Functionality Required From Online Vending Services

20 October 2010

1 Introduction

This document defines the functionality that Eskom requires from the various types of vending issuing devices.

Some of the functions are listed as "optional" or "if required" etc. However, if a function is required from any of the potentially offered devices, it must obviously be supported by the server of the Online Vendor.

Therefore the functionality will be required in the server of the Online Vendor and tested by Eskom, unless that particular functionality is marked as "prohibited" or "optional" for all types of devices which will be offered by the Online Vendor.

2 Definition of Terms

2.1 Operator Driven Interface

This refers to the generic way of selling prepaid tokens from a handheld terminal, PC or other token issuing device. For this type of equipment, the data is entered by a trained/dedicated operator and the result is interpreted and issued by the operator, i.e. the customer does not directly interact with the sales equipment or interface.

2.2 Customer Driven Interface

The customer driven interface devices allow the end user to interact directly with the sales interface and there is no dedicated/trained operator to assist the customer. These interfaces typically include: ATM (auto teller machine), Internet transaction, Cell phone based transaction (through various channels like SMS, USSD, WAP, Internet, etc.)

2.3 Blind Vending and Number-Only Based Vending

"Blind Vending" refers to a scenario where the meter is not registered on the system but the transaction is still conducted by entering all the meter configuration (like supply group and tariff index) as well. Alternatively the data can be read from a meter card which also provides all the meter data. The opposite of this is known as "Number Only Based Vending" which means only the meter number is required and the meter must therefore be registered on the database to conduct the transaction.

Note: The word "Vending" is included in these definitions but the same concept applies for most types of transactions e.g. FBE transactions, Engineering Transactions and Key Changes.

3 Types of Functions

3.1 Mandatory Functions

Mandatory requirements occur with the following variations which are strictly managed by Eskom:

- Mandatory for all equipment means the function must be provided on all devices
- Mandatory where required means Eskom may identify a scenario where the function is needed and then it must be provided, e.g. If there are magnetic card meters in the area, the functionality to support magnetic tokens must be provided.
- Mandatory per location means that this functionality must be provided at every locality but it does not have to be provided from every device if there are multiple devices in the same locality, e.g. "Blind Vending" is mandatory per location which means multiple till points in a shop can only allow "Number Based Vending" as long as there are sufficient dedicated points that also allow "Blind Vending".

Note: Eskom reserves the right to determine how many devices will be required per locality for functions that are mandatory "per location" or "where required", e.g. For sites with few magnetic card meters it may be sufficient to provide only one device that can vend magnetic tokens, but where there are many customers that buy magnetic card tokens, it will be necessary to provide that functionality from almost all devices.

3.2 Optional Functions

Optional functionality is not required by Eskom and is mostly for the benefit of the vendor or customer.

3.3 Prohibited Functions

Some functionality carries unacceptable risk under certain conditions and shall not be provided if prohibited for a specific device or interface.

4 Types of Client Machines

4.1 Operator Driven Devices

Operator driven devices typically include normal PCs and handheld terminals (e.g. credit card machines). They may be at a fixed location or portable, but they must always be operated by an identified and trained operator. The operator is typically contractually bound by the vendor.

4.2 Customer Driven Devices

Customer driven devices are where the end user/customer has direct interaction with the interface like; ATMs (Auto Teller Machines), Internet based transactions, various types of cellular phone transactions (e.g. SMS, USSD, WAP and internet.). These devices do not provide trained operators or dedicated personnel and allow typically less flexibility when requesting tokens.

4.3 Customer Support (Eskom only PSG functionality)

The Prepayment Support Gateway (PSG) is a dedicated customer support device and is only available to trained Eskom employees to provide specialised customer support functions.

5 Functionality Required Per Device

	Operator Driven Devices	Customer Driven Devices	Customer Support (PSG)
Functionality provided			
Number only based vending	all equipment	all equipment	all equipment
Enter all data (Blind vending)	per location	prohibited	all equipment
Produce magnetic tokens	where required	optional	where required
Convert numeric to mag token	where required	optional	where required
Use Cases Supported			
Purchase Credit Token (may include auto FBE or Debt from server)	all equipment	all equipment	prohibited
Collect FBE Token	all equipment	all equipment	all equipment
Meter Credit Transfer Token	prohibited	prohibited	all equipment
Update Meter Key (must also encode meter card)	per location	prohibited	all equipment
Engineering Key Change (must also encode meter card)	prohibited	prohibited	all equipment
Account Payment (manual selection to pay)	per location	prohibited	prohibited
Pay Debt (manual selection to pay)	per location	optional	prohibited
Reprint Transaction	all equipment	all equipment	all equipment
Confirm Meter Details (manually make a Meter Card)	per location	prohibited	all equipment
Confirm Customer Details	optional	prohibited	all equipment
Verify Token	optional	prohibited	all equipment
Capture Customer Fault	per location	prohibited	prohibited
Trial Vend (no user interface)	optional	optional	optional
Vendor Statement	optional	optional	optional
Create Deposit Slip	optional	optional	optional
Reprint Deposit Slip	optional	optional	optional
Non Meter Specific (Test Tokens)	prohibited	prohibited	all equipment
Meter Engineering Tokens (Power limit, clear credit etc.)	prohibited	prohibited	all equipment
Advice(Last_Response) (no user interface)	all equipment	all equipment	all equipment