

# Smart Card News

Smart Cards, SIM, Biometrics, NFC and RFID

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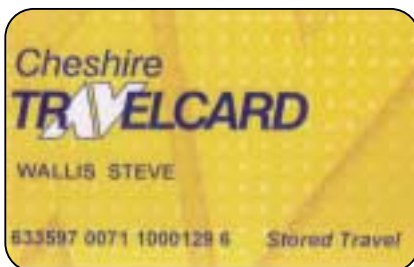
04 • 3 Italia Choose USIM Cards



07 • Oberthur Achieves FIPS 201



04 • TfL Scraps e-Purse for Oyster Card



04 • Cheshire ITSO HOPS Goes Live

## This Month's Lead Story

### How Would You Like to Pay? Cash, Card or Phone?



## In This Issue

### Regular Features

- 03 Lead Story - How Would You Like to Pay? Cash, Card or Phone
- 13 Events Diary

### World News In Brief

- 04 Smart Cards Save Australia \$3 Billion
- 04 Half a Million ePassports Supplied
- 04 France Issues First ePassport
- 05 Smart Cards for Indian Workers
- 05 Malaysian's Lose 2 Million ID Cards
- 06 Gemplus Chosend By Safink
- 06 Japan's First 3G CDMA Card Launch
- 07 Growth of Payment Cards in Latvia
- 07 Verifone to Acquire Lipman
- 08 Gemplus Reports Strong Sales Growth
- 09 New VP of Sales at INSIDE

### Featured Articles

- 10 Cracks in Chip and PIN?
- 11 The Smart Path into the Middle East
- 12 PayPass - The Faster and More Convenient Way to Pay
- 14 US Traveller Identity Cards
- 15 US International E-Passport Testing
- 16 Latin American Banks Shift Towards EMV Smart Cards
- 18 Is Your Information Safe?



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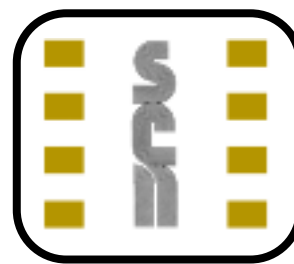
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Dear Subscribers,

Chip and PIN is back in the news again this month with Shell withdrawing the service from all its petrol filling stations because of an estimated £1 million fraud against its customers. Professor Ross Anderson from Cambridge University has pointed out that the use of PIN at the Point of Sale opens up a whole new vulnerability for the PIN which is of course also used for getting cash out of an ATM. Meanwhile Sandra Quinn from APACS wishes to assure us all that this won't happen, "We don't think they can use fake machines because the machines themselves are engineered to read the chip so they must be reading the chip very carefully". "That makes the transaction itself extremely secure."

Now I don't claim to be a security expert but even I can see the chinks here, we all know about false ATM fronts and one imagines that POS terminals are probably easier to attack. What is clear to all is that it is not the smart card that is being attacked but the terminals which then allows the fraudsters access to foreign ATMs that are using the magnetic stripe and not the chip. I seem to remember this PIN security was a big concern with the launch of EftPOS UK some 15 years ago which had stringent requirements on the physical security of the PIN pad. David Everett gives an impartial short briefing on this elsewhere in the newsletter.



The main event for me during May, apart for my Ruby Wedding Anniversary was my first trip to Egypt to attend the 4th. Card-Ex conference and exhibition held in Cairo. This was a very well attended event with some 200 delegates and around 50 exhibitors.

What did surprise me was the turn out of two ministers Dr. Tarek Kamel, Minister of Communications & Information Technology and Dr. Ahmad Darwish, Minister of State for Administration Development who made well informed speeches and then took the time out to visit each individual exhibitor and even ask them some questions.



One really did get the impression that these ministers were determined to get to grips with Smart Card Technology and they aren't even up for election just yet. More in this months Newsletter.

**Please Note**

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Smart Card News



# How Would You Like to Pay? Cash, Card or Phone?



Visa International, has collaborated with Maybank, Maxis Communications Berhad (Maxis) and Nokia, to launch the world's first Mobile Visa Wave Payment Pilot in Malaysia. Two hundred participants who are both Maybankard Visa cardholders and Maxis mobile phone subscribers will participate in the four-month trial which began at the end of April 2006. The "Mobile Visa Wave Payment Pilot" project marks the first step towards turning the mobile phones into an electronic wallet for consumers, officials at Visa have stated. Mobile Visa Wave Payment combines Near Field Communications (NFC) with Visa Wave Contactless Card technologies, building on the successes of the existing Visa Wave contactless card platform. This means that no change to the current acceptance infrastructure is required.

Paul Jung, Visa Asia Pacific's Regional Head for Emerging Products and Technology, said: "The completion of the national migration to EMV chip, coupled with the widespread use of wireless technology in Malaysia, has created numerous payment opportunities far beyond that of the simple swipe of a card. Mobile Visa Wave Payment shows innovative use of the latest technologies to increase convenience and provide secure transactions for cardholders on the move." The Visa Wave payment system was introduced last year and there are now some four million such cards globally, mainly in the United States. This represents a small fraction of the 1.4 billion Visa brand cards worldwide.

Visa International's country manager for Malaysia, Jeffrey Perera, said that Malaysia was the first country in the world to launch Visa Wave contactless card technology in 2004 and is now the first to launch Mobile Visa Wave Payment. "We introduced Visa Wave to Malaysia two years ago to the day, and now there are 2,500 outlets in Malaysia that accept Visa Wave. Currently there are more than 160,000 Visa Wave cards issued in Malaysia and we are targeting 600,000 cards by end-2006. By the end of this year, about 10% all Visa payment cards are expected to carry the Wave functionality and within the next three to five years, Visa Wave cards will be the norm rather than the exception," added Perera.

In Malaysia, the pilot Maybankard Visa Wave-enabled phone is two products in one. The Nokia 3220 model operates as a standard mobile phone connected to the Maxis network and, with the built-in Visa Wave function, can also be used to wave and pay wherever a Visa Wave sign is displayed. Cardholders selected for the pilot will be issued a phone pre-programmed with their regular Maybankard Visa Wave card information. Inside the Visa Wave-enabled phone cover is a secure chip and an antenna that sends an RF signal to the terminal, transferring payment information quickly and securely, to a reader connected to the merchant's card terminal. By simply holding the Visa Wave card at a close range (4cm) from the specially installed payment reader, the card will be detected and transaction processed.



"Merchants, noting that consumers are embracing Visa Wave, are very pleased with the faster-moving queues," said Jung. "Cardholders like the high-tech feel of Visa Wave and the fact that it's so easy to use, saving them time and bother from having to search for small change." These observations were backed by a recent NFC and contactless payment technology study in the US by Visa International and Philip Electronics. The study showed that consumers like the convenience, ease of use and trendy aspects of making secure transactions with their mobile phones. Retail purchases with the mobile phone were particularly well received, as participants found the NFC technology and Visa contactless payments easy to understand, convenient and fast.

Risto Sipila, Business Development Senior Manager at Nokia has said there is vast market potential for such services because mobile phone users worldwide are expected to surge to 3 billion by 2008, nearly half of the world's population. "This new technology won't replace your wallet entirely but it is very promising because it will make life easier for everyone," he said. If the trial is successful, the phone could be made available for commercial use as early as next year, he said, adding that Nokia is also working on developing more models for such usages.



## Smart Cards

### Smart Cards Save Australia \$3 Billion

The Australian Federal Government has released a report by consulting firm KPMG, which shows the Smart Card for welfare payments will save at least \$3 billion over 10 years. The Health Minister Tony Abbott has announced it was not normal practice to release such documents and described the predicted savings as an estimate. However Human Services Minister Joe Hockey has told Australian press he believes a \$3 billion saving is a conservative figure. He says he will release the KPMG calculations once commercial material is removed. The Government has decided to introduce the Smart Cards by 2010.

### TfL Scraps e-Purse for Oyster Card

Plans to launch an electronic wallet for contactless payments on the Oyster Smart Card have been scrapped by Transport for London (TfL). Originally TfL wanted to add an e-purse facility to the Oyster card to allow London commuters to pay for low-value goods and services. However after more than eight months of bidding and negotiation, TfL finally decided that the e-purse project was too costly to roll out.

### Half a Million ePassports Supplied

In the last six months, Gemplus has supplied over half a million personalised and biometric Setec ePassports to four different countries. Taking into account both the number of personalised biometric passports issued and the number of countries using Setec ePassports, Gemplus is currently the leading ePassport supplier in the world. Sweden and Norway were the two first pioneers worldwide to start nationwide roll-outs with biometric passports. In addition, Gemplus also supplies Sweden with biometric national eID cards suitable for travel within the Schengen area.

### 3 Italia Choose USIM Cards

Gemplus has been selected as the exclusive USIM partner of 3 Italia, an Italian Mobile Media Company, for its world first Mobile TV service. The Gemplus GemXplore Generations host the end-user's access rights and protect the access to the encrypted TV content, thus securing the actual service. The GemXplore cards will enable 3 Italia to dynamically manage each user profile, thus creating a highly flexible Mobile TV service.

### Cheshire ITSO HOPS Goes Live

UK Cheshire County Council's TravelCard ITSO HOPS (AMS) system is now in operational service. The HOPS (AMS) system, developed and provided by Applied Card Technologies Limited (ACT), and the first using the ITSO mandated SMS VPN communication network is now permanently connected to the ITSO SMS. Commenting on this recent progress, Helen Mitchell, Travelcard Development Officer for Cheshire County Council said: "This is an exciting achievement and a highly significant milestone, not only for the TravelCard project but for the progress of ITSO implementation in general. The ACT HOPS (AMS) is already fully integrated into our card issuing equipment as well as the various ETM equipment we are using both for the pilot stage and for the full scheme, meaning TravelCard's roll out plans are now at an extremely advanced stage."

### France Issues First ePassports

Axalto has supplied the electronic covers for the new passports being issued by the Hauts de Seine prefecture (issuing authority in France). Axalto, in coordination with a group of French industrial players, has worked alongside Imprimerie Nationale to meet the extremely tight deployment schedule recently set by the French Ministry of the Interior for the electronic passports designed for French citizens. Axalto will provide Imprimerie Nationale with around two million units in 2006. These new passports are now available in the Hauts de Seine region and deployment will be extended to the rest of mainland France by the end of May. These new modern travel documents feature Axseal, Axalto's e-passport technology that works on a contactless chip incorporated into the passport's cover.

### New Oce ePassport Reader

Oce has begun production of a new version of its successful Oce ID-Star 4054 passport reader incorporating the latest ePassport required security features. This 3rd generation reader, which scans passports, visas and other secure travel documents in colour, ultraviolet light, infrared and security laminate, now includes the latest RFID advancements from Integrated Engineering. The Oce ID-Star 4054 ePR supports all new security requirements in the field of biometrics based on the latest ICAO standards and recommendations. Oce's Document Technologies unit markets this solution worldwide.





## ASK e-Passports for Greece

ASK's ePassport technology has been selected by Toppan, the current provider of the personalisation solution to the Greek Authorities. This agreement involves several millions of passports to be delivered starting June 2006.

## Readers for Belgian eID Card

The Federal Information and Communication Technology (FedICT) Department of the Belgian Government has made a decision to deploy Advanced Card Systems Ltd's (ACS) ACR38 Smart Card readers for their national electronic identity (eID) cards. The initial scope is the issuance of electronic identity card readers to 12-year-old children when they obtain their eID cards for the first time.

## Smart Cards for Indian Workers

The Overseas Indians Affairs Ministry has announced a September 30 deadline for the roll out of Smart Cards for Indian workers abroad. The card, which contains all the relevant information, will save workers from carrying their passports always with them. The card will have the personal details that the passport has, plus the skills of the worker. The card being developed by the National Institute of Smart Government will cost about Rs 600 (£7 million) and the Ministry is yet to decide who will foot the bill for the cards. Initially cards will be issued to workers going to the Gulf and South-Eastern countries.

## Smart Cards for Karnataka Vehicles

The Karnataka government in India has embarked on an ambitious project to issue Smart Cards to vehicle owners across the state, putting an end to road tax evasion and preventing fabrication of fake documents. The state transport department is finalising tender guidelines to seek bids from vendors. The Smart Card project is part of a computerisation programme prepared for the transport department.

It rests on two legs. Computerised government records will identify all those whose taxes are overdue and record the tax paid on Smart Cards which will remove the chance of faking tax receipts. The Smart Card will include technical details of the vehicle such as its year of manufacture, model, engine number, chassis number, state permit, road tax payment, insurance payment, fitness certificate and registration details.

## Malaysian's Lose 2 Million ID Cards

Malaysian press has reported that Malaysians have lost two million MyKad, the smart identification card, since 2001, triggering a loss of 75 million ringgit (£11 million) to the government. The government has to shoulder the cost of producing each card at 38 ringgit (£5) for each person who gets the card for free, Deputy Home Affairs Minister Tan Chai Ho was quoted as saying. To compel citizens to take better care of the MyKads, the Home Affairs Ministry will propose higher fines for those who lose their cards and will also consider "penalising" repeated offenders, who have lost their cards three times or even more, said Tan. "We will not give them a new MyKad for three to six months, just to teach them a lesson and also to properly investigate why they lose it so many times," said the deputy minister on Sunday. Tan expressed his concern that certain quarters would get their hands on the lost MyKads, alter them and pass them off as their own for illegal activities.

## MyKad Card for 24 Million Malaysians

Unisys MSC has been awarded a two-year \$5 million contract as part of the national rollout of Malaysia's MyKad Smart Card project. This rollout was developed and implemented by Unisys and a consortium of companies on behalf of the government of Malaysia. This identity card is a government multi-application Smart Card and is the largest deployment of government Smart Cards with over 19 million cards being issued to date.

## R-UIM Cards For North America

Axalto's R-UIM Smart Cards and compatible phones are now available in North America, giving Code Division Multiple Access (CDMA) subscribers all of the benefits that were once exclusive to users of GSM networks. Axalto R-UIM cards ease handset upgrades, provide international roaming and add to overall convenience for subscribers of CDMA networks like Sprint, Verizon, Alltel and Bell Mobility. A R-UIM is the equivalent of the SIM card used on GSM phones. Based on the R-UIM, GSM and iDEN standards, Axalto has developed the Simera Airflex SIM card that can operate in CDMA, CDMA-1xRTT, CDMA 2000, W-CDMA (UMTS), GSM, iDEN and GPRS networks. With the Simera Airflex card in a suitable phone, CDMA carriers are now able to offer a true worldwide roaming service spanning across all continents and all types of wireless networks.



## Gemplus Chosen by Saflink

Gemplus has integrated its GemProx contactless reader into the SureAccess all-weather biometric Smart Card reader from Saflink. The integrated Smart Card reader solution is designed to comply with the US government's stringent Federal Information Processing Standard (FIPS) 201 requirements. In light of an increasing need for secure access to key national facilities, the Saflink SureAccess reader can strengthen security for both seaports and airports, and can be integrated with many existing physical access control systems. It is designed to comply with the HSPD-12/FIPS 201 directive, which will provide interoperable credentials for all federal employees and contractors.

## Japan's First 3G CDMA Card Launch

Axalto has launched the first third generation CDMA User Identification Module (UIM) commercial card in Japan with KDDI, one of Japan's leading mobile service providers. The Axalto cards are designed to work together with KDDI's CDMA 2000 EV-DO third generation mobile handsets. With the Axalto UIM card, KDDI offers increased transaction security and delivers groundbreaking portability ease for Japanese mobile users. This collaborative deployment also creates opportunities for additional innovative third generation applications development, in particular Public Key Infrastructure (PKI) based applications, to provide further personal, convenient and secure solutions to KDDI's mobile users.

## Smart Ticketing for Rail Franchise

The Department of Transport has issued an Invitation to Tender (ITT) for the South Western rail franchise replacement. Bidders for the new franchise will be asked to set out how a new smart ticketing system could be introduced across the mainline franchise area from 2009 onwards. The operator of the new franchise will have to ensure the new system also accepts existing Oyster products in London zones 1 - 6. This will ensure that future passengers can use Oyster Pay as You Go products as well as the newly available smart tickets. In advance of this introduction a zonal fares structure will be introduced for single and return fares across the Capital's rail network. The details are contained within the Invitation to Tender that has been issued to bidders for the new Franchise. It covers services currently operated by South West Trains and the Island Line on the Isle of Wight - both currently operated by Stagecoach plc.

## Companies Pass SIM Tests

Gemplus, Oberthur Card Systems and Sagem Orga, have teamed up to demonstrate interoperability of the Multimedia SIM. Tests were carried out in close cooperation with major handset manufacturers and were based on the MMC 4.1 protocol, which offers significant advantages in terms of maturity and IP connectivity. Gemplus, Oberthur Card Systems and Sagem Orga will now propose their common approach based on this guideline and its further versions to the appropriate standardisation committees.

## BA Upgrades Its Access Control

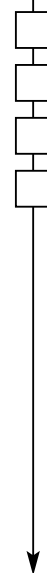
British Airways has completed a major software and hardware upgrade to the existing CEMAC2000 access control system installed at British Airways buildings throughout London's Heathrow and Gatwick airports. The airline has been using the CEM AC2000 system to control and monitor access at its facilities for over 15 years. Today's system has more than 750 CEM card readers and 50,000 active cardholders. As part of the upgrade, BA has facilitated the planned migration to Smart Cards by issuing dual technology Wiegand and Picopass Smart Cards.

## Parking System for Santa Monica

CardLogix has completed the first phase of parking meter automation for the city of Santa Monica, California. CardLogix helped the city develop a Smart Card-based solution for the payment of parking fees at meters throughout the city. The cards replace coins with stored value that is deducted at the meter to cover the amount of parking time desired. Card value is loaded and replenished at the city's public offices and the card can be used at any meters throughout Santa Monica. According to the Smart Card Alliance (SCA) the \$17 billion parking industry currently has 30 programs for Smart Card meters throughout the US.

## Secures Entry in US Air Force

SCM Microsystems' PACT physical access control terminals are being used in a new physical access system which supports both contact and contactless secure access applications at a US Air Force facility. SCM's PACT terminals are designed to support the 3.8 million contact interface Common Access Card (CAC) cards that have been distributed to US military personnel and contractors since late 2002, as well as new contactless interface CAC cards planned for distribution in the next few months.



## Growth of Payment Cards in Latvia

First Data International, a provider of electronic commerce and payment services, has announced the 2006 findings from its annual study of card usage in Latvia. The study, which was carried out on behalf of First Data by the Market and Public Opinion Research Centre SKDS, reveals that the number of card holders in Latvia who use cards to pay for their everyday purchases has grown by 12% over the past year. Payment cards are used by 57% of Latvians aged between 15 and 74 years and 31% of survey respondents are using their cards more often than a year ago.

There has been a 5% increase in banking clients over 2005. Today, 64% of Latvian people between 15 and 74 years old are banking clients and 92% of them have at least one valid card. 96% of card holders use payment cards to withdraw cash at ATMs. 17% use cards to pay bills at ATMs. Only 7% use their cards to make bookings and place orders online. Over the last year, the frequency of payment card use has grown. Although a majority (53%) of card users state that they are using their cards as often as a year ago, 31% are using their cards more often and only 7% less often. 12% of card users expect to use their cards more often over the next year; only 2% expect to use them less often.

## Oberthur Achieves FIPS 201

Oberthur Card Systems has become the first provider of a FIPS 201 certified Smart Card. With this certification, Government Agencies and other organisations now have a commercial source of dual interface Smart Cards to meet requirements as part of Homeland Security Presidential Directive 12.

Europay, MasterCard & Visa

## VeriFone to Acquire Lipman

VeriFone Holdings Inc and Lipman Electronic Engineering Ltd have entered into an agreement for VeriFone to acquire Lipman. Following the acquisition, VeriFone will become the largest global provider of electronic payment solutions and services. Lipman shareholders will receive for each Lipman share 0.5 shares of VeriFone common stock and \$14.304 in cash, adjusted for a special dividend.

## 2 Million EMV Cards for CartaSi

Axalto has been working alongside Ghirlanda, an Italian provider of banking cards, to supply high-end EMV cards to credit card issuer CartaSi. Under the contract, Axalto supplies the modules and the related digital security technology, while Ghirlanda is in charge of local card production and personalisation.

## Axalto Solution for Visa Program

Axalto has announced a turnkey Smart Card personalisation offer through the Visa Smart Breakthrough program, an initiative facilitating the EMV migration process. Axalto will be offering in particular a very compelling "fee-per-card" scheme that allows banks to migrate to the advanced EMV standard without a large upfront investment.

## First EMV Solution for Morocco

Axalto has supplied an EMV personalisation solution to the "Société Maghrébine de Monétique" (S2M), North Africa's leader in payment system solutions. With its Morocco-based EMV personalisation centre fully operational, S2M is poised to support banks in their migration to chip and will drive the move in the country. The first smart banking cards will be issued by mid-2006. Axalto provided S2M with a complete EMV package including consulting services, data preparation tools and a personalisation software suite.

## EMV Cards for Turkish Bank

Sagem Orga and local partner OLCSAN have won a major contract with Fortis Bank in Istanbul. Fortis Bank has placed a further order for several million EMV Lite Y Smart Cards with Sagem Orga. As part of the order for the major Turkish bank, Sagem Orga has completed the system customisation to provide Smart Card personalisation and customer loyalty features based on Sagem Orga CPS, the global card personalisation standard.

## QatarBanks Achieve EMV

QCB Deputy Governor HE Sheikh Fahad bin Faisal al-Thani of Qatar has announced that Qatar banks have now complied with the EMV specifications. QATAR has become the first country in the region to achieve near-total compliance of EMV. "By complying with the EMV specifications, banks operating in Qatar have become more secured against frauds.



A vast majority of the ATMs and POS machines in Qatar have become fully compliant with the Smart Card system. A majority of the issuing banks have also migrated from magnetic strip cards to Smart Cards," he said.

## Biometrics

### Follow-Up Order for Thai ID Card

Precise Biometrics has received a follow-up order from the Thai authorities concerning biometrics for national ID cards. Precise Biometrics estimates that the expected revenue during a three-year period will generate about £1.5 million. The Thailand project in its entirety means that Precise Biometrics, together with Smart Card Systems International Co, Ltd (SSI), will be delivering biometrics for the national ID card to all of Thailand's 64 million citizens.

### Singapore Unveils Biometric Passport

Singapore's Deputy Prime Minister and Minister for Home Affairs Wong Kan Seng, has unveiled the BioPass, Singapore's new biometric passport. The e-passport will contain a polycarbonate page that is embedded with a contactless chip which will carry the owner's facial and fingerprint biometric identifiers. This new e-passport is complimentary with the standards set by the International Civil Aviation Organisation (ICAO). The aim of the new e-passport will be to enhance its border security and will be available from August 2006.

### Cross Match Releases PIV One

Cross Match Technologies has released the PIV One, a Personal Identity Verification (PIV) solution to help federal agencies meet the requirements of President Bush's Homeland Security Presidential Directive-12 (HSPD-12). This directive outlines a new federal standard for a secure and reliable form of identification issued by all federal agencies to their employees and contractors. With PIV One, federal government agencies will be able to create verified biometric personal identity records of employees and contractors in compliance with the federal standard. The records can then be formatted into an Electronic Fingerprint Transmission Specification (EFTS) file and submitted to the FBI's Integrated Automated Fingerprint Identification System (IAFIS) for background checks. In addition, the records will contain the biometric and demographic information necessary to construct standards-based, compliant Smart Card credentials for the individuals.

## Financial

### Gemplus Reports Strong Sales Growth

Gemplus has reported results for their first quarter ended March 31, 2006. Net sales were 230.3 million euros, up 19.3% year-on-year driven by Financial Services and ID & Security. Gross profit was reported as 70.2 million euros and their Gross margin was 30.5%, down 1.6% point year-on-year. Working capital was up 18.6 million euros quarter-on-quarter, but decreased, as a percentage of sales, to 14%, compared with 16% a year ago. Operating income was up 12.3%, at 8.4 million euros. Payment microprocessor card revenue rose 55% year-on-year. Shipments of payment microprocessor cards grew 75% to 22.3 million units.

### Oberthur 2006 Q1 Sales

Oberthur Card Systems has reported first quarter 2006 revenue of 121.9 million euros, matching the record-breaking 118.1 million euros Q1 2005 sales and 121.1 million euros Q2 2005 sales. During the first three months of the year, Oberthur Card Systems has delivered 56 million microprocessor cards, a 29.4% increase year-on-year. In the Mobile segment, volumes reached a record level at 33.8 million units, showing a 70.7% growth compared to Q1 2005. Sales of payment cards amounted to 24.7 million euros with 16 million cards delivered vs. 19.6 million for the corresponding period last year. Sales for "Identity and Security" segment reached 10.6 million euros, up 18.9% on a year-on-year basis. Volumes for the Identity and Security segment reached 5.9 million units, a 61.1% growth pushed by strong demand in the Pay TV sector and e-passport, Moroccan ID card deliveries.

### PubliCARD Reports Financial Results

PubliCARD, Inc. has reported its revenues for the fourth quarter of 2005 decreased to \$928,000, compared to \$1,279,000 in 2004. The Company reported a net loss for the quarter ended December 31, 2005 of \$547,000 compared with a net loss of \$491,000, a year ago. As of December 31, 2005, cash and short-term investments totalled \$1,072,000. For the year ended December 31, 2005, sales were \$3,617,000 compared to \$4,395,000 a year ago. The Company reported a net loss of \$2,031,000, or \$.08 per share for the year ended December 31, 2005 compared to a net loss of \$4,859,000, or \$.20 per share, in 2004.







## Ingenico Q1 Sales Up By 28%

The Ingenico Group booked (unaudited) consolidated sales of 120 million euros (estimated) in the first quarter of 2006. On a like for like basis, this represents a 28% increase over the first quarter of 2005, and a 22.8% increase over the published sales figure (97.7 million euros) for Q1 2005

## Radio Frequency Identification

### RF Transceiver for Mobile Phones

Infineon Technologies has announced that Samsung, a mobile phone supplier, has selected the single-chip SMARTi PM CMOS radio frequency (RF) transceiver for new EDGE mobile phones that will be coming to the market in the second half of 2006. The SMARTi PM chip reduces component count in a complete GPRS/EDGE radio by 30%, requiring 50% less board space for the RF portion of the phone than competing solutions. "The market for EDGE mobile phones will double from 160 million in 2006 to more than 320 million in 2010, with an annual growth rate of 15%.

### RFID Readers for Jewellery Tags

The Jewellery Store (TJS) has selected Identification Technologies RFID reader plug-in module for handheld devices for a RFID-based jewellery identification project. TJS's RFID-based jewellery tagging solution, which enables the company to guarantee traceability and accurate inventory across the supply chain, provides the jewellery wholesale and retail industries with various benefits. With greater accountability for stock, TJS and its partners are able to offer their retail and wholesale clients enhanced financing options and more cost-effective insurance solutions

### First NFC / RFID mini-SD Card

Wireless Dynamics Inc has released the SDiD 2010, the first NFC (Near Field Communications) and RFID Reader/Writer in mini-SD Card form factor. The SdiD 2010 is also integrated with the SAM (Secured Access Module) used for many contactless payment standards. Now Smartphones, mobiles phones and PDA's with externally accessible mini-SD connectors can be enabled by the SDiD 2010 for mobile payment, e-ticket, retail and other NFC applications.

## On the Move

### New VP of Sales at INSIDE

INSIDE Contactless has appointed Charles Walton as Executive Vice President of Sales and Marketing and Philippe Martineau as Vice President of the NFC Business Line in order to help the company capitalise on the emerging markets in contactless.

### New Appointment at Infineon

Thomas Weber has been appointed Corporate Vice President and Head of Global Corporate Communications at Infineon Technologies AG, Munich, and will report directly to CEO Wolfgang Ziebart. Weber studied literature, political science and philosophy in Freiburg, Paris and Munich, and began his professional career in 1986 as press officer in the Components Group of Siemens AG.

### New Board Members at Hypercom

Hypercom Corp has announced the appointments of Todd S. Nelson, former Chairman, Chief Executive Officer and President of Apollo Group Inc. and Philippe Tartavull, President of Oberthur Card Systems North and Central America, to its board of directors effective April 3, 2006. The election expands the number of directors on the Hypercom board to six, five of whom are independent outside directors.

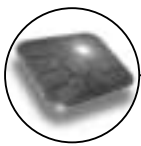
### New VP at Sagem Orga

Sagem Orga has appointed Holm Neuhäuser, formerly Managing Director of Dr. Neuhaus Telekommunikation GmbH in Hamburg, as Vice President Manufacturing. He has been given responsibility for their worldwide production operations, among other things.

### ACI Appoints New Consultant

ACI Worldwide has appointed Euan Tennant as e-ID business consultant. Responding to the growing interest in e-ID in both the public and private sectors, ACI has created this new position to enhance ACI's consulting expertise. He will work with ACI to use his experience and expertise in the Smart Cards and e-ID environments to consult customers on their e-ID strategy and implementation.





# Cracks in Chip and PIN?



By Dr David Everett, Principal Consultant, Microexpert Ltd



Dr David Everett

This month the press has been full of the fraud resulting from card skimming in Shell filling stations in the UK, reportedly at just three sites but which has resulted in customer accounts losing over £1 million. Shell has subsequently stopped using the PIN at its own filling stations. In the press this has been highlighted as a failure of 'chip and PIN' but this is misleading to say the least. In fact the chip is not really involved, what the fraudsters have done is to copy the magnetic stripe data and intercept the PIN entered at the terminal. This allows them to create a counterfeit magnetic stripe card for which they know the account PIN.

These cards of course can only be used in terminals and ATMs that accept a magnetic stripe card. This is still quite common in some parts of Europe, the Middle East, Asia and North America. The important point to note here is that the attack is not against the 'Chip' but against the tamper resistance properties of the terminal. That is not to say that you can't break the Smart Card chip but that we consider it sufficiently difficult or in other words it is fit for purpose.



Exposure of the PIN at the POS terminal is not a new problem. Some 15 years ago we faced the same problem in the design of the UK's National eftPOS scheme. Although initially a magnetic stripe card scheme the major concerns were around the PIN pads which were mandatory at the POS. As my colleagues will remember many long hours were spent in the specifications of the PIN Pad and the necessary tamper resistance certification. So what has gone wrong here?



Well in the first instance the terminals at the Shell garages are clearly not adequately tamper resistant. Even though it appears that the Trintech terminals were attacked by insiders this should not have been possible without considerable collusion. The problem is further compounded when the terminal reads both the magnetic stripe and Smart Card chip in the same reader action. Although a hacker can read the Track 2 data from the chip it should not be possible to predict the CVV (Card Verification Value) which is a security mechanism to stop hackers creating magnetic stripe data from just the account data. If the terminal reads both in one go then of course you get all the details including CVV and PIN.

So a few recommendations,

- 1) The PIN pad really should be tamper resistant (i.e. it should fail to operate when interfered with and should have tamper evident properties).
- 2) The reading of chip and magnetic stripe should not be combined. If the terminal is using the chip then why is it reading the magnetic stripe? (A lot of terminals seem to do this and even when there are separate reader heads the cashiers often read the magnetic stripe after a successful chip transaction, not just at Shell garages).
- 3) Distributed PIN Pads should be adequately protected using security cables or cryptographic techniques (I for one am never very happy when my card gets put in a slot on one side of the counter and I enter my PIN in another unit on the other side of the counter).

Of course as long as you allow the use of magnetic stripe cards then these vulnerabilities will always exist but it seems crazy that the exposure is being opened up in a chip and PIN environment.





# The Smart Path into the Middle East



By Patsy Everett, Managing Director, Smart Card News Ltd



*Patsy Everett*

Card-Ex 2006 is in its 4th. year and this time around the conference attracted around 200 delegates and 50 exhibitors, a 100% increase on 2005. Organised by Egytec Engineering Company, the conference was held in Cairo, Egypt and focused around the Middle Eastern and African markets. The conference was opened by Mr. Moustafa Samaha, Chairman of the Egyptian Association for Smart Card Industry & Applications

World attention is now focused on Egypt as an emerging market with a strong economy that is expected to exceed a growth rate of 5% in 2006. With a population of 65 million and a gross domestic product of \$75.5 billion, Egypt represents the second largest economy in the Middle East and North Africa. Egypt is witnessing noticeable growth in the utilisation of Smart Card solutions. The use of this technology has increased dramatically recently due to the growth in the use of mobile phones.

The conference itself was a wonderfully friendly, shambolic affair with some very good speakers and one or two obvious company promotional presentations. Subjects covered included a very good presentation by Kelly Richdale at A4 Vision of Switzerland on the new frontier e-Passports and border controls which use 2D-3D face recognition and David Smart from Keycorp. on e-Passport standards and secure efficient border crossings.



*Detlef Houdeau*

Detlef Houdeau of Infineon talked about the trends in digital identity such as travel documents, national electronic ID cards, Citizen cards and health cards. Ronald Saade of IRIS Corp. spoke about the evolution and usage of the first electronic biometric passport in Malaysia who have issued over 6 million passports since 1998.

Dr David Everett of Microexpert was his usual controversial, energetic self explaining that a national ID card will not stop fraud, illegal immigration, organised crime or terrorism and the reasons why not. His presentation highlights the difficulties in creating an identity infrastructure and showed how these problems can be overcome. David plans to publish an article on this subject in a future edition of Smart Card News but this month he has given us his views on Chip and PIN!



Hisham Surkhi, Business Development Manager ID&S, Gemplus, UAE gave a presentation about National electronic ID card Solutions saying "Governments in the world have realised that new level of security is required after the new changes in the world. Basically securing the identity of its own population became the concern of the governments. Having electronic ID cards helps governments to identify its citizens and to offer a convenient way of interacting with them.



There were two conference streams running, I of course was only interested in the card issues. The other stream was on e-banking solutions. Keeping to time did not seem to be important, but when the temperature outside is in the high 30's and there is a sandstorm raging, who cares. The exhibition was very professional and well attended with some 50 exhibitors, these included the likes of ACG, Abacard, BGS Smartcard Systems, Eastcompeace Smart Card Company, Egy-Card Technology, Giesecke & Devrient Egypt Ltd, Lastercard, Muhlbauer, Omnikey, Thales and Siemens Egypt, to name but a few

[www.egytec.com/card-Egypt.htm](http://www.egytec.com/card-Egypt.htm)



# PayPass - The Faster and More Convenient Way to Pay



By Art Kranzley, Executive Vice President, Advanced Payments, MasterCard International



The MasterCard PayPass contactless payment solution continues to provide consumers with a faster and more convenient way to pay for their small ticket purchases. To date, approximately seven million PayPass cards and devices have been issued to consumers and PayPass is now accepted at approximately 30,000 merchant locations around the world.

There are a number of PayPass-related programs currently underway in ten countries around the world. PayPass rollouts and trials have been announced in the United States, Canada, United Kingdom, Japan, Korea, Lebanon, Malaysia, Australia, Taiwan, and the Philippines, with many more programs and rollouts anticipated throughout 2006. In recognition of its success in leading the contactless payment market with its innovative PayPass program, MasterCard was recently awarded Frost & Sullivan's "2006 Market Penetration Leadership Award."

PayPass offers consumers a convenient alternative to cash that allows for small ticket purchases to be completed quickly, securely and easily. Consumers no longer need to fumble for cash and coins, swipe a card, or sign a receipt for any PayPass purchase under \$25 (purchases over \$25 will require a signature and a receipt). Users simply tap their PayPass-enabled card or device on the PayPass reader at participating merchants and they are on their way.



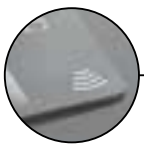
These past few years have been an exciting time for the payments industry. Contactless payments have expanded from a series of regional trials to a broader, more nationwide, and increasingly global, adoption of this new way to pay for everyday purchases. The real power behind contactless payments is that it benefits everyone in the value chain - consumers, financial institutions and merchants alike.

PayPass allows financial institutions to offer customers more payment options and it helps increase GDV for issuers by attracting payments away from cash, increasing account holder loyalty for their card programs and opening up new acceptance opportunities for "quick pay" environments. In the US, Chase, Citi, Citizens Financial Group, Inc., GE Consumer Finance, HSBC, KeyBank, MBNA and Peoples Bank of Paris, Texas have all begun offering MasterCard PayPass-enhanced payment programs to their account holders. PayPass technology enhances any payment account it is added to - be it a credit, debit, pre-paid/stored-value, co-brand, small business or private label account.



PayPass technology can be found in a number of different forms. PayPass cards include magnetic stripe technology, so the cards can also be used in the traditional manner anywhere MasterCard is accepted around the world. In regions where EMV Smart Cards are predominant, such as Europe and the Asia/Pacific, OneSmart PayPass combines both contact and contactless interfaces on one chip. PayPass technology can also be used in a number of devices, such as a convenient payment tag that fits on a key chain for easy access, and in mobile phones.

MasterCard PayPass also allows merchants to function more efficiently and serve their customers better. PayPass speeds consumers through the check-out process, reduces cash handling, improves efficiency and provides competitive differentiation. McDonald's was the first merchant to announce its acceptance of PayPass in August 2004, and additional US merchants quickly followed - including 7-Eleven, CVS, Duane Reade, Subway, Regal Entertainment Group, Wawa, Sheetz, Central Parking, Meijer Stores, Ritz Camera Centers and Boater's World Marine Centers.



Interest in PayPass has not been limited to retail establishments. PayPass technology has proved popular in sports facilities as well, and PayPass is now accepted in many Major League Baseball and National Football League stadiums, as well as at numerous golf events. MasterCard and its partners will also be conducting contactless payment trials for transit programs, such as with Citi and the MTA in select NYC subways, while trials continue with the vending industry as well.

**Global Interoperability Is Key** - The importance of a common user experience at the point of sale also led MasterCard, Visa and JCB Co. Ltd. to reach an agreement to utilize the MasterCard PayPass ISO/IEC 14443 Implementation Specification as a common communications protocol for radio frequency-based contactless payments. The agreements ensure that cards and terminals supporting all three payment organisations' contactless payment applications conform to the same communications protocol and undergo equivalent testing, thus ensuring interoperability across brands as well. We understand that global interoperability is vital to the success of any payment program. MasterCard PayPass was designed using globally interoperable standards, to ensure that it will work consistently around the world wherever it is accepted.



**Strong Marketing Support** - MasterCard launched a multi-layered national and regional consumer awareness campaign to promote PayPass - including television, newspaper, magazines, Internet banner advertisements, giant billboards in Times Square in New York City, posters on subways, buses, and commuter trains. In fact, the MasterCard PayPass "Marathoner - Convenience Store" 15-second spot was named to Adweek's "Best Spots of the Month" list for January 2006. MasterCard will continue to build broad awareness of PayPass nationally throughout 2006.

## Events Diary

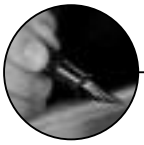
### June 2006

- 7 - 9 Asian Securitex 2006 - *Hong Kong, China* - [www.asiansecuritex.com](http://www.asiansecuritex.com)
- 8 - 9 The Electronic Passport Forum - *Paris, France* - [www.electronic-passport.com](http://www.electronic-passport.com)
- 8 - 9 Biometrics Institute Australia Conference - *Sydney, Australia* - [www.biometricsinstitute.org](http://www.biometricsinstitute.org)
- 13 - 14 CardEx Asia 2006 - *Kuala Lumpur, Malaysia* - [www.cardexasia.com](http://www.cardexasia.com)
- 13 Cardware 2006 - *Toronto, Canada* - <http://www.actcda.com>
- 13 - 14 Air & Port Security Expo Asia 06 - *Hong Kong, China* - [www.aps-expo.com](http://www.aps-expo.com)
- 14 - 17 CardExpo 2006 - *Lagos, Nigeria* - [www.cardexpoafrika.com/index\\_wa.htm](http://www.cardexpoafrika.com/index_wa.htm)
- 15 Cardware 2006 - *Ottawa, Canada* - <http://www.actcda.com>
- 24 - 28 Biometric Identification: Theory, Algorithms, Applications, *California, Los Angeles* - [www.uclaextension.edu](http://www.uclaextension.edu)
- 26 - 27 Contactless Cards - *London* - [www.smi-online.co.uk/events/overview.asp?is=8&ref=2351](http://www.smi-online.co.uk/events/overview.asp?is=8&ref=2351)
- 21 - 22 Extended Retail Solutions Symposium 2006 (Europe) - *Munich, Germany* - <http://erssummit.extendedretail.com>
- 27 - 28 Smart Label Summit Americas 2006 - *Miami, Florida, USA* - [www.smartlabelsevents.com](http://www.smartlabelsevents.com)
- 28 - 29 Australian Smart Cards Summit 2006 - *Sydney, Australia* - <http://www.acevents.com.au/cards2006/>

### July 2006

- 12-14 CardTech Korea and RFID World 2006 - *Seoul, South Korea* - <http://www.cardtechkorea.com>





# US Traveller Identity Cards



By Randy Vanderhoof, Executive Director, Smart Card Alliance



Randy Vanderhoof

Plans to use long read range RFID technology in a new border crossing card, the latest on the US electronic passport and the re-emergence of a registered traveler program, were among the news highlights that's recently emerged from the Smart Card Alliance's 5th Annual Smart Cards in Government Conference and Exhibition. Interest in government identity programs and technologies pushed attendance to a record level, attracting more than 600 government and technology leaders.

New travel documents to expedite land border crossings may include embedded RFID chips that can be read at a distance up to 30 feet, Jim Williams, director of the US Visit Program, Department of Homeland Security, told conference attendees. The announcement created debate, however, as many meeting attendees questioned the privacy and security protections afforded by the RFID technology proposed for the new identity document, called the PASS card (People Access Security Services). Conference attendees who commented during the question and answer period urged DHS to consider contactless smart chip technology, like that used in the State Department's new electronic passport, in order to achieve additional privacy protections and security measures. Contactless Smart Card technology also uses radio frequency for communications, but is based on microprocessors with built-in security features, capabilities that are not present in typical long read range RFID chips.

Driven by the Western Hemisphere Travel Initiative signed by the United States, Mexico and Canada and a federal mandate that requires a passport or an alternative document to cross these borders starting in 2008, the State Department and DHS are working together to define the PASS card technology and the process for issuing them. The State Department would be responsible for issuing the new documents. According to Williams and Frank Moss, deputy assistant secretary of state for passport services, who presented later in the conference program, both long-range RFID technology and contactless smart chip technology are still being evaluated for the PASS card. "The State and the Homeland Security are still resolving if this will be a proximity or distance read," said Moss. Providing the document as a card that can be carried in the wallet will make it convenient to carry and use. To increase security, DHS plans to use a digital facial image as a biometric, so border agents can make sure the person carrying the credential is the one to whom it was issued. But with \$1.8 billion in trade crossing the border every day, DHS needs to balance the goals of security and privacy protection with economic efficiency, which translates into a requirement for fast throughput at the land borders. To speed things up, the current thinking at DHS is that they would use some form of RFID that could be read from up to 30 feet away, so when individuals get to the checkpoint their information has been pre-loaded for the agent to see. The card would contain a number that is a "pointer" to a confidential record on a secure central database with the information about the cardholder, including a facial biometric.

According to Williams, security and privacy is assured by the fact that any personal information is stored remotely, and no personal information is broadcast. DHS is currently testing such technology, although test results have not yet been released. Questions and comments at the meeting showed a strong concern to make sure everything is done in a privacy-sensitive way. One problem Williams sees with contactless Smart Card technology, however, is that the read range is only a couple of inches, and customs and border agents are concerned about throughput and people dropping cards or sticking their arms out of the car. "We're very sensitive to privacy, but we're concerned about backups at entry points, too," said Williams. Williams also reported that since January 2004, the US Visit program has screened 53 million border crossings and stopped more than 1,000 people at the border. Sharing the data with the State Department for screening people has paid off, too. "They have had 16,500 biometric hits on people. These are people that have done something wrong," he said.

"This month, the electronic passports went into pilot production," Moss announced at the conference. "We expect to start issuing tourist e-passports in August." Explaining why the program took longer to implement than planned, Moss said the passport was completely re-designed and the adjudication process strengthened.



The State Department also added a number of security features to the electronic passport over the last year, including an anti-skimming material woven into the covers that greatly restricts reading the contactless smart chip in the passport when the cover is closed. There is also a printed data key inside the cover that must be scanned to unlock the ability to read the passport information. "We went back to the drawing board and took a belt-and-suspenders approach to protect the identity and privacy of Americans," said Moss.

The United States is the world's biggest issuer of passports, bigger than No. 2 UK and No. 3 Germany combined. "This year we will issue about 13 million, and we expect to reach 17 million in 2008," Moss said. The new electronic passport is based on international standards. It includes contactless smart chip technology with anti-forging features and a digital photograph to ensure the person carrying the passport is really the one to whom it was issued. This week, the Transportation Security Agency is expected to announce new standards for registered traveller programs that will be privately managed and selected locally by airports, according to Carter Morris, senior vice president of transportation security policy at the American Association of Airport Executives. The TSA hopes the program will streamline airport security processing by allowing people to be pre-screened, qualifying them for an expedited screening process. This could be a big benefit to all travellers, since 8% of air travelers represent 40% of air traffic, according to Morris.

The AAAE organised the Registered Traveller Interoperability Consortium, a group of more than 70 airports representing 80% of all passenger capacity. All of the members agreed to do business the same way, and follow the rules for technical interoperability and finances established by the TSA and the consortium. "We took a collaborative approach, and we hope that it bears fruit," said Morris.

## US International E-Passport Testing



By Michael Jackson, Deputy Secretary, Department of Homeland Security

The US Department of Homeland Security (DHS) has started testing e-Passports and e-Passport readers in anticipation of an upcoming deadline requiring all Visa Waiver travelers issued a passport after October 26, 2006 to present an e-Passport to enter the United States under the Visa Waiver Program (VWP). The use of the new e-Passports and deployment of e-Passport readers to US ports of entry will help to ensure the authenticity of international travel documents and provide US Customs and Border Protection officers with another invaluable tool for use in the border inspection process. We are adopting biometric, electronically-based, and secure travel documents that are tamper resistant, yet provide a very convenient way to move back and forth across our borders. We have now successfully completed e-Passport technology testing in a live environment. Working with Visa Waiver countries, we will begin to deploy these important security enhancements this year.

The US anticipates the deployment of e-Passport readers for processing VWP visitors by October 26, 2006. Recently, US VISIT conducted a successful test of e-Passports and e-Passport readers with Basic Access Control (BAC) at San Francisco International Airport. BAC enhances the security of the document and protects the privacy of the traveler by preventing the unauthorised reading, or "skimming," of information. The test, which was conducted between January 15, 2006 and April 15, 2006, evaluated the operational impact of reading and verifying information embedded in the e-Passports on the border inspection process. This test was a collaborative effort between the United States, Australia, New Zealand and Singapore. A total of 1,938 e-Passports were successfully processed during the test in San Francisco. A similar test was conducted in 2005 at Los Angeles International Airport.

E-Passports contain an individual's biographic information and a digital photograph on a contactless chip embedded in the document. DHS requires that any passport issued after the October 26 deadline, and used for VWP travel to the United States, must be an e-Passport. In addition, DHS will have the capability to read and authenticate these e-Passports. The US Department of State has begun issuing diplomatic e-Passports and expects to begin issuance of regular e-Passports this summer to US citizens. Travellers applying for admission under the VWP are allowed to enter the United States for up to 90 days for business or pleasure without obtaining a non-immigrant visa. Those VWP travellers that are issued a passport after October 26, 2006, must present an e-Passport.



# Latin American Banks Shift Towards EMV Smart Cards



By InfoAmericas, Market Research and Strategic Consultants



As the process of consolidation and acquisition among Latin American banks has matured, key players have shifted their attention to new technologies, seeking to boost card penetration and to reinforce their competitive positions. The new EMV Smart Cards are on the leading edge of this trend. Delayed Innovation Card penetration grew substantially during the consolidation of the banking sector, rising from 17% in 2000 to nearly 27% in 2005 across the region, and reaching over 30% in Brazil and Mexico.

Surprisingly, this growth was achieved without major upgrades to the underlying infrastructure and technology. This situation has now shifted, with an investment of more than \$200 million in card technologies expected in 2006, marking a rise of 70% over 2004 and 2005. This spending will follow the same route as other recent investments and will be targeted at software solutions for credit-rating and new terminals. Further investments are expected in CRM and retail-reward solutions linked to EMV technology technologies.

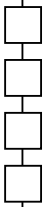
In retrospect, the fact that the banks and credit card companies delayed infrastructure upgrades during the period of consolidation has actually helped them. They avoided the cost of adopting intermediate solutions and are now in a position to leapfrog to the latest technologies. In some cases this has helped to reposition brands after acquisitions. For example, when HSBC acquired Bital in Mexico in 2004, it launched a new smart card bearing both Bital and HSBC branding. The most important new technology is the EMV card. This is a smart card that enables the global standard for payment systems developed by Europay, MasterCard and Visa (EMV). The standard defines protocols for interactions between the terminal and the card's computer chip, as well as the software installed on the card. Fraud prevention was the most important impetus for its development but it is also enabling personalised loyalty programs as well as new back-office solutions for credit risk assessment.

Although the EMV standard was published in 1994, the initial excitement quickly wore off and the cards were very slow to gain traction, especially in Latin America. The migration to EMV cards began in Mexico in 2002, when Santander Serfin launched the Uni Santander-K and Citigroup Banamex introduced B-Smart cards. Rollout has been aggressive in Brasil, Mexico and Argentina, and the near totality of card portfolios is expected to have migrated to EMV by 2008. This is slower than originally expected (and desired) but promises total transition.

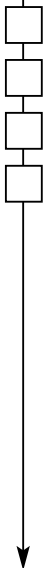
**Rising Fraud is a Key Motivator** - One reason that banks and acquirers were slow to adopt EMV technology was that card fraud rates in Latin America have traditionally been among the lowest in the world. While fraud remains low by global standards, the rapid growth of card penetration has pushed up the number of fraudulent incidents by some 15% annually. This has motivated key players to act, and most banks in the region initially indicated that reducing fraud was the most important benefit of the EMV standard.



The highest rate of migration from magnetic-strip cards to EMV cards is seen in Brazil, where almost 90% of terminals are EMV-compatible and where the fraud rate is reported to have fallen by more than 80%. Mexico is also migrating quickly and is projected to have 370,000 EMV-compliant terminals in service by the end of next year. In smaller markets like Chile and Peru, the rate of adoption will be slower as EMV-compliant cards are issued to new accounts, but existing cardholders continue to use magnetic-strip cards until they expire. The delayed migration to EMV in Latin America means that the global standard comes with the latest generation of card chips, which allows them to run state-of-the-art software. Memory has increased too, with the latest cards sporting 32KB and even 64KB of memory, compared with 8KB seen on earlier versions.







Among other benefits, this increase enables the storage of more complex customer profiles on the card. This greatly improves opportunities for cross-selling by banks and merchants, and helps them to develop targeted marketing. For example, they can offer special discounts if a particular card is used in a designated store. It also enables instant processing of loyalty rewards at point of sale, and can identify new customers the first time they use their card in a store. The result is higher transaction volumes per card and increased retail sales.

Improved customer profiling, rather than fraud reduction, was the principal motivation behind the decision of Mexico's BBVA-Bancomer to launch Mexico's first enhanced loyalty program that leverages smart card technology. The Vida Bancomer card, introduced in March 2005, uses custom-designed software developed by the bank. More than 2,000 merchants have already enrolled in the program, and the bank's objective is to reach at least 10,000 merchants. Consumer feedback in 2006 is positive, and includes high satisfaction scores for merchants.



**Increasing Low-Income Penetration** - The Latin American card market is at a critical juncture in its history. The higher-income market segments are saturated, while increasing penetration of lower-income segments is hampered by the absence of adequate credit rating systems. Smart Cards are an important part of the solution in both segments. In the higher-income segments, card issuers will rely more and more on information collected through the new cards to build customer profiles, to target marketing initiatives, to develop niche markets and to refine customer services. If these efforts are successful, the result will be an increase in the value of transactions per card.

In the low-income segment, card issuers have learned the hard way about the risks of offering cards to customers that have little or no credit history. In Colombia, Mexico and Brazil bad-debt write-offs grew rapidly between 2002 and 2005, and only now are beginning to be reigned in. And while most consumers with no credit cards are willing to pay premium interest rates to get their first card, in practice the activation rate is very low. In Brazil, for example, Santander-Banespa reports that nearly 40% of new cards issued to the low-income segment are not activated at the end of the first six months. Assuming that low-income cardholders do eventually use their cards, Smart Card technology provides a valuable tool for evaluating credit risk. Details of their transactions are stored on the card, making it easier to create customer profiles. By comparing their activity with behavior models, banks can develop systems for establishing and increasing credit limits, while at the same time developing tailored marketing tactics for this segment, with the goal of attracting debit card users to switch to credit cards.

Mexico's Banco Azteca, a bank that grew out of Grupo Elektra's consumer credit unit, provides a good example of this strategy. The bank is focused on the unbanked population that has been generally ignored by the mainstream banks. Smart Cards make it much easier for low-income individuals to use payment cards. These customers are generally poorly educated, may be illiterate, and often lack official ID, so the ability to store their photographs and biometric data in the card's memory is a major advantage.



While this might be seen as a negative factor to privacy-conscious affluent customers, the opposite is true for the unbanked. Personalisation bolsters their confidence in a card and helps to overcome their inherent distrust of traditional banks. If Banco Azteca can translate this increased confidence into sustained card usage, it will gain additional data that can further improve customer profiling and carry out highly-targeted marketing. The benefits of Smart Cards described here, including fraud reduction, enhanced loyalty schemes, better customer profiling and targeting, utility for low-income customers, and improved risk assessment are each substantial.

Taken together, they are a major market driver. As power of Smart Cards is increasingly exploited they will play a key role in continued strong growth of the payment card market in Latin America. 2006

<http://infoamericas.com>



# Is Your Information Safe?



By Jason Smith, Staff Reporter, Smart Card News Limited



Jason Smith

Information Security has become a top priority for government and business' in recent years. With the threat to information security continuing to grow companies from around the globe congregated in London for Infosecurity Europe 2006. This years show held at the Grand Hall, Olympia in London had over 300 exhibitors, showcasing a diverse range of products and services in the areas of network security, intrusion prevention, encryption, identity and access management, Smart Cards, regulatory compliance, anti-virus, anti spam and IT forensics to name a few. The show was attended by over 12,000 visitors this year compared to 11,000 in 2005, so the shows organisers saw a 12% increase in attendance.

After making my way through the labyrinth of stands to get my bearings and hunt out the best trinkets and freebies, I made my way to all the companies that were using Smart Cards as part of their security solutions. Gemplus had a small stand and once I found it hidden away amongst some of the more extravagant stands I found out that they were launching a new product line at the show called GemEvidence. They informed me that GemEvidence was a One Time Password (OTP) token-based solution for Small and Medium-Sized Enterprises (SMEs), to improve network security for mobile workers. GemEvidence allows SMEs to roll-out strong authentication tokens to remote and internal users in a cost effective way, while extending the security of Smart Cards to OTP tokens.



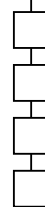
Siemens Communications showcased their portfolio of IT security products, professional services and applications at the show. The Siemens stand was predominantly focused on Smart Card technology and identity management. When I arrived at the stand I watched a presentation by Colin Robbins, Head of Technology Consulting, Siemens Insight Consulting, which gave the audience a detailed insight into the business processes involved in the provision of a single access Smart Card.



Robbins then introduced the identify management demonstration running on the Siemens stand. I was issued with my own personalised Smart Card, which enabled me to experience how the technology is used in a number of user applications including physical access, cashless vending and controlled system access. I was also shown how the Siemens SiPass Smart Card solution integrated with back office systems, such as SAP and identity management packages. Siemens gave me and other visitors a very good overview of how Smart Cards play a central role in safeguarding logical access to IT networks and physical access to buildings.

I later had a demonstration by Cherry Electrical Products Ltd of their G83-14000 Fingertip ID board which had an integrated fingerprint sensor. The board also featured a PC/SC Smart Card reader that enables password-free log-on and authentication. Pointsec Mobile Technologies announced their new Pointsec for PC version 6.0 which now comes with new access control for standardised authentication factors for Smart Cards and tokens. Aladdin Knowledge Systems was also present at the show and even though their main focus was on their new eSafe content security solution they were promoting their eToken authentication and password management solutions. A representative on the stand informed me that "Aladdin's eToken authentication helps ensure that only authorised individuals access your organisation's sensitive information, while their password management solutions increase productivity and security. He went on to say that "tokens, especially USB tokens, will see strong growth over the next five years."

ActivIdentity showcased their newly launched SecureLogin Single Sign-On solution. They claim it is the industry's first enterprise single sign-on (e-SSO) solution with fully integrated Smart Card support. The solution enables companies to improve their security, lower help desk support costs, deliver improved employee productivity, and comply with government regulations.



Authenticated users can quickly access their applications with automated log in and credential management, and eliminate the burden of remembering multiple credentials for different applications, or dealing with frustrating password policy. ActivIdentity also showcased their Enterprise Access Card solution. This solution consolidates employee credentials onto a single, secure Smart Card providing a photo ID as well as a security device that enables secure Windows and network login, PC 'locking', secure remote access (VPN), secure email with digital signatures, and single sign-on to your enterprise and desktop applications.

Following their partnership with Salt Group, Thales e-Security and their new partners were represented together at the show. On their stand they provided me with an on-line demonstration on how a financial company can offer cost effective mobile phone based authentication capabilities to their customers. Thales also demonstrated their integrated capabilities of SafeSign, their end-to-end authentication platform and Salt Group's mobile token authentication technology. SafeSign provides organisations with a single, central authentication platform with the ability to authenticate users with different security and authentication requirements, ensuring that the most appropriate level of security is applied to transactions. SafeSign can authenticate users and transactions regardless of channel and for a range of identity solutions, including PKI certificates, Smart Cards, USB tokens, handheld tokens and biometrics.



PriceWaterhouseCoopers together with the Department of Trade and Industry (DTI) unveiled the findings of the 2006 DTI information Security Breaches Survey at the show. The research, in its eight-year, takes place every two years and examines information security breaches to help UK businesses better understand the risks they face. The latest survey showed that 62% of UK companies had a security incident in the last year, down from 74% two years ago. Large businesses have also seen a reduction, down to 87% from 94%. Malicious incidents were responsible for the large increase in 2004; they now account for the reduction seen in 2006 (down to 52% from 68%).

The DTI reported that the cost associated with security incidents is on the rise. In 2004, the average cost of a UK company's worst incident was roughly £10,000; it is now £12,000. The DTI stated that large businesses are more likely to have security incidents (87%), tend to have more of them and their breaches tend to be more expensive (£90,000 on average for the worst incident). Apparently despite the overall increase in security expenditure, roughly two fifths of businesses still spend less than 1% of their IT budget on information security. To justify expenditure and spend effectively, businesses need to carry out security risk assessments. However, only 44% of companies have done this in the last year.

The survey then went on to show that more than half of UK businesses are dependent on the physical security of their premises alone to protect their PCs and laptops (and the data that is on them) from theft. Only one in seven encrypts the data on hard discs. The DTI feels that UK companies are poorly placed to deal with the current trend in identity theft; only 1% have a comprehensive approach to identity management (authentication, access control and user provisioning). 84% say there is no business requirement to improve this. As more customers and suppliers are granted direct access to corporate systems, this will represent an increasing exposure.

At the end of the survey the DTI stated that the adoption of appropriate security controls is not keeping pace with the growing use of emerging technologies. But from what I have seen at this show, it seems like the masses are sitting up and taking note and that there are still a number of threats out there that need to be addressed to help protect their corporate information and identity access rights.



With shows like this to educate and offer services in the area of information protection, it will not be long before the DTI and the industry as a whole, witness a bigger security revolution and breaching and identity theft figures fall. Smart Cards and Tokens provide this type of security needed and are already being recognised as the core to an effective information security solution.