



ADDENDUM No. 2 TO THE ORIGINAL BRIEF

DATE: 25 NOVEMBER 2021

This addendum must be included and read as part of the original tender

TENDER NUMBER: HO/CRES/REAM/03/11/2021

DESCRIPTION: REQUEST FOR PROPOSAL TO SOURCE NATIONAL PROFESSIONAL SERVICE PROVIDER TO RENDER SERVICES FOR A NATIONAL, STANDARDISED PARKING MANAGEMENT SERVICES ON A DESIGN-BUILD-OPERATE MODEL FOR KEY STATIONS. DURBAN STATION & ISIPINGO IN KZN AND PRETORIA STATION IN THE GAUTENG PROVINCE

PLEASE NOTE THE FOLLOWING AMENDMENTS AND CONFIRMATIONS OF SOME OF THE AREAS IN THE ORIGINAL TENDER DOCUMENTS

The following detailed specification forms part of the RFP document

1. DETAILED SPECIFICATION OF THE SERVICES REQUIRED –

The bidder will present PRASA with a comprehensive and creative Parking Management System solution with state-of-the-art software features and Operational Plan based on station specific design requirements and will encompass, but not limited to the following:

1.1 PAY ON FOOT SYSTEM SPECIFICATIONS PARKING MANAGEMENT REQUIRMENTS - Summary

The design and scope of the proposed Parking Management must include the components as summarised hereunder but not limited to the following:

- New road markings and parking markings for cars and buses
- Traffic Barriers
- Signage of Parking Areas
- Fencing of Parking where required
- Lighting
- Civil works
- Integration of access control and security features such as Automatic



- Number Plate Recognition (ANPR), Radio Frequency Identification (RFID), CCTV Surveillance, and others
- Spikes
- Wheel clamps for buses and cars
- Computer system
- Security booths
- Parking Management office for Operations
- All network requirements (active and passive equipment)
- All power Requirements (UPS and Standby Power)

The POF system must at minimum comply with the following requirements:

1.1.1 ENTRY AND EXIT AND PARKING SPACE REQUIREMENTS

- Design site specific entry and exit lane configuration for cars and buses including park and ride areas,
- The Service provider will be responsible for all equipment installation including civil works and or structural reconfigurations, cabling (fibre, ethernet and power), parking area signage, electronic boards and entry points indicating capacity and availability of parking bays, lighting etc,
- Where necessary, the service provider will be responsible to erect high density mesh fence comprising of the following minimum specifications:
 - Reinforced fence panels
 - Consists of narrow apertures.
 - Climb resistance properties
 - Difficult to cut through blades, saws and discs.
 - Resistant to acetylene torch and other heat sources
 - Fence toppings: Shark tooth spikes with razor sharp and high tensile steel.
- Reflective road markings and parking markings for cars and buses
- Entry lanes will require ticket dispensers, the dispensers shall use the latest components and applications that comply with relevant national standards



and shall be of high quality, able to withstand severe weather conditions and be vandal proof.

- The entry lanes will also be equipped with vehicle detection magnetic loops to sense vehicles in order to ensure correct operation and timing and entry and exit Log Devices,
- Lane exits and entries shall be equipped with vehicle barrier systems (single barrier arm) to prevent unauthorised exits and entries, vehicle barrier systems shall incorporate electro-mechanical drive units to allow automatic and manual opening and closing of barrier arms where automatic operation shall be the primary mode of operation for the vehicle barrier systems. The vehicle barrier system shall be a costs effective solution that requires minimum maintenance,
- Entry and exit lanes shall be equipped with access control/security features such as License Plate Recognition (LPR), Proximity devices (Radio Frequency Identification (RFID)) for each lane,
- The LPR subsystem shall consist of all hardware and software necessary to provide a complete licence plate reading subsystem that does not adversely affect any function of the POF system and all cameras for the LPR system must be digital and IP based and should be in tamper plate housing,
- The Automated Number Plate Recognition System should be a stand-alone system able to function in the absence of any integration with POF/Parking Management/Access Control but should be able to integrate with any of these,
- All entry and exit points must have spike grippers to avoid tail gating,
- The POF Field equipment will be provided with UPS and standby power,
- The System must accept chip and pin cards, credit cards and tap and pay and RFID technology devices at the entrance and exit stations,
- The Parking Management system will allow for the creation of customer accounts. The customers with accounts will be issued with wireless RFID cards, the RFID cards will allow entrance and exit for all respective parking areas connected to the POF System, with the accounts automatically updated with the associated fees. Customers (Bus, Taxi, Rental Car companies and Tenants etc) with created accounts must also be able to add more vehicles and link to their accounts,



- Capability of the system for uses to be issued with a monthly account statement via e-mail and for account holders to be able to make payments to their accounts via EFT, payment at the cash registers, or by means of their RFID cards at the pay stations,
- Network requirements (active and passive equipment)
- 24-hour manned Operations and Management Office per Region/site,
- The Service Provider will be required to establish a full management and operations office per Region, operating from the respective Region/Site in order to manage the Parking System with a Cost Centre created per Region in order to manage the day-to-day operations of the parking system, parking fee income and associated expenses related to the operations of the parking system
- The services shall be rendered independently at specific stations wherein all such revenue collected will be recorded and accounted for at each site/Region.
- It shall be expected that monthly disbursement statements per specific site shall be submitted to the accounting officer on the dates and times that shall have to be agreed upon with PRASA
- The Parking Management System shall have sufficient storage capacity to store the following data, along with the necessary backups:
 - Three (3) years of audio recordings from all intercom subsystems
 - Three (3) years of all LPR images
 - Three (3) years of facial recognition images
 - Ninety (90) days of CCTV video playback, with up to 12 months of archived footage
 - Three (3) years of the entire Parking Management System transactional data

1.1.2. BUS/COACH OPERATIONS MANAGEMENT SYSTEM

The automated bus management system must be able to manage the entry, exit and loading time of buses entering each Station with minimal human



interface, to be able to bill the bus operators per bus entry at a determined entry fee per bus with accurate dwell, entry and exit times.

The system should be able to record buses entering and exiting the Stations per bus companies.

The POF design, layout and operation must accommodate the integration of bus/coach management system per site requirements in relation to, but not limited to the following;

- Dedicated bus/coach entry and exit lanes,
- Bus Management Systems;
- Recording Bus entries, exits and dwell time
- Recording of accurate loading time
- Integrated and incorporated Bus Billing System
- Must be capable to provide automatic reports on daily, weekly and monthly basis per Bus Operator operating within each station where busses are operational,
- Must be capable to generate daily, weekly and monthly reports for bus billing with monthly summary,
- Link with the POF system and LPR Systems
- Any other requirements by clients to aid with bus management system at stations,

1.1.3 RENTAL CAR OPERATIONS MANAGEMENT SYSTEM (where applicable)

The automated rental car management system must be able to manage entries and exits of car rental companies' vehicles according to number of parking bays allocated per rental companies with minimal human interface.

System should be linked to license number plate system that will assist with opening the barriers without passenger pulling out the ticket at the entry points. System should be able to accommodate fleet of car rental companies in the data base system but only allow entry into the parking area as per allocated bays.



If number of entries exceeds the allocated parking bays the system should record the entries with dwell times for additional billing at the end of the month by Centre management office.

The POF design, layout and operation must accommodate the integration of the rental car management system as required per site in relation to ~~the~~, but not limited to the following:

- Dedicated Rental Car Holding Areas as per site specific requirements
- Record and control entry and exit for car rental vehicles without the issue of tickets on entry in parking area,
- Link with the POF system and LPR Systems
- Integrated and incorporated rental car operation billing system
- Must be capable to provide automatic reports on daily, weekly and monthly basis
- Any other requirements by clients to aid with rental car operations management system at stations

1.1.4 METERED TAXIS / PRIVATE TAXIS MANAGEMENT SYSTEM

The POF design, layout and operation must accommodate the integration of the metered/private Taxi's management system as required per site in relation to, but not limited to the following:

- Provide Taxi Management Solutions per site specific requirements
- Record and control entry, exit and dwell time for metered/private Taxi operators in the parking area,
- Link with the POF system and LPR Systems
- Integrated and incorporated Taxi operation billing system
- Must be capable to provide automatic reports on daily, weekly and monthly basis
- Any other requirements by clients to aid with rental car operations management system at stations



1.1.5 TENANT AND STAFF PARKING MANAGEMENT SYSTEM

The POF design, layout and operation must accommodate the integration of the tenant and staff management system as required per site.

1.2 POF ENABLING TECHNOLOGIES

The entire POF must be based on a modern state-of-the-art operating system which must incorporate and comply with, but limited to the following technology:

- Magnetic Loop System to detect vehicles
- The ticket dispensers with a VOIP intercom system with magnetic stripe ticket dispensed at entrance.
- Barcode Scanners (Tickets)
- Technology for Ticketing and Printing
- Single/Multi-space Parking Meters
- Pay and Display Terminals
- Prepaid / Credit Card parking meters
- RFID Readers to facilitate entry by prepaid card systems, and RFID tag systems that will allow staff etc to enter and exit
- Ticket Validators
- The subsystem for the Intercom at each entry and exit point must have audio recording and playback capabilities
- CCTV
- Pinhole facial cameras for entry and exit points
- Parking Meters Management Software
- Transponder Technology – cards
- Automatic Number Plate Recognition (ANPR) System with storage capacity of 60 days
- Radio Frequency Identification (RFID)
- Automatic Barriers
- Vehicle Detection Loops
- Entry Log Devices
- Ticket/card dispenser, ANPR camera, proximity devices (RFID)
- All network requirements (active and passive equipment)



- All power requirements (UPS and Standby Power)
- Servers (backup for POF subsystem, LPR subsystem, bus, car rental, metered taxi's management subsystems etc)
- All the required Fibre Optic Cabling

The proposals from the bidders must comprehensively demonstrate the use and incorporation of the technologies mention above including any other appropriate technologies and management systems available in the market that could offer solutions to effectively manage the parking systems as required per region/site.

1.3 PAY STATIONS AND PAYMENT SYSTEMS

The Service Provider must ensure that the Payment System for the entire POF Parking Management System is adequate and capable to provide seamless and secure payment solutions must incorporate but not limited to the following:

- All pay stations shall be fully automated pay-on-foot machines that offer complete ticket handing capabilities for central cashiering parking operations and capable of accepting cash or cashless payment methods (credit/debit cards)
- All pay stations shall be low maintenance and reliable with weather-proof cabinets and vandal-resistant faceplates
- All pay stations shall compromise user friendly interfaces including relevant messaging and notices, including parking tariff signage
- Payments Systems Capability for comprehensive cash audits and revenue management reports captured on-line and off-line to ensure 100% collection of all parking fees
- All cash handling modules must incorporate all relevant and maximum-security features including operating restrictions
- A pinhole camera is to be installed into each pay-station to record the passengers face when concluding a payment and an image stored with the unique ticket information and accessible on demand
- All pay stations must incorporate Bill to Bill functionality, B2B is a component of the pay stations that uses bills paid with by previous customers to pay back change in bills to subsequent customers.



- All pay stations/systems must address lost ticket options
- Provision must be made for a spare note and coin safes for each pay station.
- All pay stations must have local off-line capabilities in the event of a communications failure
- At least one pay station within the parking management system should comply with universal access requirements.
- Capability to retrieve loss of data or information from Server if memory is lost due to some malfunction of pay stations
- The Payment Systems must have the ability to handle prepaid parking arrangements, monthly parking, bus, taxi and rental car operations billing systems and subscription payments and Manual Cashiering
- Provision of Ticket Validators as per site specific requirements
- Automate entry of vehicles with pre-entry authorisations
- All transactions processed by pay stations shall reflect immediately in the POF system
- All Pay stations must be equipped with electronic monitoring devices to detect tampering and misuse and be able to automatically log and report such instances to the central POF system immediately
- All network requirements (active and passive equipment)
- All power requirements (UPS and standby Power)
- The operator will have a strict operating procedure manual for the handling of cash and operating of the Pay stations.

1.4 REPORTS REQUIREMENTS SPECIFICATIONS

The entire Parking Management System must be able to generate the following minimum reports specifications per Region as well as consolidated reports for the entire Operation (all regional operations) as and when required.

- Payments by time range;
- Daily statistics for pay stations: number of notes in safe, number of coins in safe, amount of notes removed etc;
- Current pay station statistics: number of notes in safe, number of coins in safe, etc;
- Wireless card and automatic licence plate transactions;
- Account holders with vehicles registered and cards issued;



- Number of entries and exits per day per entrance and exit area;
- Number of total entries and exits by hour, by week and by month;
- Failed entries and exits by hour, by week and by month;
- Lost entry tickets sold;
- Lost entry tickets usage;
- Manual boom openings indicating the boom that was opened;
- Midnight money statistics;
- Net fees by ticket dispenser station;
- Net fees by pay station;
- Park time by day (Occupancy), by day, by week, by month and by facility;
- Parker movement report;
- Ticket statistics;
- Validation by types: pay station, credit/debit card, cashier station, wireless access card etc;
- Cash audits;
- Note recycling and coin recycling removal report with content values;
- Specific reports for Bus, Rental Cars, Metred Taxi's management systems.

Exception transactions report to include

- Lost ticket;
- Unreadable ticket;
- Stolen ticket;
- Validations (must be sortable by type);
- Voids/Cancelled transactions;
- Towed and Impound vehicles;
- Non-revenue badges; and
- Communication statistics summary by date by device (this key performance indicator indicates the overall health of the communication system);
- Communications statistics by date by device;
- Operator activity by date (an operator audit trail report);
- Current Operators;
- Offline history by device by date;
- Sensor errors by device by date;



- Current parking utilisation by zone;
- Parking utilisation summary by zone by date;
- Parking utilisation detail by zone by day, week, month, year;
- Parking duration by registration number;
- Estimated parking revenue;
- Average time bays are occupied by day, week, month, year;
- Event logs for User and Admin accounts;
- User verification list;
- List of expired accounts;
- All reports generated must be time stamped to correspond to shift patterns;

Over and above the abovementioned reports, the System must, from time to time, be capable to generator any customisation of reports per site as per PRASA requirements.

Management specifications and requirements

- The Service Provider may be required to open a Trust Account
- PRASA should have access to view information on the parking management system for live and recorded data on a read only basis
- A Performance Contract will be concluded with the Service Provider
- An SLA Agreement will be concluded where a management committee will be formed to monitor performance against deliverables
- Management meeting will be held on monthly basis between Service Provider and PRASA or ad-hoc as and when required.



1.5 MAINTENANCE SCOPE OF SERVICE

The proposal from the bidder must provide a comprehensive Preventative and corrective Maintenance Services plan and cost, which costs will be included in the capex costs, per Region/Site regarding all Parking Management Systems and Related Devices.

Kind Regards

Albert Mdluli

Manager: SCM