

## Punjab Masstransit Authority

### Minutes of Meeting

Subject:	Pre-Bid Conference On Tender For Development, Implementation, Operations, and Long-Term Maintenance of Proven Globally Deployed Automated Fare Collection and Bus Scheduling System (AFC-BSS) for Multan Metrobus System and Feeder Routes		
Date:	November 05, 2015	Time:	11:00 AM
Venue:	Committee Room, Punjab Masstransit Authority	Chair:	Mr. Muhammad Ozair Shah, General Manager Operations, PMA
Participants:	<p>List of Participants:</p> <ol style="list-style-type: none"> <li>1. General Manager Operations, PMA</li> <li>2. Manager IT, PMA</li> <li>3. IT Expert, PMA</li> <li>4. Financial Specialist, PMA</li> <li>5. Manager Operations Planning, PMA</li> </ol> <p>The list of prospective bidders who participated the Pre-Bid meeting is attached at Annex-A</p>		

Question	Discussion/Decision
<ol style="list-style-type: none"> <li>1. LMKT and Interactive Convergence requested for extension in bid submission time.</li> <li>2. Clarification regarding queuing of audio messages to be announced sequentially through integration with the public address system deployed by another service provider on the metrobus stations.</li> <li>3. Clarification regarding allowed locations of Data Center</li> <li>4. Clarification regarding using cloud hardware i.e already available equipment (servers, storages etc) in a data center</li> </ol>	<ol style="list-style-type: none"> <li>1. After discussion with all the prospective bidders and as per their agreement it was decided that the bid submission time will not be extended.</li> <li>2. It is clarified that maintaining queues and sending audio messages sequentially from the queue to the deployed public address system is the responsibility of the AFC-BSS service provider.</li> <li>3. The Data Center can be located anywhere inside Punjab/Islamabad territory.</li> <li>4. The bidder <b>can</b> use private cloud using <b>dedicated</b> hardware i.e already available equipment (servers, storages etc) in a data center located in</li> </ol>

	<p>Punjab/Islamabad. However, the bidders were reminded that the entire AFC-BSS project is in OPEX model as opposed to CAPEX model and for technical evaluation they must provide complete architecture of such equipment.</p>
--	--

ATTENDANCE SHEET

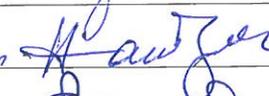
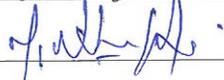
PRE-BID MEETING ON DEVELOPMENT, IMPLEMENTATION, OPERATIONS AND LONG-TERM MAINTENANCE OF PROVEN GLOBALLY DEPLOYED AUTOMATED FARE COLLECTION AND BUS SCHEDULING SYSTEM (AFC-BSS) FOR MULTAN METROBUS SYSTEM AND FEEDER ROUTES

ATTENDANCE SHEET

Place: Committee Room, PMA Office, 5th floor,  
Arfa Software Technology Park, Lhr

Date: 05/11/2015

Time 11:00 AM

Sr. No.	Name of Organization	Name of JV Partner (If any)	Representative's Name & Designation	Contact No.	Email Address	Signature
1	Interactive Grp		Sami Farooqi	03450552102	sami.farooqi@iacgrp.com	
2	INBOX		ALI SHAHBAZ	0333-4466791	ALI.SHAHBAZ@INBOXBIZ.COM	
3	<del>Interactive Corp</del> Interactive Corp		HAMZA Buxney	0321-5371144	HAMZA.Buxney@iacgrp.com	
4	Inbox Business Technologies		Rashid Rauchhary	0331-2488863	rashid.ch@inboxbiz.com	
5	Inbox Business Technologies		Mustafa Beg	0323-5922028	mustafa_beg@inboxbiz.com	
6	Inbox		HAFIZ. M. TALAL	0321-2064641	HAFIZ.TALAL@INBOXBIZ.COM	
7	LNKI Pvt Ltd.		Norman Ali	0331-5296147	mnali@lnkt.com	
8						
9						
10						
11						
12						
13						
14						
15						

# **Addendum No1 to Tender Document**

**DEVELOPMENT, IMPLEMENTATION, OPERATIONS AND LONG-TERM MAINTENANCE OF PROVEN GLOBALLY DEPLOYED AUTOMATED FARE COLLECTION & BUS SCHEDULING SYSTEM (AFC-BSS) FOR MULTAN METROBUS SYSTEM AND FEEDER ROUTES**



**THE PUNJAB MASSTRANSIT AUTHORITY**

**Government of the Punjab**

5<sup>th</sup> 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](http://www.pma.punjab.gov.pk)



# **Addendum No.1 to the Tender Document**

Due to some clarifications required in the RFP document, the following addendum is hereby issued; which shall form a part and parcel of the original document titled

**"DEVELOPMENT, IMPLEMENTATION, OPERATIONS AND LONG-TERM MAINTENANCE OF PROVEN GLOBALLY DEPLOYED AUTOMATED FARE COLLECTION & BUS SCHEDULING SYSTEM (AFC-BSS) FOR MULTAN METROBUS SYSTEM AND FEEDER ROUTES"**

, issued and uploaded on October 28, 2015. The contents of this addendum shall supersede/replace page 31 of the original RFP document, and shall be read as part of the RFP document uploaded on the following websites:

[www.pma.punjab.gov.pk](http://www.pma.punjab.gov.pk)

[www.ppra.punjab.gov.pk](http://www.ppra.punjab.gov.pk)

14.1.14 The software must have provision of API/web services to interface with any other systems in future.

14.1.15 The software must have point of sales system to keep track of daily sales at the stations.

## **14.2 Vehicle Location System**

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

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

## **14.3 Passenger Information System and Scheduler**

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

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

## **14.4 Networks & Data Connectivity**

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

14.4.2 Primary medium for internet connectivity must be Fiber optic provisioned by purchaser which is outside the scope of this tender document; however for redundant connection any other medium may be used.

14.4.3 Reliable/redundant network availability onto the stations.

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

## **14.5 Station Equipment**

14.5.1 Deployment (and security) of Turnstiles, validators, UPS, cabling for networks, routers/signal boosters, top up/refund machines, station PCs and/or any other component required to run AFC-BSS System efficiently, adequately, and as per industry standards as well as to ensure compliance to parameters mentioned in the Service Level Agreement. A 1x1 meter space will be provided on each platform/station where station PC, router etc can be placed.

## **14.6 Centralized/Back-office systems and reliable hosting**

14.6.1 Deployment of all AFC-BSS Components on industrial strength, branded platforms/servers/equipment in a reliable, high-availability data center. The bidder can use private cloud using dedicated hardware i.e already available equipment (servers, storages etc) in a data center located in Punjab/Islamabad; but for technical evaluation they must provide complete architecture of such equipment. The AFC-BSS solution must be able to pick up the load for off-board and on board ticketing and handle daily passenger volumes of up to 1,000,000 in an efficient, uninterrupted manner, and must be able to comply with service level agreement.