

Kenya Switch Opportunities Letter of Intent

CashDingo Switch Services
P.O Box 18982 – 00100
Nairobi, Kenya

Regional Switch
Movement of Funds
Settlement

Effective October 23, 2008
Offer expires Nov 23 2008

1. Letter of intent

Between, on the one hand:

CashDingo Ltd.
P.O. Box 18982 – 00100
Nairobi, Kenya

Represented By:
Mark Sibthorpe
CEO

Signature _____ Date

Hereinafter referred to as “CashDingo”

And on the other:

<Company Name>
<Address line 1>
<City, Country>

Represented By:
<Name>
<Position>
<Phone>
<Cell>
<Email>

Signature _____ Date

Hereinafter referred to as “<Client Short Name>”

Purpose of the letter of intent.

The purpose of this document is to define the cooperation between the parties and to define the scope of switching services provided between CashDingo and <Client Short Name>. This document defines the steps necessary for <Client Short Name> to understand each parties requirements and obligations in order to be able to participate in the regional switch project. The project is broken into 3 phases and an agreement step as outlined below. The first step being to review the relevant documents and commitments and then to execute a formal agreement in order to proceed with

implementing the switching services outlined in this document. The regional project will hereinafter be referred to as “KenyaConnect” to signify the nature of the project to connect Kenyan banks to each other, regionally and with other switches worldwide.

The first step in the process is to review the rules and regulations, fees, and terms of agreement documents. Depending on the banks level of experience with such documents this could take several hours and involve stakeholders from different departments. These documents will be made available upon signing of the letter of intent. Once agreement and understanding of the documents is achieved, the subsequent phases will be initiated along with a formal agreement.

Subsequent to signing a formal agreement, there will be a signup fee that will be used to pay for training, implementation and support offered by CashDingo. This fee will be applied against your transaction fees for the first 9 months of operations. This applies only to the first 8 banks to sign up for the KenyaConnect project.

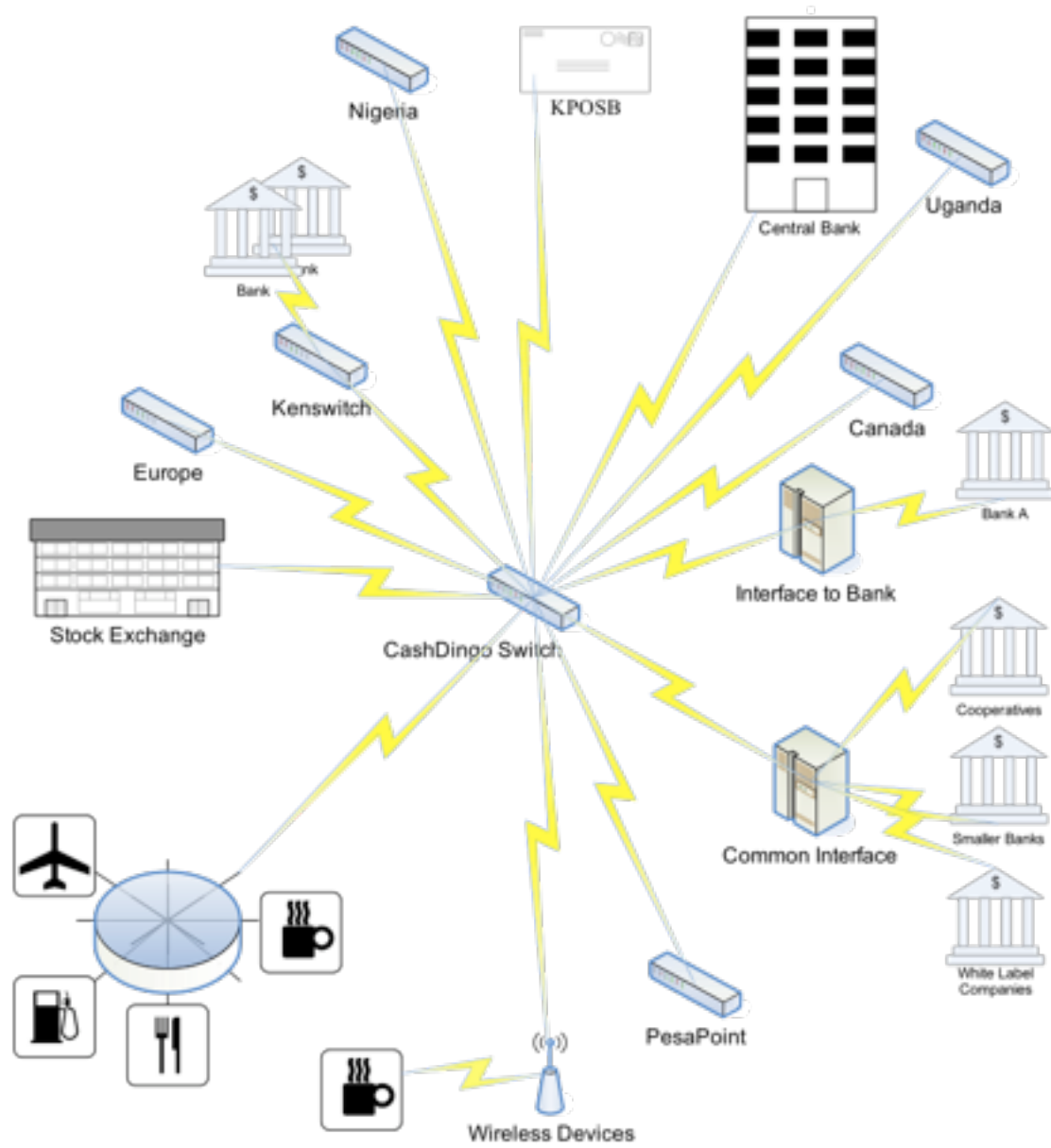
In addition CashDingo will:

- Operate on a separate network than the MasterCard or Visa networks and use the latest communication technology currently being deployed.
- Provide access to switching services to 3rd party device operators and POS networks in addition to existing ATM services available today. This will permit growth as there will be no restrictions to expansion because barriers such as connecting to banks individually will be eliminated.
- Promote the use of the latest technologies independent of the financial companies themselves in order to promote innovation, competition and efficiencies of scale.
- Provide the ability to provide loyalty programs and consumer statistic tracking through a combination of the core switch and the use of third party companies.
- Provide email money transfer and other forms of secure money transfer via the internet in future releases through third party services.
- Use an open architecture and set of international standards to provide Kenya with a powerful financial network that can interconnect Kenya’s competing ATM networks like Kenswitch, PesaPoint and potential white label ATM providers who wish to take advantage of a more open market.
- Promote the concept of Kenya becoming the central clearer for international money transfers for most if not all of Africa that over time can start flowing funds through Kenya. Currently CashDingo connects to one hundred percent of the banks in Nigeria and has started discussions with firms that manage switch transactions for Australia, Canada, China, United Kingdom, parts of South America, South East Asia and the United States.
- Actively promote infrastructure projects that improve financial services in Kenya and lead to more trade between African countries.

- Actively engage international switch companies to provide cost efficient alternatives to swift transfers.

2. Connection Diagram

The following diagram shows some of the possible connections CashDingo can connect to.



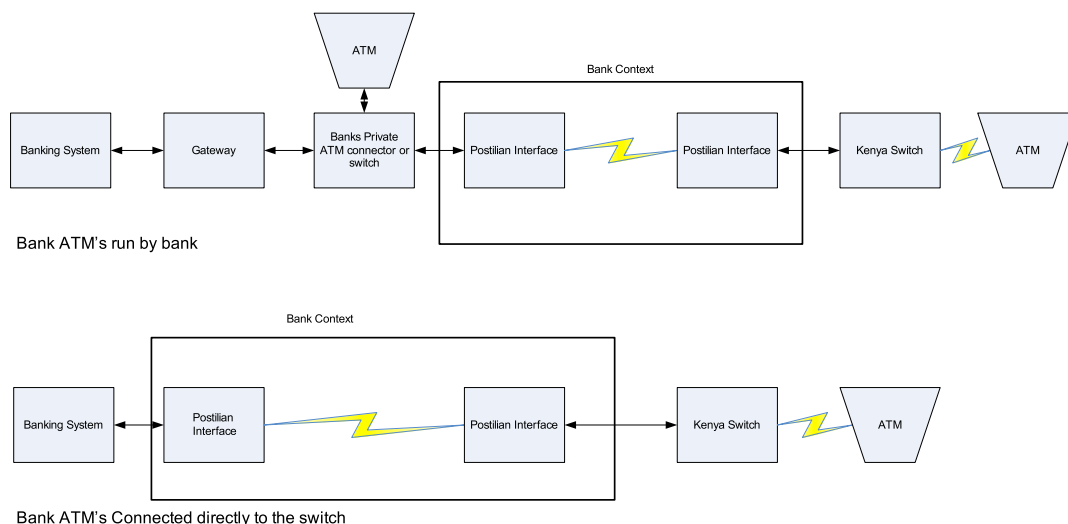
3. High Level Proposal

CashDingo Ltd. wishes to connect all the banks in Kenya and surrounding countries through a common platform referred to as a switch. The switch can be used to connect to other switch's, directly to the banking system, or to a common connection shared by a group of banks. The proposed project is broken down into three phases. Phase 1 is to implement basic functionality, much like a bank has today except that users can access funds from any ATM. Phase 2 is to add POS devices to the switch and the third phase is to add additional ATM functionality if the bank agrees.

4. Project Scope

The following context diagram shows the KenyaConnect components related to the banks involvement.

Kenya Switch Implementation Options Context Diagram



Under the above scenarios the bank will choose the deployment model from the following options.

1. Connect the banking system directly to the switch. Where a bank has very few ATM's this is a viable option.
2. Replace current switch with Postilian component that will drive ATM's and connect to Postilian switch.
3. Connect Postilian switch to clients switch.

The KenyaConnect project has the following phases:

4.1. Agreement Phase

The agreement phase is geared to working with banks to ensure a proper understanding of project and related documentation. This phase involves the review of project documentation, rules and regulations. Client obligations and responsibilities are stipulated and must be agreed before subsequent phases can be initiated. The related documents include: project overview; corporate rule book; and fees document. <Bank Short Name> must complete and sign off on the above documents before implementation can proceed.

4.2. Implementation

4.3. Phase 1

Deploy the CashDingo switch and connect to the bank in order to support ATM cash withdrawals

4.4. Phase 2

Implement standardized POS devices connected directly to CashDingo and then to the banking systems.

4.5. Phase 3

Upon the banks agreement implement cash and cheque deposits through ATM. In addition, additional functionality such as recent transactions can also be added.

5. Switch Location

The switch is to be located at a high availability centre in Nairobi that provides 99.9% uptime along with disaster recovery planning in place.

6. Deliverables

No	Deliverable	Companies Involved	Time Frame
1	Implement CashDingo Switch	CashDingo and Subcontractors	2 months
2	Implement connection from bank or banks switch to CashDingo switch	Bank, CashDingo and Subcontractors	3 weeks to 6 months
3	Implement Communication Link	Bank, Communications Company and CashDingo	TBD
4	QA (SIT / UAT) Assumption is that testing only involves testing of messaging between ATM and banking system and connection is standard.	Bank and CashDingo	5 to 15 days
5	Certification of Connection to all banks	CashDingo and Bank	5 days
6	Audit review of Certification process	Independent Review	3 days

7	Audit Approval	Governing Body	1 day (TBD)
8	Approval Sign off for Go Live	Independent body, Bank and CashDingo	1 day

7. Timeframe Impacts

There are four items that affect the timeframe discussed in this document.

1. World Cup Football (Soccer) – this is a hard deadline. Any bank that wishes to take advantage of the event needs to start preparing now.
2. The number and size of the banks that initially sign up will affect when the switch server will be up and running. Based on current feed back it is expected that a minimum of eight banks will comprise the first release. If this holds true then the switch can be up and running as early as December 08.
3. Implementing the connection to the switch will depend on the banking system, the interfaces available, and the card features used or wanted. Implementation times can vary drastically from two weeks to months. We will be conducting an assessment to identify all that is needed to be up and running.
4. The use of “EMV” or “Smart Card” will extend the timeline. CashDingo recommends the use of this technology to avoid fraud and theft.

8. Current Issues / Opportunities

This document focuses on the many challenges a consumer faces and how the financial services industry can assist or even solve many of them while also receiving a financial return. Most of the items listed below have come from our market research, interviews with industry representatives and FSD Kenya.

1. Kenya's data (voice, data, image) infrastructure is incomplete and lacks the basic performance found in competing countries. A business person in North America can look up information or conduct a financial transaction at least ten times faster than a Kenyan today. This means that Kenyan's are at a competitive disadvantage before they start to conduct business.
2. Consumers must typically hold several debit cards if they wish to make purchases at multiple business locations. This concern is echoed by many groups including FSD Kenya.
3. Foreign consumers typically deal with a small set of financial institutions in order to organize their funds versus Kenya where people may need to have numerous cards to access funds from different locations.
4. Merchants lose a percentage of sales due to the need to use cash as opposed to markets where debit cards are widely used.
5. Banks are missing opportunities to service clients with more flexible lending products that encourage clients to stay with a particular bank.

The following information comes from the government to person market analysis supply side report called "KENYA'S PAYMENT MARKET - Identifying an Enabling Environment for Government to Person Transfers Through the Banking Sector". Each item in bold can be resolved by the CashDingo switch.

- Commercial and Mutual Banks: have access to the national payment system and provide retail transaction acquiring through branches, smaller agencies, Automated Teller Machines (ATMs), electronic Point of Sale (POS) machines, telephone call centres, and websites. Most physical infrastructure is found in urban areas. **A small number of banks dominate the sector. Low-income customers in remote areas seldom benefit from this infrastructure because of high transaction fees, limited infrastructure presence, and because much of the infrastructure available is not interoperable and cannot be used by customers of other banks.**
- Kenya Post Office Savings Bank (KPOSB): the bank uses the Postal Corporation of Kenya's large agency network to provide basic savings and transfer services to its customers. Its current customer base of about one million makes it the largest provider of retail financial services in Kenya. **The bank is hampered by a lack of automated payments infrastructure - very few cards have been issued or ATMs deployed.**
- Micro-finance institutions (MFIs): are based mostly in major urban, peri-urban and large trading centres. MFIs provide limited transactional banking facilities, although this is expected to change with the Deposit Taking Microfinance Act. They typically use commercial bank infrastructure and

payment capabilities to process payments. Their focus is on providing credit.

The lack of regulation in the past, no direct access to the national payments system, and their small size in comparison to larger banks has precluded them as significant players in the payment services market.

- Savings and Credit Cooperatives (SACCOs): are both numerous (an estimated 3,500 operate in Kenya) and significant providers of financial services to peri-urban and rural Kenya (three to four million customers). They provide basic savings and credit facilities to their members. A small number of the larger SACCOs have access to payments via PesaPoint, a third-party card acquiring network. **However, none has its own electronic transaction acquiring infrastructure, apart from small branches or Front Office Service Activity (FOSA) points. The large number of small proprietary network SACCOs also limits their ability to process payments outside their service areas.**
- ATMs: relatively few ATMs are dispersed across Kenya. These are mainly deployed in urban centres. The top five providers are PesaPoint (a third-party provider), KCB, Equity, Co-operative Bank and Barclays. **Monthly ATM transactions in Kenya have been low by international standards. This is partly due to limited interoperability between ATM providers, as well as high costs when they are interoperable.**
- Retail transactions switching is relatively new in Kenya. There are two dominant retail transactions switches, Visa and Kenswitch. Visa is currently used by the larger ATM infrastructure providers. Kenswitch provides switching to smaller financial institutions and KPOSB. **PesaPoint includes members from both Kenswitch and Visa, but does not offer switching between PesaPoint members.**
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9. Other Opportunities

The following opportunities should be considered a sample of the true opportunities available to the banks of Kenya.

1. Accept Kenya visa fees at Nairobi International airport via a POS device in order to reduce the amount of cash and possible accounting errors. It is harder for staff to provide incorrect change.
2. Access to debit card purchases is limited at Nairobi International airport. This limits purchases from all groups including tourists.
3. Transport businesses such as taxis operating from Nairobi airport do not take credit cards. This opens the opportunity for a sub set of taxis to offer credit card payments or expanded use if the market demands it.
4. Loyalty programs in general are missing. There is an opportunity to link purchases to loyalty programs via debit or credit card transactions. A bank or group of banks can work with merchants to offer debit card programs that are also loyalty programs that also produce market research.
5. POS devices could be used as cash points where ATM coverage is limited.

6. Additional 3rd party device managers could have easy access to the market as barriers to entry will be reduced dramatically. This will increase access and fee based revenue for banks.

10. Glossary of Terms

The following terms are used through out this document.

No	Term	Description
1	ACQUIRER	The person, organization or financial institution, which accepts and processes a transaction on his own or someone else's behalf, is known as the Acquirer (i.e. the ATM owner).
2	AFFILIATE	This is a category of stakeholders that do not own an FEP but connect to CashDingo via a Member's FEP.
3	ASP	Application Service Processor is provided to banks who do not wish to own Front End processors but still want to issue cards and authorize transactions on the CashDingo network. The ASP is owned and managed by CashDingo and can be shared by many banks.
4	AUTHORISER	The person, organization or financial institution, which authorizes a transaction, is known as the authorizer. In Nigeria this will be the card issuer in every instance, as no stand-in-processing on behalf of a third party is planned.
5	CAPITAL ADEQUACY RATIO	Capital adequacy is based on the standard recommendation of Basle Committee of the Bank for International Settlement and is defined as Tier one capital plus Tier two capital divided by weighted average.
6	CARD ABSENT/ MANUAL ENTRY	Credit/Debit card information that is manually keyed-in through a computer or terminal key pad as opposed to being swiped through a terminal.
7	CARD ACCEPTORS	The person, organization or financial institution, which has a relationship with an issuer to accept cards or other payment tokens issued by these institutions.

8	CARD HOLDER	An individual who has opened a credit/Debit card account to make purchases and obtain cash advances.
	CBK	Central Bank of Kenya
9	CBN	Central Bank of Nigeria
10	CHARGE BACK	A reversal against a sale that was credited to the merchant's account. Charge backs are usually the result of an error made by the card holder's bank, a misunderstanding by the customer, or fraud. The merchant must provide proof that the goods and services in question were provided to the customer.
11	CTP	A customer touch point refers to POS terminals, self-service devices, ATMs or other device from which customers can initiate transactions or communicate with financial institutions.
12	CTP DRIVING	CTP driving involves offering consumers a variety of transactions and then fulfilling these transactions. This entails ensuring that the transactions are authorized, and completing the transaction to the customer's satisfaction. Driving includes managing the screens, states, menus, peripheral devices and monitoring the condition of devices in the field.
13	ENCODE	Plastic cards, which are 'encoded', have data conforming to ISO standard formats on the magnetic stripe on the backside of the plastic card. Such data is only machine-readable.
14	FEP	Front End processors are mini switches or ATM driving software deployed by organizations and used to connect to CashDingo.
15	FI	Financial Institution
16	HOT CARD	A hot card is a card on which there is some alert – usually because of a previous fraud or because it has been reported as 'stolen'.

17	ISEAC	CashDingo Stakeholder Evaluation and Arbitration Committee will be responsible for handling the admission of new stakeholders to CashDingo.
18	ISO	The International Standards Organisation
19	ISOs	An independent sales/Service organization that is registered with CashDingo to deploy CTPs that would be available on the switch network and set up credit/Debit card merchant accounts. ISOs may represent banks or third party processors or may be set up by a consortium of banks or independent organizations.
20	ISR	An independent Sales Representative that contracts to an independent sales/Service organization for the purpose of acting on behalf of the ISO to source for merchants.
21	ISSUER	The financial institution that issues a plastic card to a customer is known as the Card Issuer.
	KBA	Kenya Bankers Association
22	MAC	The message authentication code, which is produced by a checksum routine performed on data that may be transmitted 'in clear'. A complementary routine performed when message is received ensures integrity of data transmitted i.e. that it has not been altered/changed en route.
23	MERCHANT	A business that has a merchant account to accept credit/Debit cards.
24	National Switch	A switch that connects localized switches to those in other countries
25	NIBSS	Nigeria Inter-Bank Settlement System Plc

26	NOT-ON-US	Transactions acquired by one financial institution on behalf of another and to whom the transaction is referred for authorisation are described by the acquiring institution as 'not-on-us' transactions.
27	OFF-LINE	An 'off-line' state pertains when the authorising institution's network is unavailable to accept, authorise and process EFT transactions.
28	ON-LINE	An 'on-line' state pertains when the authorising institution's network is available to accept, authorise and process EFT transactions.
29	ON-US	Transactions acquired by a financial institution that also issued the payment tokens used to initiate the transaction.
30	PARTICIPANTS	Participants are another category of stakeholders that do not own FEPs and so they are connected directly to CashDingo. They are basically non-financial institutions.
31	PAYMENT TOKENS	Any acceptable payment instrument (physical or electronic) used to initiate a transaction e.g. Debit Cards, Credit Cards, etc.
32	POS	Point of sale terminal
33	SIT	System Integration Test
34	Switch	Technology that connects card issuers to financial systems in order to authorize cash withdrawals or purchases using ATM/ATB/POS devices. Switches can also be connected to other switches.
35	TPP	A Third-Party Processor is a company that processes credit/Debit card transactions and distributes funds. Many banks choose to outsource credit card processing to third party processors instead of handling it in-house while they handle debit card transactions in-house.
36	TRANSACTION FEE	A per transaction fee that is charged by the bank for processing transactions

37	UAT	User Acceptance Test
38	VAS	Value added services