MTN Zambia IT

Sim Card Management

Process

Document

January 2019

Table of Contents

i. Purpose

The purpose of this document is to present the processes for implementation in MTN Zambia IT. Information provided in this document serves as a common reference point and language for the discussions and implementation of the Sim Card Management Processes as part of MTN Zambia IT implementation. The purpose of this process document is to provide guidance in the process of SIM Management focusing on simplicity of activations, fraud mitigation and regulatory compliance. It covers the Sim Card Generation and Provisioning.

ii. Scope

This document applies to all Retail Outlets managing MTN products and services. It includes interactions with Supply Chain, Mobile Sales, Information Technology and Finance departments.

iii. Roles and Responsibilities

Key responsibilities for the specified activities rest with the designated functions/departments within the process flowcharts.

iv. Definition of Terms

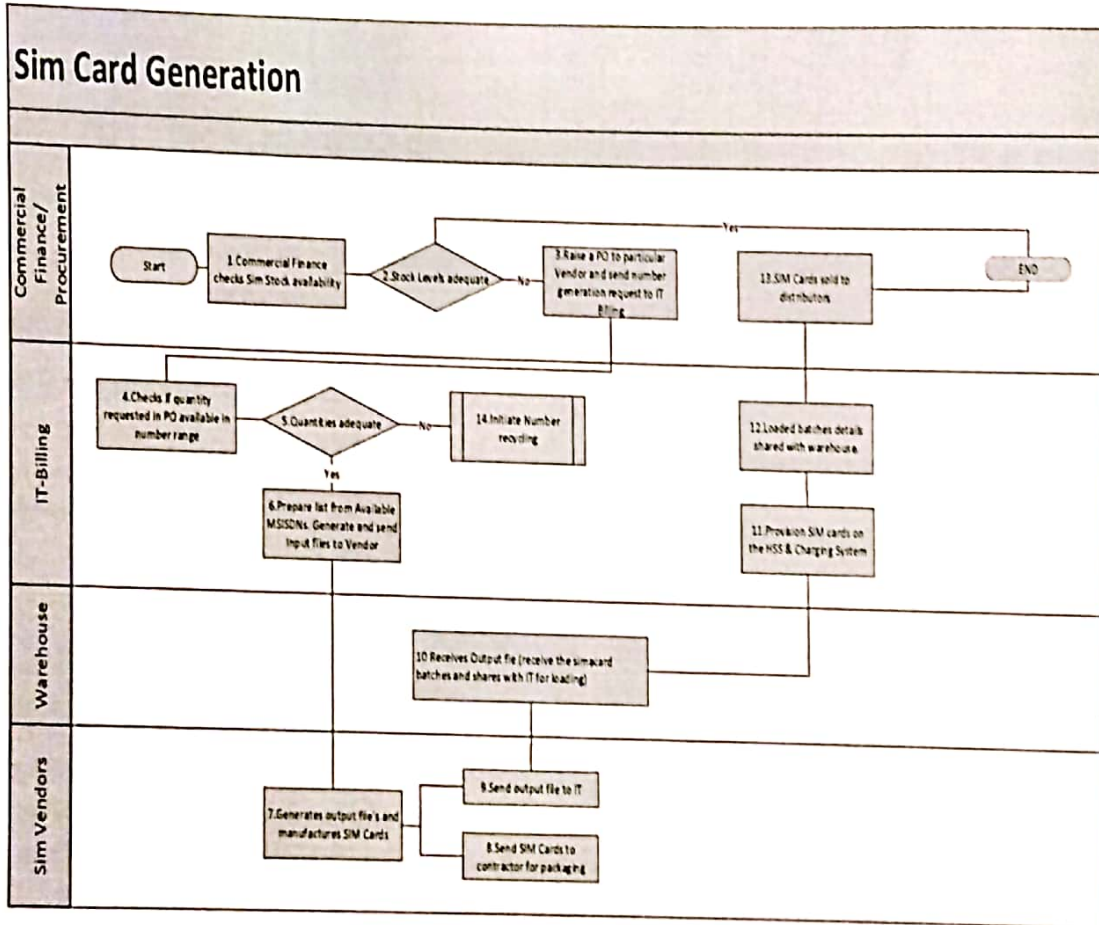| Term	Definitions
SIM CARD	A subscriber identity module or subscriber identification module (SIM), widely known as a SIM card, is an integrated circuit that is intended to securely store the international mobile subscriber identity (IMSI) number and its related key, which are used to identify and authenticate subscribers on mobile telephony devices (such as mobile phones and computers)

v. Processes

The various SIM Card management process are depicted below,

1.1. Sim Card generation Process

Sim Card Generation

Commercial Finance/Procurement	IT-Billing	Warehouse	Sim Vendors

Flowchart content:

Commercial Finance/Procurement:
- Start
- 1. Commercial Finance checks Sim Stock availability
- 2. Stock Levels adequate — No → 3. Raise a PO to particular Vendor and send number generation request to IT Billing
- Yes
- 13. SIM Cards sold to distributors
- END

IT-Billing:
- 4. Checks if quantity requested in PO available in number range
- 5. Quantities adequate — No → 14. Initiate Number recycling
- Yes
- 6. Prepare list from Available MSISDNs. Generate and send input files to Vendor
- 12. Loaded batches details shared with warehouse
- 11. Provision SIM cards on the HSS & Charging System

Warehouse:
- 10. Receives Output file (receive the simcard batches and shares with IT for loading)

Sim Vendors:
- 7. Generates output file's and manufactures SIM Cards
- 9. Send output file to IT
- 8. Send SIM Cards to contractor for packaging

SIM Card Generation Key notes

Nr.	Activity	Description	Responsibility	Input / Output	Supporting Tool
	SIM Card Generation Process				
1	Check Stock availability	• Commercial Finance checks stock levels of Sim Cards and Starter Packs	Commercial Finance		IFS
2	Confirm Stock Level	• Commercial Finance confirms if stock levels are adequate	Commercial Finance		IFS
3	Raise Purchase Order	Procurement Raises Purchase Order to a Sim Vendor and send a number generation request to IT Billing for number generation	Procurement		IFS
4	Check availability of number range	• IT Billing checks if number range is available and if they have adequate quantities	• IT Billing		Charging System
6	Generate input files from range and send to vendor	IT Billing prepares a list from the available numbers and send input files to the vendor via procurement	IT Billing		
7	Generate Output Files and Manufacture Cards	SIM Vendors receive the input files and generate output files and begin manufacturing physical SIM Cards	SIM Vendors		
8	Packaging	Sim Vendors send Sim Cards to Contractors for packaging	SIM Vendors		
9	Send Output File to IT	SIM Vendors send generated output to MTN Warehouse who receive the SIMCARD batches and shares with IT for loading	Warehouse		
10	Receive Output file	IT Billing receives output files from Sim Vendors	IT Billing		
11	Provisioning	IT Billing receives the output files and provision the SIM Cards on HSS and Charging System	IT Billing		HSS, Charging System
12	Share batch details	IT Billing shares Loaded batch details to Warehouse			

1.2 SIM Registration and Activation
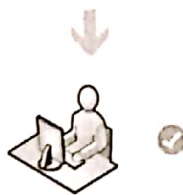
1.2.1 Process Flow
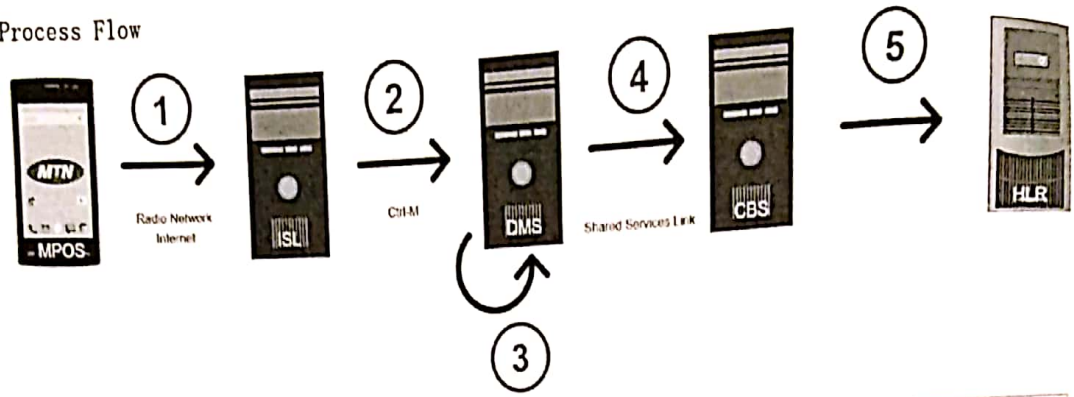
- Step 1 : Registration documents and KYC information sent from MPOS to ISL
- Step 2 : Registration documents sent from ISL to DMS
- Step 3 : Registration documents verified on DMS
- Step 4 : Confirmation sent from DMS to CBS
- Step 5 : Activation request sent from CBS to HLR

Step 1- Registration

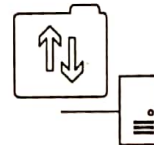Agent performs a registration getting full customer details and kyc documents (images of form and NRC OR Drivers license on Using MPOS App)

Step 3- Activation

Once verification is done number is activated on the network- By CBS-Request sent via EMA to network nodes and billing nodes for activate

Verifications of Customer details done by S & D team on DMS and CBS

Step 2- Verification

Scanned by CamScanner

SIM Registration and activation Key notes

Nr.	Activity	Description	Responsibility	Input / Output	Supporting Tool
	SIM Card Registration and activation Process				
1	Register	• The Agent performs a SIM Registration with the Customer using MPOS and uploads Customer details	Agent		MPOS
2	Verify KYC Documents	• S&D team verifies the Customer KYC details on DMS and CBS	S&D		CBS and DMS
3	Activation	Once Verification is done, activation is done on the network nodes	IT Billing		

Number Recycling

MTN Zambia Number Recycling

Phase

IT Billing

Start

Generate dump of POS +270 numbers. IT test numbers filtered out

Filter out numbers active on MoMo and share the dump with other business units.

IT Billing filter out all numbers highlighted by the business units

CBS filter out, Starter Packs and any numbers that have done a provisioning activity in the last 180 days

Final Filtered list recycled from the Network nodes and Charging System. Status in CBS is updated accordingly

List of numbers recycled generated and shared with MFS and IT BI for recycling on BIB and MoMo

End

IT MFS

IT MFS assign MoMo status to each of the numbers in the dump

JUMO recycle numbers with outstanding debt.

IT MFS recycle numbers on MoMo

IT Business Intelligence

IT BI recycle numbers on BIB

Networks

Core Network team, identify E1 numbers and highlight to IT Billing for removal from the list

CTO signs off based on confirmation of E1 removal from list

Marketing (CVM)

Marketing (CVM) identify numbers targeted for win back campaigns and highlight to IT Billing for removal

CMO signs off based on confirmation of removal of CVM, test lines and roaming test lines

Marketing (Data, Roaming etc)

Marketing identify roaming test numbers, product test numbers and highlight to IT Billing for removal

Sales & Distribution

SnD identify MPOS and EVD numbers and highlight to IT Billing for removal

CSDO signs based on confirmation of removal of MPOS and EVD numbers

Mobile Money

MoMo Head signs based on IT MFS confirmation of removal of active numbers

Number Recycling Process and Key notes

Nr.	Activity	Description	Responsibility	Input / Output	Supporting Tool
		Number Recycling Process			

Role	Step	Description
IT Billing	➤	IT Billing manages the recycling of numbers when the number range have been exhausted.
		STEP
		1.0 IT Billing generates a dump of RGS +270 numbers and filter out all the test numbers
		2.0 This is shared with the MOMO team to identify all numbers that are active on MOMO
		3.0 Then the MOMO number are filtered out and then the dump shared with all the business units
		4.0 All numbers highlighted from the business units are filtered out
		5.0 The next filter is on all numbers in CBS that have provisioning activity in last 180 days
		6.0 Final list after filtering is then recycled and shared with MFS,BI, BIB and MOMO for recycling
IT MFS	➤	IT MFS identify the active users and update the status in the shared list
		1.0 Once they receive the final list they recycle on MOMO and JUMO
Networks	➤	2.0 Identify E1 numbers and highlight
		3.0 CTO signs for any numbers to be removed once the final list is shared.
Marketing (CVM)	➤	➤ Identify numbers stationed for campaigns and highlight in the shared list
Marketing(Data, roaming)	➤	➤ Identify test and production test numbers from shared list and highlight from the list
Sales and Distribution	➤	➤ Identify MPOS and EVD numbers from the list and share
		➤ CSDO signs for any removal of MPOS or EVD numbers
Mobile Money	➤	➤ MOMO head signs for any removal of Mobile Money Number

MTN

3. Approval Sign-Off

Signature   Date

Kalombo Chilongoshi (signature)   29 /03 /2019

Kalombo Chilongoshi
IT Manager Billing and
Customer Care (CRM)

Signature   Date

(signature)   29/03/2019 .

Lottie Masi
Senior Manager IT
Governance and Service
Management

(signature)   29/8/19
Date

Signature

Godfrey Mulenga
Senior Manager IT
Operations

Signature   02. 04. 2019.

                                     Date

Thomas Lumba

Senior Manager Commercial Finance

--   08. 04. 2019

Signature   Date

Olanrewaju Lamina

CIO