

www.smartcardforum.org.uk

SmartCard Networking Forum

The SCNF is intended for use by local government and other local bodies, and is an attractive-looking site. With a review of a site such as this obviously limited to the freely-available content, one suspects that there is a hive of activity in the members area of the site. The links to those pages include sections such as a bulletin board, members directory and news, all of which offer worthwhile tools. The public area is, as one would expect, rather sparse, offering little other than the standard 'FAQ' content and legal documents. More style than substance at first glance, government officials should find it useful if the member benefits live up to the promise.

- Navigation ■■■■■■
- Content ■■■■■■
- Appearance ■■■■■■



www.smartcardalliance.org

Smart Card Alliance

The Smart Card Alliance is one of the more mature presences in the Industry, and it shows in its website. The navigation and layouts are superbly designed, with only the relevant links for each section on display, and your reviewer had no trouble finding his way around. In contrast to the SCNF there is almost too much information on offer, requiring some patience in order to digest the voluminous text. For companies wishing to join the benefits are clearly expressed, but the most pleasing aspect of this website is that visitors are very well catered for.

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www.globalplatform.org

GlobalPlatform

GlobalPlatform is a standards body dedicated to the establishment and maintenance of an open Smart Card infrastructure, and, whilst also a member organisation, it is by nature more technically oriented. Since your reviewer's last visit in August 2002 things have changed for the better. This is a brilliantly laid out website, with a sophisticated navigation structure, clever use of mouseovers and photography, and an attractively airy colour scheme. The text is punchy and informative, and the content management continues to impress. A very successful revamp.

- Navigation ■■■■■■
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SmartID Project for Israel-Palestinian Border

On Track Innovations (OTI), specialists in contactless Microprocessor based Smart Card solutions, is helping the government to secure the Israel-Palestinian border which has become one of the most volatile frontier crossings in the world.

The company, headquartered in Israel, has announced the completion of another stage in installing a contactless access control system on the border. Called the Basel Project, the first checkpoint will be at Erez between Gaza Strip and Israel and is scheduled to go live later this year.

The contract was awarded by the Israel Ministry of Defense and the Israeli National Police to a consortium headed by Electronic Data Systems (EDS) and includes OTI.

When fully operational, the system will monitor the entrance and exit of around 120,000 daily workers in a secure and fast manner and is the first border control system in the world to use both hand and facial biometrics with contactless chip technology as the primary methods of identification.

The Basel solution is based in part on OTI's SmartID technology, which was tested and approved by the Israeli MoD. It incorporates high levels of security encryption and is available in multiple shapes and sizes including stickers that can be used to upgrade existing travel documents like visas and passports.


OTI is providing ISO 14443 compliant Smart Cards, readers and application software. The readers are programmed with sufficient flash memory to allow for multiple software upgrades.

Oded Bashan, Chairman of OTI, said: "The Basel Project will allow secured and user-friendly personal identification of people during border crossing while minimising unnecessary human contact and friction.

"Our SmartID product meets the stringent demands of the Israeli MoD and has proved itself in secured environment applications around the world."

Those wishing to cross into Israel will be required to obtain a contactless Smart Card that will be programmed with hand and facial biometrics and include recent photographs and personal information stored on the contactless chip. They will be required to waive the card in front of a reader and place their hand on a biometric sensor for identification. Once identity has been confirmed, an automatic gate will open allowing the person to cross into Israel. The process is expected to take no more than four to nine seconds.

Website

 www.oti.co.il

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Don't Forget!

Our Website containing daily News On-Line, and information about the full range of SCN services, can be found at the following address: www.smartcardgroup.com

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Concession Card Relaunch

A card scheme offering discounts to people receiving certain benefits in the Stowmarket area is being relaunched by Mid Suffolk District Council and Suffolk County Council in the UK.

The new Stowmarket Key scheme aims to provide special discounts for shopping, education, travel and entertainment, for people who qualify for benefits such as housing benefit and income support.

Originally, the concessionary card was launched in 1997 and was held by nearly 3,000 residents. The project has now been widened to include local organisations and groups helping Suffolk residents.

The card will, for the first time, hold personal health data for those that opt to include it to provide better care in the event of a medical emergency.

Other ideas include new technology to enable a single card to replace current cards such as library, leisure and transport concession cards.

In addition to assisting people to take advantage of a concessionary scheme, it is hoped that it will play an important part in helping to combat social exclusion.

German Healthcare Order

ORGA Kartensysteme and IBM Business Consulting Services (BCS) have received a planning order for nationwide implementation of electronic prescription and electronic doctors' notes services in Germany's healthcare sector.

The order comes from the umbrella organisation of Germany's national health insurers — the association of private health insurers (PKV), the German physicians council (BÄK), the National Association of Statutory Health Insurance Physicians (KBV) and the German hospital association (DKG).

The plan is to shift from paper-based transactions to electronic data communications to speed communications between service providers and improve the data on which they base their treatment.

During the six-month planning period, the two companies will develop a concept for implementing the applications and setting up the necessary infrastructure. This will include project plans, cost estimates, schedules and organisation models. The planning

order and the project activities involved will also be the basis for developing and defining the necessary standards and interfaces. A committee comprising members of the umbrella organisations in the health-care sector will monitor project implementation.

The concept design will take account of the electronic health card, whose introduction is planned by the Federal Ministry for Health and Social Security.

Smart Cash for Volkswagen

Contactless Smart Card specialists Legic Ident systems reports high acceptance of the contactless Smart Card payment system it introduced at the service centres of car manufacturer Volkswagen.

The scheme has more than 65,000 cardholders, over 60 cash registers and 68 cash loading and exchanging terminals and handles a cumulative food consumption of almost \$9.5 million per year.

Legic, headquartered in Switzerland, says that with more than one million payment transactions the system has achieved high acceptance among users.

BasicCard Has More Storage

ZeitControl has announced a new Professional BasicCard ZC5.5 offering twice as much data storage as all other cards in this series. It has 30K bytes of EEPROM and supports DES (up to 112 bit), AES (up to 256 bit) and Elliptic Curve cryptography (167 bit).

The company says that using the Elliptic Curve Cryptography provides the user with nearly the same facilities and security options as the well-known RSA encryption, although the key encoding is noticeably smaller. ISO protocols T=0 or T=1 are supported.

ZeitControl is offering free the BasicCard Development Kit with a Smart Card reader and various BasicCards.

Chip and PIN will Combat Fraud

Three quarters of UK consumers feel that the introduction of Chip and PIN authorisation at the point of sale will make paying by plastic much safer, according to research by MasterCard.

A survey of 1,000 people found that almost half (46%) felt it was too easy for fraudsters to copy their signatures and to use their cards to pay for purchases in stores.





Only 26% of respondents felt that signatures provided adequate protection against fraud. Furthermore, just under 10% admitted to knowing someone who had paid and signed for goods using another person's credit card.

Paul Lucraft, MasterCard's General Manager, Business Services, Northern Europe, said: "It is clear that the nation lacks complete confidence in the security of signature only checks. Replacing signatures with PIN at the point of sale will go a long way towards making plastic safer for everybody."

Concerns over security in the credit card marketplace is the key driver behind the UK's move to chip and PIN technology, which is currently being trialed in Northampton. The migration will see more than 850,000 retailer terminals, 122 million cards and 40,000 cash machines upgraded by 2005, said MasterCard.

Fast Tracks Pass for Skiers

Enthusiastic skiers who want to spend more time on the ski runs and less time getting to the top of the mountain, have welcomed Park City Mountain Resort's Fast Tracks Pass which gives them quicker access to the ski slopes.

One of North America's premier ski resorts in Utah, Park City is expanding its access system which utilises Rapidtron's contactless Smart Card technology allowing adult full-season pass holders and multi-day ticket purchasers (four or more days) access to an express lane on four of the resort's most popular lifts.

In addition to increasing the number of 'hands free' turnstiles per lift, Park City will now utilise Rapidtron's Thermo Smart and Bar code reader to issue single and multi-day Smart passes.

Combatting Football Hooligans

Millwall football club in the UK reports that its security measures, according to an official Home Office report, had cut arrests for football violence from 109 in the 2001-2002 season to just 18 last season. The news comes in a year that saw football related arrests jump 19% from 4,035 to 4,793.

To bring the hooligan problem under control, the club introduced Teamcard, a Smart Card-based membership scheme before last season's kick off. To enter Millwall's ground, supporters had to use a Smart Card

containing ticket entitlement and personal details. As a result the club knew exactly who attended each game and could instantly ban anyone caught causing trouble or misusing their card in or around the ground.

Randal McLister, Teamcard's Managing Director, explained: "The system provides enough intelligence to frighten hooligans away. Most clubs know little about their troublemakers, but with Teamcard installed, the advantage swings in their favour and they can stop hooligans in their tracks."

Celtic Selects PayWare

Celtic Football Club, one of the Scottish Premier Leagues top clubs, has selected Trintech Group's PayWare Merchant to automate the processing of all card payments related to ticket sales.

The club has deployed the PayWare solution at its headquarters in Glasgow to manage all card transactions from all the club's ticket sale operations including tickets sold over the Internet. The implementation will also enable the club to migrate to Chip and PIN transactions.

John Paul Taylor, Celtic FC, said: "By introducing a faster and more secure payment method our supporters have the freedom and choice to buy match tickets whenever it suits them. This will also generate increased ticket sales for the club, as we are able to offer our supporters a 24-hour ordering service."

"The addition of Celtic FC brings our roster of clients in the sporting field to well over 60," said Eamon Keating, General Manager of Trintech's Retail Division.

For more information visit ...



Mid Suffolk County Council

www.midsuffolk.gov.uk

ORGA

www.orga.com

ZeitControl

www.basiccard.com

Rapidtron

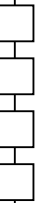
www.rapidtron.com

Park City Mountain Resort

www.parkcitymountain.com

Trintech

www.trintech.com





Securing New York's Water Supply

Controlled Access has been awarded a contract by the Department of Environmental Protection (DEP) to secure New York City's water supply. Work on the estimated nine-month project to upgrade the Queens, NY facility is scheduled for completion in the first quarter of 2004.

With over 6,000 employees, the DEP manages the entire New York City water supply. Any lapse of security could have devastating consequences.

Currently, the DEP is using an older badging system that is not integrated into the department's outdated access control system. In addition, the CCTV system utilises a Matrix switcher with recording via video multiplexers and VCRs. The security system upgrade includes enterprise DVRs, proximity readers, sophisticated badge printers, equipment racks, LCD displays and video intercoms.

Workstations will be connected to a new security LAN providing real time alarm and status information, the ability to manage the system, and to run reports from various security posts throughout the facility.

Proximity card readers will replace existing magnetic stripe readers and two notebook computers will allow badging at remote locations. In the future, the system will be able to accept virtually any biometric reader or Smart Card capability if the DEP decides to add that technology.

The new system will also provide digital video recording and management for over 120 cameras and the security LAN will provide access to both live and recorded video for security post workstations throughout the facility.

Enhanced ID and Security Solution

Intercede Group in the UK has announced a re-seller agreement with WinMagic of Canada to incorporate WinMagic's disk encryption product, SecureDoc, into its MyID family of identity and security solutions.

WinMagic's SecureDoc is a disk encryption and access control product, providing full hard disk encryption and pre-boot authentication. Security is further enhanced with the use of Smart Cards providing two-factor authentication. The product has achieved Common Criteria and FIPS 140-1 Level 2 accreditation.

MasterCard Certificate for Ingenico

Ingenico was granted certification from MasterCard International on its Terminal Quality Management (TQM) during MasterCard's Global Vendor Information Forum held recently in Brussels. Ingenico is the first terminal vendor to obtain this quality label from MasterCard.

The TQM approval program was created last year to help ensure the quality and reliability of EMV-compliant terminals worldwide. The certification process consists of auditing, on-site, the entire lifecycle of a product (from design to manufacturing to field support) thus ensuring customer satisfaction through consistent product quality levels. MasterCard's TQM label is specific to an IFM (Interface module) produced in a specific production site.

Ingenico has piloted the scheme with its 3100 and 3300 PIN pads, which are positioned for mass roll-out worldwide. The audit led by MasterCard TQM team dealt with Ingenico's IFM which is standard on Ingenico's U32 payment devices range.

Hypercom Terminals for UAE Bank

Computer Network Systems (CNS), a UAE-based systems integrator, has announced that Mashreqbank has awarded it a contract to supply 4,600 Hypercom point-of-sale terminals.

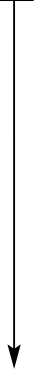
New M&S Loyalty and Credit Card

UK retailer Marks and Spencer is launching nationally a combined loyalty and credit Smart Card called '&more' on 6 October and rebranding its financial services arm as Marks & Spencer Money.

The new card can be used in all outlets which accept credit card payments and spend on the card will earn loyalty points which will be translated into reward vouchers for use in M&S stores. Some 2.6 million existing chargecard users will be upgraded to the new credit card during September.

Mobile GPRS EFTPOS

Australia's Commonwealth Bank has introduced MobileComm GPRS, a portable EFTPOS terminal, which operates on the Optus GPRS mobile data network. The terminal is designed and manufactured by Keycorp.





“The GPRS data network offers a lower cost structure, with savings in communication costs, which the bank will pass on to our merchants,” according to Peter Roeleven, the bank’s General Manager, Merchant Acquiring, Working Capital Services.

“MobileComm GPRS allows mobile merchants the capability to process real-time card payments and reduce their cash handling risk, which is a major benefit to any mobile business,” he said.

Hong Kong Cinemas Loyalty Scheme

INSIDE Contactless and MajorLink, a supplier of card and wireless integration, have teamed up to provide an E-Loyalty Club Program with UA Cinemas, the leading retail cinema chain in Hong Kong.

The project utilises INSIDE’s contactless memory chip, PicoTag 2KS, and proximity reader, M220H, and MajorLink’s Retail Smart Card Solution.

The system consists of a Smart Card, an automated kiosk, an online Web site and loyalty management modules in order to invite customers to participate in the personalisation of their own membership card.

The concept allows points from every purchase to accumulate for gift redemption. The photo kiosk has been set up to assist with the application process, printing and issuance of the personalised card on the spot. The contactless card reader included with the POS terminals allows members’ bonus points to be updated while the loyalty kiosk is meant to offer a self-service interactive terminal featuring movie titles, previews, bonus points checking as well as reward redemption.

Border Card Technology

Cubic Corporation and LaserCard Systems Corporation, a wholly-owned subsidiary of Drexler Technology Corporation, have developed a new type of Smart Card that combines contactless and optical memory technologies to support biometric identification.

The new hybrid card has been designed to improve the identity verification process and shorten wait times at US borders and will be offered to the US government for evaluation.

The contactless portion of the new card contains a computer chip and radio antenna and operates much the same way as Cubic’s transit Smart Cards. The

technology allows the card to be read in about 100 milliseconds, allowing people and/or cards to approach a gate, having their status verified against border security databases. The LaserCard’s optical memory stripe provides counterfeit resistance, automatic card authentication and high capacity secure storage for multiple biometric images.

Leadership Award for Bioscrypt

Bioscrypt, a provider of advanced fingerprint technology has announced it has been awarded the Frost & Sullivan Application Market Penetration Leadership Award, in recognition of its market leadership in the Finger-Scan Physical Access/Time and Attendance application segment across the world.

The award is given each year to the company that has been most effective in penetrating their industry’s application markets.

Deep Mehra, Frost & Sullivan Research Analyst, said: “The Physical Access Control application segment was the largest revenue generating application for the finger-scan biometrics market in year 2002, and will continue to be the dominating application market for the next few years.

“With a strong focus on technological leadership and building key strategic partnerships, coupled with highly successful implementations all over the world in various vertical market segments, Bioscrypt has demonstrated excellent market penetration skills and is poised to make further inroads into the biometrics market,” Mehra added.

For more information visit ...



Controlled Access

www.controlledaccessllc.com

Intercede

www.intercedegroup.com

WinMagic Inc

www.winmagic.com

Hypercom

www.hypercom.com

INSIDE Contactless

www.insidecontactless.com

MajorLink Communications

www.majorlink.com

Cubic Corporation

www.cubic.com

LaserCard Systems

www.lasercard.com

Bioscrypt Inc

www.bioscrypt.com





SNCF Paris Contract for Ascom

French company Ascom Monétel has been awarded a €50 million contract from the French National Railways (SNCF, Société Nationale de Chemins de fer) for the delivery and installation of access control equipment for an automatic fare collection system in the Paris region.

The contract comes just a month after Ascom signed a Can\$66 million contract with the Montreal transport authority in Canada for a fare collection system (see SCN August, 2003).

Ascom will equip 120 stations on the Paris suburban network with access control systems, including supervision equipment and more than 1,500 access control gates scheduled to come into service between September 2004 and December 2008. The contract also includes an equipment maintenance agreement valid until 2010.

The new access control systems will be able to read magnetic stripe cards as well as contactless Smart Cards. The gates will be equipped with sliding gates and card readers designed for magnetic stripe and/or contactless chip cards with features adapted to meet the requirements of each station: mixed or contactless ticketing readers, one- or two-way access control gates, free or controlled exits. Each station will include at least one unit for customers with impaired mobility (special access lock).

Cubic \$12m Washington Contract

Cubic Transportation Systems has received a \$12 million contract to upgrade the Washington Metropolitan Area Transit Authority's Smart Card-based fare collection regional central computing system. The upgrades will support new customer service initiatives for the SmarTrip card system, giving regional commuters options for purchasing and reloading their Smart Cards.

Cubic will deliver software and hardware upgrades to interface with the regional fare collection system's customer service centre, which is expected to be operational in late summer 2004. The upgrades will support new applications for the SmarTrip card, including the company's Autoload, Smart Benefits, Regional Transit Benefits and its future Fairest Fare functionality.

Cubic will also deploy 500 point-of-sale terminals at

retail outlets throughout the region linking merchants to the Nextfare Central System. In addition to the new contract, WMATA is giving Cubic an option to provide \$2.4 million in rail system upgrades.

Certificate for EU Tachograph

ORGA Kartensysteme has been awarded the security certificate from Germany's Federal Office for Information Technology Security (BSI) for its Smart Card technology for the new digital tachograph.

As reported in SCN last month, ORGA is supplying Java Card technology for two million tachograph cards for the UK, one of the first countries implementing the technology.

The digital tachograph, which is replacing the current paper-based system, uses a Smart Card to record vehicle speed as well as the times at which the driver is behind the wheel or resting. In accordance with an EU directive, all new trucks and buses must be equipped with a digital tachograph as of August 2004.

The certification process includes the functional tests for the tachograph application prescribed by the EU directive. ORGA expects it will soon receive the successful results of the interoperability tests and final type approval from the country-specific motor traffic authorities.

TigerMiles Card Scheme

The largest Smart Card based loyalty scheme in Ireland is now being used by over 250,000 Esso TigerMiles customers following the latest stage of an implementation by prime contractor Fujitsu, formerly ICL, and Smart Card solutions provider, Applied Card Technologies.

Esso is Ireland's largest fuel retailer and has just deployed over 280 Smart Card terminals at its sites throughout the country as part of its Esso TigerMiles customer loyalty scheme replacing the paper-based Tiger Tokens.

µ-Chip with Internal Antenna

Hitachi has announced from Tokyo that it has developed a new version of its RFID µ-Chip embedding an antenna.

The original µ-Chip, announced in July 2001, is one of the world's smallest IC chips at 0.4mm x 0.4mm.





The chip data is recorded in read-only memory during the semiconductor production process and therefore cannot be rewritten, thus guaranteeing its authenticity.

An external antenna must be attached to the chip to allow external devices to read the 128-bit ID number stored in its ROM.

The new version, however, features an internal antenna, enabling chips to employ the energy of incoming electrical waves to wirelessly transmit its ID number to a reader.

Hitachi says this breakthrough opens the door to using μ -Chips as RFID IC tags in extremely minute and precise applications that had been impractical until now, for example the new μ -Chip can be easily embedded in bank notes, gift certificates and documents, etc, to prevent counterfeiting.

Oyster Card Price Freeze

The introduction of the Oyster Smart Card has been given a boost by the Mayor of London, Ken Livingstone who announced a four-year fare package from January when the price of travel on London's Underground will be frozen for passengers using the card and under-11s will travel free on the buses.

He said: "The new four-year fare package will encourage people to switch to pre-paid tickets like the Oyster Smart Card and Bus Saver tickets. Use of pre-paid tickets helps speed up our bus service, reduce queues at Tube stations and make bus drivers safer by taking cash off the bus. The new package is also designed to encourage off-peak use of public transport when we have the most capacity."

First EMV Card in Czech Republic

Welcome Real-time has announced that Komerční Banka, a subsidiary of Société Générale and the top merchant acquiring bank and leading card-issuing bank in the Czech Republic, has selected its XLS technology for the launch of the country's first EMV loyalty Smart Card.

Komerční Banka has already begun converting all of their credit and debit cards to EMV and will use XLS to enhance their cards with numerous added-value services, such as gifts, loyalty points and surprise bonuses, designed to appeal to a wide range of customers and merchant segments.

EMV in Macedonia

In Macedonia, bank Stopanska will be the first in the country to issue customers with credit cards, which will be fully EMV compliant in year 2004, thanks to the implementation of the Nomad Cortex Credit-Card solution from Nomad Software.

Stopanska, whose main shareholder is the National Bank of Greece, will benefit from being the first financial institution in Macedonia to meet customer demand for credit cards in a traditionally cash and cheque led society. The bank believes that this will provide additional revenue opportunities and also provide a means of retaining customers and attracting new ones.

Milica Caparovska, Retail Banking Manager from Stopanska, said: "As the first bank in Macedonia to meet customer demand for credit cards, we are paving the way forward for the entire banking industry."

Serbia Moves to EMV

The National Bank of Serbia is moving towards EMV migration with the help of Giesecke & Devrient (G&D), of Germany, which has been tasked with setting up a card personalisation center in Belgrade by the end of the year.

G&D will also act as consultant to Serbia's central bank on converting their payment cards to EMV Smart Cards, accompany the adaptation to new processes, and provide the center with the appropriate equipment.

For more information visit ...



Ascom

www.ascom.com

Cubic Corporation

www.cubic.com

ORGA

www.orga.com

Applied Card Technologies

www.card.co.uk

Hitachi

www.hitachi.com

**Mayor of London, London
Assembly and Greater London**

www.london.gov.uk

Nomad Software

www.nomadsoft.com

Giesecke & Devrient

www.gi-de.com





Revolution or Evolution?

The “teenage” years are over for the Smart Card industry

by Simon Reed, Director of Application and Technology partnerships

ORGA Kartensysteme, and member of the Editorial Advisory Board, Smart Cards Now



Simon Reed

Although some companies date back over 30 years the reality is that we have only seen a global commercial Smart Card sector for around 10 years and within that period we have seen one major slump.

As a result of that slump which started in 2001 (but the seeds were probably sown some 6 months before) the last 18 months has been defined by a significant period of change in the industry we know as Smart Cards. Due to an economic downturn in the IT and Telecommunications sector, 2002 marked a huge requirement for all companies in this sector to re-align, consolidate and focus. Coming into the last quarter of 2003 we are starting to see if those changes have made a difference and who is now ready to leave the teenage years behind them and step out into a new commercial world.

So what has happened, what is happening and is this the end of a process or the beginning of a radical change in the way the technology of Smart Cards is built, delivered, packaged and exploited?

Let us consider the factors that have come together some seemingly unrelated but which have contributed to this change. Firstly we must not lose sight of two important drivers — internet growth and the .com “boom and bust”. Three years ago Smart Cards shared a unique stage in terms of growth rate with only one close rival, that of internet connections (both exceeding 35% per annum globally). Fuelled by the desire to communicate and connect both in a mobile and fixed world the growth of SIM cards amongst the mobile telecommunications companies soared as ages for new subscriber phone usage in the Western world dropped to pre-teenage years — our predictions for 500 million cards in mobile telecoms alone seemed pessimistic and that was without the 1.2 billion bank card migration.

We were encouraged in these predictions by the multi-billions paid for next generation 3G mobile licenses around the world — all requiring our technology. With the Orange, Vodafone, TIM and T-Mobiles of the world leading the charge we were surely with safe partners.

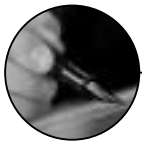
Consequently this was what was thought to be the beginning of a long and never ending growth. No investment bankers could resist the lure of this area nor could the Smart Card companies disagree that after all the hard years of work we deserved a party — new factories, new employees to market this growth, new suits and unlimited development to demonstrate our technology in every conceivable business sector. Previously private Smart Card companies started to sell shares to eager suitors, others decided that stocklisting was irresistible, some deciding to acquire companies themselves — everyone keen to buy and we being keen to get the investment to leave our small technical backwater and claim our rightful place on the world mainstream technology stage. In short this was so much better than being let loose in the candy store!

But history should have warned us, as the Romans found out — as soon as you start building temples to yourself the end is not far off.

What then happened is a lesson which has been painfully inflicted, painfully learnt and is by no means over — the worst set of factors imaginable came to bear.

The .com bust levelled the entire technology sector wiping billions of value off companies, a position which it is still only gradually recovering from. The massive loans used to purchase 3G licenses were usually secured against the share value of the big mobile operators — the knock on affect being a huge application of the 3G migration and roll-out brake. Suddenly the heaven of the stock market turned to the devil on your back.





But surely the rule is applied that you “never put all your eggs in one basket”. Unfortunately most Smart Card companies found the one type of mobile telecommunication egg just too attractive.

Some companies did invest in the banking sector but the commercial and logistical dynamics mean a different model of high volume, country specific production and a relatively low Smart Card technology entry level — SIM card business was still a major requirement to provide the means of investment in this emerging EMV migration banking sector.

Combined with lower cost production start-ups in Asia, over supply of silicon due to the general IT slow down and over capacity in card production the effect was a dramatic reversal for the industry which is still being felt today.

In the last 18 months out of some 20,000 jobs in the Smart Card industry across manufacturing, development and services, it is estimated over 30% of the workforce has been lost. Many smaller innovative Java Card application development companies have disappeared and several production plants have been closed or sit empty or under utilised. In addition out of the top 6 Smart Card companies one has been completely sold, one is still for sale, one continues to fragment with heavy losses and one, Incard, has now been absorbed into the silicon manufacturer ST Microelectronics.

So what of the future? Well it seems inevitable that the larger silicon players like Infineon and Phillips will watch ST's move very carefully — Motorola and Siemens looked at going further up the Smart Card value chain before but will this time they make the balance of being both supplier and competitor work? Will this trend to commoditisation spread across the industry and will the new players have the skill and appetite to cope with the ever increasing complex logistics required to meet global customers? Will the incumbents, now leaner and more focussed and with huge knowledge of software and security ride a slower but steady requirement for the integration of Smart Card technology into ID and mainstream IT?

What is certain is that further periods of consolidation will occur. However it is now clear that in a rather bizarre way the turmoil of the last 18 months has in no way diminished the medium and long term demand for Smart Card technology. Global security both in armed conflict and via cyber-space fraudsters has highlighted a view that opening up of communications and online services must be balanced by greater control of ones identity in many aspects of our daily life.

It was certainly a painful teenage period but perhaps it was only what we should have expected. Looking forward all signs are for a gradual pick-up gaining more pace in 2004... let's only hope those rumours of silicon shortages on the horizon are just a hint to plan better in the future and to stay clear of temple building! ❖

News in Brief

Smart ID for Boeing Corporation

The Boeing Company, the world's leading aerospace company, is introducing a Smart Card-based identity management system in which more than 200,000 employees, contractors and partners around the world will receive a multi-function Smart Card for access to information systems and buildings.

A two-year contract for the Smart ID scheme, with extension options, has been awarded to Siemens Information and Communication Networks who will be supported by Bell ID and Gemplus.

As the prime contractor, Siemens will provide project management and system integration services. Gemplus

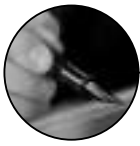
will deliver middleware components and the Smart Cards. Bell ID will provide ANDiS Management Systems as the software platform for life cycle management of the cards and the supported applications.

The first roll-out phase involves US-based staff being issued with an ID card for performing digital signing and encrypting of e-mails as well as secure log-on to the company's Windows2000 computer network. Boeing's phased approach will eventually result in all staff using the Smart Card which supports a wide range of applications, including biometrics-based access control to company premises and electronic payment in cafeterias and at vending machines.

Websites

-  www.boeing.com
-  www.usa.siemens.com/networks
-  www.bellid.com
-  www.gemplus.com





Why Do I Need A Smart Card?

by Dr David B Everett, Technical Advisor, Smart Cards Now



Dr David B Everett

Although the price of Smart Cards and particularly multi-application Smart Cards is getting ever closer to the \$2 figure, the question is often asked: isn't there a cheaper way?

As always there is never a simple answer, but we can look at the underlying concepts which determine the best way to go. A Smart Card is fundamentally an identity token with the capability of proving its authenticity and also of proving the binding with the authorised card holder. The Smart Card is also capable of providing the crypto token to any application invoking cryptographic security services.

In general it should not be looked on as a portable database although there are some business schemes such as GSM where the SIM card has also (in addition to identity authentication) been used to store the users address database. In general it is simpler and cheaper to do this in the phone, which is becoming more common with the modern phones. The same is true for other applications; the Smart Card is not the most effective place to store the data. The core function of the Smart Card should be to store sensitive data such as the cryptographic keys and PINs. The applications that process this data also need to be stored in the memory of the Smart Card.

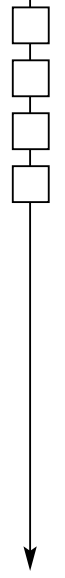
So let's look at some real world applications to see whether a Smart Card is the right solution.

A Retailer Loyalty Card

A retailer wishes to issue all his customers with a loyalty card that can be used to identify the customer at the point of sale and register the purchases against his identity. This information can be used as part of a CRM program. As an incentive to the customer the retailer will issue points to be stored on the card that the customer can redeem as appropriate.

The requirement here is to store sufficient information on the card to identify the customer and also to be able to inform the customer of his points total. The card can only be used at the retailer's point of sale devices, and the points can only be redeemed by an online check with the company's data centre.

In this particular case the use of a simple magnetic stripe card can adequately achieve the necessary requirements. We can show this by examining the threats and vulnerabilities model for this business scenario and show the risk to be manageable. Let's assume that the card stores a unique number which is registered to the particular customer on the magnetic stripe and a number that represents the points earned to date.



| Events Diary | |
|-----------------|---|
| October | |
| 8 — 9 | ASROC — Alternative Payment Processing Conference, Le Meridien Waldorf Hotel London, UK Tel: +1 (212) 722 — 1744 Website: www.asroc.com |
| 19 — 23 | 10th World Congress and Exhibition on Intelligent Transport Systems and Services, IFEMA, Madrid, Spain Website: www.madrid2003.itcongress.org |
| 29 — 31 | Biometrics 2003, Queen Elizabeth II Conference Centre, Westminster, London, UK Tel: +44 (0)1743 241289 Website: www.biometrics-2003.com |
| 29 — 31 | 9th Annual Cards Africa 2003 Sandton Convention Centre, Johannesburg, South Africa Website: www.cards-worldwide.com/2003/cards_ZA |
| 30 — 31 | ID Smart: Cards for Government & Healthcare, QE II Centre, London, UK Website: www.idsmartconference.com |
| November | |
| 11 — 13 | Airport, Port and Terminal Security 2003, Transport Terminal Solutions, International Aviation Safety & Security, Exhibition and Conference, Olympia 2, London, UK Tel: +44 (0)20 7344 3841 Email: Jknaggs@iirltd.co.uk |
| 12 | Business Continuity Planning 4 Retailers — Protecting Your Multi Channel Strategy, SAS Radisson, London, UK Website: www.retailvents.co.uk |



So what are the threats? The customer could lose his card, but then if he informs the company they can cancel the card number and issue a new card with a new number registered to that customer. A dishonest person could counterfeit a duplicate card with some one else's number but the redemption of points requires some proof of identity which the cashier can check (i.e. use of a credit card). The card holder could increase the number of points on the card but since the company is going to check the card image held by its data centre before redeeming value this wouldn't get you very far.

In this particular scenario all the card is really doing is presenting the cashier (and the POS) with a number that they can link to the registered customer. It is a simple way to quickly enter identification data into the POS transaction. There is little need for identity verification or authentication.

A Financial Payment Card

In this case the cardholder needs to authorise the release of funds from an account held and managed by a financial organisation (i.e.: a bank). For the bank to authorise payment against a customer's instruction it needs to authenticate the customer's identity and to be assured that he has authorised the particular transaction.

Authentication is the first security requirement. A magnetic stripe card can hold the necessary account identification number just as well as a Smart Card. It's tempting to say that this achieves single factor authentication (1-F) by possession of a token but of course the magnetic stripe card could be easily counterfeited whereas a modern Smart Card chip is very difficult to counterfeit. Do note here that the Smart Card chip must be challenged to prove this authenticity. Good practice requires two factor authentication so the use of PIN is about to become the standard in the world of Mastercard and Visa with their EMV cards now on wide scale roll out internationally. So how about the use of a magnetic stripe and PIN, is it fit for purpose? The problem really is that you are heavily dependant on the PIN to achieve the necessary authentication and PIN security is a major problem. Where do you check the PIN? Locally at the POS is difficult to make adequately secure and if you send it to the card issuer for checking there is a significant cryptographic key management overhead. The 80s and 90s were full of different mechanisms for trying to make this secure. EftPos UK was the first to move to public key cryptography to solve this problem.

The better solution is not to transmit the PIN at all but to check it locally in the customer's Smart Card. There is no way that you can match this security without using some trusted tamper resistant module, so the Smart Card is the ideal vehicle.

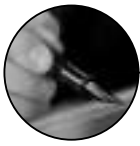
The financial payment card goes further by having the capability to create a transaction signature that can stop mischievous repudiation by the customer.

The General Case

It is possible to define the characteristics where a magnetic stripe card provides an adequate instrument for a particular application:

- 1 Identity authentication is not required.
- 2 Identity authentication is not dependant on the authenticity of the card (there have been numerous mechanisms invented for providing card authenticity such as Magnetic Watermark, MM, etc, but the chip is unanimously agreed to be the best). PIN and biometrics may both be used for identity verification.
- 3 If an asset is to be stored on a passive memory device it must not be vulnerable to copying (it should be noted that you can protect against data integrity and confidentiality exposure by encrypting and signing the data prior to storing it on the magnetic stripe).
- 4 The total amount of data that can be stored on a magnetic stripe is limited to a few hundred bytes (depending on the modulation and data compression techniques).
- 5 There is no requirement for the card to exhibit any functional operation (i.e. the magnetic stripe is a passive memory device). ❖





Letters to the Editor

We would appreciate your comments and opinions on the contents of Smart Cards Now, and the industry in general.

Please send your letters to:

The Editor
PO Box 1383, Rottingdean
Brighton, BN2 8WX
United Kingdom
Email: info@smartcard.co.uk

Please state whether you would like your letter to be published or not. Thank you. Please note that Smart Cards Now reserves the right to edit letters.

Dear Sir,

Big Brother. Thank goodness the UK government has put on hold any ideas of a national ID card. What a waste of public money! Does anyone really think that carrying an ID card will make this country any more secure?

*Yours faithfully,
Angela of Birmingham, United Kingdom, UK*

Dear Sir,

Our company has just been the victim of a disgruntled employee who maliciously accessed an unauthorised workstation while the user was away from their desk, and deleted an important section of our working database. Legal action is obviously being taken against this employee. However after this incident I myself walked around the offices and to my surprise found several workstations left logged in and secure access passwords written on post-its just lying around for anyone to find. It was a major concern, and one that could have potentially brought our company down if action had not been taken immediately.

Now we have implemented a Smart Card authentication system, which means our workstations are locked down once cards are removed and passwords are only entered once the card is registered in a reader. We have only recently learnt the benefits of using such a system. I always thought passwords were a very effective form of security. Shows how little I know! Times have obviously changed and security has evolved with it.

My point is that we made a big mistake; we thought our security level was fine and knew no better. Most companies only make changes to their security once a breach has been made, just as we did. I would like

to say that, from our experience alone, this is a big mistake. Companies should try at all times to be ahead of the game, especially when it comes to IT security. No matter what the cost. Hopefully, we will not make that mistake again. We learnt the hard way! I don't want others to make the same mistake! It has cost us a lot of money, stress and embarrassment.

*Yours faithfully
Andrews of Kingston-Upon-Thames, UK*

Dear Sir,

This government is considering giving every child in the UK a unique identity number at birth. Surely we already have a system called National Insurance, which provides a number, and identifies and stays with us for life. If these numbers are kept secure why doesn't the existing system work?

How long will it be before babies are chipped at birth? We already chip our pets, so why not our children too? I am sure it is only a matter of time before there will be a very good reason to have everyone chipped: after all the UK's police force is already suggesting they have the DNA of every citizen on file.

*Yours faithfully,
Hadlow of Romsey, UK*

Dear Sir,

Is the public really concerned about having RFID chips inserted into their purchases? Frankly I doubt it. We can already be traced through our mobile phones and that doesn't seem to concern the average man in the street, as it's a convenience that we now cannot imagine life without.

Do we really think that retailers, or worse, the law enforcement authorities, are interested in the average law abiding citizen's movements? We are already tracked on the roads, in car parks and city centres. Our personal details are distributed and stored by banks, retailers and bulk mail companies. If we really think we have genuine liberty we are in cloud cuckoo land. If we want anonymity then we must not open a bank account, not own a house or car, not work or travel abroad, and not expect medical treatment.

Personally I feel that if RFID chips stop pilfering, speed the time through a checkout and ensure goods are in date, I'm all for them.

*Yours faithfully,
Wheeler of Southampton, UK*



Smart Card Guidelines Update

BearingPoint, a systems integrator, has been selected to update the General Services Administration's (GSA) Smart Card Policy and Guidelines Handbook that serves as a point of reference for any federal government agency planning or implementing a Smart Card project.

"There have been significant advancements in Smart Card and related technologies since the handbook's initial release, which was almost three years ago," said Michael Palmer, Managing Director and Head of BearingPoint's secure access and identity management team.

BearingPoint is working with the Smart Card Alliance which will contribute expert input and reviews provided by its members who represent a cross-section of users and technology providers.

GlobalPlatform Revamps Web Site

GlobalPlatform has re-launched its public Web site, www.globalplatform.org. The on-line portal has undergone a design and content transformation, and now offers up-to-date information on the increasing number of Smart Card projects worldwide which are based on GlobalPlatform technology.

Users can now access abstracts and more detailed case studies on a number of GlobalPlatform implementations and free downloads of the GlobalPlatform Specifications and information on industry events can also be accessed directly from the home page.

The first 'best practice' case study to be launched on the new look Web site details the business case, technical development and general progress of the US Department of Defense's Common Access Card (CAC). Other case studies, such as the Taiwan Health Card Initiative and the Moscow Social Card Project will be published before the end of the year.

Kevin Gillick, Head of Corporate Marketing for Datacard Group and Chair of the GlobalPlatform Marketing Center, said: "This is a milestone for the organisation in terms of highlighting the stability and relevance of GlobalPlatform specifications for cards, devices and systems across sectors and markets and showcasing the endorsement of major players who have used, and benefited from, GlobalPlatform technology."

Infinion Management Changes

Infinion has announced changes in management. Dr Erk Thorsten Heyen, former CEO at Unit.Net AG, has taken over worldwide responsibility for Infineon's Secure Mobile Solutions (SMS) group. He takes over from Ulrich Hamann who has left Infineon to take up new challenges outside the company.

Dr Thomas Marquardt has been appointed as Infineon's Global Head of Human Resources.

Infineon has also launched a new department, People & Organisation, within the Corporate Center, for which Annika Farin has global responsibility. She is tasked with the implementation of strategic personnel and organisational development, including promotion, development and supervision of managers, and setting up a shared management culture.

Datakey Chairman Resigns

Gary Holland had resigned from the board of directors and from his position as board Chairman of Datakey, developers of Smart Card technology, citing a potential conflict of interest with his other business activities. Gene Courtney, who has served on the Datakey board for eight years has been appointed board Chairman.

RFI Appointment

Radio Frequency Investigation has appointed Teresa Gillman as Senior Security Evaluation Engineer expanding its Smart Card security team. Previously she worked in the UK and the US developing Smart Card secure back office products for MasterCard International and Mondex International.

Seven New Members for ICMA

The International Card Manufacturers Association (ICMA) has added seven new members bringing the total to over 230 worldwide. They are: Principal Members (card manufacturers): Production Services Associates (USA), Sandia Imaging (USA) and MK Smartcard Joint Venture Company (Vietnam). Associate Members (suppliers): PCU Mefema (Germany), Schuster Flexible Packaging (USA), Coding Products (USA) and Bayer Polymers (Germany).

Websites

- www.bearingpoint.com
- www.smartcardalliance.org
- www.globalplatform.org
- www.icma.com





DeXa.Badge for Transpetro

SchlumbergerSema has announced it has been awarded a contract with Transpetro, the transportation company of Petrobras Group, the Brazilian national energy company. SchlumbergerSema has implemented its DeXa.Badge solution to provide secure physical access to its offices in Rio de Janeiro, RJ, Brazil, ahead of schedule in only 100 days.

DeXa.Badge is a corporate identity management and access control solution that incorporates Smart Card and other technologies, and in this case includes biometric, three-factor authentication for even stronger security.

The access control project at Transpetro includes physical blockade equipment, electromagnetic locking devices, biometric authentication, and physical barriers surrounding the compound. Transpetro is using fingerprint scanning to control access to secure areas. The DeXa.Badge solution in place can also be expanded to include other applications.

SchlumbergerSema have provided the cards and reader hardware, the middleware licensing and service implementation of the new system. The project was implemented in two stages, beginning with the installation of the card readers in the common areas of the building followed by installations in the private, restricted areas of Transpetro. With the DeXa.Badge access control system, event control and monitoring of the physical access environment is fully automated.

Fast RFID Tag Assembly System

Matrics Inc., a developer of EPC-compliant RFID technology, has announced PICA, the company's new high-speed RFID tag assembly system enabling the RFID transformation of the consumer goods supply chain. PICA (Parallel Integrated Chip Assembly) dwarfs all existing RFID tag producing processes currently available. Unlike existing web-based flip-chip assemblers that have a maximum capacity of attaching chips at speeds of 8,000 units per hour, one PICA machine will be able to produce tags up to 1500 times faster.

"With the introduction of PICA, Matrics will have the capacity to produce millions of EPC-compliant RFID tags per hour at a price point that is economically feasible," said Mike Arneson, Founder and CTO of Matrics, Inc. "The implications of PICA for the world around us are staggering. Imagine

increased production, improved security, reduced liability due to malfunctioning tags, and increased profitability."

A PICA prototype machine was built in spring 2003 and 15 provisional patents have been secured, further validating the process. A PICA production machine, which will be installed at Matrics' headquarters in Columbia, Maryland, will begin production in first quarter 2004.

ImageWare Launches Badging Suite

ImageWare Systems has announced the release of its latest version of EPI Suite ID badging software. EPI Suite v6.0 is a photo ID software for organisations to create, manage, produce and check basic-to-complex, secure identification. EPI Suite is currently used for developing ID cards and credentials in the government, education, healthcare, public venue, public safety and retail markets, among others.

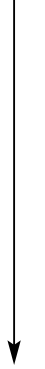
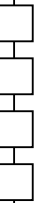
New image capture features include additional camera drivers for image capture in high volume enrolment situations, as well as a smart face finding tool that automatically locates a face then centres and crops the image, ensuring consistent, professional-looking photos every time.

To address new market applications, EPI Suite v6.0 also includes the ability to store more images per person and supports new bar codes including PDF417 and Datastrip's 2D barcodes. The barcodes enable cards to be used as portable databases that can hold biometric and other personal information, expanding EPI Suite's applications into deeper levels of the healthcare, education, childcare and public safety markets, among others.

EPI Suite v6.0 can now also be used as an access control tool, with its Guard Station feature. To use the feature EPI Suite is connected to a serial card reader. When a card is swiped in the reader, EPI Suite automatically populates the computer screen with the cardholder's photo and card status for visual verification.

SCM Mediaguard for CanalDigitaal

SCM Microsystems, Inc. has announced an agreement for SCM to provide Common Interface (CI) Modules to CanalDigitaal, a pay TV operator in the Netherlands. The CI modules from SCM include the Canal+ Technologies Mediaguard digital TV conditional access system, which enables CanalDigitaal to





securely deliver pay TV services to the rapidly growing base of CI-ready set top boxes and devices.

Earlier SCM announced plans to develop, manufacture and market Mediaguard conditional access modules. Based on SCM's WorldCAM product family, the modules will comply with the Digital Video Broadcasting (DVB) Common Interface (CI) standard. Worldwide there are about 350 companies that have endorsed the DVB standard for digital TV security.

CanalDigitaal, part of the Canal+ Group, had 550,000 customers as of July 2003. The Canal+ Group in total has more than seven million digital subscribers plus an additional ten million analog subscribers.

Naspers Launches Irdeto PPT Card

Irdeto Access has launched the Irdeto Delta Pay Per Time (PPT) Card, a new generation of Smart Card that enables a channel or package to be viewed for a predetermined amount of time.

The PPT card enables customers to view pay-per-view films, events or any other program and pay for it according to the actual amount of time consumed in terms of hours and minutes. The EasySatCard benefits subscribers who want to purchase content on an ad hoc basis, manage their costs and have the freedom to view particular content with anonymity. It also benefits subscribers who do not want the responsibility of being tied to a Pay-TV contract with a particular operator. Technocell, a company based in Switzerland, active in the GSM telecom business, was the first company to recognise the different ways that subscribers wish to purchase content to be viewed and to understand that they could be solved through the use of an appropriate Smart Card.

The card, meant primarily for retail distribution, has been designed to facilitate quick operator deployment and growth, with the advantage that no subscriber management is required. The card life span can be predetermined with a duration chosen by the operator, typically one year, eliminating the risk of long-term inventory management and piracy issues.

The card has been developed in addition to the stand alone subscription-based business model often associated with conditional access providers and Pay TV operators. Existing operators can use the PPT card to run special promotions and give customers a taste of the type of content that they can receive, therefore this card could also be ideal for a start up operation where there is not a large number of STBs

deployed. The same PPT card can then be converted to a traditional subscription-based model if the subscribers like the content they've seen.

The card was first released in June 2003 and works on any Irdeto Access-embedded or Common Interface set top box, meaning that no additional software or modification to the box is required. It delivers the same level of security as all other current Irdeto Access products. The PPT card works with either of Irdeto Access' conditional access head end products; Irdeto PIsys for large operators, and Irdeto M-Crypt, the compact CA system for small to medium operators.

Mascot Smart Card System for Unix

CardBASE Technologies has announced the availability of its flagship product, Mascot, on the Sun Solaris operating system. Mascot, which was initially developed on Windows, was ported to the Solaris platform as a result of customer demand to have the Smart Card management system available on a Unix platform due to its popularity within the banking community. The Mascot port ensures that all customers have available a system capable of handling large volumes of cards either on Microsoft Windows or on Sun Solaris.

Mascot is an integrated solution aimed at the customised bulk issuance and lifecycle management of Smart Cards in a single or multi application environment. It provides the functionality to place the card, the applications and the cardholder details into the system and then collate these details for the purpose of card personalisation, initial issuance and subsequent card management — a total card lifecycle solution.

For more information visit ...



SchlumbergerSema
www.slb.com

ImageWare Systems
www.iwsinc.com

SCM Microsystems
www.scmmicro.com

CanalDigitaal
www.canaldigitaal.nl

Naspers
www.naspers.com

Irdeto Access
www.irdetoaccess.com

CardBASE Technologies
www.cardbase.com





Smart Card News On Line: Round-Up

Smart Card Group's *Smart Card News On Line* service is emailed to subscribers every working day, reporting on industry events as they happen. This service is available FREE to *Smart Cards Now* subscribers (£100 per year for non-subscribers). For further details and to sign up please contact Amanda Pearce — amanda.pearce@smartcard.co.uk; tel: +44 1273 515651 (further contact details are available on page 163). Here's a selection of the headlines we covered in August:

Banking, EMV and Finance

- Cadmus Technology Announces EMV Compliance
- DZ to Produce EMV Cards for Visa Malaysia
- Early Upgrade to Chip and PIN Recommended to UK Retailers
- Banque-Tec Sees Major Opportunities in the USA
- Olympian Investment in e-Payments as Athenians Get Intellect
- EMV, Mobile and ID Expected to Drive Card Market Growth
- Cyota's SecureSuite Selected by UC for Visa authentication
- Aconite Announces EMV Transaction Enabler and Script Processor
- China Unicom Selects Schlumberger for First OTA Project
- SPAR Supermarket Selects VeriFone SC 5000 for Chip and PIN
- First Data Wins China Everbright Bank Contract
- Trintech Releases ReconNET Bank Fee Analysis 6.6 System
- Cardronics Acquires ATMs from American Express
- Hansabank Launches First Visa Cards in Lithuania
- CNS to Supply Mashreqbank with Hypercom POS Terminals
- Visa Launches New Mini Payment Card in Asia Pacific
- AmeriCard's Verified by Visa Authentication Supported by ACI
- Hypercom Supplies Terminals for First National Bank's Migration to EMV
- Australian Banks Slow to Move to EMV Cards, Experts Warn
- Rhythm to Invest RM80-100 Million in EMV Migration
- Stopanska Banka to Implement Nomad Cortex's EMV Software Solution

Corporate

- Applied DNA Sciences and Sequiam Corporation Sign Agreement
- ORGA's Interim CFO Eickhoff Hands Over to Successor
- ScreenCheck International Enters Middle East Market
- Bioscrypt Announces Second Quarter Results
- VeriSign Plans to Set Up New RFID Business
- Datakey Announces Board Member Resignation
- Western Union Takes Majority Stake in Epos
- First Data Appoints Senior Compliance Officer for Western Union
- e-Smart Technologies Announces New Consultant
- Canuity Reports Continued Revenue Gain in Q2 2003
- QI Systems Signs Marketing Alliance with US Outsourcing
- Wave Systems Publishes Q2/First Half Results
- Rainbow Technologies Announces Intent to Acquire Chrysalis-ITS
- QI Systems Announces Private Placements and Options Repricing
- RFI Appoints New Senior Security Evaluation Engineer
- Finx Group Executes Marketing Agreement with Consulting Firm
- Aspace Appoints New Product Marketing Manger
- StereoVision Reach Agreement with Smart Chip Technologies
- Thomson and Panasonic Sign DVD-RAM and SmartRight Agreement
- Veritec Announces Distributor Agreement with Nirtrade Agencies
- Saflink's Team Receives OSD Award for DoD Network Logon System
- First Data Names New Executive Vice President of Human Resources
- First Data Sets Date for Meeting on Proposed Concord Merger

Government

- UK Government Publishes Smart Cards Policy Framework
- Diebold Issues Detailed Rebuttal Following e-Voting Research
- e-Smart and Homeland Defense Launch Super SmartCard
- London's e-Government Initiative Faces Funding Crisis
- Smart Card Scheme for Council Tenants' Rental Payments
- DoD Approval for Northrop Grumman Team's ID Credentialing Test
- China Announces Plans to Issue One Billion Smart ID Cards

Healthcare

- ORGA and IBM BCS Win Order for German e-Health Scheme

ID and Authentication

- Thailand Plans e-Passport Scheme to Assist Immigration
- Brevard County Installs Realtime's bioLock to Secure US Spacecoast
- Square One Launches Intrusion Detection System
- Novell eDirectory Ships with Card and Token Security
- Datastrip's 2D Bar ID System Helps Combat Terrorism at Sea
- Siemens Dematic and Matrics Complete RFID Integration Testing
- Microexpert Launches Remote Network Access System
- INCableNet Launches New Conditional Access System
- Datacard Launches ID Works in Four Additional Languages
- ImageWare Showcases Digital Imaging and ID Solutions at ACA
- ImageWare Systems Receives \$835K ID Software Order
- Baltimore Airport Chooses Bioscrypt to Secure Key Sites
- Biometrics Direct Get Lucky Deal for US iGuard Distribution
- Electronic Registration for New Births in Raipur State
- NAR Forms Sentrilock to Market New LockBox Product
- Controlled Access Secures NYC's Dept of Environmental Protection
- UK to Trial ID Cards in a Small Market Town this Autumn
- Bahrain Chooses Benefit to Launch National Smart ID Card in 2004
- Gemplus Provides Secure Web Access at Internationale Medienwoche

Leisure

- US Card Customer Settles with DirecTV Over Pirating Lawsuit
- Student Hacker to Plead Guilty in DirecTV Case
- Shakespeare's Globe Doth Unite with London Pass Endeavour
- Keycorp Sued by TAB for \$6m Over Gaming Machine Device
- INSIDE and MajorLink Partner in Cinemas Loyalty Scheme
- NDS CableCard Completes CableLabs Qualification
- Rapidtron's Card System Gives Park City a Big Lift
- Millwall Soccer Hoooligans Outsmarted by Teamcard
- Rapidtron's Smart System to Pilot at Grand Prix of Americas Miami Race

Misc

- More Illegal Smart Cards Blocked
- Smart Card Shopping for Dubai Prisoners
- Welcome Granted European Patent for Card Rewards Programs

- Growth Spurt in Japan's Smart Card Market Expected
- CardXX's New Manufacturing Facility, Funding, and Management Team
- Palm, Microsoft and Compaq Face Patent Litigation
- Nextest Receives Multiple System Order from Emosyn
- Lawyers in Singapore Use Cards to File Private Property Claims
- Court Dismisses Cubic's Lawsuit to Block Continuation of SF Transit Project
- GSA Awards Contract for Updated Card Policy and Guidance Handbook

Technical

- Honey, I Shrunk the Mu-Chips
- GlobalPlatform Launches Reference Manual for GPD/STIP Devices
- Patriot Scientific Awarded Patent for Microprocessor Technology
- Bring Me Sunshine, In Your ... ATM
- Thomson Sells MediaGuard Unit to Kudelski Group
- Samsung and Staccato to Develop Ultra-Wideband Technology
- ZeitControl Launches Professional BasicCard ZC5.5
- India's New R&D Centre for Computer and Internet Security
- Legic Announces New Contactless Card Systems Installations
- TouchSystems Launches Mighty Touch Kiosk Terminal
- Diebold, Mosaic and Thales Install Triple-DES Solution at ABECU
- Maxell Corp Launches New RFID Tag with More Memory
- Comtrast Introduces PKI Card for Travelling Executives
- ISC Ships Upgrade of Windows Security Software
- Infineon Samples the World's Smallest 1-Gbit Double Data Rate SDRAMs

Telecoms

- Mobile Payments with Citibank Slovakia's New Terminal
- Japanese Companies Team to Enable In-Store Payments Via Mobiles

Transport

- Four Malaysian Highway Operators Introduce Touch N Go
- ORGA Awarded Security Certificate for EU Tachograph Cards
- Cubic Awarded \$12 Million Contract to Expand Washington's Card System
- City of Dundee to Implement Smart Travel Card
- Baram Toll Bridge to Replace Ferry Crossings
- US Car Dealership Implements Successful Card Loyalty System
- Contactless Cards for Mass Transit in Japan G&D Receives Security Certification for Digital Tachograph
- Emirates Begins E-ticketing on Australia and New Zealand Routes
- BemroseBooth and Philips Launch MIFARE UltraLight Ticket
- e-go Cards Will Benefit Bus Travellers in Dubai
- Philadelphia's Smart Parking Meters Spread Throughout City
- Bus Contract Award in Honolulu Provokes Fierce Controversy
- Pakistan to Install Card Meters to Check Power Theft
- Singapore Bicycle-sharing Venture Turns to Smart Cards

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Expiry Date

Signature

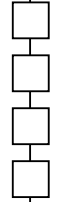
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A View of the Future

Contactless Smart Cards will revolutionise sales and National ID cards could be the “killer application” the industry has been looking for, according to two recent reports.

Analysis by Frost & Sullivan, *World Card Reader Markets*, says that the quest for a killer application is stymieing investment in Smart Cards, slowing down their adoption, but efforts by governments such as using Smart Cards as authentication devices in national ID programs is expected to bring “significant revenues” and also expand the market for multi-application cards. The report reveals that this industry generated revenue totalling \$1.17 billion in 2002 and total market revenues are expected to reach \$1.66 billion in 2009.

It points to the Malaysian MyKad project, with potentially 23 million users and more than 20,000 card reader deployments between 2003 and 2005, and says this is expected to allay manufacturers’ fears of lack of killer applications.

“MyKad aims to provide every Malaysian citizen with a single microprocessor-based Smart Card that contains the citizen’s identification, driving license and passport among other information,” says Frost & Sullivan Research Analyst Karthik Nagarajan.

Several e-purse and loyalty applications that were developed to optimise the processing power of Smart Cards have been unsuccessful because their value addition did not justify their costs. Currently, e-security and National IDs are the safest bets for an extremely profitable business case.



*MyKad’s website allows Malaysian citizens to apply for an ID card online
www.jpn.gov.my/gmpc/main_menu.htm*



Gary Watts

Another view on the direction of the industry comes from Gary Watts, Managing Director of Smart Card specialists Applied Card Technologies (ACT), who says contactless Smart Cards are moving into the mainstream.

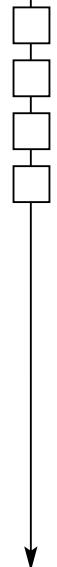
Experience of contactless cards in the USA points the way for future sales opportunities for retailers in the UK, he said. As an example, the Mobil SpeedPass, a RFID token that consumers hang on their key rings, originally introduced in the US in 1997 to make paying for petrol more convenient, is now being used by over five million consumers across 7,000 Mobil and Exxon petrol stations. When introduced, the company witnessed a 2.5% to 3% uplift in sales.

“The benefits to merchants can be substantial,” said Watts. “When the use of the Octopus contactless card in Hong Kong was extended from mass transit to vending machines, retailers saw an immediate 15% increase in sales.”

He concluded: “A payment revolution is already underway. Experience to date shows that the adoption of contactless cards accelerates sales. Perhaps now is the time to take the leap.”

Websites

- www.frost.com
- www.card.co.uk



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