

E-Zwich: Net 1 UEPS to Supply \$32m Worth Cards, PoS Terminals

Accra, Ghana: South African-based technology firm, Net1 UEPS Technologies has landed a R243 million (\$32 million) deal to implement the first nationwide roll-out of biometric-based smart card technology to financial institutions in Ghana. The deal will see millions of smart cards and PoS devices being rolled out across Ghana this year, with banking institutions driving the uptake of the technology.

Net1 is supported by Ghana's president, John Agyekum Kufuor, and the country's Central Bank, which has made it compulsory for the nation's 169 commercial banks, savings and loans providers and community banks to become part of the e-zwich initiative.

E-zwich works based on smart cards that are biometrics based – fingerprints – and not PINs. The card constitutes an individual's entire bank account, and transactions can be done either online or offline over any of the banks' platforms, at any time.

Some of the transactions that are enabled include card-to-card transfers, card-to-bank transfers, cash withdrawals at biometric-enabled ATMs, as well as card-to-person transfers. This involves a cardholder paying cash to an individual for whom a virtual bank account is created and they are furnished with a virtual code for it. The individual can then go to any bank in the country and provide the code in order to receive the cash.

The handheld devices the cards operate on can store up to 800 transactions at a time, after which it uses GPRS technology to link with the national live e-zwich site – linked to all the bank databases – to reflect those transactions. Customers can choose to pay slightly higher fees to do transactions online and have them reflect almost immediately. Up to eight accounts can be linked on one card and transactions between those accounts reflect immediately, even when done offline.

The cardholder has all their fingers scanned and can, therefore, use any of them to do transactions. However, one finger can be selected as a “panic button”, should criminals target the person. When the “panic button” is used, it automatically drains all the cash in the account temporarily, leaving only a pre-set amount of cash with which to appease the criminals.

Brenda Steward, Net1 senior VP for marketing and sales, says Ghana has been able to take up the world-first initiative because it has no Visa or MasterCard infrastructure in place – technologies that are dependent on being online. “Underdeveloped African countries can, in other words, leapfrog countries like SA,” she says. “The technology is suited to emerging markets to bank the unbanked as it offers real-time offline capabilities.”

Ghana has about 22 million people, of which only about 800, 000 are banked. President Kufuor has said the country's banks need more people to become banked in order to have more cash

to push into services, hence the drive to connect millions of people as soon as possible. Ghana is rich in natural resources, but is still heavily dependent on international financial and technical assistance. Its fixed-line infrastructure is generally unreliable. In addition, it only has about five million cellular phones in the entire country, says Steward.

The Net1 deal encompasses all hardware and software, both back- and front-office solutions – including a national disaster recovery site – and will see more than three million cards and 10 000 point-of-sale devices being rolled out by the end of the year. The contract includes a five-year maintenance agreement and the project has already been piloted at five of Ghana's commercial banks. Steward says Net1 has talked to some South African financial companies about taking up the technology, but has not yet achieved great success in this regard.

“South African banks generally already have online Visa and MasterCard infrastructure in place. African banks, on the other hand, are desperate to roll-out services,” she explains. Steward says the technology would work in SA, but would need “a strong central bank” to sway policy and effect a mindset change where banks compete on product offering and not price, and use a common infrastructure.

The company has other smart card-based business in SA, such as administering the payment of about 3.4 million pensioners every month for government.

Net1 has been awarded a contract to do a similar rollout to the one in Ghana in Iraq, where it aims to supply four million smart cards in its first year there. In addition, the company wants to introduce phone banking in Ghana as the smart cards that are currently used are already using SIM chips. This would mean individuals' cellphones would become point-of-sale devices and their bank account would be based on their phone.