



## South Africa equips the unbanked

South Africa has the biggest and most vibrant economy in the continent and a population just shy of 51 million with a young profile – almost a third are under 15. It's no surprise then that the country's mature banking sector is keen to find ways of innovating to attract new customers. A host of schemes is now being driven by its big four banks – ABSA, Standard Bank, FNB and Nedbank – backed by Visa and MasterCard, with the deployment of contactless payment cards on the back of transport applications one of the most exciting initiatives.

### **Background**

Public transport is popular in South Africa, with 45 million trips being taken each day by minibus, taxi, train and bus.

Like their counterparts around the world, the country's transport operators are keen to remove cash from the system. The reason? Cash is a problem for commuters and transport operators alike because it has to be kept secure. Plus transport operators want to improve fare collection, cut operating costs and introduce innovative and improved fare structures. Also on their wish-list is an interoperable system that every citizen, including the

poorest, can access and which enables them to minimize infrastructure costs. These demands led the National Department of Transport (NDOT) and transport operators to opt for an open loop system to encourage country-wide usage.

Entering the transit market is a major priority for Visa and MasterCard, so the two organizations have been keen to be involved in South Africa's contactless transit systems. Both entities are strongly encouraging issuers to base all new contactless dual interface projects on their new specifications. They believe these new applications are key to developing the contactless habit as the idea of 'tapping for a ride' is similar to 'tapping for a coffee'. The business case for deploying a dual interface transport and payment scheme is interesting, based on a fee for loading value onto the card, which is paid by the cardholder to the issuing bank when topping it up. There is also a fee for loading the transit application onto the card, which is paid by the transit operator to the issuing bank and subsequently included in the ticket price paid by the commuter. Plus there is a transaction fee when paying with the card, which is paid by the operator to the issuing bank.

# South Africa brings payment to the unbanked

**As South Africa moves into the latest stage of its innovative dual interface scheme, stakeholders want a pre-authorized debit equivalent to the prepaid card that has a number of functions and uses. It should:**

- > be issuable to unbanked people, children & tourists;
- > enable offline transactions using validators at station access gates as well as on buses and in taxis;
- > be interoperable so it can be used across multiple operators, making it essential that all cards, terminals, validators and readers are based on EMV international standards;
- > handle low-value retail payments – a huge plus for all with added socio-economic benefits;
- > store data, such as transit specifications, that can be certified by an NDOT-approved certification organization.

## The market

NDOT's goal is for one bank in each province to issue prepaid cards. This has clear benefits for issuers because there are 12 million-plus unbanked people in South Africa with an estimated 12 billion rand stashed under the mattress who are all potential customers. And new customers using their cards and reloading them in bank branches means improved brand awareness.

## The business drivers

South Africa's biggest bank, ABSA, is part of the Barclays Group, and has a strong record of innovation in the prepaid, debit and credit card markets. As a strong believer in and an early adopter of contactless, it has led contactless migration for new transit projects in Cape Town and Johannesburg. ABSA's My City Card project saw 150,000 prepaid cards issued to the unbanked, tourists and students in Cape Town at dedicated kiosks or bank branches. This was part of its rollout of standard One Touch-branded payment cards to its existing customers and which support the NDOT's goal of enabling electronic fare collection (EFC) payment system.

Other contactless projects include the country's first card-based system for private taxis, which is backed by ABSA, and Durban's MUVO card, issued by Standard Bank. Future schemes include ABSA-backed rollouts in Johannesburg and other major districts for minibus taxis and private operators.

## The needs

As ABSA and Standard Bank continue their efforts to be part of South Africa's transit schemes, they are addressing the issues associated with multiple partners and technologies.

When rolling out a payment scheme for public transport, the card must carry data specific to the transit application. It should be able to accommodate various fare structures, including distance-based tap-on and tap-off payments. It should also be able to cope with specific fares for different groups of passengers, such as pensioners and students, and to carry a variety of transit products, such as season tickets, daily, weekly and monthly passes, as well as prepaid trips. These all require data storage functionality, such as Pay@Gate, as well as Visa/MasterCard-certified products based on new specifications.

## The solution

As an expert in transport products as well as contactless payments, Gemalto has been a key player in driving South Africa's contactless deployment. It has also been working closely with payment associations locally and at the product line level to get products ready on time. This includes developing products to support NDOT tags; local lobbying with MasterCard to ensure certification as soon as the product was ready; creating an interim product which is being replaced by M/Chip Advance; plus ongoing work with ABSA and other banks. On top of this, Gemalto has developed a Visa transit application in close collaboration with Visa Inc and Visa South Africa.

## The technology

Both Visa and MasterCard have updated their specifications which are generating new opportunities for contactless products.

As a result, Gemalto has created a new dual interface product that supports MasterCard's M/Chip Advance. It has deployed the first ever M/Chip Advance product in Turkey and is now rolling out the technology with ABSA in South Africa. The products – Optelio Contactless D16 R4+ and now R6 – are certified for use with both half and full antennas, and offers all the functionality of M/Chip Advance, including data storage and prepaid applications. The firm is also rolling out Multos Combi ML4 with M/Chip Advance.

For Visa, Gemalto offers two types of applets on the Optelio Contactless D16 R4+ and R6 range that meet Visa requirements:

- > **VSDC2.8.1 range** meets Visa's VIS1.5 and VCSP2.1.1 specifications and is designed for interoperable payments and simplified Pay@Gate;
- > **Dual VSDC SESAME** meets all Visa specifications, including prepaid and transit, and supports full Pay@Gate and Global PIN.