



**ORANGE & GREEN LINE IITS PROJECT  
RESPONSES TO QUERIES RAISED DURING AND SUBSEQUENT TO THE  
PRE-BID MEETINGS HELD ON JULY 09, 2020**

**SINDH INFRASTRUCTURE DEVELOPMENT COMPANY LIMITED (SIDCL)**

**GOVERNMENT OF PAKISTAN**



**RESPONSES TO BIDDERS QUERIES NO 2**

**IN RELATION TO THE**

**DESIGN DELIVERY, INSTALLATION, OPERATION AND MAINTENANCE AND TRANSFER OF AN  
INTEGRATED INTELLIGENT TRANSPORT SYSTEM (IITS)**

**FOR THE**

**BUS RAPID TRANSIT SYSTEM OF THE ORANGE AND GREEN LINES**

**ISSUED ON: 30<sup>RD</sup> JULY 2020**



NO. SIDCL/GM(ENGG)/OPS/2020/7489  
DATED 30<sup>TH</sup> JULY, 2020

**SUBJECT: RESPONSES TO QUERIES NO 2 IN RESPECT OF “DESIGN DELIVERY, INSTALLATION, OPERATION AND MAINTENANCE AND TRANSFER OF AN INTEGRATED INTELLIGENT TRANSPORT SYSTEM” PPRA REFERENCE TS-424844E AND ADVERTISED ON 17<sup>TH</sup> JUNE 2020.**

THIS IS IN CONTINUATION OF THE PREVIOUS DOCUMENT DATED 23<sup>RD</sup> JULY 2020

THE QUESTIONS/QUERIES WERE RECORDED / OBTAINED IN WRITING, AND RESPONDED-TO ACCORDINGLY.

THE BIDDERS ARE ADVISED TO FOLLOW THE PRE-BID MINUTES IN CONJUNCTION WITH THE ISSUED BIDDING DOCUMENTS, SUBJECT TO THE FOLLOWING DISCLAIMER.

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ISSUED WITH APPROVAL OF THE COMPETENT AUTHORITY,  
SINDH INFRASTRUCTURE DEVELOPMENT COMPANY LIMITED



### IMPORTANT NOTICE / DISCLAIMER

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This ‘**RESPONSE TO BIDDERS’ QUERIES DOCUMENT II**’ (this **Response Document II**) is further to the ‘REQUEST FOR PROPOSAL’ and Draft Contracts Agreement (“**Draft Contract**”) issued in June 2020 (the **RFP Documents**) and the various queries received from the prospective bidders in respect of the bidding process relating to the **Design Delivery, Installation, Operation and Maintenance and Transfer of an Integrated Intelligent Transport System (IITS)** for the Bus Rapid Transit System of the Orange and Green Lines (the **Project**). This Response Document is being circulated by the Sindh Infrastructure Development Company Limited (the **Employer**), solely for use by the recipients in preparing and submitting their Bids for participation in the competitive bidding process in relation to the Project. Upon signing of the Contracts for the Project, the Contracts will be the final and binding document and any responses set out in this Response Document will not have any effect or be sued for interpretation.

*Unless expressly specified otherwise, all capitalized terms used herein shall bear the meaning ascribed thereto in the RFP Documents.*

This Response Document is not an agreement; its sole purpose is to provide interested parties with information that may be useful to them in making their offers (bids/proposals) pursuant to the RFP Documents. The RFP Documents and this Response Document includes statements, which reflect various assumptions and assessments arrived at by the Employer in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This Response Document may not be appropriate for all persons, and it is not possible for the Employer, its employees or advisors to consider the investment objectives, financial situation and particular needs of each party, that relies on, reads or uses this Response Document.

Neither the Employer nor its employees, personnel, agents, consultants, advisors and contractors etc., make any representation (express or implied) as to the accuracy or completeness of the information contained herein, or in any other document made available to any person in connection with the tender process for the Project and the same shall have no liability for this Response Document or for any other written or oral communication transmitted to the recipient in the course of the recipient’s evaluation of the Project. Neither these entities nor their employees, personnel, agents, consultants, advisors and contractors etc., will be liable in any manner whatsoever to reimburse or compensate the recipient for any costs, fees, damages or expenses incurred by the recipient in evaluating or acting upon this Response Document or otherwise in connection with the Project.

The assumptions, assessments, statements and information contained in the RFP Documents, may not be complete, accurate, adequate or correct for the purposes of Bidders. Employer or any of its advisors has no liability for any statements, opinions or information provided in the RFP Documents. Each Bidder should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in the RFP Documents. The Bidders are required to undertake their independent



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assessment and to seek independent professional advice on any or all aspects of the RFP Documents. No decision should be based solely on the basis of the information provided by the RFP Documents and this Response Document.

Employer expressly disavow any obligation or duty (whether in contract, tort or otherwise) to any Bidder. No Bidder is entitled to rely on Employer's involvement in the preparation of this Response Document or in the solicitation process as a basis for preparing the Bid or developing the Project.

**IMPORTANT NOTE:**

Prospective Bidders are hereby apprised that the Authority shall not entertain any queries ten (10) days prior to the submission of bids. The Authority reserves right not to respond to any further query similar in nature to that of already responded-to in this document.



## RESPONSES TO PROSPECTIVE BIDDERS' QUERIES

S No.	Name of Questionnaire	Reference to RFP – Document	Bidder Query/Question	SIDCL's Response
1	Inbox		Provide the Drawings for the equipment of EMS and generator units at all sites for proper system design.	Drawings are available Link below. <a href="http://sidcl.com.pk/wp-content/uploads/2020/07/EA-889-BRT-STA-E1-0100-SLD-EA-889-GEN-MV-05-SLD.pdf">http://sidcl.com.pk/wp-content/uploads/2020/07/EA-889-BRT-STA-E1-0100-SLD-EA-889-GEN-MV-05-SLD.pdf</a>
2	Inbox		Provide the Line Drawings with load ratings of the EMS.	Single Line Diagrams are available Link below. <a href="http://sidcl.com.pk/wp-content/uploads/2020/07/EA-889-BRT-STA-E1-0100-SLD-EA-889-GEN-MV-05-SLD.pdf">http://sidcl.com.pk/wp-content/uploads/2020/07/EA-889-BRT-STA-E1-0100-SLD-EA-889-GEN-MV-05-SLD.pdf</a>
3	Inbox		Provide Intersection drawings with all possible traffic flows.	Intersection drawings are available on Link below. <a href="http://sidcl.com.pk/wp-content/uploads/2020/07/Signal-Drawings-Sheet-1-4.pdf">http://sidcl.com.pk/wp-content/uploads/2020/07/Signal-Drawings-Sheet-1-4.pdf</a>
4	Inbox		Clarify that the BRT Bus will only move on Corridor or Feeder busses will also be traveling on the corridor by Entering/ Exit from Mix traffic intersections.	In the current design, only BRT buses will be moving in the corridor. The AVM system must be flexible to incorporate possibility of feeder buses entering/exiting the BRT Corridor from mixed traffic.
5	Inbox		Clarify/ provide the pole design for the Traffic signal lights. (Mast Arm/ Straight / Mono-Tube etc.)	Pole design may be proposed by the bidder based on site conditions. Not required to provide at this stage.



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6	Inbox		In BOQ there is only mention of 4 way, 200mm Traffic Lights but in standard practice there are combinations of 200mm and 300mm Lights installed as primary/ secondary lights w.r.t road and traffic scenarios.	Please refer to the attached drawings as mentioned in response to question number 3 above.
7	Inbox		Pedestrian Lights and Push buttons are required or not. Because it is one of the necessary components for road users safety in international practice.	Pedestrian Lights are required but push buttons are not required.
8	Sapphire Consulting	Page No 48	"The OCC will be in a central building of SIDCL". Is this the HQ Building i.e. Bahria Complex iv?	OCC has already been constructed as a purpose-built building on Aga Khan III Road, off MA Jinnah Road, Karachi. Bidders may like to visit the building if they desire so.
9	Sapphire Consulting	Page No 52	Disaster Management: where will be disaster management site	Disaster Management Site will be at Green Line Bus Depot.
10	Sapphire Consulting	Page No 53	"The API must be open and accessible for integration from ITS software" Off the shelf products' vendor will have reservation about this.	Integration with future BRT Lines is an absolute requirement.



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11	Sapphire Consulting	Page No 56	"Black/White List at CCH" Kindly explain this requirement	<p>as stated on Page 72 the blacklist is managed by the L4 and will be distributed to all L1s. Example of blacklist stolen card, the customer will call the call center and ask to blacklist his Card to avoid any usage by other person.</p> <p>the TOM device should be able to blacklist cards too.</p> <p>All L1 devices will receive the blacklist in real time and must be able to block the cards if included in the list.</p> <p>White list as stated on page 76 where any new stock should be first imported to L4 before it can be used/identified by L3 and L1s</p>
12	Sapphire Consulting	Page No 63	"Delivery of anonymous CSC" Kindly explain this requirement	<p>The TVM can issue only anonymous CSC with the selected products by the customer. If the customer wish to have a personalized CSC, it can be issued only at TOM</p>
13	Sapphire Consulting	Page No 63	"Payment Options for HHM" This must be the scope of Mobile App not device	<p>this is the scope of the handheld as it's requested. The HHT must accept Cash, contact and contactless Credit and debit cards (EMV ready), T-purse to deduct from CSC balance or from mobile app in case of availability of emulated CSC</p>
14	Sapphire Consulting	Page No 67	"The HHM must be certified for Bank payment usage" Should it be PCI compliant or any other compliances are pre-requisites too.	<p>the HHT bank payment will be linked to the selected partner bank back office. The certification requirements are based on central bank (or the Bank payment certification Authority). More details is scope of the Bidder with the Bank later</p>



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15	Sapphire Consulting	Page No 67	"Reminder and Debt Collection System" Please elaborate this requirement	as explained on Page 71, example if resellers are linked in the future to L3, the L3 should be able to manage the financial process to send reminders and issue invoices to resellers and share will L4 the status of linked resellers financial status (pending collection)
16	Sapphire Consulting	Page No 67	"Disaster (standby) System" will there be any DR site? where?	DR site will be at Green Line Bus Depot.
17	Sapphire Consulting	Page No 68	"Exchange with L4 CSC Stock and Paper Stock and manage all own Stocks and L1 devices Stocks" Please elaborate this requirement.	Part of L3 is the CSC and Paper rolls stock management application and reports. The L3 using L3-L4 interface should send the live status of its Stock per device/location(station, depot), in order for L4 to have the overall status of the current stock in the transport network
18	Sapphire Consulting	Page No 73	"Static ITS Test area" Please elaborate this requirement	Its part of the BoQ, a complete set of the Devices and the Back office should be provide to the test system
19	Sapphire Consulting	Page No 94	"should use commercial of the shelf products" is that means the products already available in the market has to be procured rather than any in house development?	It is not an absolute requirement to use only Commercial Off The Shelf components. Technical design guidelines states "should use commercial of the shelf products (COTS) and cost-effective technology available as much as possible to minimize the risks in the implementation and availability".
20	Sapphire Consulting	Page No 99	As the Bus operations is performed by operators, why driver roistering and management and its publishing is scope of IITS vendor	The AVM System must provide tools for holistic fleet management. The tools provided for driver roistering and management will be utilized by Bus Operation Contractor and will also be used





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				by the Authority for monitoring the performance of Bus Operation Contractor.
21	Sapphire Consulting	Page No 101	"Details and suitable setups are discussed in the feasibility or the communication network" Kindly share the feasibility report	Details of Communication network are described in Section B2 of RFP. The Communication network is also part of scope of supply of IITS.
22	Sapphire Consulting	Page No 104	"AVM on-board controller" Kindly explain the WLAN Switch that how it will be backhauled with Communication network from moving Object i.e. BUS	Details of Communication network are described in Section B2 of RFP. The Communication network is also part of scope of supply of IITS.
23	Sapphire Consulting	Page No 105	"Feeder Buses (optional)" please specify the number of Feeder Buses	Number of feeder buses will be shared when available. This is OPTIONAL.
24	Sapphire Consulting	Page No 107	"Voice and data communication" will that require VOIP or cellular network voice?	"Voice and Data Communication" will be over the Wifi mesh, Ethernet LAN and Backbone fiber. The Bidder may propose cellular network as backup means of communication.
25	Sapphire Consulting	Page No 131	"BIAS interface with SECURITY CCTV" please explain what kind of analysis are required	BIAS may interface with Security and CCTV L4 system to produce safety and security reports such as number of security related incidents in a particular duration. Also some of the cameras have heat mapping features that can detect overcrowding instances. L4 Security software may log such instances and BIAS may interface with L4 Security Software to produce reports about such



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				events. BIAS can produce reports on timings at certain stations when overcrowding occurs.
26	Supernet		<p>We are in process of negotiating the financial facilities with our bank related to the project under proposal by SIDCL (Integrated Intelligent Transport System (IITS) for Bus Rapid Transit System (Green Line), Karachi). Our banker has asked us whether it would be possible for you, SIDCL (as our customer) to :</p> <p>1. Assign the receivables in our (Telecard Limited's) favor based which the bank could use as a collateral to issue a letter of credit securing our vendor related to the Project;</p>	No. Prospective bidders are advised to read the document in toto and comply with the RFP.
27	Supernet		<p>2. Mention in the contract that the SIDCL will make payment to Telecard in the nominated bank account only</p>	All payments will be made to the Contractor/JV as per milestones and in PKR. SIDCL has no preference as to and specific bank of contractors. It is for contractors to manage themselves.



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			related to the Project for the comfort of Telecard's vendor's.	Please also refer to response to question number 223 in "RESPONSES TO BIDDERS QUERIES / PRE-BID MINUTES" for IITS dated 23rd July 2020.
28	NRTC		a. Survey required for green line / orange Line OCC	OCC Building Data networking drawings are attached in Appendix VIII of RFP
29	NRTC		b. Location / Survey of training room.	Training room is located in OCC. OCC Building Data networking drawings are attached in Appendix VIII of RFP
30	NRTC		c. Depot station control room location.	Operation Control Center (OCC) is located in OCC Building (Aga Khan-III Road, Off MA Jinnah Road), not in Bus Depot
31	NRTC		d. FRS cameras locations.	Camera locations are marked in Data networking Drawings.
32	NRTC		e. Signals locations.	Please refer to response of question number 2 above.
33	NRTC		f. CCTV camera will be installed on the existing Light poles	Yes. For the BRTS Corridor CCTV Cameras will be installed on lighting poles.
34	NRTC		g. Why dome camera are mentioned in the security and surveillance part? No fixed camera will be installed, please elaborate.	The cameras mentioned are fixed dome cameras, Dome cameras are less prone to vandalism, change of direction and nesting by birds in outdoor environment.
35	NRTC		h. EMS location survey / EMS Software	EMS Software features are mention in Section B4 of RFP.
36	NRTC		i. WIFI mesh locations and CCTV camera point locations	The location for Wifimesh equipment will be agreed in the detailed design phase. CCTV Camera locations are marked in the Data networking drawings attached as Appendix VIII to RFP.



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37	LMKT	<BLIC Request For Proposal IITS_June_16_2020.pdf> Page1, route map	The route map isn't very clear in Page 1 for Green Line and Orange Line. Would Authority kindly provide high definition ones?	Clear high resolution map and drawings will be provided to successful bidder.
38	LMKT	<BLIC Request For Proposal IITS_June_16_2020.pdf> Page 58, Mobile Ticketing (NFC & QR Barcode) and BLE(optional)	BLE is optional. Should we need to provide the technical proposal about it in the tender?	Yes, Optional means the Bidder need to propose the solution and the System should support it or the concept how to add this function in the future. Any optional component shall not be binding on the Authority.
39	LMKT	<BLIC Request For Proposal IITS_June_16_2020.pdf> Page 58 & 59, contactless smart card	Required contactless card type MIFARE® DESFire® EV1 is compliant with the ISO/IEC 14443 - Type A , but not compliant with Type B. While, in P59, it says "Media of type Contactless Smart Card (CSC) (RF interface compliant with ISO/IEC 14443 type A/B)". There seems to be contradictions here. Kindly please clarify on this .	The CSC to be used with the AFC System shall be "Type A" (DESFire) with 8k memory. The CSC should be fully compliant with ISO/IEC 14443 parts 1-4 and other relevant ISO/IEC standards. The dimensions of the CSC should comply with ISO 7810 (credit card size). The resistance of the CSC to mechanical stress and chemicals should comply with ISO 10373. Furthermore, the CSC should be in full compliance with the following international standards: • CEN / ENV 1545 (Storage of information regarding public transports). • ISO / IEC 7816 1, 2, 3, 4 (Smartcard interfaces and files).



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40	LMKT	<BLIC Request For Proposal IITS_June_16_2020.pdf> Page 60, The NFC Mobile application should be available for iPhone (if certified)	NFC function of Apple phone is not open to the technical developing firm and the more common cooperation mode is that Apple collaborates with public transport brand on projects. As AFC of Karachi Green Line needs to be certified by Apple, thus, approval by Apple is prerequisite and contractor will do the technical collaboration with Apple afterward.	the NFC requirement is for Android phone and windows. For 2D app all smart phones incl. Apple should be included. if Apple NFC is certified in the future by the related government Authority, the AFC system and the partner Bank should lead the solution.
41	LMKT	<BLIC Request For Proposal IITS_June_16_2020.pdf> Page 60, Windows 10 (depends on Windows mobiles penetration in Pakistan)	Win10 is not an open mobile operating system developed by Microsoft and the similar question exists like NFC function of Apple. Thus, approval by Microsoft is prerequisite and then contractor will do the technical collaboration with Microsoft afterward.	For NFC apple pls refer to previous point. For Win10, the bidder should develop the Application, and for certifications the Authority will support.
42	LMKT	<BLIC Request For Proposal IITS_June_16_2020.pdf> Page 60, NFC mobile application for android phones	Android is an open source operating system. But there is no NFC encryption standard in Android phone hardware, for instance, Oppo and Samsung use different NFC hardware encryption module, the NFC mobile APP may not be compatible to all the brands of	the NFC app should support all androids as it's already implemented in many different projects. For SAT you can use LG and samsung



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			android phones. Can you please specify one typical mobile brand for the development, test and SAT of the NFC mobile APP.	
43	LMKT	<BLIC Request For Proposal IITS_June_16_2020.pdf> Page 63 to page 67, AFC equipment, including AFC Gate, HHM, POS, TVM, Top Up Machine, on-board Validate (vehicular card reader), SAM card issuing equipment, passenger card issuing equipment.	There are no detailed technical specifications for these equipment, only functional specifications. Does this mean that we need to develop our own technical specifications (such as dimension of AFC Gates) according to business requirements and management models, as well as the design drawings of relevant platforms?	We are asking the functional requirements and the standards to be followed. The Bidder to propose his own products subject to fulfilling the functional and environment requirements
44	LMKT	<BLIC Request For Proposal IITS_June_16_2020.pdf> Page 65, The gate shall be reversible, and capable of bi-di-directional operation.	Please clarify in details "The gate shall be reversible, and capable of bi-di-directional operation". According to our experience, during operation, each lane of the gate should be accessible in one direction only, but it can be switched to reverse direction manually.	the Gate should be controlled manually as well as automatically by the Station computer and by the L3 system. The L3 or station computer should be able to parameterize a Gate or Station gates or group of gates based on the operational needs the mode of the operation.



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45	LMKT	<BLIC Request For Proposal IITS_June_16_2020.pdf> Page 66, The Handheld must be equipped with 2 SIMs (one for Bank payment and one for AFC) and at least one SAM Slot.	The handheld only needs to communicate with AFC level3, and AFC Level3 communicates with bank servers. So the handheld equipped with 1 SIM is enough. Please clarify whether 1 SIM is ok ?	The HHT should be equipped with 2 SIMs, one SIM is from the Bank to connect to Bank system directly from the HHT, the other SIM for the AFC transactions to connect to L3 system. The Bank might require to use his own SIM for his own APN for only Banking transactions.
46	LMKT	<BLIC Request For Proposal IITS_June_16_2020.pdf> Page 72, Management of Blacklist	Please clarify how many blacklists should be supported in the AFC charging terminal.	minimum 2 Million blacklist entries should be supported by the Terminals.
47	LMKT	<BLIC Request For Proposal IITS_June_16_2020.pdf> Page144 : Dual redundant Fiber Optic Cable 48 core must be laid in these two segments along with the necessary integration with the corridor fiber network.	For the optical fiber of Corridor-OCC and Corridor-Depo, Is the civil work like ducts and man/hand holes completed? If not, please specify whose responsibility for the civil work? It's Authority's responsibility to acquire the land use right for these 2 segments.	Yes. Ducts and man/and holes complete will be provided by Authority for optical fiber in Corridor-OCC and Corridor-Depo. Authority will be responsible for right of way for these segments.
48	LMKT	<BLIC Request For Proposal IITS_June_16_2020.pdf> RFP Page147 : The optical cables must be laid from station to each camera in the corridor.	Are the optical cables from station to each camera in the corridor included in the BoQ? If so, kindly please specify the position in BoQ.	Yes. Pack B Item number 5.022
49	LMKT	MEM_IITS_PackAB_BOQ_GL_16June2020 / Pack B / Line 79	Is the optical fiber of corridor-OCC and corridor-Depot included in the 55,000 meters? Does the contractor need to	Optical fiber of corridor-OCC and corridor-Depot is included in the 55,000 meters. The contractor does not need to quote separately for these 2 segments.



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			quote separately for these 2 segments?	
50	LMKT	MEM_IITS_PackAB_BOQ_GL_16June2020 / Pack B / Line 82	Please clarify the position for these 1000 meters 12-core optical cables? Is there existing duct?	Yes, there are existing ducts.
51	LMKT	MEM_IITS_PackAB_BOQ_GL_16June2020 / Pack B / Line 115	Does contractor need to provide the NMS hardware (server/workstation)? Or share hardware with existing servers for AFC etc.?	If a separate workstation is required for NMS it may be included in item 5.042
52	LMKT	MEM_IITS_PackAB_BOQ_GL_16June2020 / Pack B / Line 119	For the required coverage of wifi along the corridor, contractor may adjust the number of wifi infrastructure static device for the best coverage, and the quantity of item in quotation may increase accordingly. Is it acceptable for the Authority?	Yes. Unit rates may be provided. Some variations in quantity of wifi devices will be acceptable based upon optimal coverage requirement.
53	LMKT	MEM_IITS_PackAB_BOQ_GL_16June2020 / Pack A / Line 182, Pos.12.006& 12.007, Turnstile Gate. Pos. 12.013, Wide Gate	Please clarify if the station gates can only be Turnstile Gates, If wing gate acceptable? What is the preferred type of Wild Gate?	for type of Gate pls refer to BoQ PackA Chapter 12. the Bidder might propose other Gate type if fulfilling the requirement and dimensions.
54	LMKT	MEM_IITS_PackAB_BOQ_GL_16June2020 / Pack A / Line 253, Pos.16.006, RFID Plastic Card(Package of 10000 cards).	What does it mean by the Package of 10000 CARDS?Does 40 PCS refer to 40*10000 CARDS?	Yes, the asked price in column L is for one item which means 10000 CSC. Column O will calculate 40*10000 CSC for the position





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55	LMKT	<p>p145 j. All cameras to have following intelligent features as standard/built in.</p> <ol style="list-style-type: none"> <li>1. Motion detection,</li> <li>2. Tripwire detection</li> <li>3. Intrusion detection</li> <li>4. Scene change</li> <li>5. Abandoned/missing object detection.</li> <li>6. Facial detection,</li> </ol>	<p>What specific function with Facial detection? How to apply face pictures?</p>	<p>Facial detection/ recognition is a standard security feature available in currently available security cameras.</p>
56	LMKT	<p>P155 3. Multi chassis system with Minimum 120,000 IOPS and minimum 12 GB/s bandwidth per chassis.</p>	<p>120,000 IOPS and minimum 12 GB/s bandwidth per chassis. The performance requirements are too high, and such high performance is not actually needed, how to verify the performance</p>	<p>These specifications are provided based upon the number of cameras. The equipment provided must have specifications conforming to these requirements.</p>
57	LMKT	<p>BOQ</p>	<p>There is no software in BOQ with respect to dispatch system, including schedule, Dispatch, Fleet Management, Report, BI</p>	<p>Please refer to Pack A item number 2.010 to 2.024 and 6.004 to 6.005</p>



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58	LMKT	The equipment has no specific technical requirements	<p>The content of requirements is mainly based on the business objectives to be achieved. In the bidding documents, there are functional requirements or technical circuit requirements, but there are no specific requirements such as technical specifications and performance indicators.</p> <p>There are no detailed technical specifications for all major dedicated AFC equipment, only functional specifications. Including AFC Gate, HHM, POS, TVM, Top Up Machine, on-board Validate (vehicular card reader), SAM card issuing equipment, passenger card issuing equipment.</p> <p>AVL's on-board terminal device, AVM On-board Controller, has only component units and functional descriptions, but no specifications. The Driver Interface, it's in the Driver Interface, not in the text description.</p> <p>Does this mean that we need to develop our own technical</p>	<p>We are focusing on functional requirements and standards to be fulfilled, but exact dimensions were not specified to keep flexibility for the Bidders to be accommodated in their final designs. The details of mounting positions for all elements of IITS are provided in Appendix VIII Drawings.</p>
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			<p>specifications according to business requirements and management models, as well as the design drawings of relevant platforms?</p>	
59	LMKT	<p>Part of the technical requirements are not understood or are not known to be correct</p>	<p>P104“WLAN to transmit long-term AVM and AFC(feeder in future stage) data to the central database in OCC” Does it mean that the vehicle use WLAN to transmit video data to the center when it back to terminal.</p>	<p>The vehicle will use Wifi to transmit video in real time to OCC.</p>



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60	LMKT		<p>P104“Analogue Radio to transmit Bus Prioritization (BP) data to the junction traffic controllers (future BRT lines) as an option or via (x)G networks or alternative communication”here“Analogue Radio”mean Analogue Radio ?</p>	<p>Analogue Radio means Analogue Radio. It is an option.</p>
61	LMKT		<p>P105“Locate the vehicle using satellite technologies, distance sensor, door criterion or other technical options. Here "distance sensor" refers to gyroscope, speed pulse, or RFID, ZigBee, WiFi and other auxiliary identification technology for entrancing and exiting the station? Does "door Criterion" refer to safety door data in AFC?</p>	<p>Distance sensor means any one of the alternate sensors including door position sensor, wifi or other which can be used as alternate for bus position indication in case of primary sensor failure.</p>



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62	LMKT	Signal priority	<p>Why use analog radio instead of digital communication? RFID / WSN / DSRC is the most popular signal priority request device.</p> <p>If the on-board device works with the roadside device and relies on the short-distance communication for requesting signal priority (this is also the current practice in the industry), but there is no roadside device specifications and installation construction stated in the tender documents. Unless background communication between the BRT Control Center and the Signal Control Center of the Traffic Control Office can be achieved, the vehicle can send the signal priority request to the BRT Control Center in time, and the BRT Control Center can send the request to the Signal Control Center of the Traffic Control Office. However, this design and corresponding software and communication configuration are not indicated in the RFP and BOQ.</p>	<p>Analogue Radio is vintage technology still used in world for transit signal priority. It may be proposed as redundant system. Please refer to BoQ Pack B item 10.001 to 10.007 for line items related to design and other elements of Signal Priority System</p>
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63	LMKT	<p>Page 146 The Wi-Fi mesh network must provide seamless connectivity to Bus with maximum handover time of 20 ms throughout the whole BRTS corridor including section from last station to Bus Depot.</p> <p>Page 164 It must integrate with Wi-Fi mesh network for communication with central TSP software.</p>	Is Wi-Fi mesh network used for signal priority request communication?	Yes Wifi mesh will be used for Bus Priority Signal communication also.
64	LMKT		For phase-1, RFP allowed for letter of credit for foreign hardware/software and in queries reply payment is 100% local. Please clarify if SIDCL will not L/C ? Please also clarify 100% price of foreign equipment will be paid through L/C as per RFP payment terms ?	As already stipulated in bidding documents and issued by SIDCL in the "RESPONSES TO BIDDERS QUERIES / PRE-BID MINUTES" for IITS dated 23rd July 2020, it is reiterated that opening of the L/C is the responsibility of the Contractor. The Authority may however consider issuing a letter to the issuing bank of the Contractor introducing project scope and Government funding on the project. All payments will be made strictly in PKR as already clarified in "RESPONSES TO BIDDERS QUERIES / PRE-BID MINUTES" for IITS dated 23rd July 2020.



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65	LMKT		<p>If L/C not is allowed, please specify the reason of not allowing it at this stage because transferring this much of USD out of Pakistan very difficult and long process for private companies due to approvals from State Bank of Pakistan . This will give advantage to consortium who are participating as JV with GOVT/Defense based organization over private entities &amp; foreign consortiums.</p>	<p>The bidding documents have been designed to invite widest competition under the Public Procurement Rules 2004. The payment mechanism has already been defined in Schedule 2 of Draft Agreement for IITS. Further clarification is provided in response to question 64 above.</p>
66	LMKT		<p>Warranty period of all hardware/software is for 2 years. Will contractor be responsible for procurement of warranty after two years or SIDCL will procure warranties separately for eight years.</p>	<p>The Contract is for Operation and Maintenance for 10 years including two years warranty period. The Contractor will be responsible for any and all costs related to warranty, maintenance and support for ten years and must include these in its bid price.</p>
67	LMKT		<p>Do we need to provide specific uniforms to our staff ?</p>	<p>Yes. The Contractor will be required to provide specific uniform to its staff.</p>



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68	LMKT		<p>Bid security has been changed from PKR 50M to 2% of bid value and we also didn't get answer to our original queries which is hindrance for us to complete the proposal and calculate the bid security.. Since, this international partners and banks will be involved for this bidding so we would request you to extend the bid submission time of at least two more week to give fair chance to all bidder and encourage the fair competition.</p>	<p>Considered and regretted. The authority has already given more than enough time under the Public Procurement Rules 2004. This is a high priority project and has to be installed in sync with fleet test run. No more extension of time is being given.</p>
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69	LMKT	<p>Page 3:</p> <p>1.3 This bid for the development of the above said IITS infrastructure is being procured along with the bids for the following Packages of the Projects:</p> <p>Package A</p> <ul style="list-style-type: none"> <li>- Automatic Fare Collection (AFC) System</li> <li>- Fleet Management / Automatic Vehicle Location System (AVL)</li> <li>- Real Time Passenger Information (RTPI)</li> <li>- Business Intelligence &amp; Analysis Software</li> </ul> <p>Package B</p> <ul style="list-style-type: none"> <li>- Operation Command &amp; Control Centre (OCC) Video Wall</li> <li>- Communication Network / Digital Transmission System</li> <li>- Security &amp; Surveillance System</li> <li>- Energy Management System</li> <li>- Signal Priority System</li> </ul>	<p>But in page 46, the scope of two Packages is as follows. Please clarify which one should prevail.</p> <p>Package A</p> <ol style="list-style-type: none"> <li>1. Automatic Fare Collection (AFC) System</li> <li>2. Fleet Management / Automatic Vehicle Location System (AVL)</li> <li>3. Central Operation Command &amp; Control Centre(OCC)</li> <li>4. Real Time Passenger Information (RTPI)</li> <li>5. Business Intelligence &amp; Analysis Software (BIAS)</li> </ol> <p>Package B</p> <ol style="list-style-type: none"> <li>1. Central Operation Command &amp; Control Centre Video wall (OCC)</li> <li>2. Communication Network / Digital Transmission System</li> <li>3. Security &amp; Surveillance System</li> <li>4. Energy Management System (EMS)</li> <li>5. Signal Priority System</li> </ol>	<p>Refer to response to question number 134 in "RESPONSES TO BIDDERS QUERIES / PRE-BID MINUTES" for IITS dated 23rd July 2020 .</p>
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70	LMKT		<p>Currency is acceptable USD/PKR, we assume that we can quote foreign equipment/software, warranties of phase-1 &amp; phase-2 in USD and price term will be CIP and customer will pay for the duty and taxes for imported items and bidder will be responsible for taxes in case of local hardware, software and services.</p>	<p>Please note that all payments will be made in PKR into local bank account(s) only. No payment shall be made into any foreign currency nor in any foreign account. For tax liabilities please refer to Section 4.30 of IITS RFP and Clause 62.2 of IITS Draft Agreement.</p>
71	LMKT	Page 3, 1.3.	<p>And in page 4, there is also a chapter with serial number "1.3". Please clarify.</p>	<p>Please read "1.3a" instead of 1.3 on page number 4 of RFP.</p>
72	LMKT	Page 5, in the table: Components of the stage, the Proposal Deadline is By 29th July, 2020.	<p>Due to the COVID-19, it would take longer than expected for the bank to issue the Bid Security and mobilize teams for bid preparation. Please extend the bid submission by 4 weeks</p>	<p>Please refer to response to question number 68 above.</p>
73	LMKT	Page 7, 2.8, For purpose of Bid evaluation only, the amounts quoted in USD will be converted to PKR at the rate of 1 USD = 160 PKR.	<p>As per Page 15,4.3 of Contract Agreement, "the AUTHORITY shall pay a total amount of PKR... only(hereinafter referred to as "Total Project Cost") ", so please clarify which currency will be paid to the contractor for implementation works and O&amp;M works respectively. What is the rate of exchange USD/PKR for payment.</p>	<p>Please note that all payments will be made in PKR into local bank account(s) only. No payment shall be made into any foreign currency nor in any foreign account.. Please also refer to Draft Agreement IITS Green Line Clause 50.1(d)</p>



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74	LMKT	In page 9, No.9, Bid security. ".....an amount equal to two percent (2%) of the Aggregate Cost."	But in Page 42, No.10, Bid security, ".... an amount of PKR 50 million. " Please clarify the amount of the Bid security.	Please refer to response to question number 36 in "RESPONSES TO BIDDERS QUERIES / PRE-BID MINUTES" for IITS dated 23rd July 2020 .
75	LMKT	In Page 11, No. 20, Development of IITS Performance Security." ...an amount of ten percent (10%) of the Total Project Cost..."	Please clarify the bid security of phase-1 and phase-2 separately. In other similar projects in Punjab and KP, GOVT has asked 10% of phase-1 and for O&M its either 10% of annual contract value or fixed PKR 200 Million in one similar project. We would request to you follow the same model as being followed in other provinces in Pakistan.	Please refer to response to question number 207 in "RESPONSES TO BIDDERS QUERIES / PRE-BID MINUTES" for IITS dated 23rd July 2020 .
76	LMKT	In page 14, Sr. 59, Warranty Period	Warranty cost shall be quoted separately or free of charge? Noticed in BOQ, title 17 Service and Maintenance," the Service and Maintenance inclusive all spare parts and defect components for the first/second year(in parallel to the warranty) "are listed for quotation, does this mean the same of warranty cost. Please clarify.	Please refer to response to question number 66 above.



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77	LMKT	In Page 20,x. Information required pursuant to this RFP, c. Operation start-up of the projects. ...(Details as more particularly described in Section 8 of this RFP).	Please clarify when such information should be provided.	Section 8 describes in detail Operational Startup and System Operation.
78	LMKT	In Page 28, 4.14.1. Bid Security shall be required to be valid for an initial period of one hundred and twenty (120) days plus sixty (60) days beyond the original bid validity period making it a total of one hundred and eighty (180) days from the Proposal Deadline.	But in page 216, Format for bid security, the validity of the bid security is 12 months. (i) Proposal Deadline + [12 months] (the Guarantee Original Expiry Date) provided that, in the event the Issuing Bank has receipt of the Demand on or immediately prior to the Guarantee Original Expiry Date, the Issuing Bank shall honor that Demand. Please clarify the validity.	The requirement for Bid Validity period is as per clause 4.13.1. On page 216 instead of "Proposal Deadline + [12 months] (the Guarantee Original Expiry Date)" read "Proposal Deadline + [180 days] (the Guarantee Original Expiry Date)"
79	LMKT	In page 30, 4.16.8. The Successful Bidder shall be required to furnish satisfactory Performance Bonds in respect of the Contracts for both the Projects. In the event the Successful Bidder furnishes a Performance Bond for one Project and not the other, within the timelines provided herein, the award of both Contracts shall be cancelled, and the Bid Security shall be forfeited.	There is Development of IITS Performance Security and O&M Performance Security referred in many chapters of RFP. Please clarify what does "Performance Bonds" refer to exactly.	On Page 30 Section 4.16.8 of IITS RFP, instead of "Performance Bonds" read "Performance Securities" And instead of "Performance Bond" read "Performance Security"



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80	LMKT	<p>In page 30, 4.16.9 In the event the Notice to Proceed is not issued within three (3) months of signing of the IITS for Orange Line Contract, the Development of IITS Performance Security furnished by the Successful Bidder for Orange Line Contract shall, upon request of the Successful Bidder, be returned by the Authority.</p>	<p>Based on this term, there should be one Development of IITS Performance Security and one O&amp;M Performance Security for each line submitted respectively in different due time. Where Development of IITS Performance Security and O&amp;M Performance Security are mentioned in 3.Glossary/4. Information to bidders/5. Data Sheet, it always mean the one for either Green Line or Orange Line? Please clarify.</p>	<p>Development of IITS Performance Security and O&amp;M Performance Security shall be provided separately for each of the two Contracts. That is one Development of IITS Performance Security and one O&amp;M Performance Security for Green Line and one Development of IITS Performance Security and one O&amp;M Performance Security for Orange Line.</p>
81	LMKT	<p>&lt;BLIC Request For Proposal IITS_June_16_2020.pdf&gt; Page 59</p>	<p>Personalized card<sup>™</sup>: Card with customer's name printed on, and registered in a customer file. This will need to be real time? Or offline? What is the mechanism expected for name printing on card? Engraved? Embossed?</p>	<p>The TOM must be connected to L4 when performing a personalized Card, the Customer should be able to load a concession Product and use it immediately. Example of CSC printer available in the Market are DATACARD<sup>®</sup> CD800<sup>™</sup> CARD PRINTER OR ZENIUS by EVOLIS</p>
82	LMKT	<p>&lt;BLIC Request For Proposal IITS_June_16_2020.pdf&gt; Page 61</p>	<p>Back office services validate user and Smartphone ID. User application will be bound with Phone number or IMEI?</p>	<p>Depends on the proposed solution, when creating a user to access the APP, a unique identifier should be registered in the Database. The solution should be available for tourist which might have no local mobile number.</p>



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83	LMKT	MEM_IITS_PackAB_BOQ_GL_16June2020 / Pack A / Line 182	Turnstile gates should be reversible Validators will be installed on both sides of the turnstile gates?	Yes.
84	LMKT	MEM_IITS_PackAB_BOQ_GL_16June2020 / Pack A / Line 253	Unit for CSC is PCS, description unit is Package of 10,000. What exact quantity of cards is required?	In the BoQ, as an example item 16.006 the asked price in column L is for one item which means 10000 CSC. Column O will calculate automatically 40*10000 CSC for the position. The required quantity for this position is 40*10000
85	LMKT	MEM_IITS_PackAB_BOQ_GL_16June2020 / Pack B / Line 126,127	Network Switch quantities are defined in the BoQ but actual implementation quantities might differ as per actual Low Level Design, will customer accept the per unit cost above the mentioned quantities?	Please refer to response to question number 220 in "RESPONSES TO BIDDERS QUERIES / PRE-BID MINUTES" for IITS dated 23rd July 2020 .
86	LMKT	Station Designs	Complete station layouts required including AFC and ITS equipment design, and network diagrams for deployment. Provided data does not have these.	AFC and ITS equipment design are to be provided by the Contractor. Station Layout and network diagrams are included in Appendix VIII Drawings as provided at SIDCL website along with the bid documents.
87	LMKT	<BLIC Request For Proposal IITS_June_16_2020.pdf> Page 73	A fully functional second server (disaster) system must be provided as a „warm“ standby solution which will be installed at a separate place. Where exactly this will be installed? What about	Please refer to response to question number 222 in "RESPONSES TO BIDDERS QUERIES / PRE-BID MINUTES" for IITS dated 23rd July 2020 .



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			connectivity and layouts of this place? More details required	
88	Supernet		We want to know about Uplink provided for Wi-Fi in each bus (type of uplink with interface and bandwidth)	The Wifi is to be used as uplink for bus communication. Wifi is not supposed to be used for public access.
89	Supernet		We also want to know the dimensions of bus as well as No. of users in each bus.	Please refer to response to question 88 above.
90	Supernet		Type of Wi-Fi Authentication require for each user.	Please refer to response to question 88 above.
91	Supernet		Is there any Radius Server and AD environment.	Please refer to response to question 88 above.
92	Supernet		Route Map/Plan for OFC structure	Network diagrams are attached in Appendix VIII
93	Supernet		Station to station backhaul how many OFC cores shall be utilized	Network diagrams are attached in Appendix VIII
94	Supernet		Last station with OCC how many OFC cores shall be utilized	Network diagrams are attached in Appendix VIII
95	Supernet		Inside station , from floor to floor , OFC cores ?	Network diagrams are attached in Appendix VIII
96	Supernet		Each floor/room how many terminating point of OFC ?	Network diagrams are attached in Appendix VIII
97	Supernet		Coordinates for all stations, OCC and depot site.	Details will be shared with the successful bidder.



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98	Supernet		OCC hall dimensions and necessary details.	Details will be shared with the successful bidder.
99	Supernet		POC for sites surveys.	<a href="mailto:info@sidcl.com.pk">info@sidcl.com.pk</a> Point of Contact : Col (R) Zaid Shamshad, SIDCL Cell No: 03333980142
100	Wibbow	<BLIC Request For Proposal IITS_June_16_2020.pdf> Page 93	<p>Page 93 Technical boundaries&gt;Using extensive integrated services, such as real-time radio communication to the fleet to communicated with the drivers and send/receive, status information, instructions updates), GPS/GLONASS/BEIDU tracking the fleet, GIS based map matching, pre-planned network schedule and map planning, intelligent prediction and management tools the system should provide typically a comprehensive set of tools to ease the operation management, boost the quality of service provided and ensure the passenger are well informed.</p> <p>Page 104 Analogue Radio to transmit Bus Prioritization (BP) data to the junction traffic controllers (future BRT lines) as an option</p>	UHF/VHF devices are not required. Fiber Optics back haul and Wifi mesh are the communication media.





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			or via (x)G networks or alternative communication. There is no mention of UHF/VHF network/devices in the BoQ, shall we add these on our own?	
101	Wibbow	General Query	Can there be more than 3 partners in a consortium?	No. Number of Consortium members cannot be more than three(3). Please refer to IITS RFP, Page 11, Section 3, item 18. However, the prospective bidders may nominate sub-contractors for minor tasks not being the core expertise.