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## This Month's Lead Story

# Smart Card Shipments 2006



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# www.smartcard.co.uk

Dear Subscribers

Once more Cartes has come and gone, congratulations to the organisers for what seemed to be a particularly well managed event. That is in spite of the RER strike on the Wednesday which caused absolute mayhem for many and probably a quiet grin for those staying near the exhibition park.

The talk of the show was all about margins or in the case of the chip manufacturers and card companies, lack of margins. The terminal suppliers by comparison had smiles all across their faces. Whispers all around about more consolidation in the industry for which you can find more from our latest recruit reporting in her column "The Squeaker" new this month. One of the advantages of a subscription newsletter is that you can report the latest gossip and scandal in the industry.

David Everett has produced a summary of some of the key highlights of the show published in this months copy. One of the things he did mention to me was the poor showing at some of the conference sessions, the classic case of the speakers out numbering the audience. The trouble is that the exhibition dominates and this will always be a problem.

Can't help but mention the iris scan readers for the fast track coming back into Heathrow. In the time my long queue (50 or more) vanished through immigration I watched 3 people rejected out of 11 in what seemed a pretty slow and painful process not to mention the stigma of having to reverse out of the booth - I'm not convinced.

See you next time,

Patsy.

# Smart Card Shipments 2006

*Jacques Seneca*

During a press conference at Cartes 2006, Eurosmart, the international association located in Brussels representing the Smart Card industry for multi-sector applications, released their shipment forecasts for 2006 and 2007. They estimated that 3.2 billion cards have been shipped by Smart Card vendors this year (2006). They also estimated that this figure will increase to 3.7 billions for 2007. According to Jacques Seneca, the chairman of trade organisation Eurosmart, in 2006, the activity of the Smart Card industry has grown by 27% and this growth should continue by a rate of 20% in 2007.

These figures combine shipments worldwide of memory cards and microprocessor cards in all segments of the Smart Card Industry. In terms of microprocessor cards alone Eurosmart's annual shipment estimate for 2006 was 24 million card which is an increase of 22% over 2005's figure of 1.9 million. This overall shipment figure for microprocessor cards is further broken down into segments. Eurosmart figures show that Smart Card vendors estimate they will ship 1.8 billion SIM cards during 2006, 29% more than the estimated 1.39 billion SIMs they shipped during 2005. This growth has been driven by higher shipments of mainly low-end cards to mobile operators in emerging countires such as India, Asia, Middles East, South America. After a stable year in 2005 the new growth in the Chinese market has also helped with the segments overall growth.

The financial services sector is also steadily growing shipping 400 million banking Smart Cards in 2006 which is an increase of 19% on 2005's figures. In particular, contactless payment continues to grow significantly in the US with more than 10 million already deployed so far with another 20 million planned by the end of the year. Eurosmart forecasts that this annual figure for the financial services sector will rise by another 20% in 2007 bringing its shipment rate up to 480 million cards fueled by the continued deployment of EMV (mainly in Asia) and the growth in contactless cards.

Smart Card vendors have also reported shipping 90 million Government and Healthcare related Smart Cards during 2006. This segment of the industry has seen a massive growth and has doubled in volume sales (an increase of 50% in volume versus 2005). This growth in shipment volume, according to Eurosmart forecasts, will continue to rise by a further 55% in 2007 bringing the number of Smart Cards shipped to this segment up to 140 million. This growth has been fuelled by the uptake of Electronic passports, which have now effectively been deployed in around 40 countries. This trend in ePassport will continue in 2007 with the deployment of ePassports reaching 40 to 50 million worldwide. This large growth in segment figures has been fuelled not only by National ID Cards appearing in Belgium, Sweden, Finland and Italy but for the first time, Eurosmart has included the Chinese National ID Card project. This has made a big impact on figures this in segment because 150 Millions ID Cards will be shipped in 2006 for China and 250 million are forecasted for 2007.

So it appears that 2006 is the year of electronic Passports' take off. But luckily this was what the Smart Card Industry was crying out for because even though the SIM market still provides around two thirds of the Smart Card industry business, the revenues to be gained from this market continue to decline. Most of the Smart Card chip manufacturers and vendors at Cartes 2006 in Paris this year said that they are now pinning their hopes on large amounts of business from government-issued electronic passports, health cards and national ID cards. "The Smart Card industry is struggling as SIM cards ... are completely commoditised." said Christophe Duverne, Vice President and General Manager for identification products at NXP Semiconductors. However despite this slow down of growth, the Eurosmart figures show that more than 2.1 billion SIMs should be shipped in 2007.

But with 3G about to start in China, high end SIMs to take off in more mature countries, EMV still being deployed in certain countries, the growth of contactless payments, the deployment of eDriving licenses in Japan, the continued boom in ePassports, and a predicted overall shipment growth rate of 27%, 2007 looks promising for the Smart Card Industry.

## Smart Cards

### Cartes Goes Contactless

ASSA ABLOY Identification Technologies has equipped the organisers of Cartes with contactless cards and readers for their access control system. Cartes took place on November 7-9, 2006 in Paris. ASSA ABLOY Identification Technologies (ITG) provided 30,000 contactless Smart Cards which where used by exhibitors, visitors, VIP guests and the organisers themselves. The cards were manufactured by VisionCard, a European card manufacturer based in Austria and part of ITG.

Among the special features of the card is the printed antenna, which represents a complementary technology to ITG's other core transponder technologies, wire-embedding, wire-transfer and coil winding. VisionCard's long track record and their expertise in high volume printing allow the company to produce high quality printed antennas very cost efficiently and to connect them to any 13.56 MHz IC module available in the market. The cards for the Cartes exhibition were based on Philips mifare 1k chips.

### US Forces Choose ActivIdentity

ActivIdentity Corp has announced major contract wins by the US Department of Defense (DoD), US Army and the US Air Force. The company's Smart Card desktop client software ActivIdentity Activ-Client 6.0 was selected to enable their move to next-generation HSPD-12 certified Common Access Cards due to be put in place by October 27, 2006. The DoD contract was awarded through the Government Services Administration (GSA) and systems integrator EDS for five years and is available to other agencies throughout the government.

### e-Passport for Ireland

BearingPoint, Inc has successfully delivered the Irish Government's e-Passport project. Development of an e-Passport was key for the Irish government, which needed to have a biometric passport in place before October 26, 2006 to meet the requirements of the United States visa waiver program. Meeting the waiver program's aggressive schedule had serious implications for Ireland, as it is one of the top 10 visiting nations to the US, with an estimated 500,000 Irish citizens visiting the country last year. The bulk of these visits were visa free.

### New Specs for Contactless Cards

The Smart Payment Association (made up of members such as Gemalto, Giesecke & Devrient, Oberthur Card Systems and Sagem Orga) has announced the release of the first version of their contactless data storage specifications. In line with the Smart Payment Association mission to establish joint industry standards and to promote interoperability, this document defines how to securely store and manage data for value-added applications. The last months have seen the massive deployment of contactless payment all around the world.

More than 10 million devices have been issued in the US alone (source Datamonitor, June 2006). With the dramatic growth of this market, the need arose to add new value-added applications, such as: ticketing, access control, loyalty or personal data storage. The lack of standards is perceived as a threat to interoperability and led the Smart Payment Association to develop this new set of specifications.

### Countries Meet e-Passports Deadline

The Department of Homeland Security (DHS) has announced that nearly all of the Visa Waiver Program (VWP) countries have met the requirement for issuing e-Passports. Working in close collaboration with the United States, 24 of the 27 VWP countries have met the October 26, 2006 deadline, requiring all newly issued passports to contain a contactless chip with the passport holder's biographic information and a biometric identifier, such as a digital photograph of the holder.

The United States continues to work with the three countries not yet issuing e-Passports, Andorra, Brunei and Liechtenstein, to ensure that they meet the requirement as soon as possible. Travellers from these countries will need to obtain a visa to enter the United States if they hold a passport issued on or after October 26, 2006, until e-Passports are available.

### Gemalto Integrates with Microsoft

Gemalto has announced the integration of its .NET Smart Cards in Microsoft Certificate Life Cycle Manager (CLM). As a result, customers will be able to streamline deployment and management of Gemalto Smart Cards using CLM. Microsoft was the first enterprise to deploy Gemalto .NET Smart Cards to tens of thousands of Employees. The microprocessor-based Gemalto .NET card runs a streamlined version of the .NET framework.

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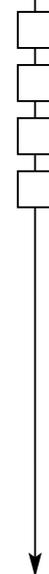
It provides full cryptographic capabilities, customisable two-factor authentication and support for on-card services seamlessly within the Windows environment. Support for Gemalto's .NET Smart Cards is integrated into Windows Vista, making Smart Cards easy to deploy and seamless to use without requiring any additional software or middleware. The same support is also available by download from the Microsoft Download Center for 2000, XP and Server 2003. Enterprises that do want to create customised applications will find it easy to do, because developers use standard Microsoft .NET programming tools and interfaces with Gemalto .NET Smart Cards.

## Oz ID to Offer Digital Wallet

Australians will have the option of storing any personal information they want on the federal Government's proposed human services Smart Card under plans detailed by Human Services Minister Joe Hockey. He said that up to one-third of the storage space on the access card would be available to card holders, who could use it to store information such as medical requirements or shopping lists. "We are creating a customer controlled area in the chip where individuals can store the information they want. In simple terms it makes the access card similar to a mini-iPod, where you can download minimum amounts of information onto the microchip and carry it around in your wallet or purse,"

Mr Hockey said. "We're using two-thirds of the capacity on the chip. The other one-third is in the hands of the individual." Mr Hockey said in a speech at the National Press Club in Canberra that the head of the federal Government's Access Card Consumer and Privacy Taskforce, Professor Allan Fels would accept submissions from the public concerning the proposal over the next month.

## Shetland Pilots Transport Smart Card

A pilot for Scotland's bus fleet has been launched on the Shetland Isles. The new ticketing machines on buses will require cardholders to place their Smart Cards on a machine reader instead of the previous 'show and go' process. Once trialled in Shetland the technology will roll out across Scotland, with the aim of creating a system of having a single Smart Card for all forms of public transport. The introduction of the new technology will be a world first - the first scheme of its kind to be introduced into an entire country rather than a city, such as Hong Kong and London.

Transport Minister Tavish Scott said: "This technology will improve efficiency and tackle potential fraud. The Smart Card systems being tested on Shetland have the potential to cut costs, and in the future we hope to see passengers using just one card to access all forms of public transport."

## Visa Announces Global Restructuring

Visa has announced that it intends to restructure its organisation in order to create a new public global corporation called Visa Inc. As a part of this restructuring, Visa Europe will remain a membership association, owned and governed by its European member banks, and become a licensee of Visa Inc. "This is a great time in Visa's history to make this transition - we continue to be a leader in the payments industry, our growth and emerging market strategies are succeeding, and the growth potential in the global payments industry is tremendous," said William I. Campbell, Chairman of the Visa International Board of Directors. As part of the restructuring, the board of Visa Inc. will be comprised of a majority of independent directors. A search for independent directors and a chief executive officer for Visa Inc. are underway.

## Spain Launches ID Card

STMicroelectronics has announced that its ST19WL34 secure microcontroller -- certified to the high 'Common Criteria' EAL5+ (Evaluation Assurance Level) security standard -- powers the new Spanish national ID Card scheme. The ID Card roll-out started in February 2006, the successful culmination of a three-year development and qualification program with FNMT-RCM (Fabrica Nacional de Moneda y Timbre -- Royal Casa de la Moneda), Spain's national printing office.

Spanish police issued around 7,000 cards as the project ramped up in the first half of 2006, in Burgos, near Madrid. Now it is available in 13 other cities, and 500,000 cards are expected to have been deployed by the end of the year, with 2 million forecast in 2007, and 6 million in 2008. Ultimately, more than 30 million Spanish citizens will benefit from the card.

## Oberthur Acquires Asian Player

Oberthur Card Systems has announced that it has reached an agreement with the five major shareholders of I'M Technologies, who together hold 70% of the company stock. This agreement provides for the purchase of the company, for a total amount of S$34 million (around 17 million euros).

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I'M Technologies is listed on the Singaporean' stock exchange. The transaction will formally take place after approval at the next I'M shareholders' general meeting, and after approval by the Singapore Stock Exchange authorities and Court of Law. As part of the transaction, all of I'M Technologies top managers are joining Oberthur Card Systems. I'M Technologies Limited is one of Asia's leading Smart Card companies. It has nine offices in Asia and offers a complete range of Smart Card technology for the mobile industry.

## NXP Slashes Card IC Thickness

NXP Semiconductors claims to be the first volume supplier of ultra thin Smart Card ICs that are finer than a human hair, or a sheet of paper. The chips of NXP's proven SmartMX family can now be manufactured to be only 75 micrometers (0.000075m) thick, which is 50% thinner than the current industry standard for Smart Card ICs. This enables product designs, such as NXP's new MOB6 contactless chip package, to deliver enhanced security features and durability to address the latest requirements for electronic identification documents such as ePassports, eVisas and national ID cards.

The new 75μm wafer will also be incorporated in NXP's new contactless package called MOB6 for ePassports and other contactless electronic identification solutions. Approximately 260μm thick, the MOB6 is 20% thinner than existing solutions. As a member of the NXP MOB contactless family, it is fully compatible with the MOB2 and MOB4 packages, which are currently in high volume production.

## New e-Passport for Estonia

Gemalto has announced that it will supply the Citizenship and Migration Board of Estonian Republic with its e-passport solution for the future Estonian electronic passport. Under the terms of the contract, Gemalto will provide the Estonian authorities with a turnkey solution, from manufacturing and binding of passport booklets, using Gemalto Setec technology, to the implementation of the personalisation system in the premises of the Citizenship and Migration Board under the Ministry of Interior.

First deliveries are scheduled to start in early 2007. The agreement runs through 2012 with a possible extension to 2015. Considering present passports issuance rates and plans, it could involve up to one million electronic passports.

Under the contract, Gemalto manufactures the travel documents including a powerful microchip for biometric identification and delivers the complete personalisation system to Estonia. Furthermore, it provides the Estonian government with enrolment software and equipment for capturing and digitising the data, picture and signature.

## Gemalto Expands into Singapore

Gemalto plans to expand its operations in Singapore. "Gemalto has decided to expand its business here in Singapore because of the high quality of local staff, the excellent logistics, and strong support and cooperation with the government, which allow us to serve the growing Asian market," said Olivier Piou, CEO Gemalto. The expansion program, to be rolled out in phases over the next five years, will more than double its overall production capacity.

## New French Health Card

Sagem Défense Sécurité and its subsidiary Sagem Orga have completed development of Vitale 2, the 2nd generation of the French health card. The operating system, which was developed for G.I.E. Sesam-Vitale, is available immediately. 59 million Vitale 2 cards will be shipped to French citizens over the next 4 years. The development is based on two electronic components from the companies Atmel and Philips.

The variants are two sources of the same product that implement the IAS specification, which is being incorporated as the standard for card software in the European CEN standard for e-administration. Vitale 2 is the first card that supports a qualified electronic signature in compliance with French legislation. The Vitale 2 card conforms to the EAL 4+ security level of the Common Criteria standard. The certificate was delivered by the Central Information Systems Security Division (DCSSI).

## New Digital Driver Licenses for Goa

The Minister of Transport of Goa's government has signed an agreement with Goa Electronics Limited (GEL) relating to the issue of Smart Card based driver licenses. In the coming five years, seven regions in the Indian state will be equipped with the new driver license system. The general contractor GEL has exclusively commissioned Smart Chip Limited, a subsidiary of Sagem Orga, Germany, to implement the project. Around 1.5 million Smart Cards for driver license holders will be supplied, as well as mobile terminals for the transport authorities.

## ACI Develops Hong Kong Passport

ACI Worldwide has been selected as the exclusive supplier of the Travel Document Management System for the Electronic Passport System of the Immigration Department, Hong Kong. The e-Passport project will leverage ACI Smart Chip Manager software to offer the Hong Kong Immigration Department an end-to-end solution for e-passport issuing and lifecycle management - including stock management and post issuance updating. The e-Passport project was started in January 2006. The system is set up to produce 3500 electronic travel documents per day.

## MTN Delivers First Afican Mobile TV

At the GSM Africa tradeshow in Cape Town (South Africa), Gemalto announced it has been selected by MTN South Africa for the first-ever commercial roll-out of secure mobile TV on the African continent. MTN South Africa is part of the MTN Group, a multinational telecommunications group operating in 21 countries in Africa and the Middle East. The Gemalto package includes the supply of third-generation cards, as well as consulting services and project management. Based on the DVB-H technology, the service is available to all MTN South Africa subscribers, post- and pre-paid.

Under the contract, Gemalto delivered a complete m-TV solution that allows MTN South Africa to address all categories of subscribers. Willing to make its innovative services accessible to the great majority, MTN South Africa aims to offer mobile TV to people who do not own a TV set so that everyone can watch their favorite program, whenever they want, wherever they are. Subscription to the service is very simple and users are offered direct access to TV programs through an easy-to-navigate menu.

## New Smart Card Facility in Canada

Giesecke & Devrient (G&D) has officially opened their new facility in Markham, Ontario, Canada. The new Canadian facility offers complete end-to-end Smart Card solutions for the North American market and will be developing innovative solutions based on Smart Card technology. With double the footprint of their previous facility, G&D Canada has enough capacity to meet North American demands for Smart Cards used in electronic payment systems, high security ID documents, and new applications, such as, customer loyalty programs.

## Assa Abloy Companies Join Forces

Assa Abloy Identification Technologies (ITG) has announced its new organisation. Through the merger of ACG Identification Technologies, Novacard do Brasil, Omnikey, Sokymat Group and VisionCard under the umbrella of Assa Abloy ITG, in providing products and services for secure identification is being formed. With the broad offering and combined know-how, the new company will be able to better meet system integrators' future needs with regards to interoperability, flexibility, convergence, reliability and standards.

## Gemalto Launches CardLikeMe

Gemalto has introduced an end-to-end solution for secure Internet design of personaliaed EMV payment cards. Gemalto's CardLikeMe provides users with an intuitive interface to upload a picture of their choice on the bank website to create a unique personal card. As part of the offering, Gemalto provides banks with the software solution required for processing the photograph on their website and ensures complete card personalisation and fulfillment. CardLikeMe has already gone live with several European financial institutions.

## New Card Terminals for Ukraine Bank

Hypercom has announced that Ukraine's PrivatBank has increased its point-of-sale network with more than 5,000 Hypercom Optimum T2100 and M2100 card payment terminals, including both IP and GSM/GPRS models. The terminals allowed PrivatBank to extend its electronic payment services to merchants in the most distant parts of Ukraine while also enabling Hypercom to maintain its leading market share in the country. The card payment terminals were supplied by Servus Systems Integration (SSI), the distributor of Hypercom products in Ukraine.

## 1GB Multimedia SIM Card

Samsung Electronics Co Ltd has introduced a 1GB subscriber identity module card solution, S-SIMTM, which expands customer experience in multimedia intensive services. Instead of carrying a separate memory card, the company's 1GB S-SIM incorporates a system-in-package (SiP) technology to carry high gigabit-density NAND Flash memory without growing the area size of the conventional SIM card. The small form factor supports the compact size of multimedia phones.

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## First EMV Contactless Mobile Pilot

The city of Strasbourg in France is to host the first trial of mobile phones for secure EMV payments. The pilot, driven by a seven-strong consortium, will commence in November with the support of two hundred consumers and over fifty merchants throughout the town. Groupe Crédit Mutuel, CIC and NRJ Mobile customers will be invited to participate in the pilot with the help of a specially designed mobile phone from Sagem Communication.

Powered by the MasterCard PayPass contactless technology, supported by an EMV capable SIM card from Gemalto, contactless readers from Sagem Monetel and an NFC (Near Field Communication) electronic chip designed by Inside Contactless, the trial is the realisation of the innovative and commercial expertise and approach of all seven consortium members.

## EMV Certification for Thyron

FreeStar Technology Corp has announced that its subsidiary Rahaxi Processing Oy., based in Helsinki, has enabled Thyron Systems to achieve EMV-certification for its mobile payment terminals in the Finnish market. Thyron Systems will provide Rahaxi Processing with the latest Chip & Pin accredited payment terminals exclusively for the Finnish market.

As a result of Thyron's EMV certification in Finland, Rahaxi Processing has purchased 500 Thyron Systems mobile terminals and has placed orders for 1,000 more to satisfy the demand. Rahaxi Processing estimated that 2,000 Thyron mobile terminals will be used by buses, 1,600 by taxies and about 1,500 by restaurants, delivery services and breweries over the next twelve months in Finland.

## Myreward EMV Reward Card

Intuitive Group in partnership with VISA have announced the launch of myreward card, a multi-currency chip-and-PIN reward card with a full e-commerce 'online banking' platform. Suitable for delivering reward, incentive, bonus and commission payments for any business from SME to blue-chip companies, the new chip-and-PIN myreward card can be used to accrue rewards through overnight payments made to participants' card accounts. Users will also have access to a secure e-commerce site where they can check balances online and monitor progress of their incentive programme.

## North Asia Catalyst for RFID Growth

The radio frequency identification (RFID) technology in China, South Korea and Japan is growing rapidly and is being increasingly deployed. Although the RFID tags market is in the growth stage of the market cycle, the application of RFID tags in different verticals and the market shares contribution across the countries are varied. With government support and greater initiatives by the industry participants to promote the usage of RFID, growth of this market expects to be phenomenal in the coming years. New analysis from Frost & Sullivan, North Asia RFID Tags Market, reveals that the market earned revenues of $200.5 million in 2005 and estimates this to reach $469 million in 2012.

## DHS Expands RFID Usage

The Department of Homeland Security (DHS), in conjunction with the Department of State's proposed rulemaking on the new PASSport card, announced that it proposes to expand the use of vicinity radio frequency identification (RFID) technology at U.S. ports of entry. The vicinity RFID technology, to be compatible with the PASSport card, would allow a travel document to be read from several feet as a vehicle approaches inspection. The PASSport card, part of the People Access Security Service (PASS) System, is designed to meet the specific requirements of the Western Hemisphere Travel Initiative (WHTI) for U.S. citizens crossing U.S. borders by land or sea.

"Vicinity RFID technology will be a force multiplier for our US Customs and Border Protection (CBP) officers by providing them with up-front information they need to quickly make critical decisions about travellers entering or re-entering the United States," said CBP Commissioner Ralph Basham. "Vicinity RFID technology leverages DHS' successful experience with currently installed reader technology used in the FAST, NEXUS and SENTRI trusted traveller programs. These trusted traveller programs have more than a quarter of a million participants. In addition, through an ongoing test at land borders, US-VISIT has issued more than 459,000 radio frequency- enabled I-94, the standard arrival and departure record issued at ports of entry.

World News in Brief
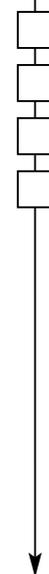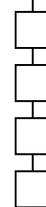
## RFID Hybrid Games Platform

Innovision Research & Technology is providing the contactless RFID reader and re-writable video tag technology at the heart of Mattel's new, first-of-its-kind, HyperScan hybrid games platform. Hyperscan is unique in combining modern video gaming with classic collector card play. Initially, the HyperScan platform appears similar to traditional CD-ROM based television game consoles. However, it features an important new interactive play element, made possible by Innovision R&T's next generation low-cost RFID reader and tag technology that now makes contactless, re-writable playing cards affordable for games and many other applications.

Players scan their collectible game cards, each containing an Innovision RFID tag, over the Innovision reader integrated within the HyperScan console and their favourite characters magically come to life on the television screen. During the game, players can pause and scan their game cards to upgrade and enhance their character with modified attributes such as extra strength, armour and special attack. When the game is over, players re-scan their cards and their new winning powers are permanently saved directly onto their Intellicard(tm) for use in future game play.

## ACG and WDI Team Up

ACG Identification Technologies has signed a partner agreement with Wireless Dynamics Inc. (WDI), a provider of NFC and RFID SD (Secure Digital) products. ACG will offer the SdiD Cards to the mobile RFID (Radio Frequency Identification) and NFC markets. With the cooperation ACG closes the circle between cards, readers and PDAs and enables applications beyond pure RFID. With the standard SDIO (Secure Digital I/O) interface the SDiD Card can be inserted into most mobile devices like PDA or mobile based PDA phones with SD slots.

## Near Field Communication

## Man City Mobile Payments Trial

Manchester City season ticket holders are trailing a mobile payment system where they "show" their Nokia 3320 handset to an automatic reader to get into a game, instead of handing a card to a gate attendant. At the same time, latest figures from ABI Research show that around 40% of mobiles will be shipped with NFC technology as standard by 2010, enabling these kinds of contactless transactions to take place.

However, mobile payments specialist, Upaid, believes that NFC technology should not rely on mobile phones for storing payment details but for accepting payment details. "The Manchester City trials are using the right solution for the wrong problem. These trials will tie the participant into a new handset that may not be compatible with their lifestyles and could end up costing the football club a lot of money for the wrong solution, selling tickets not phones. To make the trials a success, the phones need to accept all types of payment method," Terry Trench, senior vice president of commercial operations at Upaid, comments.

## Mobile J/Speedy NFC Pilot

JCB in cooperation with CCV Holland B.V., Gemalto, KPN, Nokia, NXP Semiconductors, PaySquare, and ViVOtech, have announced that they have successfully launched Mobile J/Speedy, the NFC mobile payment pilot project in Amsterdam. Following initial trials in September, the pilot service is now being rolled out to a broader group of JCB's customers. The project marks Europe's first contactless international credit payment scheme using a mobile phone with an NFC chip.

Selected JCB cardholders are provided with a mobile phone by Nokia, which is equipped with an NFC chip, developed by NXP and loaded with the JCB payment application specified by JCB and developed by Gemalto. At selected PaySquare merchants, cardholders can securely purchase items by just holding their mobile phone close to ViVOtech's contactless NFC reader/writer, which is attached to the payment terminal of CCV. KPN is taking the role of installing the application and personalising the mobile phones, and CCV is processing the transactions. JCB designed the scheme and coordinated the project based on its successful experience in contactless technology in Japan.

## NFC for Electronic Devices

INSIDE Contactless has announced Microread, a single integrated circuit for sending and receiving NFC data between two electronic devices. Microread establishes secure connections between devices, and helps to facilitate mobile payments, transport ticketing, access control, and numerous other transactions from mobile phones or PDAs. Microread-enabled mobile devices are able to complete transactions with other mobile phones, or with millions of contactless reader terminals already installed worldwide
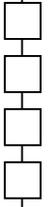
# US Government Workforce To Get Smart ID Cards

**By Tom Greco, Vice President, CyberTrust**

*Tom Greco*

The US government will soon be issuing new, high-technology identification cards to more than ten million people in the federal work force. The move is prompting a debate over whether the work IDs represent the first step toward a national identification card. Most Americans carry some kind of simple identification document - a driver's license or a passport, for instance. Those typically tend to be plastic, with some kind of photograph on them. What most people in the 'high technology' field would consider 'dumb' IDs.

The government's new Smart Card IDs are the latest and, in the United States, the broadest use so far of biometric technology that recognises a person's physical features. These new federal ID will identify individual fingerprints. In the case of the card that'll be produced for federal employees and contractors," he notes, your fingerprints can be read by scanners. Present the finger at the [machine] reader, and it just scans it and can match it on the card. The Smart Card is capable of doing that kind of biometric verification.

The reason the government is implementing a new Smart Card identification system is to protect federal employees, buildings, and information systems from a terrorist attack, because the 9/11 terrorist attacks showed conventional ID systems were ineffective. In the wake of terrorist exploitation of infrastructure, certain terrorists were able to get access to the planes using forged state driver's licenses. The impetus is to protect both the physical assets of the US government and the logical computer assets of the US government. Using current technology was viewed as the way to go."

But is it the way to go? Jay Stanley is a spokesman for the American Civil Liberties Union, or A.C.L.U. "A national ID card is something that Americans have resisted all throughout our history," Stanley says. "It is something that will be used to regiment Americans, track Americans, used to set up systems of access control throughout our country. It really becomes tantamount to an internal passport." Cards similar to the new federal worker ID will eventually be issued to tens of millions of other public employees such as transportation workers, emergency medical personnel, as well as police and firefighters. Visitors to the United States will also be issued smart ID cards. And national legislation passed by Congress in 2005 requires all state governments to convert their motor vehicle licenses to Smart Cards by 2008, putting the new IDs into the purses and wallets of 9 out of every 10 Americans. The A.C.L.U.'s Jay Stanley argues this use of Smart Cards would go too far. "As an employer, of course, the federal government can issue IDs and passes to its employees like any other employer," he says. "But when you are talking about the federal government, it is such an enormous and often standard-setting body that it does cause extra concern."

But even such widespread use of Smart Card IDs does not necessarily mean we're headed down a slippery slope toward a national ID system, according to Todd Gaziano, the director of the Center for Legal and Judicial Studies at the Heritage Foundation, a conservative think tank in Washington, D.C. Gaziano says that with public approval, precautionary measures need to be taken. "People have repeatedly shown they are willing to give up information to providers of services - so it's just not the case that most people are terribly concerned about this. But more important for flight safety," adds Gaziano, "is that we need to make sure there aren't fraudulent documents. It's just as simple as that. Those who see slippery slopes (toward the loss of civil liberty) in this program will see slippery slopes anywhere and everywhere."

Gaziano also supports the federal government's directive to the states to apply Smart Card technology to driver's licenses. The alternative, in his view, would have dire consequences for national security and civil liberties down the road. "If people do not go along with reasonable improvements in security," he warns, "we will lose much more in the way of privacy and civil liberties after the next attack. Jay Stanley of the A.C.L.U. predicts many state legislatures will balk at complying with the federal mandate - at the very least, because of the higher fees and taxes needed to pay for the Smart Card conversions.
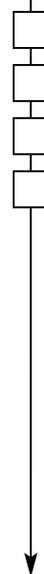
CyberTrust sees an international trend in high-tech credentialing. In a number of countries, particularly in Europe and the Far east, for almost a decade now there've been initiatives to move the traditional paper or plastic ID card to more of the 'smart' format. In Belgium, for example, almost five million people in the population credentialed with this kind of card - that contains information on name, age, and ID numbers - that can be read by a computer and validated that the ID is current. Malaysia, Singapore - a number of the Asian countries - also have very robust national ID cards that are based on smart cards. Italy is another country that has moved down this technology path. Sometimes it's just the confluence of the ability, the technology being present, and the wherewithal to move in this direction.

But there's also spirited debate about the issue in many democratic countries around the world. Many countries have Smart Cards to make it easier for their citizens to keep track of banking transactions and health insurance coverage - and gain access to public transportation and telephones - but have largely stopped short of creating a smart national ID. In the United Kingdom, for instance, there's so far been a reluctance to introduce a high-tech, national ID system designed to protect citizens from terrorism because of critics' concerns the potential threat to individual liberties.

# Planning Shortfall Will Mean Banks Miss Out on SEPA Opportunities

**By Jerry Norton, Strategy Director, Global Financial Services, LogicaCMG**

The lack of planning beyond the first SEPA deadline in 2008 could mean that many banks will miss out on the opportunities that will arise from the introduction of SEPA, according to a study of over 100 top Euro Zone and UK-based banks. The study was conducted by Coleman Parkes and found that although 64% of banks see SEPA as an opportunity, fewer than half (48%) are looking at product and market strategy post 2008 and only 37% have a strategy to exploit SEPA. Planning is also being hindered by organisational complexity, with 63% saying that a lack of coordination across the business will cause real problems for SEPA implementation. Nearly a quarter of banks (23%) are also considering outsourcing payment processing to achieve migration from national instruments reflecting a concern about the suitability of the compliance project in meeting a longer term payments strategy.

The research reveals a lack of planning for the migration of national payments to SEPA instruments within the banks. Less than a third of banks (30%) have a full plan in place and in operation for the migration of clients. And over three quarters of banks (76%) state that they are just doing the minimum to meet 2008 requirements. Although the majority of banks claim to be doing the minimum to meet SEPA, 28% of banks stated that their SEPA implementation is totally aligned to the needs of the Payment Services Directive and a further 13% said that it is closely aligned. A further 31% are setting plans to align SEPA to the Payment Services Directive in the short term.

With banks openly admitting that they are doing the minimum to meet the 2008 requirements there is a clear indication that the first deadline is currently detrimental to the overall implementation of SEPA. Banks must collaborate with their existing customers now to ensure that the migration to SEPA is as painless as possible. They must work with them to develop new products that will offer differentiation in a standardised payments market. Come what may, a communication, education and testing programme should be put in place to make customers aware of the migration timetable and motivate them to follow it. Crucially, success depends upon securing the appropriate resources to assist with migration and testing before it is too late - resources that we have found are not yet in place.
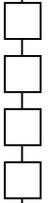
# e-Passport Cloning Claim Does Not Constitute Threat to Border Security

**By Randy Vanderhoof, Executive Director, Smart Card Alliance**

The new electronic passports planned for the United States rely on multiple layers of security to increase border security and protect citizen privacy, and electronic cloning does not constitute a threat. People do not need to be concerned about the security or privacy protection features of the new e-passport program. Recent reports that there is a 'major vulnerability' that criminals could use to 'enter countries illegally' are untrue and demonstrate a lack of understanding of how the multiple security layers in place at the US border work in the new e-passport system.

*Randy Vanderhoof*

The reports came out after a security consultant demonstrated reading and copying the electronic information in his German e-passport at a security conference last week. Even if someone could copy the information on your e-passport chip, it doesn't achieve anything, because all of the information is locked together in such a way that it can't be changed. It's no different than someone stealing your electronic passport and trying to use it. No one else can use it because your photo is on the chip and they're not you

The global electronic passport program makes passports virtually impossible to counterfeit and prevents anyone other than the passport owners from using them. The layered security features also prevent anyone from spying on e-passports as you walk by with a passport in your purse or pocket. Here's how it works: First, the information on the printed page, including the bearer's photograph, is stored on the chip and displayed on a screen at passport control. By comparing the digital information, the printed passport and the person, passport control can confirm everything matches. They will immediately see a discrepancy if someone is attempting to use someone else's e-passport chip information.

Second, the information on the chip is digitally signed by the issuing country's passport authority. That information is locked together and any changes to it would be detected at passport control. It also means any attempt to create false data and a fake passport credential would be detected. Unlike paper passports, where a photo can potentially be replaced, the digital photo and other information on the e-passport chip cannot be changed.
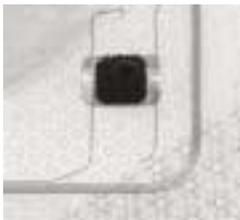
Third, the e-passport book design requires that it be handed over and opened before any information stored on the chip is communicated. Then, a unique code printed inside the cover must be optically scanned and presented to the e-passport chip before it will communicate the passport information. All information exchanged between the reader and the e-passport chip is encrypted.

Together these capabilities mean that no one could use a lost or stolen passport, or even a copy of one, to illegally enter the country. They also prevent anyone from spying on US e-passports when the passport cover is closed. This makes the new e-passports far more secure than today's documents and protects people's privacy. People need to be cautious about some claims made by so called 'experts' when it comes to RF-enabled applications. There is too much misleading and inaccurate information being reported, simply because fear gets people's attention.

# www.smartcardalliance.org
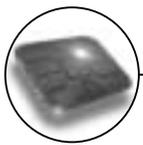
# New Opportunities for Smart Card Readers Evolving

FROST & SULLIVAN

**By Anoop Ubhey and Alejandra Etcharran, Frost & Sullivan**

The largest potential growth in the Smart Card readers and chipsets market over the short term has to come in the form of migration to next generation payment technology. EMV migration in Europe, Asia Pacific and Latin America along with contactless payment in the United States is the most important application supporting the growth in the readers and chipsets market.

E-passports, national ID, drivers' license and transit are also large markets for Smart Card readers in the medium term. The market opportunities from the government projects will grow tremendously in the medium term, which opens up numerous lucrative market opportunities.

Analysis by Frost & Sullivan has revealed that the market generated 6.9 million on units in 2004 and estimates to reach 33.0 million in 2010. "With banks shifting their business model to online banking the rate of growth in the Smart Card readers segment will be decided by whether the banks adopt PC-link readers or USB keys for user authentication. There are better cryptographic algorithms available that make online authentication secure. EMV payment cards can be configured to contain digital signatures and keys for online authentication.

It is more economical for banks to migrate to online banking than continue with the 'brick and click' model. In addition, with most enterprises and government agencies going in for logical access to their networks the Smart Card reader infrastructure will become commonplace making the transition easier. USB dongles and USB keys are giving fierce competition for Smart Card readers in the logical access market. With this market dominated by many small manufacturers, if the authentication market does not adopt Smart Card readers as a standard then the larger manufacturers will lose market share in this sector.

To overcome or stop any real threat coming from the smaller manufacturers a careful monitoring of the logical access control market must be put in place. Taking on the smaller manufacturers on the price front would be difficult but they can be countered through volumes and innovative product offerings. Offering value adds, in terms of software and service to issuers is another one, which might prove to be more successful in the medium term. Using such tactics will allow you more time to dampen the approach from these companies.

# Events Diary

**December 2006**

| | |
|---|---|
| 05-06 | Airport, Port & Transport Security - *London, UK - www.apts-expo.com* |
| 06-08 | Advanced Identification Systems 2006 - *Arlington, Va - www.intertechusa.com* |
| 06- 07 | KARTA 2006 - *Centrium Gieldowe, Warsaw - www.karta.info.pl* |
| 07-08 | China Cards & Payment Outlook 2007 - *Shanghai, China - www.ibgintl.com* |
| 10-13 | Telecoms World Middle East - *Dubai, UAE - www.terrapinn.com* |

**January 2007**

| | |
|---|---|
| 17-19 | OMNICARD 2007 - *Berlin, Germany  - www.omnicard.de* |
| 21-23 | Intersec Middle East, *Dubai, UAE - www.intersecexpo.com* |
| 22-23 | Global Payments Strategies 2007 - *Monte Carlo, Monaco - www.nacha.org/ conferences/ Global2007* |

Technology Insight ○ Events Diary

# UK Roll-Out of Contactless Payment Can Learn From EMV Implementation and US Experiences

**By Richard Sanders, Business Consultant, ACI**

For the UK to be European leaders in contactless payments, it must take advantage of its high-level of EMV compliance and educate time-hungry UK consumers and profit-focused retailers about the benefits off-line contactless payments will bring. UK banks need to consider different formats for contactless payments in order to increase consumer interest whilst simultaneously working with retailers to enable them to accept contactless cards as a payment option. Retailers need evidence of a sufficiently large potential market for them to justify installing contactless technology. There is potential to integrate contactless payments with mobile phones, which already have immense market saturation. However many UK banks believe that contactless payments on mobile phones will occur in the second phase of contactless roll-out due to the card schemes tying contactless to EMV and the unsolved issues of how credit can be topped up on the mobile phone itself.

This is a concern as, to ensure retailer uptake, contactless terminal technology must be inexpensive, easily integrated with existing POS systems and future proofed. The UK can learn lessons from advanced contactless trials in the US where MasterCard PayPass has focused on identifying key markets and acquirers. Its announcement that PayPass will be accepted in McDonald's, Subway and Sheetz, all quick-service food outlets, was an essential component of its major roll-out in 2005. By also enabling the card to support existing prepaid and customer loyalty schemes, MasterCard has presented retailers with an argument to upgrade their loyalty cards to contactless too. Similar logic could be applied in the UK. A number of key questions hang over a UK implementation of contactless but the UK can benefit from its experience of EMV roll-out, even though contactless will be competitive and not utilising a collaborative approach as the banks did for EMV roll-out. For example, mirroring the 'Chip and PIN' town trial held in Northampton in 2003, the card industry is organising a 'contactless' town trial, in which banks and retailers can see the cards working in practice and collect data on usage volumes, risk patterns, early consumer adopters and retail sectors where contactless presents the strongest benefits.

Learning from the EMV experience, APACS will also provide a centralised communication service. In addition, UK banks have to address the issue of risk and create EMV parameters that allow for high-speed of transactions whilst limiting the risk posed by off-line transactions. Furthermore, there are choices to be made about the way contactless will operate, with banks investigating the possibility of stand-alone pre-loaded contactless cards that can be topped-up or thrown away after use and a multi-application debit card with pre-authorised off-line debit limits. These choices will have a direct effect on the types of retailers and consumers the cards are aimed at. For example, the youth market may be ideal early-adopters but pose significantly higher risks.

Finally, for a successful project roll-out, a synchronised effort from banks, acquirers and retailers is crucial. There is little point in issuing cards without terminals and vice-versa, and banks should think about the other infrastructure impacts that contactless may have. For instance, contactless cards may be the first cards to be rolled out in the 'second wave' of EMV issuance. Is this the right time to implement a Smart Card management system before Smart Card issuance becomes even more complex?

Without a non-payment application to launch contactless, the UK needs to leverage its position as Europe's leading EMV compliant country and the knowledge gained from the US experience to ensure a successful contactless cards roll-out. This will create a strong launch-pad for widespread contactless payment as long as banks recognise the competitive element within contactless. The industry must now look to educate consumers and retailers on the benefits, whilst providing transitions for contactless technology from the card form factor to mobile phones and easy-to-implement additions to POS terminals, so that widespread roll-out of contactless payments becomes a matter of when, not if.

Industry Insight

# Contactless Payments Are a Quick Hit

**By James Van Dyke, President, Javelin Strategy & Research**



*James Van Dyke*

Like a great new undiscovered restaurant, contactless payment is a big hit with consumers who have tried it but still not well known, according to new research produced independently by Javelin Strategy & Research for the Smart Card Alliance. The great majority of US consumers are either ready to use contactless or have already begun to do so for payments. People view contactless as beneficial for speed at checkout and as a simpler way to pay for purchases. While security is a concern, a surprising four in ten actually view security as an advantage for these types of payments.

Of the consumers surveyed, 13% have already used contactless payment, and 95% of that group said it was both easy and fast. Those consumers who have tried it were confident in the new payment technology as well - 84% said it was as safe or safer than credit cards, and that they would use it for large purchases too. The research also showed that contactless payment is an easy sell, once the information reaches the consumer. Of consumers who are yet-to-try contactless, 75% are somewhat likely or very likely to adopt it. Yet 62% of all respondents rated themselves as not familiar with the technology, demonstrating the industry has a big marketing opportunity in front of it.

When consumers who said that they were unlikely to use contactless payments were asked what would hold them back, 61% of that group said security would be their biggest concern. The comprehensive study is based on a 3,135 respondent survey conducted online in August 2006 concerning consumer usage and attitudes around contactless payments.

The survey targeted respondents based on representative proportions of gender, age and household income compared to the online consumer average. The entire survey has a margin of error of +/- 1.75 percentage points at the 95% confidence level, while subsets of respondents have a larger margin of error.

# Card Manufacturing Global Market Survey

**By The International Card Manufacturers Association (ICMA)**

The 2005 Annual Card Manufacturing Global Market Survey by ICMA revealed that while the North American region leads the world in the total number of cards manufactured, Europe continues to be the most lucrative market as measured in dollars. The survey measured numbers of cards manufactured and market volumes. Major findings revealed that globally, in 2005, approximately 14.7 billion cards were manufactured, a 11.4% growth rate. The global card market, in US dollars, increased 11.5% to $9.1 billion, a result of microprocessor chip card growth.

The regions surveyed were North America, Europe, Asia Pacific, Latin America and Middle East/Africa. The products surveyed were plastic cards of all thicknesses including traditional cards-with and without magnetic stripe, and chip cards that include contact, contactless and combi-cards for diverse applications such as financial hologram cards, ID cards, telecom cards, gift cards, transit cards and more.

Worldwide production capacity has significantly increased. This is in part being driven by National ID programs being implemented throughout the world, new contactless credit cards and contactless transportation cards (trains, busses and subways).

The survey revealed the following growth statistics:

1) 11.4% global unit market growth to 14.7 billion cards.
2) 11.5 % global dollar market increase to $9.1 billion - impacted by microprocessor chip card growth.
3) North America remains #1 in units and #4 in dollars - still lagging in chip card growth.
4) Europe is #1 in dollars and #2 in units - driven by microprocessor chip cards in the financial and other secure (GSM) sectors.
5) Asia/Pacific card market is #2 in dollars and #3 in units - driven by China and chip card growth.
6) Latin America is #3 in dollars with continued robust growth especially in Brazil.
7) Chip Card units grew robustly to 2.6 billion units for a 13.5% increase, while dollars grew to $7.45 billion, influenced by transit card growth, national IDs and EMV migration.

# Cartes 2006 - A Half Price Sale?

**By David Everett, Principal Consultant, Microexpert Ltd**

A 50% price reduction on SIM cards in the last 12 months was the story of the show, with lesser reductions on Smart Cards in the financial market. And of course one man's gloom is another's glory, smiles all round in the camps of the terminal manufacturers, brought about of course by the popularity of the new payment products. The terminal manufacturers such as Hypercom and Verifone are happily achieving margins of 30 - 50% while the silicon manufacturers and the card companies are struggling to make a margin.

Even worse is the fact that the customers are not buying at the high end, SIMs are typically around the 16 - 32K mark and as for financial cards how close can you get to 1K of E2. As Jean-Paul Thomason from ST Microelectronics said to me, 'the functionality of payment card chips has hardly changed in the last 20 years. The technology has advanced from 3 microns to 0.13 microns, E2 memory has gone from 1Kbyte to 1Mbyte but the requirements remain the same'. In fact the only real change in requirements is for security which has now become an inherent part of modern chip design. Although even there one can't help but feel that the latest contactless payment products are taking a backward step.

The equation for the silicon manufacturers is very much a game of supply and demand, when supply capability exceeds demand as it does at the moment then margins can be eroded by powerful customers, but like any horror movie make sure you're standing in the right place when the pendulum swings. Silicon for Smart Cards represents just a few percent of the overall market and you can be sure that the price will fluctuate. Remember Dr Makimoto's Wave which predicts the cyclic nature of the semiconductor industry, well described in his book 'Living with the chip' jointly authored with David Manners.

Last month we recounted the problems being faced by Infineon but other major Smart Card chip suppliers such as NXP (nee Philips Semiconductors), Atmel and ST Microelectronics are equally having a difficult time and all that against the background of a relatively new entry into the Smart Card chip business, Samsung Electronics Company (SEC). Semiconductors now account for 32% of the company's revenues and interestingly they invested $5.34 billion or 9.2% of sales into R&D in 2005.

This is against the background of recent arguments about whether the most successful companies heavily invest in R&D. I can only comment that Samsung is the company most feared by the other silicon manufacturers.

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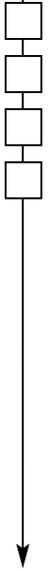
The busiest stand of the show was without a doubt Gemalto, the only concern I would have here is that if, as so many people have said to me, that most of the visitors are actually selling rather than buying, then they must have had their hands full. To try and get the latest picture I had a short session with Ernie Berger, Gemalto's President for North America.
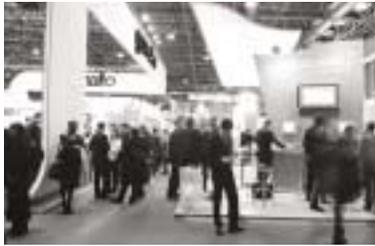
As Ernie explained to me the merger is only 150 days old but the focus is on new markets and cost structure. There has already been an announcement of one plant closure in the USA and there are predictions that at least 20% of the International work force of 11,000 is at risk. Other competitors such as Oberthur Card Systems, Giesecke & Devrient, and Sagem Orga are already biting the bullet, closing their domestic plants in favour of lower cost countries such as (in the case of G & D) Slovakia and India (Sagem Orga).

So here is the dilemma, to what extent can Gemalto create a position in new markets that will change the culture of the company currently steeped in the card commodity business? Ernie was convinced this is going to be in the Identity Management and Enterprise Security business areas. In the US there is the PIV program and the move in electronic banking to use 2-F authentication. This would mean a move up the value chain to be more involved with the infrastructure, treading into the space of the major integrators such as EDS, Fujitsu and IBM. This is worth a lot more consideration and we intend to explore this space in next month's copy of the newsletter.

With a bigger stand every year Beijing's Watchdata makes a notable presence having the advantage of starting with a low cost base for its card production. In 2005 the company had sales of $55 million with 25% of the business from international customers. The company produced 60m cpu cards in 2005 and expects to manufacture 90m cpu cards in 2006. Watchdata claims to be a market leader in China with serious international ambitions. Of particular interest is their contactless SIM foil - an alternative to NFC that we critiqued last mouth

Not particularly new but just a marvel of engineering are the nC Audio card and the nC Display cards from nCryptone which are constructed in the ubiquitous ISO ID-1 card form factor. Both cards have an internal battery, the Audio card has a sound creator for handling dynamic passwords across the telephone networks while the Display card actually has a 7 digit LCD display. Both cards are available for about 15 euros.

Wow factor, yes it was there but not actually a Smart Card. In the conference sessions Ingenia Technologies demonstrated their new Laser Surface Authentication (LSA) scheme for creating a fingerprint of documents or plastic cards. It works by illuminating the fine structure of the target surface with a focussed laser and recording the speckle reflection.

For paper documents and matt plastics the entropy is claimed to be 1 in 10100 for the signature patterns so created. Now we all start out rather cynical but Ingenia's party piece is scrunching the paper sheet into a ball, unfolding it and yet still able to recognise the signature - gasps from the audience and it was the only gasps I heard during the whole show.

## www.cartes.com

# Rumours From the Front Line

**By "The Squeaker"** *(a source who wishs to stay anonymous)*

Consolidation, that's the name of the game in the Smart Card world. David Everett has been preaching the concept for some years now. It seems like a generation ago when Schlumberger bought the Bull CP8 Smart Card division for 350 million euros, spawned as the Axalto IPO in 2003 and then merged with Gemplus to form Gemalto this year. Apparently both the Texas Pacific Group and the Quandt family, the major investors in Gemplus, wanted out, we can argue on how well this merger might be going later.

So who is next? The talk is all about Oberthur Card Systems taking over Orga, Safran's (merger of Sagem and Snecma) Smart Card division which was acquired in 2005 and merged under the Sagem brand. Orga has had a chequered history, very successful in the early days with its SIM card market but in more recent years seems to have been struggling.

So much so in fact that it is rumoured that Safran have been trying to get some of their money back from the Gunther group. Lowering the selling price some 6 - 9 months after the sale is complete is an unusual concept unless it can be shown the business was not presented correctly. Apparently Safran were expecting revenues of 300 million euros from Orga in 2006 but this has been impacted by the loss of a major Russian client. You will not be surprised to know that such talks of a merger have been hotly denied but so they were in the run-up to the Gemalto merger.

So where is Giesecke & Devrient in all this, a Munich based family owned company (GmbH) equally held by two sisters, Verena von Mitschke-Collande and Claudia Miller. Earlier this month they announced a change in ownership structure due to take place at the end of 2006, when Claudia Miller, who resides in the USA, is expected to transfer her ownership rights to the Mitschke-Collande family. The price has been kept secret but speculated at around 300 million euros. Verena has roles on both the Advisory and Supervisory boards of the company. A stable international work horse, cutting card production costs (as others) by moving their plant to the Slovak Rebublic, but very much run by Munich, probably not going to see much change here until they allow more autonomy within their divisions.

More on that long standing dispute between Cryptography Research Inc (CRI) and Visa over the licensing of Differential Power Analysis (DPA) technology. Paul Kocher's company originally made headlines with the discovery of breaking Smart Card chip security by analysing the power signals to the chip back in 1998 and has been trying to licence defence technology ever since. No major card or chip manufacturer has taken a licence yet although Inside Contactless are rumoured to be hovering.

Apparently Visa originally took a licence for the DPA technology (although rumours have it that they partially funded the original research) and for two years coughed up 25c per Visa card to CRI and then after a bit of internal re-organisation decided to call a halt. The legal dispute has been going on for over 12 months now with CRI having spent more than $5 million on legal fees. CRI can't understand why Visa couldn't do a deal at maybe 3 or 4 cents per card - I think I know why!

Anyway CRI feel very confident that the legal battle is going their way, apparently the Markman hearing (after the Supreme Court's landmark decision in Markman v. Westview Instruments in 1996 where it was held that it is for the Trial judge to interpret the patent claims for the jury) is very much in their favour.

Squeak squeak!!

# The Sesames Awards 2006

Organised in the framework of the CARTES 2006 exhibition, the Sesames awards have become, in 11 years, the world reference for the manufacturers of Smart Cards and their environment. As the undisputed labels of innovation and much coveted awards, these trophies are intended not only for the CARTES exhibitors, but more broadly for all the world contributors in this field: industrials, users, integrators and developers.

The Sesames awards are a key part of the annual Smart Card industry event. They celebrate the unique contribution and investment of leading industry players in developing next generation products and solutions for the digital age. Selected by an international jury composed of 34 members, the 10 winners where announced during a gala evening at the Théâtre Marigny in Paris. In the presence of more than 300 guests, Jacques SENECA - Eurosmart President, and Don DAVIS - Editor and Associate Publisher, invited by Sophie LUBET - CARTES General Commissioner, opened the most awaited ceremony of the industry.

At the Ceremony Gemalto won the "Best Software of the Year Award" for their IPv6 embedded stack and the "Best IT Security Application of the Year Award" for SIM Strong. The innovation of "IPv6 embedded stack" lies in the implementation of an IPv6 communication stack in a Smart Card integrating a high-speed protocol communication interface.

The growing trend towards converging all means of communication - data, voice and video - to a single protocol clearly demonstrated that the IPv4 address space could not meet the needs of an ever-increasing demand for IP connected devices. Besides providing a tremendous number of additional IP addresses, IPv6 brings significant enhancements such as autoconfiguration and built-in security for data protection. This innovation definitely makes the Smart Card a fully-fledged network citizen in this new connected world.

SIM Strong leverages the ubiquity of SIM-equipped mobile devices to provide secure access to online content and services. A user with a valid Identity Provider account and SIM enabled mobile phone, dongle or GPRS PC card can easily and securely log on to a host of online services such as e-commerce or Intranet. The service implements open standards and is easily deployable and scalable.
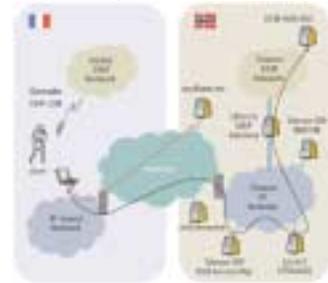
Infineon Technologies won the "Best Hardware Award" their CC EAL5+ certified Infineon's Flash Chipcard Microcontroller. This category looks for the best and most innovative chip, card, token, electronic component, terminal, reader, manufacturing / printing material, representing a genuine breakthrough in the card industry. The SLE88 Flash 32-bit product family received the certification CC EAL 5+ high (with protection profile BSI-PP0002), the highest security level for chips today.

These chip offer a decisive time-to-market advantage to card vendors and service providers in the launch of secure applications like digital signature or mobile-TV, trends of the next mobile phone services. "The integral security concept of our SLE 88 devices ensure that data and code in flash-like EEPROM are as securely stored as in ROM. This concept disproves the widespread industry mind-set that ROM memory is more secure than flash memory," said Dr. Helmut Gassel, Vice President and General Manager of the Chip Card & Security ICs business unit at Infineon Technologies.

Oberthur Card Systems won the "Best Mobile Application Award" for their AngelIC. AngelIC Enables PC's to Securely Handle MobileVoIP Calls Using Mobile phone SIM AngelIC is a breakthrough in convergence technology that enables a subscriber to plug a SIM USB key into a PC to place and receive calls from a PC soft-phone using the subscriber's mobile phone number.

Combining features of mobile services and benefits of VoIP, AngelIC use any broadband connected PC, whilst maintaining security via SIM-based authentication. "Last year for GIGAntIC and now with AngelIC, Oberthur Card Systems has won two awards for breakthrough innovations which push Secure Digital Convergence. This recognition will strengthen our long-held strategy of innovation for the benefits of our customers", said Pierre Barberis, CEO of Oberthur.



ActivIdentity won the "Best Health Care Application" with their CMS for German eHealthCard. CMS for German eHealth Card is the core component of the card application management system provided by ICW to administer the cards and related applications operations for the German eHealth card project. Responding to the card specification of the German gematik and Global platform standards, the integrated card application management system covers the entire lifecycle of the card from initial personalisation to changing patient data, integrating new applications & blocking the card. In cooperation with partner, ICW health card system already provides the complete process of an e-prescription.

Other Sesames Award winners were:

For "Best IDentification Application" - Smart Packaging Solutions won the award for their E-PASTILLE with E-BOOSTER, a unique solution with graphical and electrical perso link. The contactless module (the E-Pastille SPS) is made with a die and a small antenna. It is embedded in the coverpage of passport but cannot work directly with the reader. Communication is done through a passive larger antenna the E-Booster. The E-Booster is located on the datapage which include personnal data, on recto or verso. It is 100 % ICAO compliant and integrated on the protective layer



For "Best Transport Application" - Let It Wave won the award for their CodecID Transport software. CodecID Transport enables compressing digital ID photos to 3 times less space than usual (400-1000 bytes). It provides larger card lifespan and reduces fraud. Holder's identity is verified in real time with handheld or mounted terminals. It suits perfectly low capacity multi-application "everyday life cards" (transport, parking, access, canteen).



For "Best Banking / Finance / Retail" - ASK won this award with their Priva'C.Ticket. The Priva'C.ticket is a shielding paper that disrupts the RF functionality of the contactless media inserted in wallets. Based on a silver ink printed antenna, it comes as a unique solution for privacy protection and marketing tool thanks to printing personalisation. Low cost, user-friendly, ultra-thin, the Priva'C. ticket is also environment-friendly.

For "Best e-Transactions Application" - WAY Systems won this award for their MTT5000 terminal. The MTT5000 is the latest EMV/PCI PED certifiable mobile phone-terminal from WAY Systems with contactless capabilities. It leverages a thin client/server architecture and an open multi-application development environment based on GP/STIP. Its 32-bit processor allows it to meet the needs of individual merchants as well enterprises with dispersed workforces.

For "Best Loyalty Application" - XIRING won this award with their Xi-Card Vida Bancomer reader. Associated with the "Vida Bancomer" marketing programme in Mexico, the Xi-Card Smart Card reader allows each cardholder to check the number of coupons, loyalty points or cash bonuses earned whilst using his/her EMV payment card at participating merchants. The Xi-Card is key to this programme, which is aimed at accelerating the adoption of the EMV payment card and making "Vida Bancomer" the EMV card most used by consumers in Mexico.