Labeling

The Goods/Equipment/Software/Items maintained under the Contract, shall be clearly labeled such that no Goods/Equipment/Software/Items remain without labeling during the Contract period, so as to correspond with the delivered documentation, with proper labeling scheme. All equipment, cables, connectors, ports, boxes shall be clearly labeled.

60. Delivery

The AFC-BSS setup delivery time is ninety (90) calendar days for Lahore Metrobus System Operations from the issuance of Acceptance Letter (LOA) with complete commissioning.

61. Software Maintenance

The software release as deployed shall be maintained free of charge throughout the Contract period by the contractor/subcontractor through AFC-BSS-Manufacturer with existing features without any implications on cost. This is to assure that AFC-BSS will stay operational within the existing scope.

62. Software Updates

The Contractor during the contract period shall provide free of charge (FOC) software updates from the AFC-BSS-Manufacturer for the AFC-BSS software, including but not limited to, any software changes required due to operational needs of the Client related to AFC-BSS.

63. Site Preparation

63.1 The Contractor shall be responsible to survey the central site. (If required)

63.2 The Client shall facilitate the Contractor in discharge of the above responsibilities and the Client shall indemnify the contractor for any delays in making such arrangements and deployment time mentioned in this contract will be accordingly adjusted. (If required)

64. Power

The Goods/Equipment/Software/Items under the Contract, should be maintained for protection from over-voltage, over-heating and out-of-tolerance current surges. Contractor must ensure that all equipment as installed on the stations does not undergo power outage resulting from malfunctioning of UPS (UPS must provide uninterrupted power supply of 4 hours in all cases to all AFC-BSS related equipment deployed on the station as well as other station equipment like CCTV surveillance system already connected with UPS). Client will be responsible for the provisioning of power at all stations.

65. Safety

The Contractor shall be responsible for elimination of identified hazards, including but not limited to high voltage, electromagnetic radiation, sharp points and edges, etc., and reduction of associated risk to personnel and equipment.

66. Support and Maintenance

The contractor will support and maintain Goods/Equipment/Software/Items for the period of contract including all renewals if applicable.

67. Spare Parts and Support

67.1 The Contractor shall warrant to The Client that the Goods/Equipment/Items supplied by The Contractor, under the Contract are genuine, brand new, non- refurbished and un-altered in any way, unless provided otherwise in the Contract.

67.2 The Contractor shall further warrant that the Goods/Equipment/Items provided by The Contractor, under the Contract shall have no defects, arising from design, materials, installation, configuration, or from any act or omission of The Contractor that may develop under normal use of the Goods.

67.3 The Contractor shall maintain sufficient backup stock of spare parts and tools, for the maintenance of the AFC-BSS Goods/Equipment/Software/Items, to be replaced/repared at the Contractor's cost for the time of contract including all renewals.

67.4 The Contractor will be responsible for free, on site repair / replacement of defective / damaged parts and labor. Engage and deploy suitably skilled personnel for operation and maintenance of the AFC-BSS Project, and maintenance/replacement of all related equipment/components in a timely manner and at its own cost during the course of the contract.

68. Blacklisting

68.1 If The Contractor fails / delays in performance of any of the obligations, under the Contract / violates any of the provisions of the Contract / commits breach of any of the terms and conditions of the Contract The Client may, at any time, without prejudice to any other right of action / remedy it may have, blacklist The Contractor in accordance with PPRA Rules 2014,

either indefinitely or for a stated period, for future tenders in Public Sector.

68.2 If The Contractor/Bidder is found to have engaged in corrupt or fraudulent practices in competing for the award of contract or during the execution and currency of the Contract, The Client may, at any time, without prejudice to any other right of action / remedy it may have, blacklist The Contractor/Bidder in accordance with PPRA Rules 2014, either indefinitely or for a stated period, for future tenders in public sector.

69. Special Stipulations

SCHEDULE-A, SPECIAL STIPULATIONS	
For ease of Reference, certain special stipulations are as under:	
Tender Security	<p>The Contractor shall furnish the Tender Security as under:</p> <p>in the form of Demand Draft / Pay Order / Bank Guarantee, issued by a scheduled bank operating in Pakistan, in the name of the Client, as per the format provided in the Tender Document; for a sum of Nine Hundred Fifty Two Thousand Five Hundred Only (952,500/-); denominated in Pak Rupees;</p> <p>Have a minimum validity period of one hundred and eighty days (180) from the last date for submission of the Tender or until furnishing of the Performance Security, whichever is later</p>
Performance Security	<p>The successful Contractor shall furnish Performance Security as under:</p> <p>within ten (10) working days of the receipt of the Acceptance Letter from the Client;</p> <p>in the form of a Bank Guarantee, issued by a scheduled bank operating in Pakistan, as per the format provided in the Tender Document to the Client;</p> <p>denominated in Pak Rupees;</p> <p>Have a minimum validity period of one year from the date of Award Notification or until the date of expiry of yearly support period.</p> <p>The technically and financially successful tenderer submit a sum equivalent to 10% of the one (01) year contract value, on a yearly basis, with an undertaking to renew the Bank Guarantee before the end of each year, one month before the expiry period of the submitted bank guarantee.</p>
Start operation of Services after training	Fully functional AFC-BSS setup for Lahore Metrobus System 27 stations of PMA within 90 Calendar Days from the issuance of LOA.

<p>Liquidated damages for failure / configuration of Services by the Contractor</p>	<p>If and when applicable, liquidated damages (LD) shall be levied for delay in start date of complete services as directed by the Client as below:-</p> <ul style="list-style-type: none"> i. Incomplete number of defined resource (TOM Operators and Turnstile Controllers) deployment at Stations = 0.25 % of the annual contract value per day per station ii. Other services as required in this RFP = 0.25 % of the annual contract value per day <p>However, the amount so deducted shall not exceed, in the aggregate, the value of the performance security. The Liquidated Damages are attributable to such part of the Services as cannot, in consequence of the failure / delay, be put to the intended use, for every day between the scheduled delivery date(s), with any extension of time thereof granted by the Client, and the actual delivery date(s).</p>
<p>Legal Status to Work in Pakistan</p>	<p>The Bidder must be allowed and meet all conditions set forth by the Government to work with all concerned parties.</p>

70. Technical Evaluation Criteria

A point system will be used for technical qualifying for the contractors.

PASS MARKS: A technically eligible bidder, based on conditions listed in Section below, not meeting the 65% pass mark limit will be rejected in Technical evaluation, and its Financial Proposal will be returned to it unopened. All bidders scoring greater than or equal to 65% of the marks will be accepted in technical proposal, and their respective financial bids will be opened as per rules and regulations.

The Client reserves exclusive rights to cancel/annul or reject all bids submitted at any time without giving any reason thereof.

According to the Technical Proposal, the Technical bids will be rated as follows. Bidders may fill in the below evaluation sheet and do their own evaluation for submission, but the evaluation done by the Client/ Evaluator shall be the valid evaluation and shall hold:

COMPLIANCE SHEET FOR BIDS

Sr No	Component	Estimated Quantity	Requirements Met (Y/N)
1	Support & Maintenance of the AFC-BSS solution including – for 3 years (software support, maintenance of equipment, data network, spare parts and overall responsibility of solution)	As per requirements of RFP	
2	Operations at Ticket Sales Offices, and Turnstile Locations (Including cash handling)	62 persons for ticket sales per shift at 39 ticket offices and 64 persons for access control per shift at 62 Turnstile points at all times during PMA metrobus operating hours.	

The mandatory requirements given above must be adhered to in order to qualify for evaluation against the criteria given.

Technical Evaluation Criteria

The Client reserves exclusive rights to cancel/annul or reject all bids submitted at any time without giving any reason thereof.

Supporting documentation required as evidence for each:

Sr No.	Criteria	Marks	Comment/Description	Documents Required
1	Number of public sector ICT projects greater than Rs. 100 million in value in last 15 years	15	1 = 5 Points 2 = 10 Points 3 or Greater = 15 Points	Copy of Contract Document OR Letter of Award OR any other valid document for evidence.
2	Team members in the equipment maintenance team with more than 3 years of experience in the related field	10	4 to 5 = 4 Points 6 to 10 = 6 Points 11 to 15 = 8 Points 16 or Greater = 10 Points	Updated resumes with date of joining information and designation for each team member.
3	Financial Strength of the bidder: Average Annual Turnover of Business in last three years in Millions	15	<100 = 0 Points >100 to 200 = 5 Points >200 to 300 = 10 Points >300 = 15 Points	Audited financial Statements for last three (03) years.
4	Financial Strength of the bidder: Average Net Worth in last three years in Millions	15	<30 = 0 Points >30 to 60 = 4 Points >60 to 90 = 8 Points >90 to 120 = 12 Points >120 = 15 Points	Same as of criteria for Average Annual Turnover at Sr No. 3 above
5	Number of successful projects with deployment of more than 200 resources onsite in multiple shifts in last 15 years	10	1 = 4 Points 2 = 8 Points 3 or Greater = 10 Points	Copy of Contract Document OR Letter of Award OR any other valid document for evidence.
6	Number of projects with experience of Cash Handling	5	1 = 2 Points 2 = 4 Points 3 or Greater = 5 Points	Copy of Contract Document OR Letter of Award OR any other valid document for evidence.
7	Project Managers with more than 3 years of Project Management's Experience	5	1 = 2 Points 2 = 4 Points 3 or Greater = 5 Points	Updated resumes with date of joining information and designation for each team member.
TOTAL		75	Minimum Passing Marks = 65% i.e. 49 marks	

71. Price Schedule / Bid Price / Form of Bid

MUST BE SUBMITTED IN SEPARATE ENVELOPE HIGHLIGHTED AS FINACIAL PROPOSAL

Price Schedule/Bid Price/Form of Bid

Technically qualified bidders with the lowest value in “P” will be considered successful.

Price Table:

Sr No	Item	Price
1	Monthly Service Charges for provisioning and maintaining all AFC-BSS services stated in this RFP, excluding services listed in Sr No 2-6 below, – for 27 PMA Metrobus stations (including but not limited to operations and maintenance of all hardware, software, data communication, network, security components, top-up/TOM machines, ticket issuance and validation, turnstile functioning, etc.)	P1
2	Monthly service charges of providing all back-office processing services associated with AFC-BSS, stated in this tender document (including but not limited to setting –up of all AFC-BSS bandwidth requirements, data communication, and hosting components, etc. – associated with central datacenter setup)	P2
3	Monthly service charges for dedicating adequate human resources to manage AFC-BSS data-center components	P3
4	Monthly Service Charges for placing defined human resources at all 27 PMA stations through 27 Operations Supervisors/Shift at all times during PMA operating hours	P4
5	Monthly Service Charges for placing defined human resources at all 27 PMA stations, for ticket sales, recharging and refunds etc through 62 TOM Operators/Shift at all times during PMA operating hours	P5
6	Monthly Service Charges for placing defined human resources at all 27 PMA stations, for turnstile access control at 62 Turnstile points through 64 Turnstile Controllers/Shift at all times during PMA operating hours	P6
TOTAL Monthly Price (P1+P2+P3+P4+P5+P6)		P

Important note:

- i. The financial bid is inclusive of all applicable taxes, as per Laws of the Government of Pakistan, but is exclusive of all Sales Tax on Services which shall be added by the Client over and above the quoted amount, as applicable/required under the relevant Tax Laws, to arrive at the contract price. Accordingly, the Contract Price shall be subject to adjustments for change in rate of Sales Tax on Services as and when applicable.
- ii. No advance payments will be made. Monthly payments will be made on a prorated basis by the Client taking into account the number of stations for which AFC-BSS has been successfully provisioned. However, it is clarified that if a station is closed by the Client, not because of the

fault of Contractor but, due to riots, strikes, natural calamities or by the action of law or government etc. the Client shall make the prorated deductions in the invoice processing. Subsequently, the Contractor shall submit its separate invoice for incurred costs during such instance of closure and the Client shall evaluate the invoice and just pay the costs excluding the profits.

iii.

The bidder need not include escalation in cost for the contract period because the bid price is completely indexed with minimum wage and consumer price index (CPI). All changes in minimum wage and CPI will be passed on the bidder as per the mechanism given below.

Component prices P_5 and P_6 of the bid price P shall be adjusted for minimum wage whenever a new minimum wage rate affecting the city of operations is notified.

Component prices P_1 , P_2 , P_3 and P_4 of the bid price P shall be adjusted at the end of each fiscal year for the change in consumer price index (CPI) since the bid submission date.

The monthly gross amount (exclusive of sales tax on services) P_n shall be as follows:

$$P_n = P + E_n$$

Where

$$E_n = (P_1 + P_2 + P_3 + P_4) \times \left(\frac{CPI_n}{CPI_0} - 1 \right) + (MW_n - MW_0) \times SS \times \frac{365}{(365 - 52^* - 14^{**})}$$

Where

E_n is the cumulative escalation in monthly price in PKR since the bid submission date.

MW_n is the notified minimum wage for the invoice period.

MW_0 is the notified minimum wage on the date of bid submission.

SS is the total number of **defined** human resources in Component P_5 and P_6 .

CPI_n is the value of consumer price index (CPI) on the last date of the previous fiscal year as published by Pakistan Bureau of Statistics, i.e. 30th June 2020 for invoices submitted for the period of 1st July 2020 and onwards and 30th June 2021 for invoices submitted for the period 1st July 2021 and so on.

CPI_0 is the value of consumer price index on the date of bid submission.

*Represents 52 Sundays in a year

**Represents other leaves and relievers, if any.

Date _____

Place _____

Signature of authorized person

Name:

(Company Seal)

In the capacity of
Duly authorized by

Note: No cutting or overwriting is allowed. Any cutting or overwriting will lead to rejection of the financial bid.

72. Equipment List

Following AFC-BSS equipment is installed at Green Line LMBS stations, track, Data Centers, PMA command and control center and store. The soft copy of the technical brochures of the deployed equipment can be obtained from the Punjab Masstransit Authority office located at 5th Floor - Arfa Software Technology Park, Ferozpur Road, Lahore, in office hours (9:00am to 5:30pm).

AFC-BSS Equipment			
Sr. No	Component	Quantity	Manufacturer/Model
1	PDA / TOM	62	Kentkart/ KR-750
2	TVM	42	Kentkart/ KR 980
3	Turnstiles	240	Kentkart
4	Validators	240	Kentkart/ KV-250
5	On Station Sign Boards (LED)	54	Kentkart
6	LED OBU	52	Kentkart/ KV-280
7	Bus OBU / Driver Consoles	64	Kentkart/ KV-280
8	Fare Media RFID Tokens	120,000	Kentkart
9	Handheld Ticket Validators	2	Kentkart/ KR-750
10	BIM for Tokens	2	Kentkart
11	BIM for Cards	2	Kentkart
12	Personalization Machine	2	Magocard/ Enduro+
13	UPS+32 Dry Batteries	30	EATON/ 9155-15KVA
14	Cables and Accessories for AFC-BSS System on Stations	27 Lots	N/A
15	Storage (4TB)	1	IBM/ DS3524
16	SAS Tape Drive	1	IBM/ LTO 5
17	Servers	7	IBM/ x3650 M4
18	Server	1	IBM/ x3850 X5
19	Rack and Accessories	1	IBM/ S2 42U
Network Equipment			
Sr. No	Component	Quantity	Manufacturer
1	Optical Network Termination (ONT)	34	DASAN/ H640G

2	Optical Line Termination (OLT)	2	DASAN/ V8240
3	Optical Switch	34	Optic Trans/ OPSW-5201T
4	24-Port 10/100Base-TX port Network switch	38	Trendnet/ TL2-E284
5	Rack	2	N/A
6	MSU	4	N/A
7	Uplink	4	N/A
8	Uplink SFP	12	N/A
9	PDU	4	N/A
10	GPON Line Card	2	N/A
11	EMS	1	N/A
12	Rectifier System	2	N/A
13	Batteries	8	N/A
14	Splitter 2:8	3	N/A
15	Splitter 1:4	24	N/A
16	48F ODF	35	N/A
17	12F ODF	35	N/A
18	48 F Cable KM (Steel Armored)	30.3	N/A
19	12 F Cable KM (Steel Armored)	30.3	N/A
20	Secondary Data Connectivity (PTCL Wireless Solution)	27	N/A

*It is clarified that database at server end is Oracle Enterprise Edition and OS is Microsoft Windows Server.

Annexure-B: Financial Proposal Submission Form (Part of Financial Bid Envelope)

Financial Proposal Submission Form (Part of Financial Bid Envelope)

[Location, Date]

To (Name and address of Client/Evaluator)

Dear Sir,

We, the undersigned, offer to provide the (Insert title of assignment) in accordance with your Request for Proposal dated (insert date) and our Technical Proposal. Our attached Financial Proposal is for the sum of (insert amount in words and figures) per month. This amount is inclusive of all applicable taxes, as per Laws of the Government of Pakistan, but is exclusive of all Sales Taxes on Services which shall be added by the Client over and above the quoted amount, as applicable/required under the relevant Tax Laws, to arrive at the monthly contract price. Accordingly, the Contract Price shall be subject to adjustments for change in rate of Sales Tax on Service as and when required.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal, i.e. before the date indicated in of the Proposal Data Sheet.

We also declare that the Government of Pakistan / Punjab has not declared us or any Sub-Contractors for any part of the Contract, ineligible on charges of engaging in corrupt, fraudulent, collusive, or coercive practices. We furthermore, pledge not to indulge in such practices in competing for or in executing the Contract, and are aware of the relevant provisions of the Proposal Document.

We understand you are not bound to accept any Proposal you receive.

Signed

In the capacity of:

Duly authorized to sign the proposal on behalf of the Applicant.

Date:

Annexure-C: Format for Covering Letter

To
(Name and address of Client/Evaluator)

Sub: _____.

Dear Sir,

- a) Having examined the tender document and Appendixes we, the undersigned, in conformity with the said document, offer to provide the said items on terms of reference to be signed upon the award of contract for the sum indicated as per financial bid.
- b) We undertake, if our proposal is accepted, to provide the items/services comprise in the contract within time frame specified, starting from the date of receipt of notification of award from the client Department / Office.
- c) We agree to abide by this proposal for the period of ____ days (as per requirement of the project) from the date of bid opening and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- d) We agree to execute a contract in the form to be communicated by the _(insert name of the Client)_, incorporating all agreements with such alterations or additions thereto as may be necessary to adapt such agreement to the circumstances of the standard.
- e) Unless and until a formal agreement is prepared and executed this proposal together with your written acceptance thereof shall constitute a binding contract agreement.
- f) We understand that you are not bound to accept a lowest or any bid you may receive, not to give any reason for rejection of any bid and that you will not defray any expenses incurred by us in bidding.
- g) We would like to clearly state that we qualify for this work as our company meets all the pre-F criteria indicated on your tender document. The details are as under:

Authorized Signatures with Official Seal

Annexure-D: Instructions for preparation of power of attorney

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

Format of Power-of-Attorney

POWER OF ATTORNEY

(On a Legal / Revenue Stamp Paper of PAKISTAN / of the bidder's country in the relevant value
OR on the bidder's letter head officially signed and stamped)

We (name of the company and address of the registered office) do hereby appoint and authorize Mr. / Ms. (full name and residential address) bearing Pakistan's Computerized National Identity Card (CNIC) no. (complete CNIC no.) who is presently engaged with us and holding the position of as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our proposal for (name of the project) in response to the tenders invited by the (name of the Client) including signing and submission of all documents and providing information/responses to (name of the Client) in all matters in connection with our Bid.

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

Dated this _____ day of _____ 20__

For _____

(Signature)

(Name, Designation and Address)

Accepted

(Signature)

(Name, Title and Address of the Attorney)

Date:

Annexure-E: Undertaking

UNDERTAKING

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

Dated this _____ day of _____ 20__

Signature

(Company Seal)

In the capacity of

Duly authorized to sign bids for and on behalf of:

Annexure-G: Tender Security Form

TENDER SECURITY FORM

WHEREAS [Name and Address of the Contractor] (hereinafter called "the Contractor") has submitted Tender against Tender Name (hereinafter called "the Tender") to the [Name and Address of the Client] (hereinafter called "the Client").

AND WHEREAS [Name of the Bank] having registered office at [Address of the Bank] (hereinafter called "the Guarantor") has agreed to give the Contractor a Guarantee;

THEREFORE the Guarantor hereby affirms to bind himself, his successors and his assigns to the Client, for the sum of PKR (in figures _____) (in words _____) and undertakes to pay to the Client, upon receipt of his written demand(s), any sum(s) as specified by him, not exceeding the above limit in aggregate, without cavil / argument and without the Client having to substantiate / prove or to show grounds / reasons for such claim(s), on the occurrence of any / all of the following conditions:

1. If the Contractor withdraws the Tender during the period of the Tender validity specified by the Contractor on the Tender Form; or
2. If the Contractor does not accept the corrections of his Total Tender Price; or
3. If the Contractor, having been notified of the acceptance of the Tender by the Client during the period of the Tender validity, fails or refuses to furnish the Performance Security, in accordance with the Tender Document.

Provided that the Client shall specify the occurred condition(s) owing to which the said sum is due to him.

Provided further that any demand(s) / claim(s) from the Client shall reach the Guarantor within thirty working days after the expiry of the Guarantee.

This guarantee shall remain valid up to _____ or until furnishing of the Performance Security, whichever is earlier.

Date this _____ day of 20__.

GUARANTOR

Signature _____

CNIC # _____

Name _____

Designation _____

Address _____

Annexure-H: Performance Security

PERFORMANCE SECURITY

Issuing Authority:

Date of Issuance:

Date of Expiry:

Claim Lodgment Date:

WHEREAS [Name and Address of the Contractor] (hereinafter called "the Contractor") has agreed to supply the Services and render the Services against Tender Name (hereinafter called "the Contract") for the Contract Value of PKR (in figures _____) (in words _____).

AND WHEREAS it has been stipulated in the Tender Document that the successful Contractor shall furnish Performance Security, within ten (10) working days of the receipt of the Acceptance Letter from the Client, in the form of a Bank Guarantee, issued by a scheduled bank operating in Pakistan, as per the format provided in the Tender Document to the Client, for a sum equivalent to Rs. _____ (to 10% of the one (01) year contract value, on a yearly basis, with an undertaking to renew the Bank Guarantee before the end of each year, one month before the expiry period of the submitted bank guarantee) valid from the date of issue until all obligations have been fulfilled in accordance with the Contract; AND WHEREAS [Name of the Bank] having registered office at [Address of the Bank] (hereinafter called "the Guarantor") has agreed to give the Contractor a Guarantee;

THEREFORE the Guarantor hereby affirms to bind himself, his successors and his assigns to the Client, for the sum of PKR (in figures _____) (in words _____) and undertakes to pay to the Client, upon receipt of his written demand(s), any sum(s) as specified by him, not exceeding the above limit in aggregate, without cavil / argument and without the Client having to substantiate / prove or to show grounds / reasons for such claim(s), on the occurrence of any / all of the following conditions:

1. If the Contractor commits a default under the Contract;
2. If the Contractor fails to fulfill any of the obligations under the Contract;
3. If the Contractor violates any of the provisions of the Contract.

Provided that the Client shall specify the occurred condition(s) owing to which the said sum is due to him.

Provided further that any demand(s) / claim(s) from the Client shall reach the Guarantor within thirty working days after the expiry of the Guarantee.

This guarantee shall remain valid up to _____ or all obligations have been fulfilled in accordance with the Contract, whichever is earlier.

Date this _____ day of 20__.

GUARANTOR

Signature _____

CNIC # _____

Name _____

Designation _____

Address _____

Annexure-I: Financial Capacity of the Bidder

Additionally, the following financial data form shall be filled out for the Bidder. The Client reserves the right to request additional information about the financial capacity of the Bidder. A Bidder that fails to demonstrate through its financial records that it has the financial capacity to perform the required Supply/Services may be disqualified.

Financial Information	Historical information for the previous three years (most recent to oldest in (PAK Rupees)		
	Year 1 (Year)	Year 2 (Year)	Year 3 (Year)
Information from Balance Sheet:			
(1) Total Assets (TA)			
(2) Current Assets (CA)			
(3) Total Liabilities (TL)			
(4) Current Liabilities (CL)			
Information from Income Statement:			
(5) Total Revenue (TR)			
(6) Profits before Taxes (PBT)			
Net Worth (1) – (3)			
Current Ratio (2) / (4)			

Provide information on current or past litigation or arbitration over the last three (3) years as shown in the form below.

Litigation or arbitration in the last three (3) years: No: _____ Yes: _____ (See below)

Litigation and Arbitration During Last three (3) Years

Year	Matter in Dispute	Value of Award Against Contractor in PAK Rupees
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Authorized Signatures with Official Seal

Annexure-J: Service Level Agreement

DRAFT SERVICE LEVEL AGREEMENT (SLA)

This SERVICE LEVEL AGREEMENT (SLA) is made on this __day of _____,
20__ (hereinafter referred to as “SLA”)

NOTE: SLA as listed below will be reviewed by PMA periodically and may be updated accordingly with mutual consent. The amendments as made at the time of review will be binding on the contractor.

Scope:

The SLA describes target performance levels which the contractor must aim to deliver for the Services outlined in tender document/contract. It also lists the procedures for managing unavailability of Services, and associated penalties which will be applied if contractor fails to deliver any service performance targets in accordance with this SLA.

Service Monitoring:

PMA authorized personnel will check Service Level Compliance of the Contractor through the available mechanisms, data and systems.

An overall uptime of 99.9% is expected from all components and services associated with AFC-BSS (Components/Modules/Services as listed in tender document/ contract).

The contractor, through the monitoring system must provide the data that is sufficient to allow analysis and reporting of performance and availability of components, equipment, modules – to the detail and frequency described in this SLA.

The Contractor will additionally use data gathered from its monitoring of the Components to inform & take approval from competent authority for its decisions in respect of any changes to its infrastructure which in its sole discretion, deems necessary to maintain or improve the availability and performance of the services delivered to PMA.

The contractor must use already available helpdesk / complaint management system / ITMIS with access to PMA authorized personnel.

Periodic reviews will be scheduled by the Government of the Punjab via its concerned departments and organizations. The reports from the contractor’s service monitoring system shall form an agenda for such reviews.

Scheduled Maintenance:

Scheduled maintenance should fall outside normal working hours, and not exceed a total of 4 hours per month. The contractor must seek approval from PMA for all pre-planned/scheduled maintenance work by submitting a detailed maintenance work plan along with reasons for scheduled maintenance, and impact on services (if any), and on service levels - at least one week prior to planned execution of the scheduled maintenance work.

After completion of the planned work, the contractor will report the outcome to PMA in writing. PMA have access to complaint management system / ITMIS to log calls and to assign categories.

- The contractor will be responsible for taking and maintaining reliable backups on daily basis.
- The contractor will ensure use of licensed software and products, where applicable.
- The contractor must ensure that the support personnel are properly qualified to support all software/hardware related issues.
- The contractor will be responsible for providing timely and comprehensive analysis and reports to PMA or the concerned department based upon the information/data gathered in the system.
- The contractor would be responsible for security of the data being entered into and processed by the applications.
- The contractor will be responsible for timely resolution of reported issues. The contractor will also ensure timely escalation of issues to PMA as and when required.
- The contractor must ensure effective and efficient support via online complaint management system/ITMIS, phone, email and onsite presence as and when needed throughout the period of contract.
- Accurately and thoroughly logging service request into complaint management system/ITMIS.
- The focal person at the client is notified about the creation of all critical service requests through email, SMS, and phone call and intimation on complaint management system.
- Documenting all technical inquiries and developing solutions for the knowledge base.
- Updating service requests in the complaint management system/ITMIS with detail analysis of the issue, documenting each step as it was solved.
- Responding to service request via email, phone or in person.
- Raising issues in the timely manner before they become critical show stoppers.
- Escalating issues at the appropriate level in a timely and efficient manner.
- Resolving issues both on site and remotely.
- The contractor will be responsible for providing support throughout the period of contract. Application support should cover aspects such as performance / load management, system /security hardening, disaster recovery/system configuration, patch management etc.
- Contractor must submit and conform to a detailed, agreed upon quality management plan. The contractor will follow up all closed tickets along with response time and quality services delivered to ensure level of services provided to the client in reaching resolution.
- The Contractor shall provide a step-by-step procedure for disaster recovery and take all necessary actions to restore the system in a timely manner.
- Ownership of all data entered into the system stays as the property of Client and shall be transferred in fully operational condition on completion of support contract.

FAULT LEVEL CATEGORIES:

Fault Level Categories as described below will be assigned by the contractor/Client; however Client may amend them or disagree based on factors as present on the ground.

Fault levels Category	Definition	Initial Response	Resolution
Critical	The system is unable to be used for normal business activity. There is no viable workaround. Downtime will lead to financial loss.	Within 15 minutes	Within 90 minutes
Urgent	There is a problem with a part of the system which impacts decision-making and there is a likelihood of financial loss.	Within 1 hour	Within 3 hours
High	The efficiency of the system users is being impacted, but a viable workaround exists.	Within 2 hours	Within 6 hours
Normal	A fault with low impact and no possibility of revenue loss. A viable workaround exists.	Within 6 hours	Within 12 hours

Issues Reported by Contractor:

Every issue reported by contractor’s designated operational staff must be logged against the fault level category as mentioned above; in centralized complaint management system available to all stakeholders. Client may disagree to the fault level assigned by the contractor based on the factors as present on the ground. For equipment/scenarios where automated alert system is not available, issues will be reported via phone call to contractor’s helpline. Pertaining to issues reported on helpline by operations staff of contractor, all must be entered into centralized complaint management system.

Issues Reported by Surveillance Teams:

Issues as occurred on the ground may also be reported by surveillance teams of PMA. Surveillance teams may report via phone call to contractor’s helpline and/or logging complaint into complaint management system. Surveillance teams will log complaint but may not assign fault level category which will be assigned initially by the contractor. Client may disagree/amend to the fault level assigned by the contractor based on the factors as present on the ground.

Issues Reported by Citizens:

Passengers may also report issues to the contact center as maintained by Client.

Initial Response:

Time taken by the contractor’s qualified representative to arrive at the premises where the failure occurred, after the problem is reported by the automated alert system where applicable.

Resolution:

Time it takes to resolve the problem.

Issues as reported must be visible to all stakeholders involved via complaint management system. In addition contractor must notify the fault to the Authority, via email, fax, and/or telephone, as soon as it becomes aware of the fault, and must also keep the monitoring cell informed of progress towards resolution in a timely manner. Any fault that is not fixed within the stated resolution time will be escalated to the executive management of the contractor.

Faults/Issues/Complaints will not be closed until resolution is verified on the ground by PMA.

In case of breach of SLA parameters, penalties will apply. Depending upon the nature, severity, and duration of the breach, penalties in the form of stated percentage of monthly service charges will be imposed. It is however clarified that the Contractor is not responsible for the duration of the downtime where the problem lies with the Client and all such time shall be excluded accordingly.

Minimum service levels associated with various key aspects of the services, components, and operations related to the AFC-BSS project, are defined below:

Sr No	Service	Parameter	Service level	Validation	Penalty
1	Helpdesk	Resolution of issues logged as per fault level categories definitions above	99%	Generated from complaint management system	If 95%-98.99% calls resolved on-time, then 2% penalty on monthly charges 90%-94.99% calls resolved on time, then 5% penalty on monthly charges. <90% of complaints being resolved on time 10% of monthly charge.
2	System Configuration and Report Generation	System Configuration and Required Report Generation Resolution logged as per fault level categories definitions above. This includes changing the fare rate, fare policy etc as well	99%	Report	If 95%-98.99% are resolved on-time, then 2% penalty on monthly charges. 90%-94.99% resolved on time, then 5% penalty on monthly charges. <90% resolved on time 10% of monthly charge.

3	Asset/ Inventory Management System	Conduct annual physical asset verification	100%	Satisfaction report to be signed off by authorities	Stock not being available/ faulty must be fixed/provided/ settled by contractor. 0.5% of 12 monthly charges, if issues not addressed in given timeframe.
4	Quarterly Evaluation	Evaluation of contractor's performance on quarterly basis	N/A	Management approval of contractor's performance evaluation report	0.5% of quarterly charges
5	Network Monitoring & Management	Contractor to monitor the Network link for 99% uptime.	99%	Downtime Reports Reports on Network Performance	2% of the monthly charges for slippage
		Data center network availability minimum of 99.8% uptime measured on a monthly basis.	99.8%	Report	2% of the monthly charges for less than 99.8%. 3% of the monthly charges for less than 98%, 5% of the monthly charges for less than 95%
		Bus network availability minimum of 97% uptime measure on a monthly basis	97%	Report	2% of the monthly charges for less than 97%. 3% of the monthly charges for less than 95%
		Uptime (including turnstiles, validators, station PC, switches, communication devices etc)	99.9%	As reported by the monitoring system	2% of the monthly charges for less than 99.9% and 5% of monthly charges for less than 97%. Or revenue loss based on historical data, whichever is higher.
6	Identical Statistics	System Reports must match with the video feed outlining number of passengers passing through turnstiles, if applicable	99%	PMA Record	Penalty of 2% will be deducted from the monthly charges for any slippage.
7	Bus Operators Reimburseme	Must be as per pre defined status	100%	Monthly Reports	Any ambiguity and/or discrepancy will cause 5%

	nt Report	and present valid/ authentic data			deduction in monthly charge.
8	Server administration / management	Uptime of App servers	99.8%	Report	2% of the monthly charges for less than 99.8%. 3% of monthly charges for less than 97%. 5% of monthly charges for less than 95%.
		MIS of servers health checkup (CPU, diskspace, Memory utilization, I/O utilization, Central storage etc)	100%	Report from the system	0.5% of the monthly charges
9	Backup/ Restore Management	Contractor must take data backups as per a defined and agreed upon backup schedule.	99%	As reported by the system	If the negligence is found in the periodic audit report, contractor will be fined Rs 25,000/- per negligence.
		PMA would periodically request the service provider to restore the backup data	100%	Report	Rs 25,000/- for every restore failure
10	Problem Management	Contractor shall provide a root- cause report every month if there are more than 15 incidents of the same type. Successful bidder must take appropriate and timely corrective action to prevent further issues from same cause.	100%	Root cause report stating problems faced by the users Document detailing corrective action	5% penalty on monthly charges if the contractor does not submit a problem report for that month. Another 5% penalty if contractor does not perform corrective action for more than one calendar month.
11	Change Management	Resolution of Change Request	100%	Report	5% of monthly charge, if standardized change management patches are not updated onto servers in one calendar month. The Client may grant more time for any Change Request in its sole discretion

					depending on its complexity before logging the Change Request.
12	UPS Failure	Any IT equipment being installed at bus stations must not undergo power outage due to UPS/Battery failure. This does not include power outage exceeding 4 hours.	100%	PMA Record Report	Rs 25,000/- on each incident
13	Vehicle Tracking field equipment	Real time feeds to be supplied to control center of PMA	99.9%	Real time data feeds	0.2% of the monthly charges for less than 99.9%. 2% of the monthly charges for less than 97%. 3% of the monthly charges for less than 95%.
14	PIS field Equipment	PIS malfunction i.e. PIS data broadcast is inaccurate at bus station	N/A	PIS malfunctioning at bus stops/terminals will be reported by enforcement staff/drivers/commuters.	Rs 1000/- for each issue reported and verified.
		PIS malfunction i.e. PIS data broadcast is inaccurate in bus	N/A	PIS malfunctioning with in the bus will be reported by drivers/commuters.	Rs 1000/- for each issue reported and verified.
15	AFCS Financial Consolidation	Daily MIS of the Revenue Generation. Monthly MIS of the Revenue Settlement/ Distribution	100%	Report	2% of the monthly charge for slippage of one calendar day for monthly report.
16	Delay in Issuance of Fare Media at Ticket Office	The average time between issuance of two tokens measured over a fifteen minute period in face of queue shall be no more than 30	N/A	PMA record	Rs 50,000/- on each incident

		seconds per counter			
17	Non Availability of Fare Media	Unavailability of fare media for issuance to passengers over a five minutes period	N/A	PMA record	Rs 20,000/- for every five minutes interval per station on each incident
18	Improper Performance of Turnstile Controller	Failed to perform the assigned duties	N/A	PMA record	Rs 2,500/- on each incident
19	Non Availability of Validated Access to Station	Unavailability of all entry/exit turnstiles for validating passenger entry/exit access to/from station over a five minutes period	N/A	PMA record	Rs 20,000/- for every five minutes interval per station on each incident
20	Unmanned Turnstile	No human resource at Turnstile observed over a period of one minute	N/A	PMA record	Rs 5,000/- on each incident + Rs 5,000/- for each subsequent five minute period
21	Unmanned Ticket Office Counter	No human resource at ticket office counter observed over a period of one minute	N/A	PMA record	Rs 5,000/- on each incident + Rs 5,000/- for each subsequent five minute period
22	Misbehavior of Contractor Staff	Misbehavior of contractor staff with passengers, PMA Staff or with staff of other service providers established through concrete evidence	N/A	PMA record	Rs 25,000/- on each incident
23	Improper Implementation of Fare Policy	Wrong fare deduction or wrong fare system or fare system non-compliant to	100%	PMA record Reports	10% of monthly charge

		prescribed fare policy			
24	Inconsistency within Reports	Reports generated from the system are inconsistent with each other	N/A	PMA record	Rs 5,000/- on each incident + Rs 5,000/- for each subsequent hour
25	Fare Media travel time duration	Failed to adjust fare media expiry/ travel time duration as instructed by PMA	N/A	PMA record	Rs 10,000/- after the prescribed implementation time + Rs 10,000/- for each subsequent day
26	Time Synchronization	System reports/live time not conforms with Pakistan Standard Time	N/A	PMA record	Rs 5,000/- on each incident + Rs 5000/- for each subsequent hour
27	Resource Management	Number of shift days for which resource present at the designated location / Total number of shift days	100%	Attendance track call log, Audit call/visits measured on a monthly basis, must be available to PMA via centralized online system	The payments shall be deducted on a pro-rata basis. Moreover, <u>1. For TOM Operators and Turnstile Controllers:</u> an equivalent amount of penalty shall also be applied. <u>2. For Operations Supervisor:</u> Penalty shall be applied at Rs 4000/- for each absence of resource / shift
28	Delayed Invoice Submission	Failed to submit invoice in first 10 days of the month	N/A	PMA record	Rs 30,000/- on each incident
29	Violation of scope of services	Any act of non-conformance to PMA rules, regulations, instructions, scope of services if not covered in SLA	N/A	PMA record	Rs 5,000/-*A on each incident Where A=[1-100] depending on the sensitivity of non-conformance as per decision by the Client

Calculation of Uptime:

$\frac{\text{Actual Uptime} + \text{Scheduled Downtime}}{\text{total number of operation hours in a month}} * 100$

"**Total Operation Hours**" means the total hours over the measurement period i.e. one month (24 * number of days in the month for 24 hours operation and 18 * number of days in the month for 18 hours operation).

"**Actual Uptime**" means, of the Total Operation Hours, the aggregate number of hours in any month during which each equipment is actually available for use.

"Scheduled Downtime" means the aggregate number of hours in any month during which each equipment, is down during Total Operation Hours, due to preventive maintenance, scheduled maintenance, infrastructure problems or any other situation which is not attributable to the Contractor's (or Contractor's) failure to exercise due care in performing Contractor's responsibilities.

For 24/7 hours operation, the PMA would provide a maximum of 04 hours of planned downtime for the preventive maintenance (as part of scheduled downtime) per month per equipment/service. In other case the PMA would not provide any planned downtime for the preventive maintenance (as part of scheduled downtime) per month per equipment/service.

The downtime for scheduled maintenance (patch application, upgrades – OS, Database, etc.) would need to be mutually agreed between PMA and the Contractor for 24/7 hours operation. To reduce this time, various maintenance activities can be clubbed together with proper planning. Like above the planned downtime would not be the case if we are not having 24/7 operations.

Downtime Calculation:

The recording of downtime shall commence at the time of registering it with Contractor for any downtime situation for the equipment. The registration could be done through auto alert, Downtime shall end when the problem is rectified and the application/ service is available to the user. Down time will not be considered for Pre-scheduled preventive maintenance and health checks (Scheduled Downtime).

If the PMA elects to continue the operation of the machine, when a part of the machine is giving problem and leading to downtime, the commencement of downtime shall be deferred until the PMA releases the machine / equipment to the Contractor for remedial action.

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

Breach of SLA:

In case the Contractor does not meet the service levels mentioned in document, for three (3) continuous time periods, it will be treated as a breach of the SLA. The following steps may be taken in such a case:

- 1. A show cause notice will be issued
- 2. Contractor must respond to the notice within 3 working days
- 3. If PMA is not satisfied with the reply, it may initiate contract termination process

Exclusions:

The service provider will be exempted from delays or slippages on SLA parameters arising out of delays in execution:-

- a. due to delay in approval or review from PMA's side
- b. for the duration where the problem lies with the Client

Any such delays will be notified in writing and will be approved by the Client.

Monitoring and Auditing:

PMA will review the performance of Contractor against the SLA parameters each month, or at any periodicity defined in the contract document. The review / audit report will form basis of any action relating to imposing penalty or breach of contract.

Any such review / audit can be scheduled or unscheduled. The results will be shared with the Contractor as soon as possible. PMA reserves the right to appoint a third-party auditor to validate the SLA.

Reporting Procedures:

The Contractor will prepare and distribute to PMA the SLA performance reports in an agreed upon format by the 3rd working day of subsequent month of the reporting period. The reports will include “actual versus target” SLA performance, a variance analysis and discussion of appropriate issues or significant events.

As such, this document also defines the following management procedures:

1. A process for negotiating changes to the SLA.
2. An issue management process for documenting and resolving particularly difficult issues.
3. PMA and Contractor management escalation process to be used in the event that an issue is not being resolved in a timely manner.

SLA Change Control:

General:

It is acknowledged that this SLA may change as PMA’s business needs evolve over the course of the contract period. **The PMA reserves the right to review the SLA periodically and update it accordingly with mutual consent. The review amendments will be binding on the Contractor.**

SLA Change Process:

Both the parties may amend this SLA by mutual consent in accordance. Changes can be proposed by either party. Normally the forum for negotiating SLA changes will be PMA monthly review meetings.

Version Control:

All negotiated SLA changes will require changing the version control number. As appropriate, minor changes may be accumulated for periodic release (e.g. every quarter) or for release when a critical threshold of change has occurred.

Issue Management Procedures:

General:

This process provides an appropriate management structure for the orderly consideration and resolution of business and operational issues in the event that quick consensus is not reached between PMA and Contractor. It is expected that this pre-defined process will only be used on an exception basis if issues are not resolved at lower management levels.

Issue Management Process:

Either PMA or Contractor may raise an issue by documenting the business or technical problem, which presents a reasonably objective summary of both points of view and identifies specific points of this SLA with possible solutions.

PMA and Contractor’s representative will determine which committee or executive level should logically be involved in resolution.

A meeting or conference call will be conducted to resolve the issue in a timely manner. The documented issues will be distributed to the participants at least 24 hours prior to the discussion if the issue is not an emergency requiring immediate attention.

Management of PMA and Contractor will develop a temporary, if needed, and the permanent solution for the problem at hand. The Contractor will then communicate the resolution to all interested parties.

Management Escalation Procedures:

The purpose of this escalation process is to provide a quick and orderly method of notifying both parties that an issue is not being successfully resolved at the lowest possible management level. Implementing this procedure ensures that PMA and Contractor management are communicating at the appropriate levels. Escalation should take place on an exception basis and only if successful issue resolution cannot be achieved in a reasonable time frame.

1. All issues would be raised to the project management team, which is completely responsible for the day to day aspects of the implementation. The project management team shall classify the issues based on their severity level and resolve them within appropriate timelines.
2. If project management team is unable to resolve an issue, the issue would be escalated to the top management with options/risks detailed for decision. Top management will make decisions based on the options/risks presented by the PMA.

Training Requirements:

Training is an important activity for the successful implementation of Work. Following are the trainings to be imparted by the Contractor:

1. The Contractor shall arrange and undertake a comprehensive training program for its own staff as well as the staff nominated by the Client to ensure that they shall acquire a good working knowledge of supply of such Services to be supplied under the Contract. To make the Work a success, training programs shall be arranged by the Contractor from time to time depending on the requirement and understanding of the PMA, operators, participating users, etc. For all these training programs, the Contractor shall provide adequate course material documents.
2. Contractor shall also be responsible for re-training the PMA nominated trainers staff whenever changes are made in the System and it shall be the responsibility of the Contractor to ensure that the operators are familiar with new versions of system and its allied services.

System Availability:

The System could be required to be functional round the clock, and the availability of the System should be in excess of 99% of the operations time.

Performance Reporting:

The Contractor shall record performance and availability of each of the Components and report this information to the Client. Where periodic account reviews are agreed by both parties to be held between the Client and the Contractor, these reports will form an agenda for such reviews. The Contractor will enable the Client to view the reports via the service system.

General Maintenance Conditions:

- The maintenance shall include both Preventive Maintenance and Corrective Maintenance.
- This Service Level Conditions shall cover each and every part/component of the System. The Contractor shall examine, clean, lubricate and adjust various components/parts of the entire System including all parts and components every month and shall take necessary measures to maintain the units in proper working conditions in accordance with the Specifications in the Service Level Conditions.
- The Contractor shall supply and replace any part/components which are discovered to be potentially detrimental to the safety of the user and/or to the efficient and cost effective operation of the units and which require immediate replacement.

- In case of need to replace any part/component, the Contractor shall provide original make genuine parts/components of similar/higher quality.
- In case of emergencies, the Contractor shall respond immediately to take the necessary actions irrespective of the provisions regarding time limits.
- The Contractor shall be liable for any kind of damage to the user of the units caused by poor maintenance, delay in any repair/maintenance works and shall pay for the damage.
- Repairs may be carried out generally during non-operational hours.

IN WITNESS whereof the parties here to have caused this Contract to be executed in accordance with their respective laws the day and year first above written.

Annexure-K: Station and Bus Level AFC-BSS Equipment

AFC-BSS Equipment at Stations & Buses									
S.No	Location Name	PDA / TOM	TVM	Turnstiles	Validators	LED's	LED OBU	UPS 15KVA	Bus OBU's
1	SHAHDARA	5	1	8	8	1	1	1	
2	NIAZI CHOWK	3	1	8	8	2	2	1	
3	TIMBER MARKET	2	1	8	8	2	2	1	
4	AZADI CHOWK	2	1	8	8	2	2	1	
5	BHATTI CHOWK	3	2	8	8	2	2	1	
6	KATCHERY	2	2	8	8	2	2	1	
7	CIVIL	2	2	8	8	2	2	1	
8	MAO COLLEGE	4	4	16	16	2	2	1	
9	JANAZGAH	2	2	8	8	2	2	1	
10	QARTABA	2	2	16	16	2	2	1	
11	SHAMA	2	2	8	8	2	2	1	
12	ICHARA	2	2	8	8	2	2	1	
13	CANAL	4	2	16	16	2	2	1	
14	QADDAFI	2	1	8	8	2	2	1	
15	KALMA	3	1	8	8	2	2	1	
16	MODEL TOWN	2	1	8	8	2	2	1	
17	NASEERABAD	1	1	8	8	2	2	1	
18	ITTEFAQ	3	1	8	8	2	2	1	
19	QAINCHI	2	1	8	8	2	2	1	
20	GHAZI ROAD	2	1	8	8	2	2	1	
21	CHUNGI	2	1	8	8	2	2	1	
22	KAMAHAN	1	1	8	8	2	2	1	
23	ATARI SAROBA	1	1	8	8	2	2	1	
24	NISHTAR	2	1	8	8	2	2	1	
25	YOUHANABAD	2	1	8	8	2	2	1	
26	DULU KHURD	1	1	8	8	2	2	1	
27	GAJJUMATA	3	2	8	8	1	1	1	
28	Buses								64
Total		62	39	240	240	52	52	27	64

AFC-BSS Equipment at PMA & Store								
S.No	Location	TVM	LED's	UPS 15KVA	Ticket Validators	Personalization Machine	BIM for Tokens	BIM for Cards
1	PMA				2	2	2	2
2	Store	3	2	3				
Total		3	2	3	2	2	2	2

Annexure-L: Station Level Network/Connectivity Equipment

Network Equipment Details at Stations																			
S.No	Station Names	ONT	OLT	Optical Switch	Network Switch	Rack	MSU	UpLink	UpLink SFP	PDU	GPON Line Card	EMS	Rectifier System	Batteries	Splitter 2:8	Splitter 1:4	48F ODF	12F ODF	Secondary Data Connectivity (PTCL Wireless Solution)
1	SHAHDARA	1		1	1												1	1	1
2	NIAZI CHOWK	1		1	1												1	1	1
3	TIMBER MARKET	1		1	1												1	1	1
4	AZADI CHOWK	1		1	1												1	1	1
5	BHATTI CHOWK	1		1	1											2	1	1	1
6	KATCHERY	1		1	1												1	1	1
7	CIVIL	1		1	1												1	1	1
8	MAO COLLEGE	1		1	2												1	1	1
9	JANAZGAH	1		1	1										1	2	1	1	1
10	QARTABA	1	1	1	2	1	2			2	1		1	6			1	1	1
11	SHAMA	1		1	1												1	1	1
12	ICHARA	1		1	1											2	1	1	1
13	CANAL	1		1	2											2	1	1	1
14	QADDAFI	1		1	1												1	1	1
15	KALMA	1		1	1											2	1	1	1
16	MODEL TOWN	1		1	1											2	1	1	1
17	NASEERABAD	1		1	1												1	1	1
18	ITTEFAQ	1		1	1												1	1	1
19	QAINCHI	1		1	1										1	2	1	1	1
20	GHAZI ROAD	1		1	1												1	1	1
21	CHUNGI	1		1	1											2	1	1	1
22	KAMAHAN	1		1	1												1	1	1
23	ATARI SAROBA	1		1	1												1	1	1
24	NISHTAR	1		1	1											2	1	1	1
25	YOUHANABAD	1		1	1												1	1	1
26	DULU KHURD	1		1	1												1	1	1
27	GAJJUMATA	1		1	1											2	1	1	1
28	NISHTAR JUNCTION	1		1	1												1	1	
29	GULABDEVI JUNCTION	1		1	1												1	1	
30	KALMA JUNCTION	1		1	1												1	1	
31	TIMBER JUNCTION	1		1	1											2	1	1	
32	ASTP Data Center		1			1	2	4	12	2	1	1	1	2			1	1	
Total		31	2	31	34	2	4	4	12	4	2	1	2	8	3	24	32	32	27

Network Equipment Details at Store						
S.No	Location	ONT	Optical Switch	Network Switch	48F ODF	12F ODF
1	Store	3	3	4	3	3
Total		3	3	4	3	3

Annexure-M: Affidavit For Non-Blacklisting

AFFIDAVIT FOR NON-BLACKLISTING

(On a Legal / Revenue Stamp Paper of PAKISTAN in the relevant value.)

In response to the Tender Document for [Tender Name] We hereby solemnly declare that presently [Name of Bidder / Supplier] is having unblemished record and is not presently blacklisted on any grounds whatsoever by any Government entity (Federal, Provincial, Local Body) or Public Sector Organization in the country of origin and Pakistan.

It is understood that if this declaration is found to be incorrect for [Name of Bidder / Supplier] or any member in case of Joint Venture, then without prejudice to any other action that may be taken, our Tender Security shall be forfeited in full and our bid shall be cancelled.

Dated this _____ day of _____ 20__

Signature

(Company Seal)

In the capacity of

Duly authorized to sign bids for
and on behalf of: