

Subject	Specification
Project Name	Point of Sale Application Replacement
Reference	RFP 23/24/08/Point of Sale Application Replacement/MH



The information contained within this submission is considered proprietary and confidential. No inappropriate and/or unauthorised disclosure of this submission is allowed.

1. Background

The South African Post Office (SAPO) provides services to the public through various mediums. At the branch level SAPO interacts with its customers through the Point of Sale (POS) solution. The Point of Sale solution encapsulates various core functions and services that SAPO offers to customers and the general public.

The core functionalities and capabilities for the Point of Sale should enable SAPO to offer services and account for stock, financial transactions, audit, risk management, marketing and sales of items, promotions of items and services, ability to know our customers, integration to financial systems, tracking systems, fraud detection systems, 3rd party systems, traditional box and address management functionalities, and mail and parcel handling features. Over and above these Point of Sale systems for SAPO should be available 24/7/365 in the Fourth Industrial Revolution (4IR) digital space. It should further be OPOS compliant and able to support Europay, MasterCard and Visa (EMV) and 8583 transmission protocols. Added to this is the ability of the solution to be platform agnostic as well as option to be cloud based thereby offered as Software as a Service (SaaS).

As an OPOS compliant solution, the Point of Sale system for SAPO should easily integrate with peripherals such as pat labels, receipt printers, scanners, cash drawers, MFD printers, webcams, Biometric readers, Pin pads and many other peripherals that may be needed to enable SAPO to be a leader in the parcel and logistical digital services industry.

The ideal South African Post Office Point of Sale System that will be used in the Retail Postal Agencies and SAPO owned Post Offices will accept the currency in circulation in the Republic of South Africa (RSA). The ZA currency is the ZA Rand (R), with the rand being equal to 100 cents. Currency denominations in circulation in RSA are as follows:

Denomination	Currency Type
R200.00	Paper Currency
R100.00	Paper Currency
R50.00	Paper Currency
R20.00	Paper Currency
R10.00	Paper Currency
R5.00	Coin Currency
R2.00	Coin Currency
R1.00	Coin Currency

Denomination	Currency Type
R0.50	Coin Currency
R0.20	Coin Currency
R0.10	Coin Currency
R0.05	Coin Currency

At SAPO, the majority of interactions with clients originate from the POS. As such, the main function of the POS will be to accept payment for, record and reconcile the sale of and control the inventory of various products/goods and services that SAPO may sell from time to time. In addition to that, SAPO may provide various government-related services to the public through the POS.

The following represents the key SAPO retail transactions:

- Agency Payments (Telkom, Municipalities etc.)
- Postal Items
- Mail and Parcel Items (Acceptance and Delivery)
- Government Services (Fishing licenses etc.)
- Other stationary items, if SAPO so requires

2. Objectives

The objective of the bid is to appoint a bidder that will deliver a point of sale software application for a period of (5) five years.

The bidder shall provide an end to end solution that shall replace the front end application on SAPO provided hardware/

Replace the server hardware and software infrastructure, integrate in a financial system and related systems. All types of bank cards to be accepted as method of payment.

The bidder must be capable of launching the customised the point of sales software within 3 months from the signed contract date to deliver the first 10 Pilot branches in month 4 and align for the national rollout in 6 months.

3. Scope of Work

The Scope of work includes

- 3.1 Development , testing and installation of the Point of Sale system
- 3.2 Maintenance and Support of the implemented Point of sale
- 3.3 Integration with SAPO identified systems as per systems specification provided by Sapo
- 3.4 Application Hosting and support, i.e Backup, Storage, archiving

4. Specification

4.1 Core Functionality

The system shall be an off-the shelf post office counter automation solution and shall at a minimum provide 90% of the core functionality required by a post office. The system shall be based on world-class postal processes that SAPO will adopt.

4.2 System Architecture

The system shall be a web-based application hosted in the SAPO datacentre and shall be accessible from all branches and Retail Postal Agencies RPA) through a standard web browser at the POS terminal.

4.3 Products and Services

The system shall permit SAPO to sell products and provide services on the Point Of Sale. Some of the products or services could be residing on the partner environment. SAPO should be able to create new products without the need to resort to development. Such creation of new products should be through in-built configurations.

4.4 Collaborating Systems

The system shall interface with the following systems through the SAPO integration platform and exchange data using web services employing various file formats:

- International Postal System
- SAPO ERP
- Customer Relationship Management system
- SAPO Integrated Address System
- International Financial System
- SAPO Virtual Post Office
- SAPO SMME e-Commerce
- Post Box System
- Motor Vehicle Licence
- Universal Banking Solution
- Integrated Grants Payment System

4.5 Peripherals

The system shall connect to the following devices using the default OEM drivers installed on the Operating System:

- SAPO weighing machines (Any item weighed must be automatically captured on the system)
- Barcode Scanners (Sale Items and Tracking labels)

- Label Printers
- Receipt Printers
- Signature Pad
- Fingerprint Reader
- Webcam devices

4.6 Acceptance of All types of Mail and Parcels

The system shall accept the following mail items at the post office, RPA and Mail Processing Centre:

- Letters
- Parcels
- Packets
- Expedited Mail Service (EMS), (Different Zones, Different Dimensions, Different Countries)
- Speed Services
- Bulk Mail
- Mail Redirection
- Mail Retention

The system shall accept the dimensions of the item (weight of the item as calculated by the scales or alternatively accept the length, width and depth of the item as measured in centimetres).

The system shall compute the volumetric weight (based on the length, width and depth dimensions) and shall calculate the cost of delivery of the item based on the volumetric weight, destination tables and insurance selected.

The system shall capture and transmit the following data:

- Sender's details (First Name, Last Name, RSA ID, or Company Name, Address, Province, Postal Code, Cell Number) and
- Receiver's details (First Name, Last Name, RSA ID or Company Name, Delivery Address, Province, Postal Code, Cell Number).
- At this point the system shall accept a track and trace number scanned from the Track and Trace labels provided.
- The system shall print all the required labels and receipts.

4.7 Acceptance of Cash on Delivery Parcels

The system shall capture the following:

- sender's details (First Name, Last Name, RSA ID, or Company Name, Address, Postal Code, Province, Cell Number, Cash on Delivery/Invoice Number) and
- receiver's details (First Name, Last Name, RSA ID or Company Name, Address, Province, Postal Code, Cell Number).

At this point the system shall accept the track and trace number scanned from the Track and Trace labels provided.

4.8 Acceptance of Bulk Mail

The system should provide the capability to perform bulk booking of registered and unregistered items at the post office and mail centres.

4.9 Acceptance of Speed Services items

The system shall provide the capability to capture the following information with regards to Speed Services Items:

- Acceptance of Items
- Capture sender and recipient details
- Synchronisation of the delivery information with the SAPO track and trace system (IPS)

4.10 Mail Dispatch/ Delivery

The system shall automate the delivery of mail and parcel items at the branch.

4.11 Inventory Management

The system shall perform inventory management across all inventory items sold at the Post Office or RPAs.

- Postage Stamps
- Stationary
- Phone Cards
- Other Shop Items

4.12 Electronic Money Order Payments

The system shall be able to integrate with the International Finance System (IFS) for the processing of both domestic and international money orders. It shall permit clients to collect money order payments at any post office in the RSA.

4.13 Social Services

The system shall enable SAPO customers to collect

- pension payments,
- funeral scheme payments,

- social security (SASSA) benefits payments from any post office branch with the aid of biometric and/or RSA identification document.

4.14 Electronic Bill Payments

The system shall provide SAPO with the capability to accept utility bill payments, Telephone bill payments and other bills due to other entities.

The system shall enable SAPO to:

- Calculate agency fees and commissions/fees due to SAPO,
- Add additional 3rd party services and agency fees configurations without having to resort to code customisation.
- The system shall provide SAPO with the ability to export and import agency data to the FTP server for transportation by the SAPO integration platform to the relevant agency.

4.15 Cash Management

a) Able to transfer cash between tellers

- The system must be able to allow transfer of cash between tellers. The process must be from the teller back to the cashier and then to the teller: e.g.
- teller 1 requires money
- teller 2 transfers money to the cashier
- the cashier transfers funds to the teller 1 container
- the teller 2 acknowledges the funds

b) Able to transfer cash between branches

- The system must allow the branches to be able to transfer cash amongst each other, e.g.
 - branch 1 requires cash from branch 2
 - branch 2 transfers cash to branch 1
 - branch 1 acknowledges funds received
 - branch 2 cash is reduced by the transferred amount
 - branch 1 cash is increased by the received amount
 - branch 1 cashier transfers money to teller for transacting

c) Ordering of cash from Finance Department

- On several occasions branches order cash from finance in order to fulfil their responsibilities such as payments of pensions. The system must allow the branch to order cash for the fulfilment of these responsibilities:
 - branch 1 requires cash from Finance
 - branch 1 places an order for cash
 - finance receives an order and allocates money to branch 1
 - branch 1 acknowledges receipt of cash

- Finance performs journal entries to adjust cash balance

a) End of Day Cash Recon

- At the end of each day, tellers have to account for every cent that was transferred to them by the cashier and the cashier accounts for every cent movement in the office. The system must allow for this reconciliation at the end of the day.
 - End of day for the office
 - tellers cash up on their specific tills
 - tellers transfer cash to the cashier
 - cashier acknowledges receipt of funds from tellers
 - cashier reconciles the office cash with daily transaction

d) Ability to do cash transfer between cashier and tellers

- The system must allow the transfer of cash from the cashier to the teller to enable the teller to perform their daily duties.
 - beginning of day
 - teller logs on to the system
 - cashier transfers the daily money to the teller before start of day
 - teller acknowledges transferred money in their container
 - the cashier money and teller money is updated
 - start of day

e) Able to reconcile cash at end-of-day or at any time

- The cash transfers between tellers and cashiers is a daily thing. The system must allow the cashier to account for the cash transfers daily.
- cashier wants to know the cash movements
- cashier queries the system to check how much money is transferred to tellers and remaining in cashier

f) Able to generate cash movement reports either at all distribution levels

- The system must be able to generate a report of cash movements in the office as well as between offices including from finance to the office.
 - office requires cash movement report
 - user generates reports of all cash movements per branch

4.16 Inventory Management

b) Inventory Movement

I. Transfer and receive inventory from warehouse to regions

The system must be able to handle the transfer of inventory from the warehouse where it was procured to different regions as well as update the stock levels of the regions upon receiving the stock.

- region wants to order inventory for their branches
- region places order on the system for required inventory items
- warehouse receives and acknowledges order
- warehouse prepares order and dispatch to region
- region acknowledges receipt
- stock is debited from warehouse and credited to region

II. Transfer and receive inventory from regions to branch

The system must be able to transfer the inventory from the regions to the different post offices within those regions and update the stock levels in the offices upon receiving and the regions upon dispatch.

- branch requires inventory items
- Branch orders inventory items from region
- region receives and acknowledges order
- region dispatch order against branch
- office receives and acknowledges inventory items
- office stock and region stock adjusted with stock amount

III. Management of Postal Order Stock

The system must provide the following postal order stock functionality

- View Stock levels on hand and in transit from Distribution Centre
- Auto or manual order
- Receive (Acknowledge stock received)
- Cancel (Reverse) orders
- Manage stock levels
- Transfer stock to other branches
- Provide alerts for orders that must be done

IV. Inventory Listing and Counting

Real-time inventory Levels

While selling the inventory in the retail offices, the system must automatically adjust the inventory levels in the branch and also update the inventory levels when the new items are received.

- branch 1 sells inventory item
- system automatically adjust the inventory levels of that item in branch 1

V. Automatic inventory reorder Level

The minimum threshold levels of inventory items must be set and any inventory item that goes below the minimum inventory level must trigger an alert to the branch manager who must approve the stock orders which must be sent to the procurement department.

- branch 1 places the minimum inventory levels per item they must have
- branch 1 sells the items to the minimum threshold level
- system automatically sends a message to branch manager about the minimum amounts reached
- branch manager decides whether they want to place order
- branch manager places order of items with regional office or warehouse

VI. Inventory valuation

The system must at any given point allow the branch to take stock of how much inventory of a certain product is available as well as the value thereof.

- branch wants to take stock count
- branch generates a reports of all items and the value thereof

VII. Inventory queries

The system must be able to allow queries by users to determine how much quantities of a certain product the office or regional office has in stock.

- tellers wants to know how much quantities of a stock item are in stock
- teller inputs the inventory items and queries
- system displays the stock on hand of the item
- this function must allow queries to be done from regions of stock item in all their branches

VIII. Inventory price list queries

The system must allow the users to check the prices of the items

- teller wants to know the price of a certain item
- teller opens the system and scans the item to display price
- system display the price of the scanned item

IX. Price discount and quote

System must be able to allow the branch to give a discount based on quantities purchased

System must be able to generate quote based on client's requirements.

X. Daily inventory reconciliation

At the end of each day, the branch user must be able to perform a stock reconciliation to check how much stock they had in the beginning of the day, how much was sold and how much is left.

- at the end of day manager runs a reports to show quantities of all stock items in stock
- systems generates report

XI. Ad-hoc inventory reports at all distribution levels

The system must allow users to build custom reports of their inventory using queries as and when they need them.

- user wants to develop an ad-hoc report
- administrator creates a report cube for the report
- user runs the report

4.17 Mail and Parcel Management

c) Determine parcel delivery cost based on weight and dimensions

The system shall accept the dimensions of the item (weight of the item as calculated by the scales or alternatively accept the length, width and depth of the item as measured (centimeters))

The system shall compute the volumetric weight (based on the length, width and depth dimensions) and shall calculate the cost of delivery of the item based on the volumetric weight, destination tables and insurance selected.

d) Handle local and international mails and parcels

The system must be able to cater for domestic and international mail and parcel delivery and tracking

e) Auto Pricing

The system shall compute the volumetric weight (based on the length, width and depth dimensions) and calculate the cost of delivery of the item based on the volumetric weight, destination tables and insurance selected

f) Acceptance and Delivery of Cash on Delivery Parcels

This process is included in the normal Mail Acceptance and Mail Delivery process. The system shall capture the sender's details (First Name, Last Name, RSA ID, or Company Name, Address, Postal Code, Province, Cell Number, Cash on Delivery/Invoice Number) and receiver's details (First Name, Last Name, RSA ID or Company Name, Address, Province, Postal Code, Cell Number).

System shall accept the tracking number scanned. The system to validate the tracking number to prevent the use of duplicate numbers and ensure correctness

The system shall be able to integrate with the Cash on Delivery Parcel System for the processing of Cash on Delivery Parcels on acceptance and delivery

g) Able to track and trace mail and parcel locally and internationally

System accepts a track and trace number scanned from the Track and Trace labels provided for either domestic or international destination. Example;

- Customer has a parcel to track
- customer opens a mail tracking web portal
- customer inputs the tracking number for the parcel
- system displays the current status of the parcel as scanned

h) Able to integrate into local and international mail and parcel systems

The system must be able to integrate with local mail system such as track and trace if it doesn't have it as well as the international mail and parcel handling system such as IPS's systems

i) Mail redirection

The system must allow the redirection of mail.

j) Franking

Franking is a process whereby bulk mail is handled and clients pay the post office upfront to deliver bulk mail. The system must be able to cater for franking customers as well as perform their transactions.

- customer registers as a bulk mail customer
- customer deposits funds into their franking account
- customer sends letters to post office for delivery against their customer number
- post office calculates the amount to be charged for bulk mail delivery
- system deducts the fee from the customer balance
- customer is notified of the transaction
- mail is distributed

k) Mail redirection

The system must allow the redirection of mail

l) Handle mail and parcel returns

The system must be able to handle mail returns where the mail couldn't reach its desired destination.

- parcel or mail is undelivered
- parcel is scanned as return to sender
- parcel is delivered to sender

m) Handle mail and parcel returns

The system must be able to handle mail returns where the mail couldn't reach its desired destination.

- parcel or mail is undelivered
- parcel is scanned as return to sender
- parcel is delivered to sender

n) Counter-to-Door

One of the services offered by the post office is the delivery of mail to the recipient's door. The system must be able to provide this type of service. The charges of this service will be determined by the post office.

- customer wants to post a parcel.
- parcel is scanned and registered on the system as a counter to door parcel delivery.
- system calculates the amount to be charged using the weight, size and unit price.
- customer pays the required amount.

- system updates tracking system with the tracking number.
- parcel is sent for delivery.

4.18 Management of Post Boxes

The system shall provide SAPO with the capability to perform the following activities on behalf of customers:

Apply for post box rentals and post bag rentals from any post office

- customer applies for a new post box
- teller captures the customer details
- teller allocates opens the available box numbers
- teller asks the customer for the preferred one from available
- customer chooses the box
- teller allocates the box number to the customer
- teller collects payment for box rental and key deposit
- system updates box from available to occupied by customer
- Renew of post boxes and post bags from any post office in RSA
- customer receives renewal notice
- customer initiates renewal of post box
- teller processes the renewal process
- teller receives payment as per the renewal fee
- system updates the box as renewed
- Request lock replacement from any post office
- Submit requests for additional keys from any post office
- Termination of post boxes and post bags from any post office
- customer initiates termination
- teller terminates the rental of a box
- teller receives the box keys from customer
- teller refunds the customer the key deposit for the box
- the system changes the box to available
- Cater for virtual post boxes rental
- customer initiates the rental of new post box online
- customer completes the required documentation online
- customer makes payments on the system
- customer receives a confirmation of new box and login details
- system updates
- The system must be able to allow renewals of virtual post boxes
- customer received renewal notification
- customer logs on the system
- customer initiates renewal
- customer confirms payment details
- system updates the box details
- The system must be able to cater for the redirection of mail from post box/ private bag to post box/ private bag or street and vice versa and to calculate the applicable redirection fee

- The system must be able to cater for the updating of the client details/ information of the current renter except the id number.
- The system must be able to cater for different types of enquiries on boxes and Private Bags
- The system must be able to cater for the calculation of the amount to be refunded and to cater for the payment of the calculated refund amount
- The system must be able to cater for the updating of the box type
- The system must be able to cater for the identification of unpaid boxes and private bags and the generation of reminder notices for those boxes/ private bags.
- The system must be able to report on ranking of branches in terms of how many post boxes are rented out
- The system must be able to cater for the calculation of the price and the selling of the following additional stock items linked to post boxes and private bags:
 - chain securing private;
 - clearance of private letter posting boxes;
 - name plate;
 - new locks;
 - padlock and 2 keys for private bags;
 - security Access Deposit;
 - security Access Refund
- System have capability to link renewal date to the expiry of the rental period (anniversary)
- Capability to block reservation of a selected box number when the transaction for a new application is in process to avoid duplicate allocation of the same box number at the same time.

The system shall provide SAPO with the capability to perform the following activities:

- Flexibility to accept pro-rata payments for post box rentals
- Automatic calculation of tariffs based on SAPO identified parameters
- Provide rental discounts for certain age groups or students
- Generate automatic post box and post bags renewal reminders to be sent to customers through Short Messaging Services, e-mail and traditional mail

4.19 Postbox key management

- In the event that the post boxes are housed in a locked environment, the system must be able to cater for the second key deposit for the gate to the enclosed place
- System must be able to cater for number of post box key given to customers
- System must be able to cater for key deposits from customers

- Upon termination of the contract for mail boxes, the key deposit must be refunded on the system
- In the event user wants to change locks on the post box, there must be a charge fee on the system that allows the user to pay for the changing of locks

4.20 Money and Postal Orders

- The system shall be able to integrate with the International Financial System (IFS), Mobile Money and Postal Order System or any other 3rd party money transfer system for the processing of both domestic and international money and postal orders.
- The system shall permit clients to send and collect money and postal orders at any online office.
- Integration with backend systems for fees (Postilion for Remit fees calculation) (View/Add/Edit)

Electronic goAML reporting to the FIC. (Threshold, International, Suspicious)

- Monitoring and management of suspected fraudsters and terrorists, published by external service providers, using SAPO systems
- Electronic FINSURV reporting to the SARB.
- Customer threshold monitoring for specific periods and blocking customers from exceeding these limits.
- Mobile Money Order solution that interfaces with back end money transfer
- Issue money and postal orders
- Process money or postal orders
- Receive cash at terminal
- Print PAT Labels for postal order
- Print receipt for sender
- SMS unique number to sender and recipient
- Recipient use unique number to redeem money / postal order
- Must support IFS and REMIT and other money transfer solutions.
- Refund / Reimbursement of money and postal orders
- Process money or postal order
- Pay-out cash at terminal
- Print receipt for sender
- Sender use unique number to refund / reimburse money / postal order
- Must support IFS and REMIT and other money transfer solutions
- Money and postal order enquiries on
- Status
- Customer ID
- Customer threshold

4.21 Third Parties Management

- Real-time integration to different 3rd party system protocols, XML, web services and other APIs
 - customer requests to pay a third party bill
 - the bill barcode is scanned (if available) or captured on system
 - system links with the third party system via web services from third party
 - payment transaction is performed
 - receipt printed and given to customer
 - system updates third party system with payment details
 - Ability to process 3rd party transactions online and offline
 - Calculate agency fees and commissions/fees due to SAPO,
 - Add additional 3rd party services and agency fees configurations without having to resort to code customisation.
 - The system shall provide SAPO with the ability to export/import agency data to the FTP server for transportation by the SAPO integration platform to/from the relevant agency.
- The solution must be able to integrate with the current SAPO banking platform. It must allow the customer to perform all the banking transactions such as opening of new account, balance enquiries, withdrawals, deposits and other services offered by the banking platform.
- The system must be able to reconcile in a form of a report to determine the amount of money collected on behalf of each third party as well as the amount of money distributed on behalf of the third party for a specific period.
 - user wants to view a reports of third party transaction
 - user accesses the reporting components of the system
 - user generates a report as per requirements
- The system must be able to validate the customer's account number based on the Business rules per specific customers
- The system must be able to allow the user to scan the barcode into the system to avoid human error while capturing (The third parties invoices sent to the customers have barcodes of customer accounts with the third party)
- The user must also be able to manually input the account number with double capture for verification where necessary.
 - customer wishes to make a third party bill payment
 - customer supplies the bill with a barcode for customer id
 - teller scans the barcode on the relevant bill payment component of the system
 - payment is made on the system

- The system must be able to integrate with Microsoft outlook for the email delivery services such as alerts and other functionalities that would be required by the post office
- System must be able to communicate with point of sale devices such as pat label printers, receipt printers, barcode scanners, pin pads, Bio readers, webcams, scales etc. the universal OPOS drivers must be supported. Any new peripheral not listed herewith must be easily supported and integrated
- The system must have with it in-built implementation and support capabilities for branch and open space (e.g. malls and public venues) kiosks, mobile and handheld devices for all required business transactions
- Ability to send SMS notifications based on certain transactions (e.g., tracking number for parcel) must be provided
- Transactions must be possible on a touch screen device such as monitor or mobile devices
- System must have features to integrate to UPU's IPS International Parcel Tracking and Track and Trace systems currently used by SAPO. These system use both Oracle and MS SQL databases and have

4.22 Methods of Payments

- The system must allow payments using different payment methods such as cash, credit card (visa and MasterCard, American express, etc.) and also allow use of different payment methods for the same transaction
- The combination of payment methods for the same transaction must be allowed
- The system must offer both private hosting capability for all the business functional requirements for SAPO as well as cloud option with all required features still supported
- The system must offer the ability to remotely attend to service calls on the terminals at the branch level. Ability to take over a terminal is needed
- For both cloud and private hosting, the system must enable authorised support personnel to manager the servers and tend to changes remotely

4.23 Management of Philately

- The system shall enable SAPO and/or its customers to perform the following activities with regard to Philately items:
- Manage the movement of Philately Inventory in the post office network
- Manage Deposit accounts (when required)
- Allow individual post offices to view own stock and where permitted view stock held by all post offices in the country
- Order items related to philately through the SAPO e-commerce platform

4.24 Management of Contract Customers

Should the SAPO require such services, the system shall enable the post office to manage contract customers with regard to the following services:

- Letters
- Parcels
- EMS
- Direct Mail
- Philately
- Franking Machines

4.25 Contract Customer Portal

The system shall integrate with the SAPO Customer portal to enable customers to perform on-line enquiries.

4.26 Manager Terminal Functionality

The Manager Terminal shall provide, to an authorised user, access to all functions of the system, including:

- Inventory Management
- Access Control and Management
- System Configuration
- Database Management
- Reporting

4.27 Reconciliation

The system shall, at the end of the day, perform automatic reconciliation of cash, postage stamps and any items sold.

4.28 Central Server Functionality

The Central Server shall automatically store and back up all sales data from the Cashier POS Terminals and Manager Terminals.

The Central Server shall also provide an automatic redundant data backup to ensure all sales transaction and inventory data is not lost. All data shall be available in a format that is easily accessible for reporting for a rolling period of not less than 13 months to permit year-to-year comparison.

Proposal shall include a complete system architecture diagram. Vendor may also provide any alternative data processing, storage, and backup architecture options that would meet the system functional requirements.

4.29 Credit/Debit Processing

Credit/Debit processing must be International Organization for Standardization (ISO 8583) as well as Payment Card Industry Data Security Standard (PCI-DSS) & Payment Application – Data Security Standard (PA-DSS) compliant. Each Cashier Terminal must be capable of

processing sales using Visa, MasterCard, American Express, credit and debit cards, and must have PA-DSS 1.2-approved software to connect to SAPO's existing acquirer, Standard Bank of South Africa.

4.30 Barcode Processing

The system shall read and process linear bar codes, via Bar Code readers at the Cashier POS Terminals, using the bar code scheme of Code 128 that is currently in place at SAPO.

4.31 Access Control Management

The system shall use a secure login utilizing a user ID and password, at the Manager and Cashier Terminals, as well as the Central Server. The system must allow SAPO to choose to force a password change at regular intervals, which shall be configurable by an authorised user, between 1 and 365 days.

The System Administrator level shall be able to add/delete/modify users, including other System Administrators, and shall be able to designate access to each function of the system by user group.

The system must provide SAPO with the ability to lock-out users at the end of their shifts and permit no login from another POS device till the beginning of the next shift.

4.32 System Configuration

The system shall provide the capability for an authorised user to configure, from the Manager Terminal, the following types of information, at a minimum:

- Layout of the Cashier Terminal sales screens, including icon placement, icon naming, and screen flow.
- Control of cash drawer opening
- Text and graphics printed on receipt
- Layout of Manager Terminal screen
- Product categories, types and prices
- Access control and management parameters
- Reports to be available at Cashier Terminals

4.33 Centralised Product Database

The proposed system shall have a central product database that will permit SAPO to add, change and remove products as the situation warrants. Such changes should be performed without resorting to coding.

4.34 Transaction Recording

For every transaction conducted at the Cashier POS Terminal, the system shall record the following:

- transaction date,
- time,
- cashier ID,
- Post Office ID,

- Terminal ID,
- Product type,
- action,
- sales amount,
- payment type,
- and transaction ID number.

For credit card transactions, system must also record authorization number, and last 4 digits of credit card number.

All transactions conducted at a Cashier Terminal must be immediately available to be used for reporting from both the Cashier Terminal and Manager Terminal. Additionally, all transactions must be forwarded to the Central Server on a regular basis, on a schedule configurable by an authorised user, for backup and archiving. SAPO may elect to network Cashier, Manager, and Central Servers on a real-time basis. The system shall be capable of supporting this functionality.

All transactions conducted on all cashier and manager terminals, as well as the central server, shall be recorded in audit files, which shall be accessible by an authorised user.

4.35 SQL Database

The system shall store all data in a sql database.

4.36 Audit and Logging

The system shall log all transactions and security relevant events.

4.37 Export to Revenue Collection Facility

The proposed solution will interface with the SAP ERP system through the SAPO Enterprise Services Bus for the purpose of posting files to the ERP.

The xml data shall include the

- Store ID,
- POS ID,
- Date of Transaction,
- Time of the Transaction,
- Type of the Transaction (Credit, Debit etc.),
- Tender used to pay for goods and services,
- Quantity and
- Amount paid.

4.38 Reporting

The following reports in the form of graphs and charts should be available on a daily basis:

- Volume of products sold by product type per week/month

- Retail sales by product type per week/month
- Boxes sold, occupied, unoccupied per outlet
- End of day/week/month reports
- Transaction log interrogation
- Track and trace item report
- Postage sales data
- EMS business data
- Money order volumes and values
- Philatelic sales
- Parcel quantities (Domestic and international)

4.39 Hardware Compatibility

The system shall be able to work with a touch screen monitor and all OPOS compliant devices. The POS devices must be compatible with the SAPO standard endpoint anti-virus protection solution. The use of a Multi-factor authentication for remote access must be supported. The POS devices must further support tokenization as well as Point-to-Point Encryption (P2PE).

4.40 Technical Solution Capabilities

Platform Agnostic

- The proposed solution's core terminal PC or laptop base units must be platform agnostic.
- The server enterprise layer can be platform bound.

For each layer (terminal, hand held device, mobile device, branch layer and enterprise layer/servers) describe the following:

- List all Operating Systems Supported by the solution.
- Provide a table of Operating System, all Web Browser/s and their versions compatibles with the Operating system.
- Explain the support for all the modules of the solution for open source operating systems.
- Explain the support for all the modules for Windows Operating Systems and list all Windows Operating Systems Supported

1.16 Data Management

The proposed system shall have a central product database that will permit SAPO to add, change and remove products as the situation warrants. Such changes should be performed without resorting to coding

Transaction management

The proposed system shall have a central product database that will permit SAPO to add, change and remove products as the situation warrants. Such changes should be performed without resorting to coding.

- For every transaction conducted at the Cashier POS Terminal, the system shall record the following:
 - transaction date,
 - time,
 - cashier ID,
 - Post Office ID,
 - Terminal ID,
 - Product type,
 - action,
 - sales amount,
 - payment type,
 - Transaction ID number.
- For credit card transactions, system must also record authorization number, and last 4 digits of credit card number
- All transactions conducted at a Cashier Terminal must be immediately available to be used for reporting from both the Cashier Terminal and Manager Terminal
- Additionally, all transactions must be forwarded to the Central Server on a regular basis, on a schedule configurable by an authorised user, for backup and archiving. SAPO may elect to network Cashier, Manager, and Central Servers on a real-time basis. The system shall be capable of supporting this functionality
- All transactions conducted on all cashier and manager terminals, as well as the central server, shall be recorded in audit files, which shall be accessible by an authorised user

Mobile device support

The system must allow integration with mobile technology.

Real-time integration to different 3rd party systems

The system must allow for the real-time connectivity via web services with the different third party systems.

Online transacting

The system must allow transacting online such as on a thin client mode. Whenever the system has network connectivity, all transactions performed must be done on the server via a thin client mode

Offline transacting

Sometimes there are network connectivity issues. The system must allow the users to transact certain transactions on an offline mode and as soon as the network connectivity is restored, all the transactions performed on the offline mode must be uploaded.

Middle layer integration

The system must be able to integrate with the middle layer systems such as IBM MQ and Sterling Connect Direct in order to transfer files to the backend systems such as finance

Files generated and formats

There are certain file formats that the existing backend systems use at the post office. The file types will be communicated by the post office

Integrate to AD

The system must be able to integrate with Microsoft active directory with the purpose of validating users

Integrate to SAP

The system must be able to integrate to SAP via web calls and though file sharing methods such as s/FTP, Middle Layer or APIs. Any other ERP system that SAPO may elect to use must be easily integrated as well

Integrate to email service

The system must be able to integrate with Microsoft outlook for the email delivery services such as alerts and other functionalities that would be required by the post office

Peripherals integration

System must be able to communicate with point of sale devices such as pat label printers, receipt printers, barcode scanners, pin pads, Bio readers, webcams, scales etc. the universal OPOS drivers must be supported. Any new peripheral not listed herewith must be easily supported and integrated

Handheld, Mobile and Kiosk support

The system must have with it in-built implementation and support capabilities for branch and open space (e.g. malls and public venues) kiosks, mobile and handheld devices for all required business transactions.

SMS

Ability to send SMS notifications based on certain transactions (e.g., tracking number for parcel) must be provided

Thermal and Capacitive Support

Transactions must be possible on a touch screen device such as monitor or mobile devices

Integrate to Tracking Systems

System must have features to integrate to UPU's IPS International Parcel Tracking and Track and Trace systems currently used by SAPO. These system use both Oracle and MS SQL databases and have

User Training

All users should be trained is when implementing the system and any system changes

5. Contract Term

The contract term is a (5) five year period.

6. Service Areas and associated Branches

See attached Annexure A.

7. Bid Evaluation Process

The bid will be evaluated as follows:

- Phase 1: Gatekeeping Criteria
- Phase 2.: Bid Conditions
- Phase 3: Product demonstration/Due Diligence
- Phase 4: Preferential Point (specific goals) and Commercial –Price (90) and Preferential Point (specific goals) (10) or Price (80) and Preferential Point (20)

7.1 Gatekeeping Criteria 3

Bidders must submit the following mandatory documents Failure to comply will result in the disqualification of the bidder.

7.1.1 Completed Pricing schedule (Annexure F) in the format provided in the bid document.

7.1.2 Company profile to be provided

7.1.3 The Point of sales Software will adhere to South African regulations,

E.g. Reserve Bank regulations, including those of the Banking Association South Africa (BASA) and Payment Association of South Africa (PASA). The source code must be compliant with ISO 37301 and the Compliance Institute of South Africa guidelines and standards.

7.2 Bid Conditions

Bidders must submit the following documents. Should the bidder fail to submit at the time of closing of the bid, bidders will be requested to submit the outstanding or clarification documents within five (5) working days. Failure to comply will result in the disqualification of their bid.

7.2.1 Referral Letters

The must submit a signed client reference letter on the client letter head where Point of sales software and related services were provided and is in use. The letter must include the following:

- a) Develop, integrate and manage a Point of Sales application.
- b) Supply, install and commission all required hardware and software required for the implementation of the Point of sales system and related systems.
- c) Maintain and support the implemented Point of Sales application as per annexure 10 to meet the required operational SLA for an agreed period, based on the commercial agreement
- d) Configure and integrate with external partners as per integration specification documents supplied, including third party API vendors that is contracted to SAPO.
- e) System managed external contracts for the Point of Sales application.

The following letter should also include other services that has been provided that enhanced the customer experience and is part of the service offering and included in the detailed pricing schedule.

7.2.2 Proposed Solution

- ✓ Bidders to submit their proposed solution aligned to SAPO specification

7.3 Specific Goals (The Preferential Point System)

7.3.1 The specific goal that this project seeks to achieve is the empowerment and development of micro enterprise that are 51% Black owned.

7.3.2 Bidders will be required to submit the below proof indicating that they are 51% black owned

- BBBEE Certificate
- Or Sworn Affidavit

7.3.3 20/10 Point will be scored for the proof that the bidder is 51% Black Owned Micro Enterprise

7.3.4 The Preferential Point System that will be used for this tender are **-20/80** (20 Preferential point and 80 Pricing) or **10/90** (10 Preferential point and 90 Pricing)

Commercial (Price (80) and Specific Goals (20) or (Price (90) and Specific Goals (10

Criteria	Weight	Sub-criteria
Total Price	80/100	Benchmark against lowest quote
Contribution to specific Goals	20/100	Points will be awarded to bidders according to their specific goals as indicated in the specific goal table below:
Specific Goal		Scores
Bidding Company is an EME with a 51% Black ownership or more		20
Bidding Company is not an EME with a 51% Black ownership or more		0

OR

Criteria	Weight	Sub-criteria
Total Price	90/100	Benchmark against lowest quote
Contribution to specific Goals	10/100	Points will be awarded to bidders according to their specific goals as indicated in the specific goal table below:
Specific Goal		Scores
Bidding Company is an EME with a 51% Black ownership or more		10
Bidding Company is not an EME with a 51% Black ownership or more		0

Note: Tenderers who do not submit specific goal requirement will not be disqualified from the tendering process. They will not score point out of 20/10 for the specific goals but zero (0) point will be scored.

7.4 Compliance Documents

Bidders must submit the below documents for compliance purposes.

7.4.1 The bidder(s) must be registered on National Treasury Central Supplier Database (CSD). Bidders must submit proof that they are registered on CSD

7.4.2 Tax compliance requirements

SAPO will not do business with a supplier who is not tax compliant.

The tax compliance requirements as follows:

- Bidders shall submit their unique personal identification number (pin) issued by SARS to enable the verification of the bidder's tax status.
- In bids where consortia / joint ventures / sub-contractors are involved, each party must submit a separate proof of PIN / CSD number.

7.4.3 Bidders must complete and submit SBD4

7.4.4 Bidders must complete and submit SBD1

Note: SAPO shall disqualify bidders that are in the National Treasury list of restricted supplies.

8 Penalties

In the instance of a non-response or late response R100 will be levied per alarm activation / incident.

9 Product Demonstration/Due Diligence

SAPO reserves the right to conduct due diligence to verify the information submitted with the bidder's bid proposal. The bidder will be disqualified should the information not be verifiable.

Description	Compliant	Non-compliant	Comment
Compliant with all items in specification			
All product types management			
Price, product configurations			
Tracking and dispatching mail items			
Fees are easy to understand and system calculated			
Protection against Financial Loss			
Ability to transfer funds to individuals with or without bank accounts			
Mobile and Web Capabilities (advantage)			
Customer on boarding engagement modules			
Products selection and purchasing process, single check out			
Transaction history queries			
User profile management			
Financial payments and reconciliation, reversals			
Customer, transactional and financial settlement audit trail			

Description	Compliant	Non-compliant	Comment
Data analytics and reporting at branch, region, head office			
Customer payment and settlement			
Anti-money laundering report			