



PROVISION, COMMISSIONING, INSTALLATION,
CALIBRATION, INTEGRATION, TESTING AND
EXECUTION OF IT SYSTEMS (CCTV
SURVEILLANCE AND CONNECTIVITY) FOR FEEDER
ROUTES IN LAHORE



CORRIGENDUM

1. Punjab Masstransit Authority (PMA) is a statutory body established by the Government of the Punjab for the purposes of planning, construction, operation and maintenance of mass transit systems in the major cities of the Punjab, Pakistan; for providing safe, efficient and comfortable urban transportation system.
2. The above mentioned advertisement, for Provision, Commissioning, Installation, Calibration, Integration, Testing and Execution of IT Systems (CCTV Surveillance and Connectivity) for Feeder Routes in Lahore, appeared on March 11, 2016 vide Advertisement No. IPL-2739 in the News and the Nawa-i-waqt Dailies.
3. The dates of submission and opening of the bid are hereby amended as under:-.

Tender Name	Revised Schedule of Pre-Bid Meeting	Last Date of Bid Submission		Date of Bid Opening (Technical Proposal)	
		Existing	Extended	Existing	Extended
Provision, Commissioning, Installation, Calibration, Integration, Testing and Execution of IT-Systems (CCTV Surveillance and Connectivity) for Feeder Routes in Lahore	Tuesday 29.03.16 at 11:00 am	30 .03. 2016 PST1500 Hours	Friday 08.04.2016 PST1500 Hours	30 .03. 2016 PST1500 Hours	Friday 08.04.2016 PST1500 Hours

4. Procurement will be carried out as per Punjab Procurement Regulatory Authority Rules 2014. Competitive bidding will be conducted in accordance with the single stage: two envelope bidding process.
5. Financial proposals will be opened following evaluation of the technical proposals, at PMA office on a date and time which will be conveyed in advance to bidders whose technical proposals are successful.
6. PMA reserves the right to reject all bids at any time prior to the acceptance of a bid.
7. All Bidders must obtain and carefully read the RFP document which may be downloaded from the following websites.

www.pma.punjab.gov.pk

ppra.punjab.gov.pk

Note: All other terms and conditions will remain unchanged.

General Manager Operations
Punjab Masstransit Authority, 5th Floor, Arfa Software Technology Park (ASTP)
346-B, Main Ferozepur Road, Lahore, Pakistan.TEL: +92 (42) 99028000
Fax: +92 (42) 99232541



INVITATION FOR BIDS



Punjab Masstransit Authority (PMA)

Invites Tender for

Provision, Commissioning, Installation, Calibration, Integration, Testing and Execution of IT-SYSTEMS (CCTV SURVEILLANCE AND CONNECTIVITY) FOR FEEDER ROUTES IN LAHORE

For details, please download Tender Documents from

www.pma.punjab.gov.pk

ppra.punjab.gov.pk

1. The procurement shall be conducted in accordance with the Punjab Procurement Rules 2014 as modified time to time on Single Stage Two Envelopes Procedure.
2. A single package containing separate technical proposals and financial proposals duly completed, signed, stamped, and in complete conformity with Tender Document should be dropped in the Tender Box placed at reception of the PMA Office, 5th Floor, Arfa Software Technology Park, 346-B Ferozpur Road, Lahore, no later than 1500 Hours on March 30, 2016. The Technical Proposal will be opened at 1530 Hours on March 30, 2016 in PMA office.
3. Bids which are incomplete, not sealed, not signed, unstamped, late or submitted by other than specified mode will not be considered.
4. Income tax/ Sales Tax Registration Certificate and other documents as mentioned in Tender Documents must accompany the bids. All Taxes will be deducted as per Government of Punjab rules.
5. Pre-bid meeting will be held at 1030 Hours on March 21, 2016, at PMA office.
6. PMA reserves the right to reject all bids at any time prior to the acceptance of a bid.
7. All questions/queries/clarifications regarding this procurement should be directed to the representative whose contact details are given below:

General Manager Operations

Punjab Masstransit Authority, 5th Floor, Arfa Software Technology Park (ASTP)
346-B, Main Ferozpur Road, Lahore, Pakistan. TEL: +92 (42) 99028000

Fax: +92 (42) 99232541

**PROVISION, COMMISSIONING, INSTALLATION, CALIBRATION,
INTEGRATION, TESTING, AND EXECUTION OF IT SYSTEMS (CCTV
SURVEILLANCE, CONNECTIVITY) FOR FEEDER ROUTES IN LAHORE**



**THE PUNJAB MASSTRANSIT 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 scope of the Bid covers the following two areas:

1. Provision, commissioning, installation, calibration, integration, testing and execution of CCTV Surveillance System, Connectivity, Data Center (Server/Racks/Storages) (IT Systems) for The Feeder Routes in Lahore (including all hardware, software, networking, etc), and configuration, customization, deployment, and maintenance of the entire solution.
2. Operations and Maintenance of the deployed IT Systems.

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

Purchaser will evaluate received bids in the following order:

The successful bidder shall supply all necessary IT Systems **services**, which include furnishing, installing and operating all hardware, software, networking, etc. at its own cost. In addition the successful bidder shall configure, customize, deploy, and maintain the entire IT Systems solution; and manage it at PMA Feeder Routes and Command and Control Center (C&CC) by fully utilizing the deployed IT Systems.

Purchaser, would award accordingly as per rules, and while the Purchaser 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: Friday, April 8th, 2016 (3:00pm)–5th floor Arfa Software Technology Park, Ferozpur Road, Lahore.**
- 2. Pre-bid meeting: Tuesday, March 29th, 2016(11:00am) – 5th floor Arfa Software Technology Park, Ferozpur Road, Lahore.**

1. Invitation to Bid

The Punjab Masstransit Authority (PMA), Government of the Punjab (the purchaser), invites bids for the

“PROVISION, COMMISSIONING, INSTALLATION, CALIBRATION, INTEGRATION, TESTING, AND EXECUTION OF IT SYSTEMS (CCTV SURVEILLANCE, CONNECTIVITY) LAHORE FEEDER ROUTES IN LAHORE”.

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>.

1.3 Type of Open Competitive Bidding

As per Rule 38(2)(a), Single Stage - Two Envelope Procedure shall be followed.

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 procuring agency 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 procuring agency 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, subject to approval of the Competent Authority.

2. Bidding Details (Instruction to Bidders)

All bids must be accompanied by tender security as part of technical proposal in favor of “The **Punjab Masstransit Authority**” as per Clause No. 22 (Tender Security) of this document.

The bids along with the Tender Security, Tender Forms, Affidavits, etc., must reach the office of the Punjab Masstransit Authority located at 5th floor, Arfa Software Technology Park, 346-B, Ferozpur Road, Lahore, Pakistan, on or before **3:00 pm on April 8th, 2016**. The Technical bids will be publicly opened in the Committee Room of the Punjab Masstransit Authority, 5th Floor, Arfa Software Technology Park, 346-B, Main Ferozpur Road, Lahore, at 3:30 pm on **April 8th, 2016**.

Any Bid received by the Purchaser after the abovementioned deadline for submission of Bids shall be returned unopened to such Bidder. Delays in the mail, delays of person in transit, or delivery of a Bid to the wrong office shall not be accepted as an excuse for failure to deliver a Bid at the proper place and time. It shall be the Bidder’s responsibility to determine the manner in which timely delivery of his Bid will be accomplished either in person, by messenger, courier service or by mail.

Queries of the Bidders (if any) for seeking clarifications regarding the specifications of the services must be received in writing to the PMA by **29th March 2016**. 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 details for all correspondence in relation to this bid are as follows:

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

Bidders should note that during the period from the advertisement of the tender till the receipt of the bids, 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.

Purchaser 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, Purchaser reserves the right to cancel the tender, accept or reject one or all bids without assigning any reason thereof.

3. Definitions

- 3.1 "PMA" is The Punjab Masstransit Authority, Government of the Punjab.
- 3.2 "IT Systems" PROVISION, COMMISSIONING, INSTALLATION, CALIBRATION, INTEGRATION, TESTING AND EXECUTION OF IT SYSTEMS INCLUDING CCTV SURVEILLANCE SYSTEM, CONNECTIVITY, DATA CENTER EQUIPMENT FOR FEEDER ROUTES IN LAHORE as asked for in the Tender Document. Initial phase is for IT Systems implementation for fourteen (14) Feeder Routes in Lahore.
- 3.3 "Client/Procuring Agency/Purchaser" means The 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 Purchaser to act as Purchaser.
- 3.4 "MBS" Metrobus System
- 3.5 "IT Systems Service Provider" or "Successful Bidder": The technically qualified bidder with lowest financial bid, who has the probability of award of contract for IT Systems Project, subject to approval of the Competent Authority.
- 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 procuring entity 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 "Pre-Bid Conference/Meeting" means the meeting conducted by the procuring entity 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 the Punjab.
- 3.13 "RFP" means Request for Proposals, including any amendments that may be made by the procuring entity 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 this RFP/Tender Document.
- 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 procuring entity and the bidder, and expected results and deliverables of the assignment.
- 3.20 "Video Feed Loss" Feed that is not available for a period of 24 hours from instance.

- 3.21 "Works" means work to be done by the Contractor under the Contract.
- 3.22 "Corridor" means MBS Corridor.
- 3.23 "GoPb" means Government of the Punjab.

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 Purchaser, 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 The Punjab Masstransit Authority (PMA) (The Purchaser), invites/requests Proposals (hereinafter referred to as "the Tenders") for the provision, commissioning, installation, Calibration & Testing, Operation and Maintenance of CCTV Surveillance System, Connectivity, Data Center Server/Racks/Storages, Data Cabinet, (IT Systems) for Feeder Routes and Command & Control Centre in Lahore, Pakistan.

6.2 In the first phase, the Integrated IT Systems solution needs to be rolled out for approximately fourteen (14) Feeder Routes and Command and Control Center. Eventually the IT systems will be extended for other Routes in Phase Wise as well.

6.3 This is a Service Contract and the bidder is expected to provide end-to-end services for designing, procurement, installation and commissioning of the Surveillance systems for provisioning of live feed from Cameras installed on roads/corridor to Control Center with storage facility of 30 days and allied services.

6.3.1 Scope of Services

The roles and responsibilities are as under:-

Client

The roles and responsibilities of PMAs are as under:-

6.3.1.1 Make monthly payments to the Service Provider against Camera-Hours reported by the Network Management System. Camera-hours will be computed based on actual available Video feed in Control Center and video loss if any.

6.3.1.2 Monitor Surveillance system, Feeder Bus Operation and all its activities.

6.3.1.3 Be responsible for the conduct and functioning of all staff employed in PMA and shall take prompt and appropriate action for misconduct. PMA staff shall provide efficient services, polite and courteous behavior towards Service Provider, and passengers.

6.3.1.4 Implement the Service Level Agreement and levy penalties in case of deficiencies in performance and deduct such amount from Service Provider's payment.

6.3.1.5 Resolve disputes between different Service Providers/Operators' of PMA.

6.3.1.6 Advertise the Services on completion of this Contract or extend duration of the Contract based

on satisfactory performance of the Service Provider.

- 6.3.1.7 Facilitate the Service Provider in obtaining required NOC's for Provisioning of Site.
- 6.3.1.8 Assist/facilitate the Service Provider to file FIR against any person or other Service Providers/Contractors responsible for causing damages to the equipment deployed by Service Provider for rendering services to the PMA.
- 6.3.1.9 Not hold the Service Provider responsible for delays, if any, in deploying equipment or fiber optic/wireless due to refusal of relevant Right of Way Governing Agency to give NOC for installation of Camera(s).
- 6.3.1.10 Direct Service Provider to shift location(s) of poles, if so required due to development work or operational nature. The PMA shall pay once PKR. 50,000 per shifting if so directed. The PMA may also allow Service Provider (if requested by Service Provider) to use Government infrastructure for Installation of Camera and in such case deduct cost of pole installation/erection one time at @ of PKR 100,000 per pole.

7. Overview and Objectives

Lahore, the provincial capital of Punjab and is the second largest city in Pakistan with a population of about 10 million. The city's population has been growing at a growth rate of about 3% per annum. The city's rapidly growing population coupled with increasing vehicle ownership has resulted insatiable travel demand. Development of public transport network has not kept pace with this increase, and has caused transport related problems like traffic congestion, accidents, poor environment etc.

Bus service in Lahore was planned over 53 routes, based on 2006 survey of passengers and published in Punjab Gazette 2006. However, only about 27 routes are operated due to lack of balance in supply and demand. Most public transport routes are served by vehicles which are non-registered wagons, coasters, rickshaws and Qingqis. Many public transport vehicles especially wagons operate without valid license, and do not follow the authorized route. The wagons are illegally competing with urban bus although they are not allowed to serve on main arteries. The inefficiency of public-owned public transport has led to increase of private vehicles mostly motorcycles.

The number of rickshaws operating in Lahore is estimated to be 66,000 as per registration data of the Lahore District Registration Authority, but up to 80,000 may actually ply the routes of Lahore when taking into account unregistered vehicles.

There is a declining trend of public transport mode share in proportion in favor of car and motorcycle trips. The public transport network in Lahore is currently under-developed, fragmented, inadequately managed and highly inefficient. The incomplete operation on bus routes, high fares, fewer-than-required buses, gender discrimination, and even absence of bus routes in parts of urban areas is common. On certain routes waiting times for the passengers are too long whereas on other routes buses wait for passengers and may move when feel. Such a situation prevails because routing and licensing is not based on passenger demand analysis but based on convenience of operators and lack of regulator ability to assess. Efficiency is acceptable on certain routes but reliability is poor, there being no defined schedules at all. The decline in the transport resulted in rising car ownership, greater use of motorcycles, and a huge dependency on Rickshaws and Qingqis to shoulder the burden of public transport. Due to absence of public transport, people reorganize their lives to cope with the situation, or abandon opportunities they may have otherwise taken up. Public transport operations should be improved by extending bus operations along major corridors and restricting small vehicles operations to feeder routes.

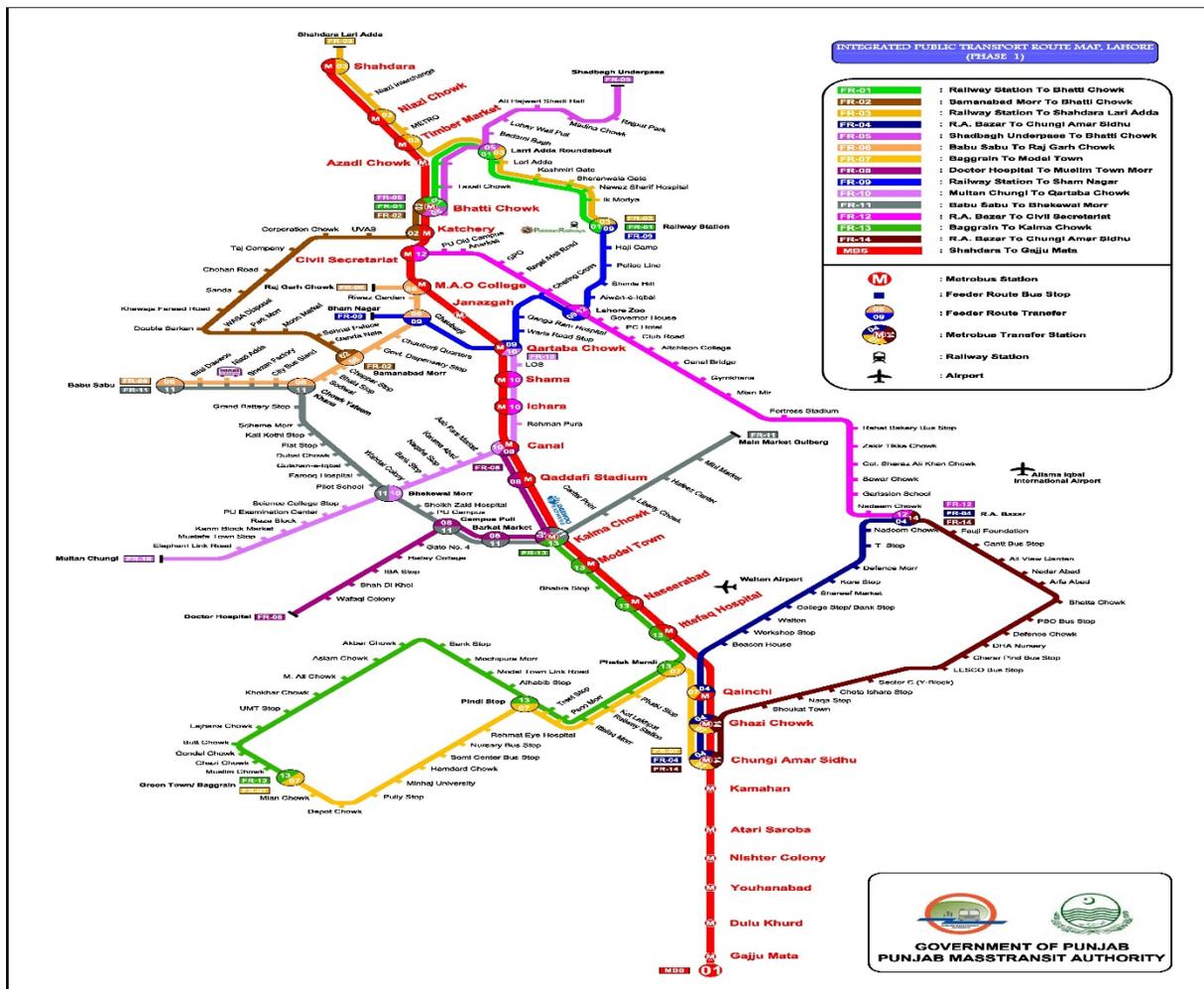
The Integrated Bus Operation was also envisioned in Lahore Transport Master Plan and has recommended completion of the project by year 2014.

GoPb realizes the importance of providing safe, efficient, comfortable, and affordable Transport to the public and commissioned the Metrobus Corridor. PMA established Metrobus line in year 2013 which is serving daily ridership of 135,000. The GoPb intends to further facilitate the passengers of Lahore Metrobus System and provide integrated transport system. The physical, operation and fare integration aspect of integrated transportation system will be catered for between Metrobus and feeder bus system. The feeder routes will be operated to facilitate passengers of Metrobus System in an efficient, reliable and safe manner through optimized route network and service based operation model. The service hours and frequency of buses on Feeder Route Operation will integrate with the Metrobus operation. The passengers in Lahore using Metrobus system or feeder routes or both will use same Metrobus card as fare media and save additional charges.

7.1 Feeder Bus System

This is the initial phase of procurement in which PMA has planned fourteen (14) feeder routes with a total route length of 123 Km's. The number of routes, headway of buses, and number of buses on routes are likely to be adjusted based on the actual travel/ridership patterns recorded and generated from the Automated Fare Collection (AFC) System. PMA will engage a separate service provider for provisioning of Automated Fare Collection and Bus Scheduling System (AFC-BSS) system which will serve as a Management Information System (MIS). The AFC-BSS will be coupled with necessary hardware and software to authenticate entry/exit of passengers into Feeder buses, and to monitor adherence to bus schedules. Each 12 m long feeder bus will have two on-board validators for authentication of entry/exit of passengers whereas each 8 m long feeder bus is to have one on-board validator. Passengers will use one stored value rechargeable smart cards for their journey in the Integrated Public Transport Network (IPTN) in Lahore.

The Driver Console Unit installed on buses shall be used to track buses accurately and reliably. The back-end system shall be able to produce MIS reports and bus-schedule adherence report and kilometers travelled by each bus of the operator. To accomplish this, The Client will receive live passenger data, financial data, and Automatic Vehicle Location data in Lahore Metrobus Command and Control Center. The whole operation will be monitored and controlled by PMA from Command and Control Centre.



7.2 Future Expansion Plans

After the successful implementation of feeder operation on fourteen (14) routes in Lahore, PMA will notify more routes to expand the IPTN.

SUMMARY OF ROUTES				
	No. of Routes	Route Length (Km)	Number of Buses	Type of Buses
Phase-I	14	123	200	Standard Bus/Mini Bus
Phase-II	12	114	166	Standard Bus
Phase-III	12	118	181	Standard Bus
Phase-IV	14	119	187	Standard Bus
Phase-V	18	117	192	Standard Bus/Mini Bus
Phase-VI	21	101	200	Standard Bus/Mini Bus
Phase-VII	13	259	275	Standard Bus
Total	104	951	1400	

7.3 The Punjab Masstransit Authority (hereinafter called "PMA") invites applications from bidders/Consortium (herein after called "Bidder") for the execution and completion of a project involving the provision, commissioning, installation, Calibration & Testing, Operation and Maintenance of CCTV Surveillance System, Connectivity, Data Center Server/Racks/Storages, Data Cabinet, for the Command & Control Centre and Feeder Routes in Lahore, Pakistan (hereinafter called the "Project").

7.4 The scope of work is limited to area of feeder routes in Lahore. The key components of the scope are provided below.

7.5 Future Expansion Plans

Once, the IT Systems solution is successfully adopted for current phase of Feeder Routes, there are plans to roll out the solution for later phases of local transport Operations Feeder Routes will be included as well.

8. Contract type and duration

Contract period is (06) six years, extendable based on needs, compliance to defined Service Level Agreement (SLA), satisfactory audit reports, and compliance to other requirements stated in this Tender Document, and formal contract.

9. Services Required

Contractual obligations of the successful bidder's (IT Systems Service Provider's roles and Responsibilities):

IT Systems Solution Deployment and onsite technical support:

1. Procure, operate and maintain Surveillance System including all its components and peripherals, reliably and securely at all times during the course of the contract for Feeder Routes operation on roads/corridor identified by PMA to meet Performance Level mentioned in the Service Level Agreement. The scope of work in Surveillance system includes hardware and software for installation of 367 Cameras with allied Civil works such as erection of poles of at least 40 ft height etc., fixing of Cameras on Poles, PTZ Cameras, design of overall system, server, storage, network (Wireless or fiber optic), power supply (Solar or LESCO supply), replacement/upgrade of hardware and software (if required), display of live video feed on Video Wall and Workstations

of existing Control Center of PMA at Arfa Software Technology Park. The Service Provider will be responsible for additional equipment/software/cable/electrical wiring, if required, for integration of Camera feed with existing Video Wall/ Workstations/Control Center.

2. Provision, Install, configure, customize, deploy, thoroughly test, and integrate Surveillance Systems components - including all related equipment and software necessary for the smooth running of the system, in accordance with provisions of this tender document, good industry practices, applicable laws, and technical specifications of components stated in this document.
3. Provision, Install, maintain and operate a robust, scalable, secure, and efficient data communications network (24x7) connecting Camera feeds/data to the datacenter/hosting site as well as the central PMA control center.
4. Arrange Uninterruptible AC(LESCO) or Solar Power Supply to ensure 24x7 availability of all Surveillance Systems equipment/components deployed at roads/corridor on which Feeder Routes are operating. Power backup to be proposed must take into account the capacity required to run all components of Surveillance Systems. The client shall facilitate the Service Provider in obtaining AC power from relevant electric supply company where required.
5. Propose Surveillance System solution that must be able to function on a 24x7x365 basis and live Video stream at Display Resolution of 1920x1080. CCTV Surveillance with storage/backups of Video for 30 days as per Video Display resolution of 1920x1080. System should be hosted in adequate data center, providing high availability access.
6. Arrange for the security of the Surveillance system and shall be responsible for the security of all equipment's of Surveillance system. The Service Provider shall also ensure license software and products, where applicable.
7. Deploy suitably skilled personnel for procurement, operation and maintenance of Surveillance System including development, configuration/customization, installation, and prompt and efficient technical support/maintenance/troubleshooting etc.
8. Adequate spare parts must be in place, in order to ensure Surveillance System in accordance with the Key Performance Indicators defined in Service Level Agreement.
9. Establish formats, standards, database parameters, and protocols for communication among the different sub-systems of Surveillance Systems.
10. Adhere to timelines of the Surveillance Systems project implementation as specified in this Tender Document.
11. Impart meaningful and timely training to all staff associated with Surveillance Systems as well as selected staff of PMA on operation and use of software operation.
12. Coordinate all equipment and software maintenance (Preventive and Corrective maintenance) activities well in advance with authorized/designated personnel at PMA.
13. Replace faulty equipment, hardware, software at its own cost so as to ensure adherence to stated service-level parameters.
14. Obtain all necessary permits/NOC under all applicable Laws required to proceed with Surveillance Systems Project implementation, and comply with applicable laws, regulations, and permits during the contract period. The cost of such NOC/permits shall be borne by the Service Provider.
15. Cooperate with all other service providers and facilitate PMA overall system

operations. In case of damages to PMA or other Service Provider property on the part of the Surveillance Systems Service Provider the damages shall be recovered from the Surveillance Systems Service Provider by the PMA.

16. Be responsible for the conduct and functioning of all staff employed on the Surveillance Systems 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.
17. Participate in all meetings as directed by PMA from time to time.
18. Take prompt and reasonable action for resolution of each complaint, including complaints received from passengers/general public as well as from PMA, related to Surveillance Systems.
19. Ensure prompt and efficient 'response time' related to all service delivery aspects.
20. Timely raise alerts/inform PMA control center staff in case of issues with equipment or system functioning.
21. The Service Provider 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).
22. After completing the initial system deployment, User Acceptance Testing (UAT) and Commissioning of the system, the Service Provider shall not make any changes to the system configuration parameters and security settings without prior written approval of the Client in a timely manner.
23. The Service Provider must provide web based/automated mechanism in the form of system generated real time alerts/reports viewable via centralize dashboard to determine downtime/Service Availability and performance of equipment installed in Surveillance System especially live feed of Camera in Control Center. The reports shall be downloadable from the System in agreed format. The NMS shall generate real time report/raw data including but not limited to the following:-
 - i. Operational Status (regarding live feed of Camera)
 - ii. Alarms
 - iii. Duration of live feed/day or hour
 - iv. Camera rotation log

The PMA may require additional reports based on his requirements.

24. System shall be capable of generating video loss report.
25. System shall be capable of generating Automatic Violation Report when capture a picture. The Violation Report shall collect information automatically such as time/date, user name, and location of Camera etc. The Violation report must also have a space for comments of the Surveillance officer. The display resolution of picture in Violation report must be not less than resolution of the camera.
26. The Network Management System (NMS) shall be capable of monitoring all the cameras and communicating with the Control Room. In Case of partial or complete failure of NMS, the PMA shall decide alternate procedure for estimating running Camera-hours for the purpose of invoice payment, which shall be acceptable to Service Provider. The service provider shall bear the cost of such arrangements.
27. Ensure that Individual Camera have enough capacity to store data temporarily for at least one day (sync able) at 2Mp in case of non-transmittal of data to Control Center

- due to failure of communication media.
28. Implement a secure and protected access control system to Surveillance Systems, software application systems and databases, limiting access to authorized personnel only.
 29. Implement appropriate security measures for the information and data generated from operations of Surveillance Systems, and deploy standard management procedures, contingency plans, and back-up plans to cope with any system failure.
 30. Provide authorized PMA staff secure 24x7 access to Management Information System reports and features -covering all critical aspects of Surveillance Systems operations, alerts, faults, and audit logs. Only authorized personnel of PMA should have secure access to add or change key configuration parameters.
 31. PMA reserves the right to procure additional Surveillance Systems solutions from any third party through competitive bidding as per the specifications mentioned in the tender document. The Service Provider is responsible to integrate all such Systems solutions in an efficient & timely manner.
 32. The PMA envisioned facilitating other Government Department regarding sharing of live video feed. The Service Provider shall be bound to provide interface for sharing of live feed from aggregation point, if required.
 33. Sixty Seven (67) Cameras out of 367 Cameras will be installed/fixed in Cantonment/Defense areas; procurement of Cameras for these 67 locations shall be made once the NOC is given by Cantonment/Defense Authorities.
 34. In addition to live Video Feed of 367 Cameras , the Service Provider may be required to add 30% more Cameras (with allied services and complying Service Level Agreement) over a 1 year period as per:-
 - I. Requirement/need of the client,
 - II. Satisfactory performance of Service Provider, and
 - III. Consent of the Service Provider.

10. Key Service-level parameters

1. Services are required during operations of the PMA buses – tentatively decided, as 24 hours a day 7 days a week and 365 days a year.
2. Adequate spare parts and fully functional maintenance lab must be in place, in order to ensure uptime defined in the Service Level Agreements.

11. Any breach of defined service level will entail penalties which shall not exceed more than 10% of the monthly payments to service provider; service level parameters are outlined in Annexure-J.

12. Tender/Bidder Eligibility

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

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

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

a. “Eligible” is defined as any country or region that is allowed to do business in Pakistan by the law of Government of Pakistan.

b. “Origin” shall be considered to be the place where the company / firm is incorporated

12.1.3 has a registered office in the respective country of origin

12.1.4 has been registered for at least 5 years in country of origin, and has proven experience of deploying solution (applicable to any partner in case of Joint Venture/Consortium).

12.1.5 has the required relevant qualified personnel and adequate financial and technical strength to fulfill the requirements.

12.1.6 Conforms to the clause of “Responsiveness of Bid” and “Preparation/Submission of Tender” given herein this tender document.

12.1.7 Verifiable proof for all the above shall be required.

12.1.8 Local companies forming part of the joint venture must be registered under the prevailing related rules or Companies Ordinance and Punjab Revenue Authority (PRA).

13. Tender Cost

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

14. Joint Venture / Consortium

Joint venture/Consortium is 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 Tender and shall remain valid throughout the currency of the Contract.

b. One partner of formulated joint venture will be designated the lead partner and would be get into legal contract with the Purchaser 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, removed or added without the prior approval of purchaser.

15. Examination of the Tender Document

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

16. Amendment of the Tender Document

16.1 The Procurer 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).

16.2 The Procurer shall notify the amendment(s) in writing to the prospective Tenderers.

16.3 The Procurer 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 Procurer/ Purchaser and the Tenderers previously subject to the deadline shall thereafter be subject to the deadline as extended.

17. Preparation / Submission of Tender

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

17.2 The Tenderer is not allowed to bid in partial in this tender.

17.3 The Tender and all documents relating to the Tender, exchanged between the Tenderer/bidder and the Purchaser or Procurer, shall be in English. Any printed literature furnished by the Tenderer/bidder in another language shall be accompanied by an English translation which shall govern for purposes of interpretation of the Tender.

17.4 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.

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

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

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

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

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

17.5.5 Details/Profile of Staff (Management / Technical) team

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

- 17.5.7 SECP Registration Certificate.
- 17.5.8 Registered service provider with Punjab Revenue Authority (PRA)
- 17.5.9 Disaster Recovery Plan
- 17.5.10 Information Security Management practices
- 17.5.11 Details of proposed solution with logical diagrams, functionality and features and the proposed deployment plan with timelines
- 17.5.12 Availability confirmation of all resources which will be used in the proposed solution.
- 17.5.13 Bidder will provide sample reports which the system can generate.
- 17.5.14 Detailed Project Plan highlighting timelines, resource allocations and deliverables for each milestone leading to solution roll out.
- 17.5.15 Detailed quality assurance plan including methodology.
- 17.5.16 Detailed Communications Management Plan.
- 17.5.17 Details of hardware/equipment used along with warranties.
- 17.5.18 Detailed features of the software systems.
 - 17.5.18.1 Provide an overview of software organization.
 - 17.5.18.2 Define external interfacing data format, semantics, and protocols.
 - 17.5.18.3 Include complete documentation of non-application components such as operating system, communications handlers, database, and report generators.
 - 17.5.18.4 Detail the procedures for building and managing software configuration.
 - 17.5.18.5 Describe the metrics embedded in IT Systems to evaluate its performance.
 - 17.5.18.6 Identify the error conditions detected through the Automated system, and the messages or Indications for those conditions.
- 17.5.19 Data collection and management methodology.
- 17.5.20 Detailed workflow of proposed IT Systems.
- 17.5.21 Integration between all IT Systems.
- 17.6 The Technical and Financial proposals shall be submitted in two separate envelopes and the envelopes will be clearly marked 'Technical Proposal' and 'Financial Proposal'. Electronic copy (CD/DVD/USB) of Microsoft Word/Excel file format (as applicable) of offered bid documents (technical section only) prepared by the bidder (not manufacturer) must be furnished. Each proposal shall be in two sets bid i.e. the original and the copy.
- 17.7 In the event of any discrepancy between the original and the duplicate, the original shall govern.
- 17.8 The **Technical Proposal** shall contain following, without quoting the price:
 - 17.8.1 Technical Proposal Form (Annexure-A)
 - 17.8.2 Affidavit and Undertaking (All terms & conditions and qualifications listed anywhere in the RFP have been satisfactorily vetted) (Annexure-E&F)
 - 17.8.3 Covering letter duly signed and stamped by authorized representative. (Annexure-C)
 - 17.8.4 Authorized Certificate / document from the principle / manufacturer.
 - 17.8.5 Evidence of eligibility of the Tenderer and the Services.
 - 17.8.6 Evidence of conformity of the Services to the Tender Document
 - 17.8.7 Technical Brochures / Literature
 - 17.8.8 The statement must be signed by the authorized representative of the Bidder
 - 17.8.9 Financial Capacity as per Annexure-I
 - 17.8.10 Valid Registration Certificate for Income Tax, Sales Tax and / or other allied agencies / organizations / regulatory authorities (Principal, Local Representative Company).

17.8.11 Income Tax & Sales Tax Returns for the last three tax years.

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

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

17.9.1 Financial Proposal Form (Annexure-B)

17.9.2 Price Schedule

17.9.3 Bid Security **(for a sum of PKR ten (10) million amount as mentioned vide clause 22 regarding Bid Security of this tender document)**

17.10 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 Procurer]
[Address of the Procurer]

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

17.11 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 Procurer]
[Address of the Procurer]

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

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

17.13 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 Procurer]
[Address of the Procurer]

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

- 17.14** 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 Procurer]
[Address of the Procurer]

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

- 17.15** The Tenderer shall enclose soft copies of the Technical Proposal and the Financial Proposals, 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.
- 17.16** 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.

18. Tender Price

18.1 The quoted price shall be:

- 18.1.1 best / final / fixed and valid until completion of all obligations under the Contract i.e. not subject to variation / escalation;
- 18.1.2 Inclusive of all charges up to the delivery point at the Project site in Lahore for IT System

- related components;
- 18.1.3 in Pak Rupees (PKR);
- 18.1.4 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 Purchaser 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.
- 18.1.5 If not specifically mention in the Tender, it shall be presumed that the quoted price is as per the above requirements.
- 18.2** 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).
- 18.3** The price hereby quoted by the Bidders would cover the whole scope of services for the contract period.

19. Bid/Tender Security

- 19.1** The Tenderer shall furnish the Tender Security/Bid security as under:
- 19.2 As part of technical bid envelope in a separate envelop**, failing which will cause rejection of bid.
- 19.3** Bid security should be submitted by the Bidder;
- 19.3.1 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];
- 19.3.2 for a sum of PKR ten (10) million;
- 19.3.3 denominated in Pak Rupees;
- 19.3.4 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.
- 19.4** The proceeds of the Tender Security shall be payable to the Purchaser, on the occurrence of any / all of the following conditions:
- 19.4.1 If the Tenderer withdraws the Tender during the period of the Tender validity specified by the Tenderer on the Tender Form; or
- 19.4.2 If the Tenderer does not accept the corrections of his Total Tender Price; or
- 19.4.3 If the Tenderer, having been notified of the acceptance of the Tender by the Purchaser during the period of the Tender validity, fails or refuses to furnish the Performance Security, in accordance with the Tender Document.
- 19.4.4 If the Tenderer fails to provide the performance security in stipulated timeframe, format, amount and currency.
- 19.4.5 The Tenderer refuses or fails to submit the Performance Security as per agreed timelines, amount and format.
- 19.5** 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.

20. 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. The Procurer may solicit the Tenderer's consent to an extension of the validity period of the Tender. The request and the response thereto shall be made in writing. If the Tenderer agrees to extension of validity period of the Tender, the validity period of the Tender security shall also be suitably extended. The Tenderer may refuse extension of validity period of the Tender, without forfeiting the Tender security.

21. Modification / Withdrawal of the Tender

21.1 The Tenderer may, by written notice served on the Procurer, modify or withdraw the Tender after submission of the Tender, prior to the deadline for submission of the Tender.

21.2 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.

22. Opening of the Tender

22.1 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.

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

22.3 No tenderer or its representative shall be allowed to keep any digital device (camera, audio recorder, cell phone etc.) during tender opening meeting at given time and location. Non-compliance will cause the rejection of respective bidder.

23. Clarification of the Tender by the Purchaser

The Procurer 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 purchaser

24. Determination of Responsiveness of the Bid (Tender)

24.1 The Procurer 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:

24.1.1 meets the eligibility criteria for the Tenderer for the Services;

24.1.2 meets the Technical Specifications for the Services;

- 24.1.3 meets the delivery period / point for the Services;
 - 24.1.4 meets the rate and limit of liquidated damages;
 - 24.1.5 offers fixed price quotations for the Services;
 - 24.1.6 is accompanied by the required Tender Security as part of technical bid envelope;
 - 24.1.7 is otherwise complete and generally in order;
 - 24.1.8 Conforms to all terms and conditions of the Tender Document, without material deviation or reservation.
- 24.2** A material deviation or reservation is one which affects the scope, quality or performance of the Services or limits the Purchaser's rights or the Tenderer's obligations under the Contract.
- 24.3** 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. However, the Purchaser may waive off any minor non-conformity or inconsistency or informality or irregularity in the Tender; but subject to approvals of Tender Evaluation Committee.

25. Correction of errors / Amendment of Tender

- 25.1** The Tender shall be checked for any arithmetic errors which shall be rectified, as follows:
- 25.1.1 if there is a discrepancy between the amount in figures and the amount in words for the Total Tender Price entered in the Tender Form, the amount which tallies with the Total Tender Price entered in the Price Schedule, shall govern.
 - 25.1.2 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.
 - 25.1.3 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.
- 25.2** The Tender price as determined after arithmetic corrections shall be termed as the Corrected Total Tender Price which shall be binding upon the Tenderer.
- 25.3** Adjustment shall be based on corrected Tender Prices. The price determined after making such adjustments shall be termed as Evaluated Total Tender Price.
- 25.4** No credit shall be given for offering delivery period earlier than the specified period.
- 25.5** 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.

26. Rejection & Acceptance of Tender/Bids

- 26.1** The Procurer / Purchaser 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 Procurer's/ Purchaser's action, and without thereby incurring any liability to the Tenderer and the decision of the Purchaser shall

be final.

26.2 The Tender shall be rejected if it is:

- 26.2.1 substantially non-responsive; or
- 26.2.2 submitted in other than prescribed forms, annexes, schedules, charts, drawings, documents / by other than specified mode; or
- 26.2.3 incomplete, un-sealed, un-signed, printed (hand written), partial, conditional, alternative, late; or
- 26.2.4 subjected to interlineations / cuttings / corrections / erasures / overwriting; or
- 26.2.5 the Tenderer submits more than one Tenders against; or
- 26.2.6 the Tenderer refuses to accept the corrected Total Tender Price; or
- 26.2.7 the Tenderer has conflict of interest with the Purchaser; or
- 26.2.8 the Tenderer tries to influence the Tender evaluation / Contract award; or
- 26.2.9 the Tenderer engages in corrupt or fraudulent practices in competing for the Contract award.
- 26.2.10 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.
- 26.2.11 the Tenderer submits any financial conditions as part of its bid which are not in conformity with tender document.
- 26.2.12 the Tenderer refuses or fails to submit the Performance Security as per agreed timelines, amount, currency and format.

27. Acceptance Letter (LOA)

The Purchaser 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. However, the Purchaser reserves exclusive rights to cancel the Acceptance letter (LOA) at any time without giving any reason thereof.

28. Performance Security

28.1 The successful Tenderer shall furnish Performance Security as under:

- 28.1.1 within ten (10) working days of the receipt of the Acceptance Letter from the Purchaser;
- 28.1.2 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];

- 28.1.3 denominated in Pak Rupees;
- 28.1.4 Have a minimum validity period of one year from the date of Award Notification or until the date of expiry of yearly support period.
- 28.1.5 The technically and financially successful tenderer submits a sum equivalent to 10% of the one 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.
- 28.2** The proceeds of the Performance Security shall be payable to the Purchaser, on occurrence of any / all of the following conditions:
 - 28.2.1 If the Contractor commits a default under the Contract;
 - 28.2.2 If the Contractor fails to submit the bank guarantee for the next year one month before the expiry of already submitted bank guarantee.
 - 28.2.3 If the Contractor fails to fulfill any of the obligations under the Contract
 - 28.2.4 If the Contractor violates any of the terms and conditions of the Contract.
 - 28.2.5 If the Tenderer refuses or fails to submit the Performance Security as per agreed timelines, amount and format.
- 28.3** 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.

29. Redressal of Grievances

- 29.1** The Procurer 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.
- 29.2** Any bidder feeling aggrieved by any act of the Procurer after the submission of his bid may lodge a written complaint concerning his grievances not later than fifteen days after the announcement of the bid evaluation report.
- 29.3** The committee shall investigate and decide upon the complaint within fifteen days of the receipt of the complaint.
- 29.4** Mere fact of lodging of a complaint shall not warrant suspension of the procurement process.
- 29.5** Any bidder not satisfied with the decision of the committee of the procuring agency may follow the process mentioned vide Statutes and Regulations.

TERMS & CONDITIONS OF THE DRAFT CONTRACT

**Draft Contract for
PROVISION, COMMISSIONING, INSTALLATION, CALIBRATION, INTEGRATION, TESTING
AND EXECUTION OF IT SYSTEMS INCLUDING CCTV SURVEILLANCE SYSTEM &
CONNECTIVITY FOR THE FEEDER ROUTES IN LAHORE**

between

[Purchaser]

and

[Contractor]

Dated:

I. Agreement

This CONTRACT/ AGREEMENT is made on this _____ day of _____, 2014 (hereafter referred to as “**Agreement**”)

BY AND BETWEEN

Managing Director, Punjab Masstransit Authority (hereinafter referred to as “**PMA**”), Government of the Punjab (hereinafter referred to as “**The Client**”) which term shall, wherever the context so permits or requires, mean and include its successors-in-interest, nominees, legal representatives, executors, administrators, transferees, attorneys and permitted assigns

AND

[full legal name of Operator /Successful Bidder] through its Managing Director having its registered office at [Address of Operator/Successful Bidder] on the other part (hereinafter called the “**Operator/Service Provider**” which expression shall include its successors-in-interest, legal representatives, executors, administrators, transferees, attorneys and permitted assigns)The Client and the Service Provider are hereinafter collectively referred to as the "Parties" and individually as the "Party"”.

RECITALS

WHEREAS,

- (a) GOP the Purchaser, 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 provision of IT Systems and services as described in the contract.
- (b) The Purchaser has requested the Contractor to provide certain IT Systems and Services as described in Tender Document; and
- (c) The Contractor, having represented to the Purchaser 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 Purchaser to supply the equipment and services, in conformity in all respects with the provisions of the Contract, in consideration of the payments to be made by the Purchaser to the Contractor.
2. The Purchaser 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/RFP
 - b. Bidder's Proposal
 - c. Acceptance Letter (LOA)
 - d. Terms and Conditions of the Contract
 - e. Special Stipulations
 - f. The Technical bid / Specifications
 - g. Tender Form
 - h. Price Schedule
 - i. Affidavit(s)
 - j. Authorized Dealership / Agency Certificate
 - k. Performance Security
 - l. Service Level Agreement (SLA),
 - m. Non-Disclosure Agreement (NDA), if required
 - n. Any Standard Clause acceptable for Purchaser
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 Purchaser]:**

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

Signature

Signature

Name

Name

Witnessed By:

Witnessed By:

WITNESSES

Signature _____
 CNIC # _____
 Name _____

Signature _____
 CNIC # _____
 Name _____

Designation _____

Address _____

Designation

Address _____

II. General Conditions of Contract

30. Contract

The Purchaser 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 Purchaser & successful tenderer, to the successful Tenderer. Within ten (10) working days of the receipt of such Contract, the Tenderer shall sign and date the Contract and return it to the Purchaser.

31. Contract Documents and Information

The Contractor shall not, without the Purchaser'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 Purchaser 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.

32. Contract Language

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

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

The Contractor shall indemnify and hold the Purchaser 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 Purchaser will hold the exclusive rights to the contents of this program.

34. Packing

The Contractor shall provide such packing of the Goods as is sufficient to prevent their damage or deterioration during storage / transit to their final destination as indicated in the Contract. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the final destination and withstand, without limitation, rough handling, exposure to extreme temperatures, salt and precipitation at all points in storage / transit. The Contractor shall arrange and pay for the packing of the Goods to the place of destination as specified in the Contract, and the cost thereof shall be included in the Contract Price.

35. Insurance

The Contractor shall provide such insurance of the Goods as is sufficient to protect against their damage or deterioration during course of the project, storage / transit to their final destination as indicated in the Contract. The Contractor shall arrange and pay for the insurance of the Goods to the place of destination and time, as required by the Purchaser.

36. Warranty

36.1 The Contractor shall warrant to the Purchaser that the Goods/Services supplied by the

Contractor, under the Contract are genuine, brand new, non- refurbished, un-altered in any way, of the most recent or current model, imported through proper channel, and incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.

36.2 The Contractor shall further warrant that the Goods/Services supplied by the Contractor, under the Contract shall have no defect, arising from design, materials, workmanship or from any act or omission of the Contractor that may develop under normal use of the supplied Goods/Services.

36.3 Free, on site repair / replacement of defective / damaged parts and labor. Engage and deploy suitably skilled personnel for development, installation, operation and maintenance of the IT system, and maintenance/replacement of all related equipment/components in a timely manner and at its own cost during the course of the contract.

36.4 The Contractor must, within the prescribed time period as per Service Level Agreement, after/in anticipation of any complaint/notice, repair or replace the defective / damaged Goods/Equipment/Software/Items or parts thereof on site, without any cost to The Purchaser.

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 Contractor shall issue invoices to the Purchaser on a calendar month basis, i.e. on 1st working day of the month following the month in which services have been rendered.

38.3 The Contractor shall not issue any invoice to the Purchaser until the following delivery conditions have been met:

38.3.1 Complete Delivery/Quantitative Inspection

38.3.2 Qualitative Inspection

38.3.3 Commissioning.

38.4 Subject to Clause No. 41.3 above, the Contractor may issue the first invoice after the occurrence of any one of the following two dates i.e. (A) and (B):

A. Date of commencement of Feeder Routes Operation in Lahore or

B. 180 days after the issuance of LOA from the date of complete fulfillment of all of the delivery conditions mentioned in clause 41.3 above, provided that non-fulfillment of any of the delivery conditions solely due to reason(s) attributable to unavailability of site/Non-commencement of Feeder Routes Operation in Lahore shall be deemed to have been fulfilled.

38.5 The Purchaser 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 Purchaser 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.

- 38.6** The Purchaser shall pay the amount verified in the Certificate of Payment within fifteen (15) days of receipt of a Certificate of Payment provided that the Contractor furnishes a sales tax invoice within such period. Payment shall not be made in advance. The Purchaser shall make payment for the Services provided, to the Contractor, as per payment schedule **through crossed cheque.**
- 38.7** Payments shall be made against successful delivery of services per each Phase of the Program
- 38.8** No advance payments will be made. Monthly payments will be made on a prorated basis by the Purchaser, taking into account the number of Feeder Routes/Cameras and C&CC for which IT System has been successfully provisioned.
- 38.9** The Purchaser at its discretion may withhold the forth invoice after the commencement of Operations if the Contractor fails to obtain the User Acceptance Test (UAT) from the Purchaser.

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 Purchaser 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 Purchaser 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

40. Contract Amendment

- 40.1** The Purchaser 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 Purchaser.
- 40.3** The Contractor shall not execute the Change until and unless the Purchaser 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 Purchaser 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 Purchaser's prior written consent.
- 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

Purchaser, promptly indicate the facts of the delay, it's likely duration and its cause(s). As soon as practicable after receipt of such notice, the Purchaser 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 the Contractor fails / delays in performance of any of the obligations except in situations of force majeure, under the Contract, or violates any of the provisions of the Contract or commits breach of any of the terms and conditions of the Contract; the Purchaser may, without prejudice to any other right of action / remedy it may have, deduct from the Contract Price, as liquidated damages, a sum of money as per following schedule:

- i. @0.25% of the concurrent annual contract cost for each day of delay/non-performance/breach/violation, for first 30-days
- ii. @2% of the concurrent annual contract cost for each day of delay/non-performance/breach/violation, next one week after expiry of first 30-days
- iii. @3% of the concurrent annual contract cost for each day of delay/non-performance/breach/violation after expiry of period mentioned at serial (ii) above i.e. from the 38th day

The amount so deducted as LDs shall not exceed, in the aggregate, the amount of the performance guarantee. LDs shall be attributable to such part of the Services/Works as cannot, in consequence of the failure / delay, be put to the intended use, between the scheduled delivery date(s), with any extension of time thereof granted by the Purchaser, and the actual delivery date(s). However, LDs shall not be levied if:

- a. the Service Provider, provides evidence to establish that he has followed all the codal formalities to enable himself to initiate works on the site and provided that 15 days have elapsed in such efforts and provided that necessary permissions are not granted by the concerned authorities to carry out such works at that site;

44. Forfeiture of Performance Security

If the Contractor fails / delays in performance of any of the obligations, under the Contract or violates any of the provisions of the Contract or commits breach of any of the terms and conditions of the Contract; the Purchaser may, without prejudice to any other right of action / remedy it may have, forfeit the Performance Security of the Contractor.

Failure to supply required items/services within the specified time period shall invoke penalty, as specified in (reference to Penalty Clauses/Annex) of this document. In addition to that, the Performance Security amount may also be forfeited and the company may 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 or violates any of the provisions of the Contract or commits breach of any of the terms and conditions of the Contract or engages in any illegal activities; the Purchaser 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 Purchaser terminates the Contract for default, in whole or in part, the Purchaser 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 Purchaser 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 (or any member of the Joint Venture) becomes bankrupt or otherwise insolvent, the Purchaser 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 Purchaser may, at any time, by written notice of thirty (30) days served on the Contractor, terminate the Contract, in whole or in part.

47.2 The Services which are complete or to be completed by the Contractor, within thirty (30) working days after the receipt of such notice, shall be accepted by the Purchaser. For the remaining services, the Purchaser may elect:

47.2.1 to have any portion thereof completed and delivered; and/or

47.2.2 to cancel the remainder and pay the Contractor by:

- Purchasing all equipment provisioned till date by the Contractor (taking into consideration depreciated values) For the purposes of this clause the price of equipment will include taxes, custom duties, freight charges, registration charges and the interests charged by the financing institutions.
- Making payments for services already rendered (if any are outstanding),
- Paying a reasonable allowance for overheads, not exceeding 10% of value of utilized equipment and services.

48. Force Majeure

48.1 Force majeure shall mean any event, act or other circumstances not being an event, act or circumstance under the control of the purchaser 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 purchaser keeping in view all the circumstances and requirements of the Purchaser.

48.2 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.

48.3 If a Force Majeure situation arises, the Contractor shall, by written notice served on the Purchaser, indicate such condition and the cause thereof. Unless otherwise directed by the Purchaser 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.

48.4 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.

48.5 Force Majeure shall not include insufficiency of funds or failure to make any payment required hereunder.

49. Dispute Resolution

49.1 The Purchaser 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.

49.2 If, after thirty working days, from the commencement of such informal negotiations, the Purchaser 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.

50. Statutes and Regulations

50.1 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 Purchaser indemnified against all penalties and liability of any kind for breach of any of the same.

50.2 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.

51. Taxes and Duties

The Contractor shall be entirely responsible for the payment, if any is required, of all Pakistani Income Tax, Duties any other taxes, duties and other such levies imposed make inquiries 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.

52. 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 following:

- a) relevant laws, rules, and regulations of Pakistan including tax / sales tax to the concerned authorities of Income Tax and Sales Tax laws/rules
- b) customs duties and other import taxes applicable in Department, Government of Pakistan
- c) Information regarding port clearance facilities, loading and unloading facilities, storage facilities, transportation facilities and congestion at Pakistan seaports.

Investigations regarding transport conditions and the probable conditions which will exist at the time the Equipment will be actually transported.

53. Contract Cost

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

54. Authorized Representative

The Purchaser, 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.

The Authorized Representative shall only carry out such duties and exercise such authority as may be delegated to him, by the Purchaser, or the Contractor.

54.1 Any such delegation or revocation shall be in writing and shall not take effect until notified to the other parties to the Contract.

54.2 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.

54.3 Notwithstanding any of the above Clauses, 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.

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

55. 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.

56. Training

56.1 The Contractor shall arrange and undertake a comprehensive training program for the staff nominated by the Purchaser / the Client to ensure that they shall acquire a good working knowledge of supply of such Services to be supplied under the Contract.

56.2 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 the Purchaser / Client and proceed to implement suitable remedial measures after consultation with them.

57. Standards

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

58. Commercial Availability

The Goods/Equipment/Software/Items and Services supplied under this Contract shall be commercially available at the time of signing of the contract. Commercial availability means that such Goods/Equipment/Software/Items shall have been sold, installed and operationalized in at least one(01) installations globally and comply to open standards as listed in the tender document.

59. Labeling

The Goods/Equipment/Software/Items supplied under the Contract, shall be clearly labeled so as to correspond with the delivered documentation, with proper labeling scheme. All equipment, cables, connectors, ports, boxes shall be clearly labeled.

60. Delivery

60.1 The IT Systems setup delivery time is one hundred and sixteen 120 calendar days from the issuance of Acceptance Letter (LOA) with complete deployment, commissioning and installation. The Contractor shall deliver the services at Lahore, as specified by The Purchaser/The Client.

60.2 The Goods/Equipment/Software/Items shall remain at the risk and under the physical custody of The Contractor until the delivery/commissioning in the live environment is completed.

60.3 The Contractor shall ensure that the Goods/Equipment/Software/Items shall be delivered complete to enable the testing to proceed without interruption. If it shall appear to The Purchaser that the Goods/Equipment/Software/Items have been or are likely to be delayed by reason of incomplete delivery or for any other reasons, he may require the Contractor to dispatch the missing items of the Goods/Equipment/Software/Items or suitable replacements thereof, at the Contractor's expense, to the site of delivery by the fastest available means including air freight.

60.4 The Contractor will deliver all the equipment in the contractor warehouse and intimate the Purchaser to inspect the Goods/Equipment/Software/Items. Purchaser will nominate the inspection team and will issue a certificate. All the expenses related to the warehousing and inspection will be borne by the contractor.

64. Installation and Implementation

61.1 The Contractor shall ensure that the implementation design conforms to an open standard by which new Goods can be added without disruption to existing Goods/Equipment/Software/Items.

61.2 The Contractor shall ensure that the implementation is fault tolerant. This is accomplished by supplying a set of programs and procedures that allow the system recovery or roll back when a fault is detected.

61.3 The Contractor shall provide all the recent patches and updates for Software Firmware/Hardware, on a reliable media, with proper labeling, during the installation to The Purchaser on free of Charge basis.

61.4 The Contractor shall configure the system for high availability and reliability, of hardware as

- per Acceptance Letter (LOA) and specifications given in this Contract.
- 61.5** The Contractor shall submit detailed and complete installation, transition and cutover plan for the new system, installation procedures for the new components specifying equipment checkout, installation constraints, operational cutover, maintenance prior to Client acceptance and if special security and/or access arrangements are required.
- 65. Maintenance**
All the patches updates as deployed shall be maintained free of charge throughout the project life by the contractor/subcontractor with existing features without any implications on cost. This is to assure that IT Systems will stay operational within the existing scope.
- 66. Updates**
The Contractor during the contract period shall provide free of charge (FOC) updates for the IT Systems, including but not limited to, any changes required due to operational needs of the Client.
- 67. Site Preparation**
- 64.1** The Contractor shall be responsible to survey the central site, determine power, air conditioning and floor space requirements etc., identify, for the proposed equipment (if required).
- 64.2** The Purchaser shall facilitate the Contractor in discharge of the above responsibilities and indemnify the Contractor for any delays in making such arrangements. Deployment time mentioned in this Contract will be accordingly adjusted (if required).
- 68. Power**
The Goods/Equipment/Software/Items supplied under the Contract, unless otherwise specified, shall be capable of operating normally with single phase AC power, within the range of 220-240V, and should be protected from over-voltage, over-heating and out-of-tolerance current surges. Contractor must ensure that all equipment, as installed on the Feeder Routes, C&CC and DC, does not undergo power outage resulting from malfunctioning of Uninterruptible Power Supply. Contractor will be Responsible for the provisioning of power at all Camera location at Feeder Routes.
- 69. Safety**
- 66.1** The Contractor shall be responsible for the embedding of safety features in the inherent design of the Goods/Equipment/Software/Items, 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.
- 66.2** The Contractor shall be responsible for the detailed survey and submission of the report in regards to the protection of the power sources, controls, and critical components of the redundant systems and subsystems by shielding or physical separation when possible.
- 70. Support and Maintenance**
The contractor will support and maintain Goods/Equipment/Software/Items for the period of contract including all renewals if applicable.

71. Test Equipment and Tools

The Contractor to provide automated mechanism for real time alerts/reports viewable via centralize dashboard to determine downtime of equipment installed on, Feeder Routes, data centers, command and Control Center and networks.

72. Spare Parts and Support

69.1 The Contractor shall ensure that the Goods/Equipment/Software/Items provided by The Contractor, under the Contract are standard and incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.

69.2 The Contractor shall further ensure that the Goods/Equipment/Software/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.

69.3 The Contractor shall maintain sufficient backup stock of spare parts and tools, for the maintenance of the supplied Goods/Equipment/Software/Items, to be replaced/ repaired at contractor's cost for the time of contract including all renewals.

69.4 The Contractor shall also identify the following:

69.4.1 Items (repairable spares, parts and consumable supplies) that are needed to maintain design performance, reliability and availability standards prescribed in the Technical Specifications. The quantity of spare parts and consumable items provided and must have sufficient operating stock for the period of contract subsequently applying to all renewal years.

69.4.2 Critical items, whose failure would cause a system failure.

69.4.3 Items of high cost and/or long lead time over thirty (30) working days.

73. Inspection and Testing

70.1 The Purchaser shall conduct the quantitative inspection of the Goods/Equipment/Software/Items and Services supplied under the Contract, to ensure the complete delivery as per the contract.

70.2 The Contractor shall engage a third party (internationally recognized & competent) for qualitative inspection and testing of the Goods/Equipment/Software/Items and Services supplied under the Contract, to verify their conformity to the Technical Specifications.

70.3 The Purchaser's post-delivery right to inspect, test and, where necessary, reject the Goods/Equipment/Software/Items shall in no way be limited or waived by reason of pre-delivery inspection, testing or passing of the Goods.

70.4 The inspections and tests shall be conducted at the premises of the Contractor / its subcontractor(s) / at the final destination. Where conducted at the premises of the Contractor / its subcontractor(s), / the final destination shall provide all-reasonable facilities and assistance, including access to drawings, production data and online verification from official web site of the Manufacturer, to the Inspectors, at no charge to The Purchaser.

70.5 The Purchaser may reject the Goods/Equipment/Software/Items and Services if they fail to conform to the Technical Specifications/Requirements, in any test(s) or inspection(s) and The Contractor shall either replace the rejected Goods/Equipment/Software/Items and Services or make all alterations necessary to meet the Technical Specifications/Requirements, within seven (7) working days, free of cost to The Purchaser.

74. Blacklisting

72.1.1 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 Purchaser 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.

72.1.2 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 Purchaser 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.

75. Special Stipulations

SCHEDULE-A, SPECIAL STIPULATIONS	
For ease of Reference, certain special stipulations are as under:	
Tender Security	<p>Tender security should be submitted by the Bidder.</p> <p>The Contractor shall furnish the Tender Security as under: 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] or in another format acceptable to the Purchaser; for a sum of PKR ten (10) million; 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: within ten (10) working days of the receipt of the Acceptance Letter from the Purchaser; 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 Purchaser; denominated in Pak Rupees; Have a minimum validity period of one year from the date of Award Notification or until the date of expiry of yearly support period. The technically and financially successful tenderer submit a sum equivalent to 10% of the yearly contract value, for a period of one year, 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 installation, configuration, deployment, commissioning, testing, and training	Fully functional IT Systems setup for Feeder Routes and command and control center of PMA within 120 Calendar Days from the issuance of LOA.
Liquidated damages for failure / configuration of Services by the Contractor	If the Contractor fails / delays in performance of any of the obligations except in situations of force majeure, under the Contract, or violates any of the provisions of the Contract or commits breach of any of the terms and conditions of the Contract; the Purchaser may, without prejudice to any other right of action / remedy it may have, deduct from the Contract Price, as liquidated damages, a sum of money as per following schedule:

	<ul style="list-style-type: none"> i. @0.25% of the concurrent annual contract cost for each day of delay/non-performance/breach/violation, for first 30-days ii. @2% of the concurrent annual contract cost for each day of delay/non-performance/breach/violation, next one week after expiry of first 30-days iii. @3% of the concurrent annual contract cost for each day of delay/non-performance/breach/violation after expiry of period mentioned at serial (ii) above i.e. from the 38th day <p>The amount so deducted as LDs shall not exceed, in the aggregate, the amount of the performance guarantee. LDs shall be attributable to such part of the Services/Works as cannot, in consequence of the failure / delay, be put to the intended use, between the scheduled delivery date(s), with any extension of time thereof granted by the Purchaser, and the actual delivery date(s). However, LDs shall not be levied if:</p> <p>the Service Provide, provides evidence to establish that he has followed all the codal formalities to enable himself to initiate works on the site and provided that 15 days have elapsed in such efforts and provided that necessary permissions are not granted by the concerned authorities to carry out such works at that site;</p>
Legal Status to Work in Pakistan	The Bidder must be allowed and meet all conditions set forth by the Government to work with all concerned parties.

76. Technical Evaluation Criteria

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

PASS MARKS: An eligible bidder, based on conditions listed in Section below, not meeting the 60% 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 60% of the marks will be accepted in technical proposal, and their respective financial bids will be opened as per rules and regulations.

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 Procurer/ Evaluator shall be the valid evaluation and shall hold:

For each component listed below, provide detailed specifications with relevant materials including information on standards compliance.

COMPLIANCE SHEET FOR BIDS

For each component listed below, provide detailed specifications with relevant materials including information on standards compliance.

Note: Major components and their quantities are listed below; Bidder may list (sr.no. 3) any other/more equipment required to integrate the system and to make it functional.

Sr. No.	Component	Estimated Quantity	Manufacturer	Model	Specifications Reference Document /Section
1	CCTV PTZ Camera (Outdoor)	367			
2	Video Recording, Storage and Retrieval Requirements	1 Solution			
3	Any other Hardware/software/component required	As per Actual			

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

Technical Evaluation Criteria

References and supporting documentation required as evidence for each:

It is mandatory to score minimum 60% marks

In case of JV, marks shall be evaluated jointly for all members unless stated otherwise.

The requirement of documents for evidence as indicated in the table below is applicable to all members of JV unless specified otherwise.

Sr No.	Criteria	Max. Marks	Comment/Description	Documents required
1	Number of Projects implemented CCTV Video surveillance system having at least 50 cameras	10	3 projects or more = 10 Points 2 Projects = 07 Points 1 Project = 05 Points 0 Project = 0 Points	Contract Document OR Letter of Award OR Any other valid document for evidence
2	Number of Projects implemented Lay out and Connectivity (fiber optics/Wireless) system	10	3 projects or more = 10 Points 2 Projects = 07 Points 1 Project = 05 Points 0 Project = 0 Points	Contract Document OR Letter of Award OR Any other valid document for evidence
3	Number of system years of Maintenance & Support (M&S) Experience from commencement date of each project as mentioned at Sr. # 1,2	10	$Y = \sum (\text{No. of years of CCTV M\&S}) + \sum (\text{No. of years of Connectivity M\&S})$ Y>15 years (10 points) Y>10 up to 15 years (7 points) Y>05 up to 10 years (5 points) Y>03 up to 1 (3 points) Y=0 (zero point) Where \sum is sum of all projects	Contract Document OR Letter of Award OR Any other valid document for evidence (In case of JV, applies to any one single member with maximum years of experience)
4	The prospective bidder shall have implemented at least five (05) ICT related projects (worth Rs 50 million each) in last three years. 4 points per project	20	Number of project Implemented:- Less than 1 = 0 Points 5 = 20 Points 4 = 16 Points 3 = 12 Points 2 = 8Points 1= 4 Points 0= 0 Points	Copy of Contract Document OR Letter of Award OR Completion Certificate OR Any other valid document for evidence

5	No. of Project Managers with more than 5 years of Project Management's Experience	05	5 or more = 5 Points 3 to 4 = 3 Points 1 to 2 = 2 Points 0 = 0 points	Cvs of Human Resources Employed stating Designation and numbers
6	Team members in the equipment maintenance team with more than 3 years of experience in the related field	05	11 or Greater = 5 Points 6 to 10 = 3 Points 5 to 3 = 2 Points Less than 3 = 0 Points	CVs of Human Resources Employed stating Designation and numbers
7	Setting up local workshops or engaging local partner for maintenance of equipment deployed – detailed plan must be shared	05	1 local workshop = 5 Points 0 local workshop = 0 Points	Documentary Evidence
8	Average Annual Turnover last three years in Millions	10	≥350 = 10 Points ≥250 = 5 Points < 250 = 0 Points	Financial Statements for the Fiscal years 2011-2012, 2012-2013, 2013-2014 OR Calendar Years 2012-2013, 2013-2014, 2014-2015 whichever is applicable in the country origin of operations.
9	Net Worth Last Year in Millions (Total Assets - Total Liabilities)	10	More than 30 = 10 Points More than 20 to 30 = 7 Points More than 10 to 20 = 5 Points More than 5 to 10 = 3 Points Less than 5 = 0 Points	Same as of Criteria for Average Annual Turnover at Sr. # 10
TOTAL		85	Minimum Passing Marks = 60%	

77. Financial Cost/ Price Schedule/ Bid Price / Form of Bid

MUST BE SUBMITTED IN SEPARATE ENVELOPE HIGHLIGHTED AS FINACIAL PROPOSAL

Financial Cost/ Price Schedule

Price Table

Bid Price

Technically qualified bidders with the lowest value of “A” computed as per price table below will be considered successful.

Price Table:

Sr. No	Item	Price
1	Monthly Service Charges for provisioning and maintaining all IT Systems services stated in this RFP – for 367 camera installation at Feeder Routes of Lahore (including but not limited to provision, commissioning, installation, calibration, integration, testing and execution of CCTV surveillance system, connectivity (fiber optic/Wireless) , AC Power/Solar System, Pole, all back office services as per scope of services mention in tender document (IT Systems) for the Feeder Routes in Lahore)	A
TOTAL		A

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 Purchaser 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. Installation of equipment along with successful testing and commissioning will be the responsibility of bidder for which bidder may not propose price separately.
- iii. No advance payments will be made. Monthly payments will be made on a prorated basis by the Purchaser taking into account the number of Feeder Routes/Cameras.
- iv. New Feeder Route and/or modules may be added at any time during the contract period at the same average monthly service charge (per module, as the case may be) as mentioned above in Price Table.

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.

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 Procurer/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) __. 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 Purchaser 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 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 Procurer/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 Purchaser)_, 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 Purchaser) including signing and submission of all documents and providing information/responses to (name of the Purchaser) 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 Procurer] (hereinafter called "the Procurer").

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 Procurer, for the sum of PKR (in figures _____) (in words _____) and undertakes to pay to the Procurer / Purchaser, 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 Procurer 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 Purchaser during the period of the Tender validity, fails or refuses to furnish the Performance Security, in accordance with the Tender Document.

Provided that the Procurer / Purchaser 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 Purchaser 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 Purchaser, 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 Purchaser, for a sum equivalent to Rs. _____ (to 10% of the one 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 Purchaser, for the sum of PKR (in figures _____) (in words _____) and undertakes to pay to the Purchaser, 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 Purchaser 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 Purchaser 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 Purchaser 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 later.

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 Purchaser 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

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.

In case of breach of Service Lever Agreement (SLA) parameters, penalties will apply supported by concrete evidence.

Scope:

- The SLA describes target performance levels which the Service Provider shall aim to deliver for the Services outlined in this contract. It lists negligence / inefficiency on part of the Service Provider, and associated penalties which will be applied if Service Provider fails to deliver any service performance targets in accordance with this Agreement.
- The Service Availability shall be evaluated based on real-time Video Feed/Camera status communicated through Network Monitoring System (NMS).
- Penalties shall be levied as per the following formula:-

$$\text{Penalty Amount (PKR)} = \text{RPCH} \times \sum\text{CH}$$

Where:

RPCH= Rate per Video Feed by single Camera in on Hour

CH= Video Feed of Camera in Hours

MCH= Monthly Camera-Hours of the System=Monthly Video Feed in Hours of all Camera’s

MCH = Number of Camera’s x Operational Camera-hours of single Camera in the Invoiced Month

RPCH = (Monthly Contract Price) / (MCH)

$\sum\text{CH}$ = Sum of Camera-Hours fined due to lapses in services, described in Table 1 & 2

- The total monthly penalty amount shall not exceed more than 10 % of same monthly payment to the Service Provider.

TABLE 1: KEY PERFORMANCE INDICATORS

Key Performance Indicators (KPIs)	Formula	Standard (Per Month)	Camera-Hours (CH) Fined based on Monthly evaluation
Service Availability (SA) of Surveillance System (Real Time Video Feed of	SA = (MCH) / (Total Scheduled Camera-Hours) x	More than 95%	90% - 95% = 3500 80% - < 90% = 4500 70% - < 80% = 5500

Camera's)	100		SA Below 70 is Not Permitted, May result in Termination of Contract
Fault Rectification (FR)	FR = (Critical* Events responded timely) / (Total Critical Events) x 100	90 %	85% - <90% = 500 80% - < 85% = 1000 70% - < 80% = 1500
NMS Performance (NMSP) Failure to communicate real-time Camera status to Control Center or loss of Control shall be termed as downtime	SF = (Total NMS uptime) / (Total Schedule Camera-Hours) x 100	99 %	90% - <99% = 6000 80% - < 90% = 7000 70% - < 80% = 8000

*Critical: The system is in Operation and there is a situation in which operation may lead to safety of passengers/general public or loss of efficiency of bus operations or real time decision is required for handling bus operation which may result increase cost of bus operation. The response time should be 30 minutes and resolution time shall not be more than 90 minutes. The Fault to be defined as Critical shall be determined by PMA.

Service Non-Availability / Down Time shall include:

- Total number of hours of system breakdown, including individual component breakdown, due to any reason;
- Number of maintenance service breakdown;
- Non-Availability of Video/Camera Feed in Control Center due to power shutdown/failure;
- Non-Availability of Camera due to manual/remote restarting after power shutdown for more than 10 minutes;
- Time duration of system interruption for planned maintenance; and
- Any other reason causing system breakdown or non-availability of Video Feed in Control Center.

TABLE 2:

Sr. No.	DESCRIPTION OF VIOLATIONS	Fine Per Instance in CH
1	Improper / Non-Functional Camera Night Vision Mode	50
2	Camera Constantly blurry for duration of more than 30 minutes due to dust on camera or technical reasons	150

3	Loss of Video Feed before one month	500
4	Surveillance System timing not confirms with Pakistan Standard Time	100
5	Failed to replaced / Installed parts of inferior quality than specified in the procurement contract. In addition to penalty parts need to be replaced in timeframe specified by PMA	100
6	Failure to carryout preventive measures and negligence in repair and maintenance that may cause injury to a passenger/general public. In addition Service Provider shall be obligated to face any legal action if any from passenger/public.	500
7	Wrong tagging of Camera	100
8	Misbehavior with PMA officers / Staff /Passengers or other Service Provider's staff	160
9	Failed to submit invoice in First 07 working of the Month along with supporting documents	50
10	Falsification of Facts and Information or breach of confidentiality of information/documents	115
11	Did not inform PMA in case of malfunctioning issues pertaining to system functioning promptly	110
12	Any act/instance which is non-conforming to Authority's Rules/Regulations/instruction given by PMA or Violation of Contract scope of work/services, not covered elsewhere in this SLA, Minimum CH=25, May be increased upto 400 CH depending on the sensitivity of the incident as per Client's Discretion	25
13	Carrying-out repair and maintenance works without seeking any permission from PMA	115
14	Camera rotates/Change direction without command	50
15	Service Provider failed to resolve and responds to complaint send by PMA	50
16	Failed to provide or extract video feed from Camera in case of emergencies where communication system failed to transmit directly as per fault level category.	100
17	Failed to provide automated generated reports from the NMS system in the format prescribed by the PMA	50
18	Failed to generate automatic Violation Report Form	50
19	Provide/share video feed with any organization, person etc. without permission	115
20	Unable to sync off line camera local video record in case connectivity is restored and local recording from off line camera does not syn with the system	115
21	Failure to arrange repairs of the damages to PMA Property caused by the Service Provider within the prescribed time frame.	50

22	Failure to carry personal and/or vehicle identification.	10
24	To cause an accident due to irresponsible behavior	100
25	Service Provider staff travel or take Passengers illegally on Feeder bus	50
26	Fail to delivers information required by the PMA	100
27	To refuse to accept the visits of the PMA's inspectors or to provide partial or erroneous information	500
28	Fight with passenger or other service provider	100
29	Manipulating NMS reports to hide facts that goes against service provider	1000
30	Execute works without precautionary measures for passengers/general public safety	100
31	Closing Complaint without resolution or consent of Client	50
32	Loss of video feed.	100

The total penalties from Table 1 & 2 measured in Camera-Hours on monthly basis will be fined according to the following chart:

Monthly Accumulated Penalties in Camera-Hours (CH)	CH fined based on Monthly Evaluation
Less than 10,000	100% of Accumulated Penalties in CH
More than 10,000 to 15,000	200% of Accumulated Penalties in CH
More than 15,000 to 20,000	300% of Accumulated Penalties in CH
More than 20,000 to 25,000	400% of Accumulated Penalties in CH
More than 25,000	500% of Accumulated Penalties in CH

Annexure-K: Reference Specifications

Note: Referenced Specifications of the Major components are listed below. Bidder should provision and integrate the complete solution on Turnkey basis.

Notes:

1. All hardware equipment supplied as part of IT System must carry industry standard certifications to ascertain that the equipment have been manufactured and certified based on international standards.
2. The Equipment supplied shall withstand the harsh working conditions of vibration, heat, dust, moisture, rough usage, Radio interference. The Service Provider shall implement application software to track the devices that are installed in the network using suitable identification methods.

Surveillance cameras shall be installed at predefined locations (150 meter plus minus) to provide surveillance coverage for Feeder Routes. To cover the Feeder Route in Phase-I 367 PTZ cameras are estimated. Selected vendor is responsible for all the necessary arrangements for end to end connectivity throughout Feeder Routs alongwith live feeds in Command & Control Center of PMA by 24x7.

2 Megapixel Outdoor IR PTZ Camera		Yes	No	Qty
Specification	Details			367
Image Sensor	2MP			
Num. of Effective Pixels	1920 x 1080 HxV			
Lens	30 X or higher Optical Zoom			
Minimum Illumination	0.1 Lux, 0 lux (IR:ON)			
Auto Iris	DC Drive			
Video Compression	Motion JPEG, MPEG-4/H.264 High Profile			
H.264/MJPEG/MPEG4	30 FPS @ 1080p, 720p/ D1/ VGA/ QVGA			
Video Streaming	Multiple Stream			
Image Setting	Compression, Brightness, Contrast, Sharpness, AWB, AES, AGC, BLC, Day/Night Mode, WDR			
Security	Password Protection, IP Address Filtering, User Access Privilege			
Protocol	Protocol to compliant for NMS communication			
Local Storage	File Recording microSD/SDHC Card Support with 32 GB SD card or higher microSD/SDHC Auto-recovery, Reset			
Pan/Tilt Movement	Pan:360 degrees endless, Tilt 180 degrees			
IR Range	80 Meter			

Video Recording, Storage and Retrieval Requirements

S.No.	DESCRIPTION	Yes	No	QTY
1	The system be capable to record, display and manage the entire surveillance system video streams for a minimum of 500 Channels IP video streams coming from the above cameras at 2MBs per camera.			01 (Solution)
	The software should Support flexible 1/2/4/16 Windows Split screen display mode or scroll mode on the PC monitor or on preview monitor as per requirement.			
	The software should be able to remotely control all features of PTZ cameras.			
	The system should support user access authority Configurable on per device or per device group basis.			
	The user shall have the facility to request the access of any Camera and can control the camera.			
	Solution should provide 32 simultaneous playback streams each @ 2MB/s			
	The system should have its own system manager for administer right and privileges for all devices, logs, etc.			
	The system administrator should be able to add, edit & delete users with rights.			
	It shall be possible to view ability / rights of each user or the cameras which can be viewed & controlled as per the permission assigned by the administrator.			
	Retrieval: The CCTV application should allow retrieval of data instantaneously or any date / time interval chosen through search functionality of the application software.			
	30 days recording capacity at 30 FPS @ 1920x1080			
	Playback with fast- or slow-motion in forward or reverse.			
	Multi-level user rights.			
	Capability to use different streams from a camera for recording and display.			

Annex-L Drawings

CAMERA LOCATIONS (COORDINATES)			
Sr. No	Name	Longitude	Latitude
1	Govt Dispencery	74.297107166	31.547374770
2	Club Rd	74.341435343	31.551053079
3	Club Rd	74.342464400	31.550741288
4	PC Hotel	74.338372275	31.553270704
5	Governor House	74.334469216	31.554704050
6	Main Market	74.346239465	31.524653722
7	Hafeez Center	74.343353639	31.514772494
8	Hafeez Center	74.343551525	31.516001701
9	Liberty	74.340587203	31.509851566
10	Liberty	74.341505376	31.510661041
11	Liberty	74.340639253	31.511390109
12	Mini Market	74.346765846	31.520838067
13	Mini Market	74.346985060	31.522022555
14	Main Market	74.345588750	31.524200912
15	Hall Road	74.318946056	31.562234850
16	GPO	74.315010057	31.565252066
17	GPO	74.313759508	31.565725580
18	Anarkali	74.310436187	31.567714077
19	Anarkali	74.310765609	31.567840112
20	Museum	74.309308444	31.568280339
21	Regal Chowk	74.318547393	31.562199766
22	Old Campus	74.309023788	31.568756676
23	Civil Secritariate	74.304377049	31.568228109
24	Civil Secritariate	74.304034733	31.568312944
25	MAO College	74.304935917	31.561953014
26	Rajgarh	74.296450407	31.561817629
27	Shamnagar	74.297950948	31.554600125
28	Depot Chowk	74.311619578	31.430895163
29	Depot Chowk	74.311369104	31.431096871
30	Mian Chowk	74.305485269	31.430314104
31	Pully Stop	74.313737434	31.435415902
32	Pully Stop	74.313888915	31.434987868
33	Minhaj Uni	74.318112952	31.443436988

34	Minhaj Uni	74.318136686	31.442707599
35	Hamdard Chowk	74.320466931	31.447581889
36	Hamdard Chowk	74.320098752	31.446263813
37	Somi Center	74.321951356	31.450310236
38	Somi Center	74.322064317	31.449787951
39	Nursery Stop	74.323624222	31.453301804
40	Nursery Stop	74.323370811	31.452174815
41	Rehmat Eye	74.325823073	31.457095776
42	Rehmat Eye	74.325845634	31.456593313
43	Pindi Stop	74.327170953	31.458929431
44	Pindi Stop	74.328243721	31.459414746
45	Treet Stop	74.331987110	31.457645891
46	Treet Stop	74.332614166	31.457841374
47	Peco Morr	74.336066436	31.456369416
48	Pico Morr	74.335370451	31.456417090
49	Pico Morr	74.335426639	31.456733318
50	Railway	74.337766921	31.460256656
51	Railway	74.338137174	31.460142403
52	Phatki	74.340684921	31.464856555
53	Phatki	74.340829703	31.464421878
54	Phatak Mandi	74.344803441	31.471957177
55	Phatak Mandi	74.344411846	31.470844858
56	Ittefaq Hospital	74.341566877	31.479750447
57	Ittefaq Hospital	74.342063976	31.479895668
58	Naseerabad	74.338703770	31.486402180
59	Naserabad	74.339236928	31.486559677
60	Babra Stop	74.337199562	31.491267947
61	Babra Stop	74.336815487	31.491136367
62	Model Town	74.334445262	31.498102420
63	Model Town	74.333846074	31.497918495
64	Kalma Chowk	74.332308426	31.503276758
65	Kalma Chowk	74.331549089	31.503306629
66	Al Habib	74.322889587	31.461691454
67	Al Habib	74.322204063	31.461427769
68	Model Town Link Road	74.316070017	31.464241645
69	Model Town Link Rd	74.314293849	31.464651678
70	Mochipura	74.312465184	31.465689208
71	Mochipura	74.311152121	31.465778142
72	Bank Stop	74.308100248	31.467361303

73	Akbar Chowk	74.306786088	31.467085576
74	Aslam Chowk	74.305394599	31.464390100
75	Aslam Chowk	74.305443501	31.463896209
76	M Ali Chowk	74.302795139	31.459369651
77	M Ali Chowk	74.302713974	31.458646864
78	Khokhar Chowk	74.300858297	31.455671567
79	Khokhar Chowk	74.300622856	31.454818819
80	Doctor Hospital	74.281240355	31.481334369
81	Doctor Hospital	74.282475860	31.480782534
82	Wafaqi Colony	74.289396958	31.484207047
83	Wafaqi Colony	74.289546999	31.485032327
84	Islamic Center	74.297643443	31.490360636
85	Islamic Center	74.298205270	31.490071624
86	IBA	74.301063754	31.493237190
87	IBA	74.301484347	31.492910786
88	Hailey College	74.304935272	31.497121712
89	Hailay College	74.305435462	31.496777060
90	Gate No. 4	74.308610381	31.501063989
91	Gate No. 4	74.309134314	31.500666189
92	Campus Pull	74.311418635	31.502951357
93	Campus Pull	74.313121561	31.503342559
94	Barkat Market	74.320578665	31.501228255
95	Barket Market	74.320679680	31.500957361
96	Kalma Chowk	74.330247038	31.503680826
97	Kalma Chowk	74.330176199	31.504211383
98	Multan Chungi	74.265263514	31.496422426
99	Elephant Link Road	74.270916484	31.497937310
100	Elephant Link Rd	74.269570823	31.497370881
101	Mustafa Town	74.273979365	31.498842283
102	Mustafa Town	74.274735663	31.499414595
103	Karim Block	74.282644581	31.502194601
104	Karim Block	74.281502190	31.501603701
105	Raza Block	74.291118935	31.505148053
106	Raza Block	74.289436669	31.504330161
107	PU Examination	74.293897428	31.506358931
108	Science College	74.297051623	31.507900995
109	Science College	74.296505021	31.507422485
110	Bekhawal Morr	74.301524190	31.510113308
111	Pilot School	74.300600702	31.510719019

112	Bhekewal Morr	74.302501182	31.509135106
113	Bhekewal Morr	74.303186094	31.509497407
114	Sheikh Zaid Hospital	74.307931360	31.506973651
115	Sheikh Zaid Hospital	74.307183376	31.507137743
116	PU Campus	74.309103642	31.505819193
117	PU Campus	74.309278674	31.505991939
118	Campus Pull	74.310628658	31.504743537
119	Campus Pull	74.311789541	31.504294167
120	Chungi Amar Sidhu	74.353432048	31.451084001
121	Chungi Amar Sidhu	74.352924440	31.450973078
122	Ghazi Chowk	74.351399031	31.457337687
123	Ghazi Chowk	74.350608413	31.458073886
124	Shukat Town	74.359320009	31.460875686
125	Punjab Society	74.367648399	31.463513489
126	Chota Ishara	74.371422083	31.464611781
127	Total Pump	74.380684699	31.467637510
128	Total Pump	74.379950975	31.467236412
129	LESCO	74.388959069	31.470225118
130	LESCO	74.388178564	31.469890692
131	Charar Pind	74.393066464	31.472969572
132	DHA Nursery	74.396379474	31.475506048
133	Defence Chowk	74.398999824	31.477547699
134	Defence Chowk	74.398524414	31.476995013
135	PSO	74.404845494	31.481971890
136	PSO	74.404535658	31.481545934
137	Bhatta Chowk	74.411866756	31.487490187
138	Bhatta Chowk	74.411479505	31.486773039
139	Arfa Abad	74.408372766	31.491327292
140	Nadra Abad	74.406079020	31.493773604
141	Ali View Garden	74.402016132	31.495130600
142	Cantt	74.397816426	31.497761964
143	Cantt	74.398216112	31.497880483
144	Fauji Foundation	74.394293635	31.499286275
145	Fauji Foundation	74.394118735	31.499558638
146	R.A Bazar	74.385518207	31.506171568
147	R.A Bazar	74.385396919	31.505828853
148	R.A Bazar	74.384652077	31.505875145
149	R.A Bazar	74.384528724	31.506169036
150	Nadeem Chowk	74.378197094	31.506481896

151	T-Stop	74.377997455	31.499688350
152	Shahdra Lari Adda	74.291304234	31.616105922
153	Shahdra Larri Adda	74.290395332	31.616574768
154	Ravi Toll Plaza	74.293479749	31.611207078
155	Ravi Toll Plaza	74.293630612	31.611290746
156	Niazi Interchange	74.298834119	31.604445758
157	Niazi Chowk	74.299747855	31.601447097
158	Niazi Chowk	74.299261879	31.601633661
159	METRO	74.299222365	31.597577552
160	METRO	74.299858374	31.597604418
161	Timber Market	74.301892588	31.595169479
162	Timber Market	74.301499138	31.594898733
163	Azadi Chowk	74.305540688	31.590960770
164	Bilal Gunj	74.307047933	31.585799792
165	Bilal Gunj	74.306573069	31.585821440
166	Bhatti Chowk	74.306434591	31.580277313
167	Bhatti Chowk	74.307187483	31.579098349
168	Bhattic Chowk	74.306595393	31.579151385
169	Bhattic Chowk	74.305910904	31.580098869
170	Urdu Bazar	74.308091630	31.578249465
171	Katchery	74.306774161	31.575023372
172	Katchery	74.306475221	31.575125801
173	UVAS	74.305812713	31.572941520
174	UVAS	74.300722673	31.573346565
175	Corporaton Chowk	74.284119447	31.570896686
176	Chohan Rd	74.282382725	31.567700077
177	Chohan Rd	74.282110200	31.568284272
178	Sanda	74.277966816	31.559664362
179	Sanda	74.277904540	31.560398438
180	Ghulam Fareed Rd	74.275165690	31.556704149
181	Ghulam Fareed Rd	74.275539054	31.556478594
182	Double Sarkan	74.270948298	31.550776620
183	Double Sarkan	74.271355258	31.550929984
184	Park Morr	74.278039163	31.550322936
185	Untitled Placemark	74.277173431	31.550012440
186	Moon Market	74.283067128	31.550241222
187	Moon Market	74.282435185	31.549899035
188	Sehnai Palace	74.286324155	31.549915037
189	Sehnai Palace	74.286001465	31.549666959

190	Ganda Nala	74.291258726	31.547835547
191	Ganda Nala	74.290650683	31.547690843
192	Samnabad Morr	74.294616607	31.544261369
193	Samanabad Morr	74.294493096	31.544077487
194	Samanabad Morr	74.294530084	31.543681915
195	Chappar Stop	74.293520852	31.541125107
196	Chappar Stop	74.293367531	31.541424102
197	Bhala Chowk	74.292507783	31.539430562
198	Bhala Chowk	74.292847183	31.539599244
199	Sodiwal	74.290304786	31.536257837
200	Sodiwal	74.290233723	31.535743251
201	Chowk Yateemkhana	74.287321067	31.532140180
202	Chowk Yateemkhana	74.287675576	31.532668603
203	Chowk Yateemkhana	74.286198600	31.532283090
204	Grand Battery	74.284896162	31.528602772
205	Grand Battery	74.284958015	31.528092075
206	Scheme Morr	74.284337835	31.525315514
207	Scheme Morr	74.284528280	31.525571132
208	Scheme Morr	74.283489675	31.525607363
209	Kali Kothi	74.287817784	31.524676174
210	Kali Kothi	74.287397260	31.524617999
211	Flat Stop	74.289754855	31.521950966
212	Flat Stop	74.290477645	31.521268957
213	Dubai Chowk	74.291239664	31.519131761
214	Dubai Chowk	74.291927406	31.518957707
215	Gulshan e Iqbal	74.294726861	31.516103732
216	Gulshan e Iqbal	74.295553253	31.515761087
217	Farooq Hospital	74.299200685	31.512711269
218	Farooq Hospital	74.298829493	31.512740624
219	Wahdat Colony	74.308177024	31.513303427
220	Wahdat Colony	74.307473433	31.512791581
221	Bank Stop	74.311615620	31.514969348
222	Bank Stop	74.310997967	31.514489328
223	Naqsha Stop	74.315922444	31.517070031
224	Naqsha Stop	74.315661088	31.516769399
225	Karamabad	74.318674624	31.518233168
226	Karamabad	74.318838332	31.518599619
227	Ab Para Market	74.320309168	31.519512876
228	Ab Para Market	74.320336253	31.519859012

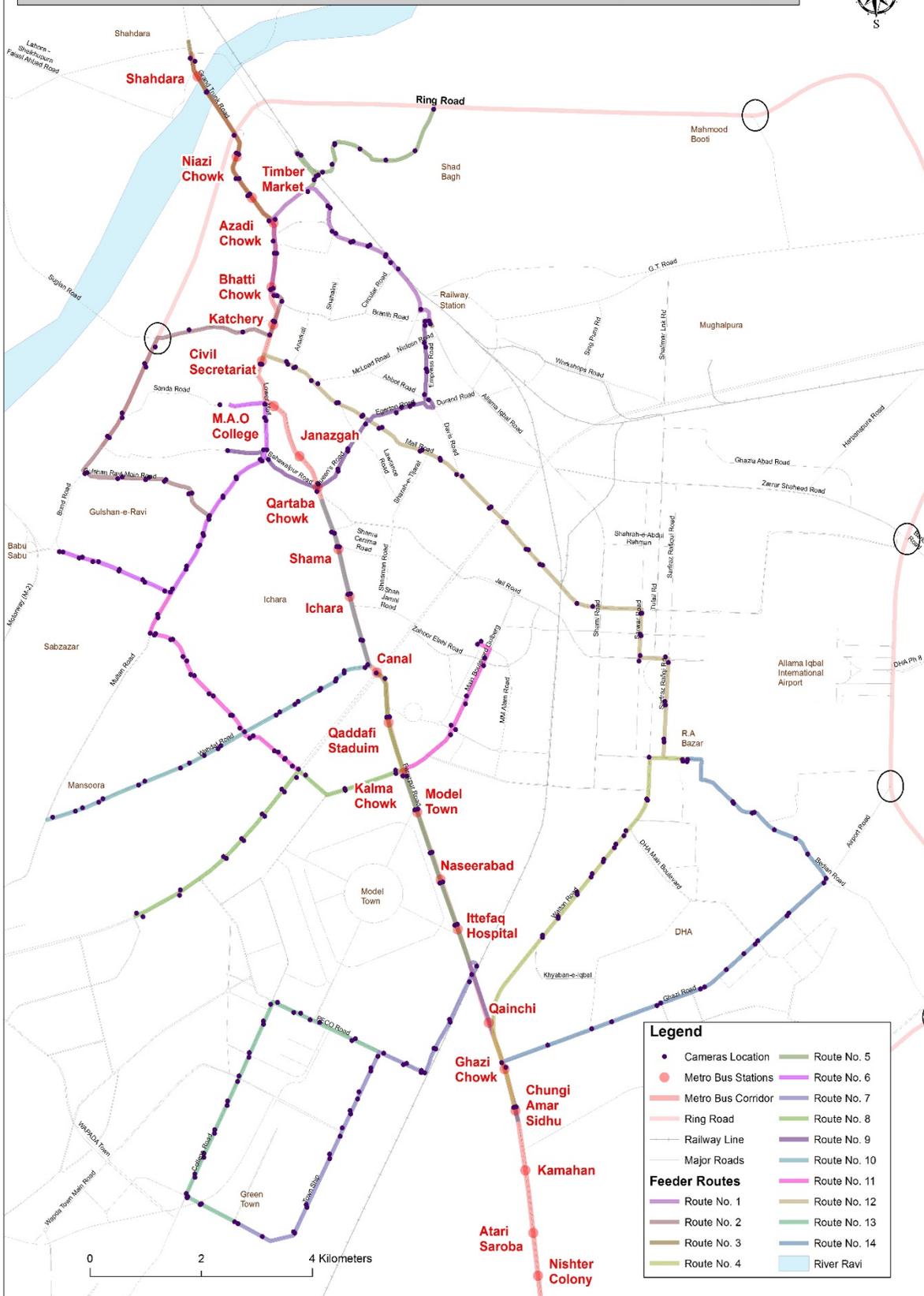
229	Muslim Town Morr	74.324305415	31.520410862
230	Muslim Town Morr	74.324774086	31.520847417
231	Canal	74.328090056	31.518698249
232	Canal	74.326402247	31.519549631
233	Qaddafi Stadium	74.328982094	31.512643345
234	Qaddafi Stadium	74.328425508	31.512563900
235	Shadbagh Underpass	74.336659031	31.608773133
236	Rajput Park	74.333170304	31.602178498
237	Madina Chowk	74.327641095	31.600675313
238	Ali Hajveri Chowk	74.322712353	31.602426638
239	Lohay Wali Pully	74.317929412	31.603061877
240	Lohay Wali Pully	74.317905554	31.603251712
241	Badami Bagh	74.317459150	31.599933803
242	Bridge	74.315661055	31.598722054
243	Railway Phatak	74.314833023	31.598241173
244	Larri Adda Roundabout	74.314464798	31.598057273
245	Azadi Chowk	74.306736159	31.591186364
246	Azadi Chowk	74.306362561	31.587754723
247	Larri Adda	74.317151528	31.593048447
248	Larri Adda	74.316691518	31.593358612
249	Masti Gate	74.317547722	31.589370290
250	Masti Gate	74.318249041	31.588998418
251	Kashmiri Gate	74.321063150	31.587660552
252	Kashmiri Gate	74.321547887	31.587803000
253	Sheranwala Gate	74.324329304	31.587058979
254	Sheranwala Gate	74.324744661	31.587214940
255	Nawaz Sharif Hospital	74.327778992	31.585734904
256	Nawaz Sharif Hospital	74.327634094	31.585464963
257	Ik Moria	74.328660171	31.584483597
258	Ik Moria	74.330138713	31.583471035
259	Railway Station	74.334459619	31.577123604
260	Railway Station	74.336273220	31.574777054
261	Railway Station	74.336030602	31.575261062
262	Railway Station	74.335323871	31.575213704
263	Railway Station	74.335303844	31.574556895
264	Haji Camp	74.335118325	31.571833448
265	Haji Camp	74.335444899	31.571135124
266	Police Line	74.335519782	31.567687788
267	Police Line	74.335729575	31.567279214

268	Shimla Hill	74.336050899	31.562816656
269	Shimla Hill	74.335214050	31.563626920
270	Shaheen Complex	74.333141115	31.562157230
271	LDA Plaza	74.332512316	31.561750972
272	Charing Cross	74.323382238	31.560131610
273	Charing Cross	74.323597629	31.560308234
274	Charing Cross	74.324127403	31.558920910
275	Zoo	74.326648567	31.558242659
276	Avari Hotel	74.327224774	31.558410847
277	Aiwan e Iqbal	74.330889550	31.561605745
278	Aiwan e Iqbal	74.329932017	31.560748401
279	Riwaz Garden	74.304941126	31.559843239
280	Riwaz Garden	74.305246292	31.559347051
281	Rehman Pura	74.323793268	31.524710144
282	Rehman Pura	74.323424269	31.524761790
283	Ichra	74.321423230	31.532074985
284	Ichra	74.320930210	31.531971752
285	Shama	74.319292191	31.539482511
286	Shama	74.318775303	31.539486124
287	LOS	74.317764366	31.541809556
288	LOS	74.318319529	31.541628807
289	Mozang	74.314944308	31.548196196
290	Mozang	74.315204406	31.549368665
291	Waris Rd	74.318875167	31.551775768
292	Waris Rd	74.318952845	31.551425878
293	Ganga Ram Hospital	74.320751725	31.554966590
294	Ganga Ram Hospital	74.320766959	31.554610055
295	Beacon House	74.358233618	31.478243601
296	Beacon House	74.358233591	31.477908168
297	Workshop	74.361148401	31.481244572
298	Workshop	74.361146980	31.480938313
299	Walton	74.364666462	31.485073468
300	Walton	74.364779905	31.484719533
301	College Stop	74.367556782	31.488018801
302	College Stop	74.367355460	31.487504570
303	Shareef Market	74.369733158	31.490322666
304	Shareef Market	74.369616461	31.489913529
305	Kora	74.371736064	31.492160968
306	Kora	74.372017655	31.492737653

307	Defence Morr	74.373899005	31.494866288
308	Defence Morr	74.373545593	31.494039659
309	T-Stop	74.377789504	31.499882108
310	Garrison School	74.375714811	31.509126801
311	Garrison School	74.375765717	31.508674738
312	Munir Sarwar	74.375870922	31.513197933
313	Munir Sarwar	74.375967642	31.512631258
314	Lt. Col Sheraz Ali Khan	74.376206998	31.521698392
315	Lt. Col. Sheraz Ali Khan	74.376411500	31.522576344
316	Zakir Tikka	74.376394484	31.525959824
317	Zakir Tikka	74.376567651	31.525719287
318	Rahat Bakery	74.376525589	31.529228188
319	Rahat Bakery	74.376712666	31.529269704
320	Fortress	74.364372586	31.530752270
321	Fortress	74.367365937	31.530295045
322	Mian Mir Bridge	74.357304229	31.536912454
323	Mian Mir Bridge	74.357865925	31.536743382
324	Gymkhana	74.354662393	31.539272749
325	Gymkhana	74.355126291	31.539219156
326	Canal	74.350342258	31.543606937
327	Canal	74.350968288	31.543438215
328	Aitchision	74.347653058	31.545745437
329	Aitchision	74.347992122	31.545953666
330	Governor House	74.334853244	31.554875271
331	PC Hotel	74.338271465	31.553567626
332	Ghousia Chowk	74.298737017	31.451715075
333	Ghousia Chowk	74.298663380	31.451031169
334	Lajhana Chowk	74.296318106	31.447148517
335	Lajhana Chowk	74.296309881	31.446564963
336	Butt Chowk	74.294291133	31.443409136
337	Butt Chowk	74.294299210	31.442775266
338	Gondal Chowk	74.292623799	31.440138047
339	Gondal Chowk	74.292664179	31.439641046
340	Ghazi Chowk	74.291002903	31.437055825
341	Ghazi Chowk	74.291333416	31.436577973
342	Ghazi Chowk	74.291168355	31.436381761
343	Muslim Chowk	74.293656001	31.435311364
344	Muslim Chowk	74.293914515	31.435476277
345	Bagrian	74.300841489	31.432340439

346	Bagrian	74.300202538	31.432614760
347	Babu Sabu	74.266878852	31.538389574
348	Babu Sabu	74.266199731	31.538406447
349	Bilal Daewoo	74.270543450	31.537563525
350	Bilal Daewoo	74.269937931	31.537420048
351	Niazi Adda	74.273617985	31.536884415
352	Niazi Adda	74.272552881	31.536866857
353	Sheezan Factory	74.277618571	31.535684399
354	Sheezan Factory	74.277503264	31.535425306
355	City Bus Terminal	74.282422237	31.533642359
356	City Bus Terminal	74.282049003	31.534068478
357	Corporation Chowk	74.290499041	31.573658528
358	Govt Dispensary	74.297174040	31.547131625
359	Chaburji Flats	74.299587175	31.550394885
360	Chaburji Flats	74.299679688	31.550114371
361	Chaburji	74.304522031	31.552948743
362	Chaburji	74.304141265	31.553202856
363	Chaburji	74.304788698	31.554735027
364	Chaburji	74.305428944	31.554740135
365	Chaburji	74.305728713	31.553241552
366	Larri Adda Roundabout	74.312864421	31.595636115
367	Larri Adda Roundabout	74.314057278	31.597494280

Feeder Route Cameras Location (Phase-1)



0 2 4 Kilometers