



www.datacard.com

Datacard

Datacard have come up with a site that looks good, works well and is packed with information. From the homepage you should navigate your way to the Smart Card Center. Inevitably, much of the pages on offer are thinly veiled attempts to push Datacard product but there's plenty of useful general information from both the technical and business Smart Card perspectives. The white paper section, which offers more in depth coverage on topics such as EMV migration and retail payments, is also worth looking at. Elsewhere on the site there is lots of information on the Datacard product range, a good download section and the site includes a dynamic linking system which tailors the links to the page you are viewing. A quality website.

- Navigation
- Content
- Appearance



www.setec.com

Setec

Compared to the Datacard site, this site appears rather thin on the ground with content concerned only with the company's product line and services. However, this is at least done well with quick loading pages and products broken down into intelligent sections such as banking, ID and telecoms. Located (somewhat misleadingly) in the press section is the 'Background Information' section which includes a few useful introductions on areas such as PKI and EMV although this is very much geared toward the beginner. There is also an authoritative glossary of terms in this section. Overall, a clean and well-designed site but not a particularly valuable resource for information on Smart Cards.

- Navigation
- Content
- Appearance



www.protonworld.com

Proton World

After a few clicks on the ERG site (www.erggroup.com) I was soon sent to the Proton World site. The site is dominated by the company's ProtonPrisma application although its full product range is well supported through-out the site with a strong download section that features a number of company brochures, fact sheets and recent presentations from a variety of different companies. Also worth a look is the Case Study section which includes information on the Proton based e-purse schemes in Belgium, the Netherlands and elsewhere, and its EMV implementations in Sweden and Belgium. The site is rather conservative in its design, but has a lot more to it than meets the eye and is therefore well worth a visit.

- Navigation
- Content
- Appearance





Call for Smart Card Security after the Biggest Case of ID Theft in US History

US Authorities are counting the cost of what US Attorney James Comey described as “the biggest case of identity theft in US history.”

Credit histories of more than 30,000 people were illegally downloaded from the computers of companies like Experian, Equifax and TransUnion. Victims have reported money being stolen from their bank accounts, unauthorised charges on their credit cards and having their identities assumed by strangers. So far, estimates of losses in the scam amount to \$2.7 million, but investigators expect this figure to go much higher.

Philip Cummings, a 33-year-old former employee of Long Island software company, was arrested last month and accused of stealing the private credit histories of thousands of people and faces fraud charges along with two other men - Linus Baptiste and Hakeem Mohammed - said to have participated in the scheme. He appeared in Manhattan federal court and was released on \$500,000 bond.

Prosecutors said that the fraud started about three years ago when Cummings began selling passwords and codes for downloading credit reports to a person who became a co-operating witness. Cummings was allegedly paid around \$30 for each report and the information was passed on to at least 20 other people who then set out to make money from the stolen data.

“With a few keystrokes, these men essentially picked the pockets of tens of thousands of Americans and, in the process, took their identities, stole their money and swiped their security,” said Comey.

The case has brought strong reaction from the Smart Card Alliance which highlighted identity theft as evidence of the risks associated with relying on password protection for securing information systems and databases.

“The ease with which passwords can be stolen and distributed puts the integrity of virtually all of our nation’s information systems at risk,” said Randy Vanderhoof, Executive Director of the Alliance. “Any system where access is protected only by passwords is rich with fraud possibilities.”

The Alliance said that companies and government agencies are increasingly moving to Smart Cards and highlighted Schlumberger, Microsoft, Shell and the US Treasury Department as those who have already implemented secure Smart Card initiatives.

Hypercom Corporation, a company providing secure electronic payment solutions, said that new technologies were ready to roll to combat criminals, but the industry must move faster as card fraud was now over \$4 billion annually in the US alone.

“New technologies developed by Hypercom and others in the industry are now available to combat this costly criminal activity,” said Chris Alexander, Hypercom Chairman and CEO. “The need to bring credit fraud under control, and indeed, eradicate it, demands that the industry take urgent and positive action now.”

Websites

-  www.smartcardalliance.org
-  www.hypercom.com

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Please Note

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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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Smart Cards at Millwall FC

New Smart Card security measures implemented at Millwall Football Club in London, UK, following a post match riot last season have been praised by the Metropolitan police who have now withdrawn threats to sue the club over the violence in which police officers were injured.

Designed and developed by Teamcard, the new membership cards issued to Millwall fans in August have dramatically tightened security at the club. A Scotland Yard spokesperson said: "The Metropolitan Police Service has been impressed with the steps taken so far by the club and its investment in technology, which has dramatically reduced problems and anti social behaviour."

Millwall Chairman Theo Paphitis said: "We have had a lot of damage done to this football club thanks to people coming just to cause aggravation. These people are not Millwall supporters and we do not want them in our stadium. Teamcard allows us to identify our real fans and make sure that the people attending our games are the people that should be in the ground. Right now, unless you have a Smart Teamcard membership, you just won't get in."

An estimated 900 fans went on the rampage outside of the London Club's ground in South East London after the division one play off between Millwall and Birmingham City on 2 May, 2002. The incidents were among the worst in recent years in English football, with the hooligans throwing bricks, bottles, flares and stones at police, injuring 50 police officers and 26 horses.

CreditCall EMV Certification

CreditCall says it is the first company in the world to gain approval for processing EMV chip card transactions from unattended terminals following the recent certification of its CardEaseEMV technology by EMVCo. The solution has been certified to EMV level 2.

The UK-based company said the new CardEaseEMV 'plug-in' hardware and software modules have been designed for parking, vending and ticketing machines enabling payment directly via EMV Smart Cards.

Peter Alcock, Marketing Director of CreditCall, said: "The enhanced security of EMV cards, with their advanced encryption and tamper-evident technology, will open up new areas for unattended payment."

Tesco Gears up for Chip and PIN

Leading UK retailer Tesco has ordered 18,000 electronic payment terminals from Wincor Nixdorf for its chip and PIN programme in all of its UK and Republic of Ireland stores during 2003.

Wincor Nixdorf's Swipe and Park solution, developed in conjunction with EMV terminal specialist Dione, will enable the processing of the new chip-based credit and debit cards as well as Tesco Clubcards and magnetic stripe cards.

Oberthur Contract in Hungary

Oberthur Card Systems is to supply the Hungarian commercial bank Kereskedelmi es Hitelbank (K&H Bank) with over 100,000 Visa certified, multi-application and native Smart Cards. Two different card platforms will enable the bank to issue cards tailored to different customer groups - from simple cash cards to high-end Java Cards which will offer secure access to the bank's online service and Visa credit/debit functionality.

University ID Card

NamITech has rolled out a student ID card system at two campuses at South Africa's Potchefstroom University. The company says it has shipped 22,000 cards to students and staff members. The initial applications on the MIFARE contactless Smart Card, will allow students to perform access control, payment at the university canteen and access to the library management system.

Debit-Purse Smart Card for Nigeria CardBASE Technologies has signed a new contract with existing customer ValuCard Nigeria to develop a new national debit card application for the country. The Smart Card has been designed to co-exist with the ValuCard Purse scheme, and will offer cardholders in Nigeria both purse and debit payment methods on the same card.

The ValuCard Purse was introduced in 1999 and now claims to be accepted in more than 3,000 merchant locations throughout Nigeria, capturing over 80% of the local market for electronic payments.

Security for Online Payments

SchlumbergerSema has been chosen by long-standing partner company Nordea to deliver a complete solution for its online payment transactions.





Under the agreement SchlumbergerSema will install a security solution which will allow 400,000 users of Nordea's transaction clearinghouse service to make online payments and use other electronic services.

The solution requires that the user insert a Smart Card into a reader, connect to the Nordea service via the Internet, enter a random number that appears on the Web site into the reader and then enter a PIN code.

Smart Card Anti-Piracy Device

US-based Cryptography Research is to launch a new Smart Card security device which claims to make Smart Cards safer by reducing the time and cost required for testing power-related security vulnerabilities.

The solution targets Differential Power Analysis (DPA) attacks which enable intruders to extract secret keys and information from Smart Cards and secure cryptographic tokens during power consumption activities.

The DPA hacking method, which was discovered by Cryptography Research scientists a few years ago, can be used to create fraudulent transactions, generate counterfeit digital cash or perform content piracy.

Cryptography Research's Differential Power Analysis workstation aims to allow Smart Card manufacturers to improve resistance to DPA attacks in Smart Cards and other tamper-resistant devices. The workstation pricing starts at \$145,000.

BS Certificate for Miotec

Finnish Smart Card company Miotec has been awarded the BS7799 (British Standard) Information Security Management System Certificate. The certificated functions include product development, manufacturing and personalisation of Miotec's card products and chip-related software.

The company says the new certification enables them to co-operate with quality-certificate issuers and participate in projects related to corporate security and electronic transaction services.

"All our products are security related, and this is why certification of our information security system that meets the standard also creates security for our customers and partners," said Timo Friman, CEO of Miotec.

Neuhaus Royalty Card

Luxury chocolatier Neuhaus has selected Keyware Technologies' Smart Shopper software for its new customer loyalty program. The scheme, called Neuhaus Royalty Card, will be tested in nine of its shops in Belgium before roll-out to more than 75 shops.

Smart Shopper is set up to run in hybrid card environments and simultaneously supports bar codes, magnetic stripe and chip cards.

New Chairman at GlobalPlatform

GlobalPlatform has announced the appointment of Datacard Group CEO Jerry Johnson as the new Chair taking over from Steve Brown. Senior Vice President Emerging Technologies at Visa International Jim Lee remains Vice Chair and Gilles Michel the President of Financial and Security Services at Gemplus is the new Secretary/Treasurer.

Mobey Forum Adds New Members

The mobile payment consortium, the Mobey Forum, has announced that it has enlisted a host of new manufacturers and banks to its membership. The new members include Sony Ericsson, Cr dit Mutuel de Bretagne, Meridea Financial Software, NCR Corporation and the Austrian Society for Research and Cooperation in Payment Systems (Stuzza).

SAFLINK Forms Advisory Board

Biometric security company SAFLINK has announced the appointment of Thomas J Colatosti as the first member of its board of advisors. He is the former CEO of Viisage Technology, a face-recognition technology provider, and then founder of American Security Ventures providing consulting to companies within the Homeland Security industry.

For more information visit ...

CreditCall

www.CreditCall.com

Wincor Nixdorf

www.wincor-nixdorf.com

Oberthur

www.oberthurcs.com

namITech

www.namitech.com

CardBASE Technologies

www.cardbase.com

SchlumbergerSema

www.slb.com

Cryptography Research, Inc

www.cryptography.com

Miotec Oy

www.miotec.fi

Keyware

www.keyware.com





ID Card for Lithuania

Giesecke & Devrient (G&D) is supplying personalisation systems for new identity documents to be issued to four million citizens in Lithuania. The Munich, Germany, technology group completed a personalisation center for various identity documents in Vilnius, Lithuania, on 1 October this year for engraving the citizen's personal details into the document whether identity card, passport or driving license.

The first documents are to be issued before the end of this year. An initial quantity of one million passports, 1.5 million identity cards and 500,000 driving licenses in Smart Card format are to be personalised in the next two years.

Microsoft Tests with SCM Readers

SCM Microsystems has announced that Microsoft Corp.'s Windows Division will use its Smart Card readers to develop a class driver for the USB Chip Card Interface Device (CCID) specification, facilitating the installation and support of future Smart Card readers.

Microsoft will use SCM's USB SCR331 CCID reader as a reference model to develop drivers for Windows XP and Microsoft .NET operating systems. This will simplify installation and lead to a generic 'Plug and Play' solution for Smart Card customers.

"With Windows XP, we have focused heavily on making it easy for customers to connect USB devices to their PCs," said Fred Bhesania, Program Manager in the Microsoft Windows Division. "As one of the first developers of a CCID Smart Card reader and an active participant in the USB Device Working Group, SCM was selected, among other hardware vendors, to test Microsoft's beta driver. When used with SCM's Smart Card readers, Microsoft's driver will provide customers with an easy and secure way to access information."

Fighting Driver License Fraud

New automated facial recognition technology is being used in the fight against identity fraud by the Colorado Department of Revenue (DOR) Motor Vehicle Business Group.

Under an enhanced license issuance program, selected driver's license applicants will be compared with the 10 million DOR digitised photo images on file

to identify possible duplicates and aid in the investigation of identity fraud.

Colorado has been using Digimarc ID Systems' technology since 1994 to issue over 1.2 million driver licenses annually. The technology has now been enhanced through an alliance between Digimarc and Identix, extending Identix's FaceIt technology to Digimarc's image databases.

John Munday, Digimarc's President, said: "The facial recognition search system from Digimarc will assist the State of Colorado to prevent multiple drivers' licenses from being issued even if the applicants try to use different names and other data. This system that builds on the facial recognition algorithms provided by Identix promises to be a powerful new tool in Colorado's fight against identity fraud."

Portable Biometric Devices

Portability and mobility are the next step for biometrics, says Steven J Ziman, President and CEO of UVIX which is planning to unveil its line of portable handheld biometric devices in early 2003.

"The need for portable biometric devices is soaring worldwide as businesses and government work on tightening security," he said.

The company revealed that the first portable biometric device to market will be the UVIX handheld biometric reader. The company says that the unit, which stores fingerprint templates, will enable police officers to scan fingerprints on the spot and instantly compare them with those in a database of known felons.

HID Appoints New President

Denis Hebert has been named as the new President of HID Corporation. He joins the company from Honeywell where he worked for 17 years in various senior positions, most recently as President of NexWatch - Honeywell's California-based access control subsidiary.

Most ATMs Can Read Chip Cards

ATMs equipped with chip card readers have increased seven-fold in the last five years, according to a report published by Retail Banking Research.

Since the second half of the 1990s, some European banks - notably those in Belgium, Spain and Switzerland - have been upgrading their ATMs to allow





reloading of electronic purses. This process has slowed in the last few years. However, the roll-out of EMV-compatible ATMs in a number of countries, and the preparation for the introduction of EMV in a number of other countries have resulted in deployers purchasing new ATMs with chip card readers.

Percentage of ATMs with Chip Card Readers

1996	1997	1998	1999	2000	2001
12%	21%	25%	39%	46%	57%

Source: Retail Banking Research

ATMs and Cash Dispensers 2002: International Survey and Analysis is available from Retail Banking Research price £4,250.

China ID Contactless Card

OTI has announced that it is to provide its contactless Smart Card technology for use in the China National ID project. The company received an initial order for the engineering of the new cards from one of the providers selected by the Chinese Ministry of Public Security.

Under the agreement OTI will supply to the Chinese company its patented contactless microprocessor technology to enable production of contactless ID cards. A prototype is expected during 2003.

The China National ID project will replace the laminated paper ID cards and manual check systems which have been used for the past 20 years. Some 850 million residents are expected to use the new system.

Chicago Transit Card

The Chicago Transit Authority (CTA) in the US has announced the system-wide launch of its new Chicago Card - a contactless Smart Card-based fare collection technology developed by Cubic Corporation.

The system initially was based on magnetic stripe ticketing when it was originally installed by Cubic in 1997 but Cubic expanded it two years ago to cater for Smart Cards. Last year, Cubic received a \$1.5 million contract from CTA to increase the purchase of Smart Cards from an initial roll-out of 3,500 to 300,000 over the next three years.

The CTA operates the second largest public transportation system in the US and covers Chicago and

38 surrounding suburbs. On an average weekday, 1.5 million passengers use the system.

Chicago Transit Board Chairman Valerie B Jarrett said: "We have purchased and applied technologies to improve our bus fleet, rail service and stations, internal operations and fare media. Customers can now feel secure that their farecard balances can be protected through this high-tech card."

Santiago Smart Card Ticketing

Chile's state-owned subway company, Metro, is to develop a Smart Card-based ticketing system to speed and simplify passenger transit through the subway in the capital Santiago. The cards will replace the existing tickets that must be manually put in the turnstiles at the entrances to each metro station, and will also be used on city buses run by Metro.

It is planned to introduce the cards in 2004 to coincide with the opening of a new line which will serve eastern Santiago.

Macao ID Card Roll-out

The former Portuguese territory of Macao has started the roll-out of new Smart ID Cards in a project that is expected to last four years.

The first citizens to receive the new cards will be those who do not currently hold one of the existing paper-based cards, including children aged five or above and people who have lost their old cards.

The card replacement program will see 380,000 permanent residents and around 40,000 non-permanent residents issued with the new cards.

For more information visit ...

Giesecke & Devrient

www.gi-de.com

Microsoft

www.microsoft.com

SCM Microsystems

www.scmmicro.com

Digimarc

www.digimarc.com

Identix

www.identix.com

UVIX Corporation

www.uvix.com

Retail Banking Research

www.rbrldn.demon.co.uk

Cubic Corporation

www.cubic.com

OTI

www.oti.co.il





BSC Launches Smallest Biometric

Biometric Security Card (BSC) has announced the launch of what it claims is the “world’s smallest biometric” which can record fingerprint, iris and retina images in 64 bytes.

With the exception of the face, the BioProtect algorithms can be stored on existing mag-stripe or 2D bar code of existing credit, frequent-flyer, ATM, healthcare, driver’s licence, employee or other ID cards, as well as Smart Cards. It is also possible to record dual biometrics (e.g. two fingerprints and a digital photo image) onto the same document.

Fingerprint Market Growth

A recent study into the global Silicon Chip Fingerprint Market by analyst group Frost & Sullivan has revealed that the sector generated revenues of over \$5 million in 2001 and is set to enjoy triple digit growth over the next four years. Total revenues are estimated to reach \$424.6 million by 2006.

“Technological improvements in the field have resulted in enhanced capabilities as well as the miniaturisation of sensors,” says Frost & Sullivan Industry Analyst Prianka Chopra. “This has resulted in declining prices and an associated widening of the application base.”

The report notes that the sweep sensors are currently being incorporated into handheld devices and laptops but that an array of lucrative new opportunities will be created by deployment in laptops, keyboards, cell phones and PDAs. Access control, time and attendance, and financial and healthcare applications were deemed to be the key sectors for the market.

Digital Driver’s License Contract

Viisage Technology has been awarded a \$20 million contract by the state of Georgia to design, develop and implement a new digital driver’s license program.

The company will implement an in-state, central card production solution that will also give the Department of Motor Vehicle Services tighter control of the storing, analysis and retrieval of information including scanned application forms, portrait images, signature images, fingerprints and data associated with each driver’s record. Entry to the new secure central production facility will be enhanced by Viisage’s FacePASS facial recognition access control.

FingerChip for Pocket PC

Atmel Corporation has announced that its AT77C101B FingerChip biometric sensor has been selected by HP to provide logon security for select models of the recently announced HP iPAQ Pocket PC h5400 Series.

“This solution, offers high security of your personal data without the inconvenience of remembering a password, ensuring your information will be safe if your handheld computer is lost or stolen,” said Alain Jutant, Atmel’s Director of Imaging Products.

Biometric-based Operating System

Australia’s Keycorp has signed a non-exclusive Memorandum of Understanding (MOU) with Precise Biometrics to develop a biometric-enabled Smart Card operating system.

Under the agreement, Precise Biometrics will integrate its Precise BioMatch C technology into Keycorp’s MULTOS operating system, enabling fingerprint matching to be performed at the transaction point.

“The co-operation with Keycorp on developing and marketing this new product opens up new opportunities in the Smart Card market globally. Anyone who aspires to set a worldwide standard in Smart Cards will need a presence in the MULTOS market,” said Precise Biometrics’ Jonas Andersson.

Keycorp and Precise Biometrics have also agreed to work together to develop API standards for the integration of biometrics into the MULTOS operating system.

Healthcare Alliance

Security Biometrics has signed a licensing, integration and royalty agreement with Seattle-based Arrillion Software.

Under the terms of the deal, Arrillion will integrate Security Biometrics’ Penflow biometric Signature Secure technology into its Virtual Sign in Systems to track, authenticate and verify patients’ visits to hospitals and other healthcare centres.

SFR m-Commerce Service

Baltimore Technologies and Atos Origin are to provide the security technology behind a new national mobile commerce service being launched by SFR, the second largest mobile operator in France.





The project claims to be one of the first pilots in France that enables subscribers to digitally sign mobile transactions and simultaneously authorise secure credit card payments.

Security is based on Baltimore's wireless security solution, Telepathy, a wireless extension of its UniCERT PKI product. It is claimed that the solution enables digital certificates and public key cryptography to be integrated easily and cost-effectively into existing mobile phone networks.

SIM2SIM Reader

ORGA Kartensysteme and mobile operator Orange UK have developed a new SIM card tool that enables Orange customers to transfer information stored on any SIM card to an Orange UK SIM card.

ORGA's card reader works by backing up the information held on a SIM card. This includes Abbreviated Dialling Numbers (ADNs), Fixed Dialling Numbers (FDNs) and SMS text messages.

ORGA says the device does not retain any personal customer information and that complete privacy is maintained as all the data is retained by the owner of the card.

The device, marketed by Orange as the Orange Memory Mate, is targeted at retailers wishing to overcome the SIM problems involved following the loss, theft or upgrade of a phone.

Gemplus R-UIM Breakthrough

Nokia and Gemplus have achieved what they claim to be the first successful test of Removable User Identity Module (R-UIM) technology in a CDMA handset for the North American wireless market.

R-UIM technology will allow North American wireless customers to roam between various CDMA coverage areas (as well as GSM coverage areas) by transferring the R-UIM card from one CDMA phone to another. The test was based on Gemplus' GemXplore World R-UIM technology.

Tele2 Expand PhoneCard Service

Tele2 is to become the first mobile operator in Estonia to enable its clients to use pre-paid Smart Cards to accept incoming calls throughout the whole Baltic region when it launches its new service this month.

Owners of Tele2's Estonian, Latvian and Lithuanian pre-paid cards will be able to make calls and

receive incoming calls in all three countries instead of only in one country.

TIM Italia Orders 64K SIM Cards

Mobile telecommunications operator TIM Italia has ordered 64K SIM cards from SchlumbergerSema and Italian Smart Card manufacturer Incard as the platform for the development of value-added services.

French-based SchlumbergerSema will supply its Simera 64K Java SIM card and Incard will provide its Java-based Mokard 64K SIM card.

GPRS in Portugal

SchlumbergerSema has announced that it has successfully completed implementation of its GPRS real-time advanced content rating solution for Portuguese mobile operator, Optimus.

The implementation will see Optimus become the first operator in Portugal to be able to rate and bill GPRS/UMTS advanced content in real-time for both pre-paid and post-paid subscribers.

SchlumbergerSema says that the solution is able to perform traffic analysis, content filtering and metering to enable real-time rating of advanced data content and enables the operator to check the pre-paid subscribers' remaining balances before allowing transactions to take place. The functionality also allows real-time charging of GPRS/UMTS traffic for pre-paid customers whilst roaming.

For more information visit ...

Biometric Security Card, Inc
www.biometricSecurityCard.com

Frost & Sullivan
www.frost.com

Viisage Inc
www.viisage.com

Atmel Corporation
www.atmel.com

Keycorp
www.keycorp.net

Security Biometrics
www.securitybiometrics.com

Baltimore Technologies
www.baltimore.com

ORGA
www.orga.com

Gemplus
www.gemplus.com

Incard
www.incard.it

SchlumbergerSema
www.slb.com





More Drama At Gemplus

by Matt Ablott, Assistant Editor, Smart Cards Now

- 1000 more jobs to go
- Sagem buy 10% stake in company
- New restructuring program targets €100m in savings

It has been another dramatic month at Gemplus with the debt laden Smart Card giant unveiling a widespread restructuring program which will see 1000 redundancies, and further changes at board level caused by estranged co-founder Marc Lassus.

Events began unfolding last month when a planned Extraordinary General Meeting (EGM) on 27th November which was expected to oust Lassus and rogue board member Ziad Takieddine was successfully postponed by a consortium that accounted for 24% of the company shareholdings. Takieddine, who had incurred the wrath of the board due to his criticism of new CEO Alex Mandl in September, said the meeting was “illegal” under Luxembourg law. Gemplus said the move was “nothing more than a delaying tactic”.



Alex Mandl

The long-running saga with Lassus, who resigned from the board in December 2001 and has been in dispute with the company ever since over an unpaid loan worth €77m, appeared to come to a close in early December when it was announced that French electronics group Sagem was to buy Lassus’ 10% share in Gemplus. Investors reacted favourably to the news with the Gemplus share price closing up 11% to a five-month high of €1.22 in response to the announcement.



Marc Lassus

Under the terms of the transaction, Mr Lassus will be paid a premium if the Gemplus share price rises above €2 before the end of 2004 whilst Sagem said in a statement it believed the deal would benefit both groups’ existing business partnership. Sagem said it bought the shares at “close to market price” although the exact figures were undisclosed. In a brief press release Gemplus said the deal demonstrated the confidence Sagem had in the company. There were even rumours in the financial press that Thales were considering buying a stake in the company as part of a strategy by the French government (who own a 33% stake in Thales) to keep Gemplus in French hands. This followed numerous reports over recent months of the increasing influence of Gemplus’ US based majority shareholder Texas Pacific Group (TPG).

However, the board level machinations took a back seat on 9th December when Gemplus announced its widespread restructuring program aimed at restoring profitable growth to the company who have seen its share price halve in value over the last year.

Gemplus said that the program would mean that another 1000 jobs would be lost with over 400 of the redundancies expected to effect the company’s core French activities. Gemplus currently employs 6500 people, with 2200 based in France and the new wave of redundancies represents an 18% reduction in the Gemplus workforce. The redundancies come on top of a similar restructuring program announced last year which saw 1149 jobs axed. However, Gemplus said that the new restructuring plan would not lead to any site closures and the volumes manufactured will remain comparable with 2002.

Gemplus said the new program would save the company €100m next year and a further €200m from 2004. Gemplus CEO Alex Mandl said it was unclear if the company would start to see benefits of the cost-cutting exercise by next year but said that “the full benefit of the initiative” would be apparent by 2004.

Mandl said: “This new business model, based on a competitive cost structure, stronger customer relationships, continuing emphasis on innovation and an efficient organisation, is designed to put the company back on a path of profitable growth and enable it to offer innovative solutions to its customers. The company has

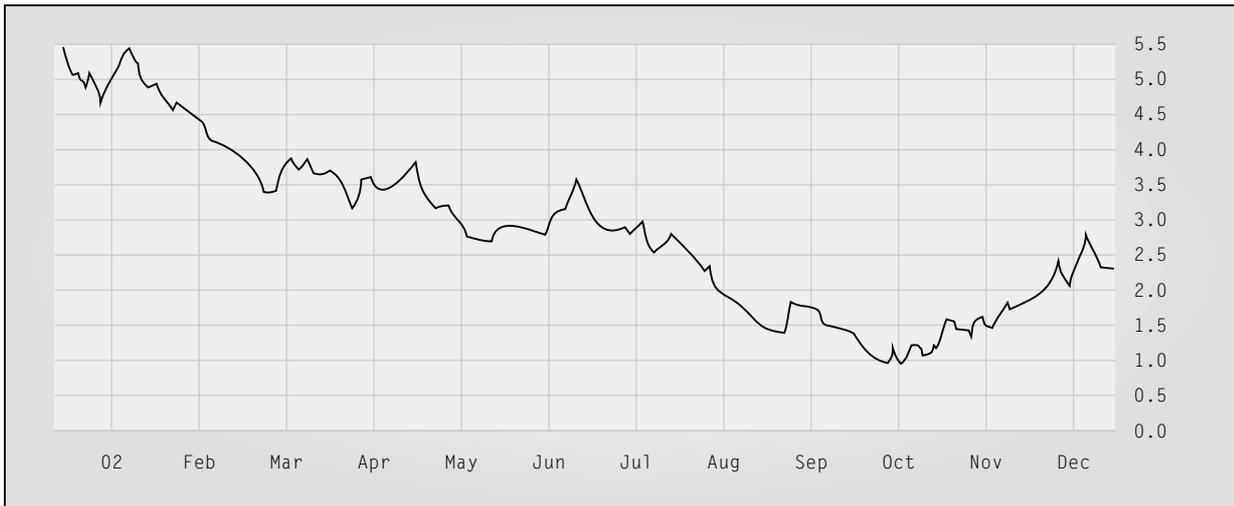




a number of existing advantages which should enable it to accomplish this. These include its unique technological capabilities, broad geographical coverage and a strong balance sheet”.

The new restructuring program marks the first major move by ex-AT&T Alex Mandl who only took control of the company in September following a nine month search by the company for a full time replacement for Antonio Perez who was ousted alongside Marc Lassus last year.

Reports from the Gemplus restructuring meeting, which took place at London’s Heathrow airport, noted that Mandl himself had come under criticism for his own salary which is said to include a €600,000 basic annual salary and a performance bonus of up to 120% a year. According to sources at Dow Jones, Mandl is said to be considering a reduction in his own bonus to show that “things start at the top”.



Gemplus Share Price 2002 (US Dollars)
Source: BigChart.com

Gemplus’ 2002 Dramas in Full

<i>January</i>	Gemplus announce that €25m is be charged to its Q4 2001 results due to the resignations of CEO Antonio Perez and Chairman Marc Lassus the previous month.	<i>June</i>	Dominique Vignon replaces Hasso von Falkenhausen as company chairman. Rumours circulate that the board is split over whether to appoint Macintosh as its permanent CEO.
<i>February</i>	Announcement that 1200 employees are to be made redundant. Q4 2001 results sees a net loss of €59.9m.	<i>July</i>	Operating loss for the second quarter drops to €24.2m
<i>March</i>	COO Frederic Spagnou and CFO Steven Gomo leave the company. French union CGT predicts a further 500 job losses	<i>August</i>	Alex Mandl appointed as new CEO
<i>April</i>	An association of minority shareholders at Gemplus called Gem Act announces its intention to scale down the influence of majority shareholder TPG.	<i>September</i>	Mandl resigns from role on the board at the CIA’s venture capital technology unit In-Q-Tel after he is publicly criticised by Gemplus board member Ziad Takkiedine. Gemplus announce intention to remove Lassus from the board for non-repayment of loan.
<i>May</i>	Q1 2002 results see a net loss for the quarter of €62.46m - below the scale of deficit that many analysts had predicted.	<i>October</i>	Q3 results see another loss. Market expectations for the 4th quarter and following year downgraded.
		<i>December</i>	Sagem buy Lassus shares. New restructuring program announced.





ERG Sells Stake in ECard

Australia's ERG Group is to sell its 39% share holding in the joint Australian Smart Card software venture ECard. The shares will be bought back by ECard under a selective buy-back agreement for \$5 million leaving the other shareholders, Telstra and ANZ with 100% control of the company.

ERG said that the main reason for its decision was that a return on its investment in the venture is likely to be "longer than that expected" by its own shareholders. ERG will continue to work in the Smart Card sector with ECard which will retain licence rights to the Proton technology owned by ERG.

All Change At ID Data

UK-based ID Data plc have announced that it has appointed current ID Data Systems MD Michael Stewart as its new Director of the Company. Meanwhile, Andrew Mintern, the company's Finance Director, has resigned from the Board to 'pursue other activities'. A replacement has yet to be named.

Commenting on the Board changes, Mike Blackburn, Chairman of ID Data plc, said: "Michael has a significant track record of success in change management, sales and profit growth and team leadership, qualities which will be of considerable benefit in achieving the objectives of the Group."

Trintech Figures

Payment infrastructure solutions provider Trintech has announced its third quarter and nine month financial results for the period ended October 31, 2002. Figures remained stable with revenues for Q3 increasing 5% sequentially to \$11.4 million and to \$32.4 million for the 9-month period.

Cyril McGuire, Chairman and CEO, said: "This solid progress will lay the foundations on which to grow revenue, continue to optimise our cost base and return the company to profitability in the near term."

Changes at G&D

Giesecke & Devrient is restructuring its card business in the new year following the retirement of senior board member Jürgen Nehls who was responsible for Smart Card and card system business in the payment and industry/government divisions at G&D. Board member Franz Haniel will head a new Products and Markets division handling telecommunications, payment and industry/government. Peter Eisenbacher, who will be promoted to Board level,

will run a new Operations unit dealing with card production, purchasing and logistics.

HID Appoints New President

Denis Hebert has been named as the new president of HID Corporation. Hebert joins the company from Honeywell where he worked for 17 years in various senior positions, most recently as President of NexWatch - Honeywell's California-based access control subsidiary.

"We are extremely pleased with the level of quality and experience Denis brings to the executive management team at HID, the flagship brand under ASSA ABLOY ITG," said Joe Grillo, president and CEO of the ASSA ABLOY ITG. "As president, Denis will focus on building HID's leadership position in the access control industry, and continuing the successful launch of the iClass product line."

Lifestream Increase in Net Sales

Smart Card Healthcare specialist Lifestream Technologies announced net sales of \$1,132,437 for its fiscal 2003 first quarter ended 30 September, an increase of 28.7% compared with \$879,845 in the corresponding quarter a year ago.

President and CEO Christopher Maus said that the improved results were due to "increased consumer demand for our Cholesterol monitor coupled with improved wholesale pricing and reductions in operating expenses."

SchlumbergerSema Job Losses

According to the FT, SchlumbergerSema is due to cut 1,600 jobs and to refocus on IT consulting, systems integration and network and infrastructure solutions in the energy market. Its Smart Card, payphone and telecoms products will be managed separately.

Orange Postpones 3G and Cuts Jobs

Mobile phone operator Orange, owned by France Telecom, is to cut up to 2,000 jobs over the next 12 months and postpone the launch of third generation (3G) wireless services in most of Europe.

"We are now clearly focusing on our existing footprint," said COO Graham Howe.

Websites

-  www.erg.com
-  www.gemplus.com





New Anti-Piracy Device Tackles DPA Attacks

by Matt Ablott, Assistant Editor, and Dr David B Everett, Technical Director, Smart Cards Now



Paul Kocher

Smart Cards Now talks to Paul Kocher, President & Chief Scientist at Cryptography Research Inc. about the launch of the company's new DPA testing workstation.

San Francisco's Cryptography Research were the company who invented Differential Power Analysis (DPA). This month the company announced the availability of its DPA Workstation which aims to provide testing labs and academic researchers with a solution to test for DPA vulnerabilities in Smart Cards and improve resistance to DPA attacks.

DPA attacks extract secret information such as secret cryptographic keys from Smart Cards and other secure devices (eg: tokens) by monitoring fluctuating electrical power consumption and is typically used to perform fraudulent transactions, generate counterfeit digital cash and other forms of card piracy.

Paul Kocher said the idea of the DPA workstation emerged out of a frustration with a lot of the work that existing testing labs had been doing in the area. "We have been working with a number of other labs who are trying to build DPA capabilities and we found that they were taking a long time on the electrical engineering and the software development so we're providing the software and training alongside the workstation," he said. "It isn't a replacement for highly skilled staff, but it does mean that the person doing the testing doesn't need to write every line of code involved in the process."

Kocher admits that the workstation is not geared toward the novice but claims the product could save several man-years of work in the development process and is a fast-track way of training staff in the DPA space.

"What's important about the workstation is that we are now sharing this expertise," Kocher continued. "What we've seen of current products in the marketplace is that there are still issues that need to be corrected and tested."

Cryptography Research have already secured two customers for the workstation – which costs from \$140,000 to purchase. The market for such a niche solution is understandably limited but Kocher estimates that the company will sell 10-15 workstations over the next few years. One early user is Radio Frequency Investigation (RFI) who told Smart Cards Now that the workstation forms part of its testing range designed for "simple and differential power analysis (SPA and DPA), environmental analysis, review of countermeasures and electromagnetic emissions analysis."

"Our main customers tend to be financial, but there are few other areas such as pre-paid telephony and transit," said Kocher. "The other big market is Pay TV." Aside from RFI, Kocher said that the other customer was a large US company who is deploying Smart Cards and wanted to do its DPA testing in-house and build a data security group internally. Kocher also noted that the company had taken steps to ensure that only legitimate companies are able to purchase the product.

Kocher admits that licensing brings in the lions share of revenue with the DPA portfolio its most valuable set of patents, and that in many respects the company is establishing a market on the fly: "If people aren't able to test for the problem they won't know whether they have a problem that needs controlling," he said.

Kocher said that the product has been designed to be modified and includes an analogue board that can be easily re-configured and changed. "We find that when you start building other things into the test its starts becoming specific to the card that you are testing so its ceases to be a general purpose tool," he said. "I know a lot of people tried to produce GUI-driven tools which are a lot less flexible."

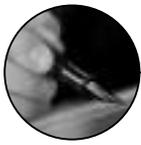
Over the last couple of years awareness of such attacks has increased dramatically but Kocher denies that this has led to the problems being solved: "The products and tests improve but the attacks improve as well," he said. "A lot of the cards on the market today are by no means impenetrable."

Websites

 www.cryptography.com



CORPORATE SPONSORING



Protecting People and Privacy

by Tate Preston, vice president, government solutions, Datacard Group



Tate Preston

In the latter half of the twentieth century, identity documents began to be produced with photos to establish trust between the bearer and the official body. In the twenty-first century, individuals need to prove that they are who they say they are to gain the same levels of trust. As a result, there is a growing trend in government towards Smart Card-based identity documents. It is, writes Tate Preston, Smart Card technology that can enable greater trust between individuals.

Where we are today

Despite tightened budgets around the globe, e-government continues to expand as a means of delivering and managing information in a cost-effective manner. As a result, many countries are moving away from paper-based documentation towards digital databases to enable on-line transactions. Once these infrastructures are in place, it is a natural progression to card-based identity solutions.

As well as the economic drivers for change, there are also many security reasons for enhancing the state of current identity programmes. Newspapers in almost any country provide examples of weaknesses in the systems we use for identification. Stories have been well-publicised in the U.S. about the fake identities used by the 9/11 terrorists and of detained foreign nationals with expired or fraudulent IDs. Around the world, citizens are familiar with carrying and producing identity documents. However, the economic and political pressures driving an enormous growth in migration have revealed many inadequacies in the existing system.

While shortcomings exist in current ID documents, cases of counterfeiters specialising in forging passports and visas, human smuggling and cross-border organised crime syndicates will become increasingly prolific. Indeed, the growth in counterfeit IDs is creating new victims daily. According to the UK government, identity theft costs the British economy at least £1.3 billion each year¹.

Part of the increase in forged documents can be attributed to advances in reprographic technology and powerful desktop publishing tools. The declining costs and increasing portability of some of the production equipment has made the counterfeiting of paper-based documents and transaction cards possible in the back of a van. As the value of fraudulent documents has increased, the returns have grown for organised crime.

General information on fraud and counterfeiting is also becoming more accessible for the novice, as sources on the Internet provide detailed “how to” guides. The availability and accessibility of this type of information is expected to expand, increasing the security threats for any form of identification.

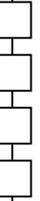
Clearly identity fraud is not a localised issue. So what options are available to governments to increase the security, efficiency and cost-effectiveness of their national identity programmes and maintain the trust required to preserve the security of their transactions systems?

How technology can help

There is a three-step authentication process for any identity document – whether verified through human interaction or via an automated reader. This comprises of three questions:

- Is the document authentic?
Sophisticated production techniques providing overt and covert security printing features are used to add counterfeit-resistance to cards or documents. This protects against accurate reproduction by copiers and scanners and allows machine-authentication.
- Is the data authentic?
Tamper-resistant technologies are available to protect visual data printed on an ID and can be combined with laser engraving to permanently embed data and photos into a card or document. Machine-readable data stored on or in the card can be protected with encryption and verified using digital signatures. Unique security features linked to the data can also be added during the personalisation process, which makes the card specific to any one individual.
- Is the document-holder authentic?
Today's identity documents generally rely on an inspector to compare the ID image with the bearer. Machine-readable biometrics of a physical attribute such as fingerprints, facial or retinal scans are now feasible as a secure means for automated verification that a person is who they say they are. Offering greater security than PINs or passwords, physical biometrics have become a focal point for areas such as airport security in the post-9/11 environment as public demand for security has grown.

Verification at all three levels provides a high level of confidence that the document holder is who they claim to be. Implicit in this process is the assumption that the examiner – whether at an airline check-in counter or at a police station – knows what the ID should look like, has the training or tools and motivation to inspect the data, and has a reliable system for





verifying the document and data. The strength or security of an ID is dependent upon the integrity of the infrastructure that is constructed as the core of the identification system.

Security is an ongoing process

However, it is a fact that no sooner is a security method in use, than the fraudsters will attempt to crack it. Unlike currencies that can be withdrawn from circulation at regular intervals, it is neither cost-effective nor convenient to issue national IDs that are valid for only short periods of time. High security IDs instead will need to be dynamically updated while still in circulation.

Smart Cards offer a critical technology for accommodating this process, as they can be updated through secure web-enabled communication link to add new security features or update applications. This process can ultimately extend the life of ID documents because it offers the potential to revalidate credentials at regular intervals.

A current example of a dynamic identification programme is the new Dutch ID system. During an INTERPOL conference in April 2002 in Amsterdam on currency counterfeiting and fraudulent documents, the new Dutch passport was cited as setting the standard for secure passports. Although only recently introduced, the new passport was designed to be upgraded with a contactless chip, allowing the card's functionality and security to be expanded as necessary.

The future of identity programmes

Moving from paper-based documents to smart ID cards requires significant investment in infrastructure, as well as in public education to present the benefits of a more secure technology.

Currently the UK government is facing much public resistance to entitlement cards and teenage loyalty cards designed to encourage learning. Although some civil liberties groups believe that government-issued Smart Cards lead down a slippery slope to a "big brother" society, it is important to demonstrate that the technology can deliver substantial improvements in security while protecting an individual's privacy. In a world where people can already be asked to produce and prove their identity at any time, it should be an advantage to have a means of proving one's identity quickly and conveniently with little inconvenience.

Smart Cards make it possible for individuals to choose what information is disclosed, adding a significant level of data privacy to our environment of on-line databases. Further along the lines of cost-cutting and improved service, Smart Cards can be extended to enable governments to radically change business processes. Unlike error-prone, paper-based programmes, Smart Card-based healthcare solutions, for example, can substantially reduce fraud and human error. They make use of secure authentication technology to verify eligibility and to enable secure online access to patient and caregiver data.

To support its long-term objectives of transforming and establishing processes using the latest cutting-edge technologies, Malaysia is issuing the world's first government multi-application Smart Card. The preliminary applications include the national ID, driver's licence, immigration and health information. A payment application will also be developed in parallel using a common technology platform to enable the future migration of all applications onto a single card.

Smart Cards are the answer

Virtually every new secure ID programme requires more advanced security than existing documents. The threat of terrorism, increasing ID theft, and abuse of government services or entitlements are causing governments to invest in new security technologies to protect the integrity of ID programmes.

Population trends in the developing world are likely to continue fuelling the growth of migration and human smuggling, and the numbers of people and funds involved will bring future challenges to the security measures that are being implemented today. The desire to obtain fraudulent IDs will continue to put at risk the ID documents that we use to identify and protect our borders, our financial resources, our intellectual property and ourselves. The growing challenge is that as the security of any document increases, its value for fraudulent purposes will also increase, and the risk of a security breach becomes even greater.

Recognising that the best programmes will stay only slightly ahead of the determined and well-funded criminal, it will become critical in the future to implement IDs that have a long-term security strategy that balance accuracy, authenticity and risk with privacy and personal convenience.

¹ Home Office report "Identity Fraud: A study", July 2002

About the author

Tate Preston is vice president of marketing for Datacard Government Group (www.datacard.com), with global responsibility for government identity schemes. Datacard redefined the identity solutions market more than 10 years ago, when it introduced the first digital identification systems. The company currently provides ID issuance systems to governments in more than 40 countries. Contact Tate Preston on +1 952 988 1827 or via email at tate_preston@datacard.com





Highlights of Cartes 2002

by Alan Borrett, Security Token Programme Manager, CESG



Alan Borrett

Introduction

1. I share some of the information I collected at Cartes 2002. I tended to focus on standards and future technology themes.
2. Smart Cards continue to see growth in the following application areas:
 - a. Automated fare collection
 - b. E-purse (e.g. vending machines, banking, open systems)
 - c. Company cards (physical/logical access, time keeping)
 - d. Loyalty
 - e. Secure national ID cards (e.g. driver license, health, passport).
3. An intriguing paper also talked about Smart Cards for digital entertainment.

New Technology

4. Philips and ST Thomson gave similar presentations on evolving technology: semiconductor manufacturers are building 32-bit processors, with flash and ferro magnetic memories being touted as EEPROM competitors. The concept of a paper card was also introduced. Paper cards are considered viable for certain transport applications where the card has a very short life.

Memory

5. EEPROM is proven technology. However, it has less density than state of the art contenders and a limited erase cum write life; it requires high voltage to be driven.
6. Writes to ferro non-volatile memory take place very rapidly (typically less than 100 ns). Consequently there is no need for RAM. The voltage required for writes is low, and alongside EEPROM, many more writes to memory can take place before memory wear out occurs: EEPROM is considered good for approximately 100k writes. It may therefore be more difficult to mount power analysis attacks on a device implementing ferro magnetic memory.
7. On the negative side, ferro magnetic memory involves more difficult process integration and a technology gulf exists with established technologies. Cell size (physical memory area takes up more real estate on the chip) and Scaling (process technology) also represent integration disadvantages.
8. Ferro RAM (FRAM) erases after read, so it is unlikely that ferro memory will become a direct replacement for EEPROM. Flash memory will probably replace ROM in due course; flash memory scores against ROM in cost and performance terms. To quote Fujitsu: ferroelectric random access memory is a non-volatile memory that uses ferroelectric film as a capacitor for storing data. Processing characteristics of both ROM and RAM devices, FRAM features swift accessibility, high endurance in write mode, low power consumption, non-volatility and excellent tamper prevention. It is therefore ideal for use in Smart Cards and cellular 'phones where high security and low power consumption are important

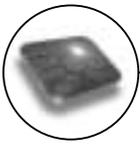
The Smart Card of Tomorrow

9. It was felt that tomorrow's Smart Card would support the following communications' protocols: ISO 7816 and 14443, USB, LPC, I2C, BLUETOOTH. The processor would probably be 32-bit. Low-end Smart Cards might have:
 - a. 128 KB EEPROM
 - b. 128 KB FRAM
 - c. in excess of 128 KB Flash.
10. The high-end Hitachi device is likely to comprise at least 0.5 MB ROM and 128 KB EEPROM, while for ST Thomson, this would mean a 12Mbit/s USB interface with 32 KB RAM, 128 KB boot ROM, 256 KB page flash and 768 KB flash.

Java Card

11. The enhancements brought about by Java Card 2.2 were described as:
 - a. Remote Method Invocation (RMI), enabling:





- 1) direct Java Card method invocation by a Java CAD (mobile 'phone, point of sale terminal);
 - 2) the programmer to create distributed Java technology-based to Java technology-based applications in which the methods of remote Java objects can be invoked from other Java virtual machines, possibly on different hosts;
 - 3) applets to become smaller and hopefully less error prone;
 - 4) removal of Smart Card protocol from applet development.
- b. Logical channels, enabling:
- 1) selection of several applets;
 - 2) multi-selection of an applet;
 - 3) continual applet selection/deselection avoidance.
- c. Optional garbage collection for keys and certificates. Removes large redundant data.
- d. Additional cryptographical and biometric application programming interface support (e.g. Elliptic Curves, AES, 2048-bit RSA).
- e. Synchronisation, involving an applet installation/deletion manager.
- f. Debug component. Permits debugging of an on-card applet.
12. It was explained that a Java Card implementation did not affect reader and server processing, input/output, cryptographic operations, application and security management and transaction management, but it does affect application processing time. Options to improve performance comprised:
- a. added processing power,
 - b. special op-codes,
 - c. extra registers for Java stack pointer,
 - d. coprocessors implementing parts of Java Card virtual memory,
 - e. a dedicated Java processor.
13. For an e-purse and a telephone book application, a typical Java Card execution might be represented by the following break down of processing areas as a percentage of total time for execution:
- | | |
|--------------------------------------|-----|
| a. Input/Output | 15% |
| b. Java Card execution | 21% |
| c. Non-volatile memory (e.g. EEPROM) | 55% |
14. For 8, 16 and 32-bit Philips controllers, percentage of time to execute Java Card applications could be apportioned between execution time and memory as follows:
- | | |
|----------------|---------------------|
| Execution Time | Non-volatile memory |
| 58% | 42% |
| 26% | 74% |
| 11% | 89% |

To be continued...

Contact

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✉ Room 10/3W08, P.O. Box 144, Cheltenham, GL52 5UE, UK

📧 Alan.Borrett@cesg.gsi.gov.uk



Events Diary		Website: www.smartcardexpo.co.uk
February 2003		
3 - 5	Cards Europe 2003, Europe's payments and transactions summit, Royal Garden Hotel London, UK Simon Reid, Terrapinn Ltd 2nd Floor, 100 Hatton Garden London, EC1N 8NX, UK Tel: +44 (0)20 7827 5974 Email: simon.reid@terrapinn.com Website: www.cards-worldwide.com/2003/cards_UK	11 - 13 The Practicalities of Implementing Real-Time Passenger and Travel Information Systems, Earl's Court, London, UK Email: ghajdu@iir-conferences.com Website: www.iir-conferences.com
4 - 5	SmartCard Expo, Earls Court 2, London, UK Armstrong House, 38 Market Sq Uxbridge, Middlesex UB8 1TG, UK Tel: +44 (0) 1895 454545	13 - 16 Cartés Korea, Atlantic Hall, COEX Seoul, Korea Email: cardes@excokorea.com Website: www.carteskorea.com
		17 - 18 Chip and Pin Towards EMV, The Radisson Edwardian Marlborough Hotel, 9-13 Bloomsbury Street, London, WC1B 3QD, UK Bethan Jones Tel: +44 (0) 20 7827 6176 Email: bjones@smi-online.co.uk



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 223). Here's a selection of the headlines we covered in November:

Corporate

- Oberthur And Welcome Form Italian Alliance
- Thales and Oberthur In Smart Card Alliance
- Infineon Cautious On Chip Prices
- IDC Report Highlights Rainbow As Market Leader
- ORGA Looks Towards Indian Market
- Vital and JCB Launch US Smart Card Campaign
- Trintech Cleared For Buy-Back Program
- ARM Signs Up Partner For New Program
- ERG Sell Stake In ECard
- Lifestream Reports Strong Quarter
- First Data Acquires BPO Company in the UK
- ON Semiconductor Appoints New CEO
- ActivCard And Entrust Form Strategic Alliance
- First Data Enters French Market With Egg
- All change at GlobalPlatform
- IBM And Chartered In Semiconductor Alliance
- Gemplus Forced To Play The Waiting Game
- Changes At The Top At G&D
- ERG Shareholders Call For Blood
- ERG Shareholder Pledges Support
- Trintech Report Latest Financial Figures

Banking

- Europe Warms To Verified By Visa
- Australian Bank Unveils CardBASE System
- Level Four Win Abbey National Contract
- Paymentech Acquire Scotiabank Business Division
- Abbey National Selects SpanKey
- UK Bank To Roll Out Biometric Signature System
- CRDB Bank Adopt CR2 e-Purse
- Logica Wins Saudi Payment Network Contract
- Oberthur Wins Hungarian Banking Contract
- CreditCall Receive EMV Certification
- Funding to Harmonise Payment Standards
- SchlumbergerSema To Power Swedish Card Scheme
- Bank of America Tests Purchase Card
- CardBASE Develop Debit-Purse Smart Card In Nigeria

Government

- Unisys Wins DoD Biometric Contract
- Gemplus Launch Government ID Solution
- Malawi Launch National Smart Card

ID & Authentication

- SchlumbergerSema Test Biometric Smart Cards
- ActivCard Launch Corporate ID Badge Solution
- RSA Launch Smart Badge Solution
- Keycorp and Precise In MULTOS Biometric Alliance
- BIO-Key Launch Oracle 9I Biometric Solution
- G&D To Process Lithuanian ID Documents
- BSC Launches Biometric Solution
- BIO-key and HID Announce Advancements In Biometrics
- Malaysian Port Offers STARTAG Cashless To Employees
- Agreement to Digitally Sign Transactions
- Chip Sensors To Drive Fingerprint Biometrics Market

Telecoms

- ACG Launch flashCOS Java GSM
- SFR Launches M-commerce Service
- SchlumbergerSema Wins SIM Contract In Italy
- ORGA And Orange UK Launch SIM2SIM Reader
- SchlumbergerSema Implement GPRS Solution In Portugal
- Tele2 Expand PhoneCard Service

Technical

- ST Launch New Memory Technology
- Atmel Adds Functionality to its 32K Smart Card
- Atmel Launch Latest Microcontrollers
- M-Systems Signs Core Agreement With ARM
- Smart Card Cracking Info Published
- Gemplus Launches GemXplore CASE 3.1 For Java Card
- Microsoft Develops Card Reader Technology
- New Smart Card Anti-Piracy Device
- Linux To Make Smart Card Debut

Retail

- SchlumbergerSema Launch DECT Terminal
- New Chinese Internet Smart Card
- Visa USA Launch Rewards Solution
- Trintech Launches Payment Solution In Eastern Europe
- UK Retailer Trials Smart Cards
- Arcot And Mosaic Develop Joint Payment Solution
- Nordea Selects SchlumbergerSema Online Payment Solution
- Xiring to Launch Mobile Payment Terminal

Transport

- Italian Island Adopts ASK Contactless Cards
- Cubic Win Houston Smart Card Transit Contract
- London Transit Smart Card Starts Trial
- London Smart Card To Use Phillips MIFARE
- Santiago Plans Smart Card Ticketing
- Flexcar's Car Sharing Program Expands To San Jose
- Chicago Goes Live With Smart Transit Card

Healthcare

- Smart Cards To Monitor School Diets

Misc

- Smart Card Alliance Release New US Research
- Sesames 2002 Awards
- Eurosmart Says Card Shipments will Meet 2002 Forecasts
- Datacard Launch Entry Level Printer
- Oberthur Prisma Smart Card Wins Support
- Bright Future For Smart Card Reader Market
- Spanish University Wins JavaCard Award
- MP3 Player/Recorder Uses Smart Card To Increase Capacity
- Alliance Calls For Switch To Smart Cards
- NamITech Rolls Out University ID Card
- New Smart Active Label Consortium

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Credit Card

Number

Expiry Date

Signature

Name

Company

Address

Telephone

Email



Retail Technologies Favoured by USA Consumers

Selected Responses	Use/Plan to use/Would use	Convenience	Speed	Ease of use
Gas Pump Payments	79%	73%	51%	24%
ATMs	75%	90%	34%	23%
Debit/Credit keypads at checkout	66%	71%	41%	24%
Self-operated checkouts	55%	64%	23%	16%
Automated financial/banking services	49%	83%	27%	19%
Automated ticket purchase	48%	72%	29%	21%

Source: Cap Gemini Ernst & Young Retail IT Report, 2002

Global Smart Card Market By Industry, 2001-3

Market (millions of units)	2001	2002	2003	Growth Forecast 2003 vs 2002
Mobile Comms	400	450	550	22%
Banking	145	181	220	22%
eGov, IT, PayTV & transit	196	263	357	36%
By Region				Share of Total
EMEA	883	923	974	46%
Asia-Pacific	558	597	656	31%
Latin America	322	346	402	19%
North America	38	58	85	4%

Source: SchlumbergerSema, March 2002

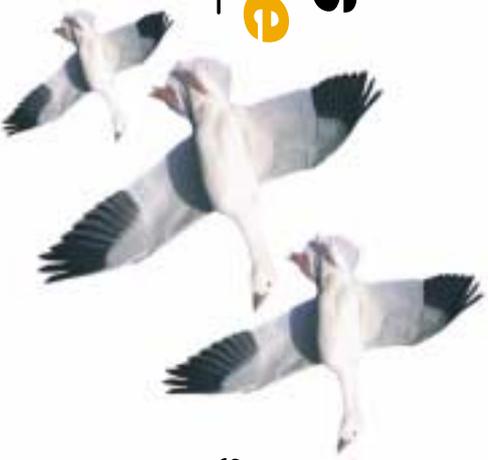


The Market in Figures



Cards Europe

2003



Europe's payments and transactions summit

Europe's payments and transactions summit

Smart move.

3 - 5 February 2003
Royal Garden Hotel
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- Toni Merschén, Senior Vice President, MasterCard International
- Ron Karporovich, Associate Director, The Royal Bank of Scotland
- Yvon Lucas, Director, Payment Systems Division, Banque de France
- Karl Oksanen, Head of Security, Nordea
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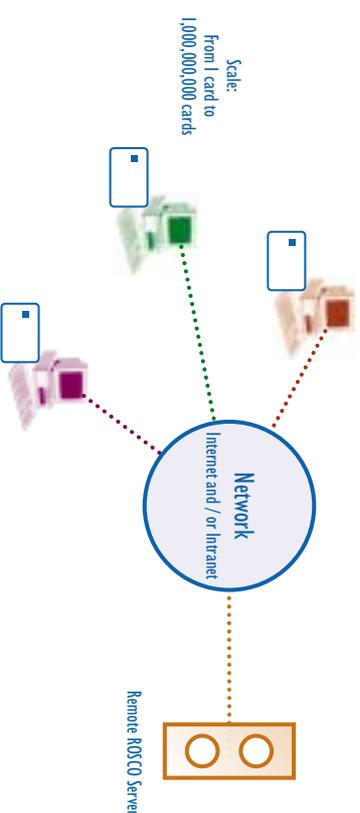
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- Yes! Please register me for the 2 day conference at £1095 + UK VAT. You may also pay in euros at the exchange rate on the day of payment
- Yes! I am interested in attending the conference. Please send me the conference agenda.
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ROSCO

On request from the client the server sends cryptographically protected scripts to the ROSCO application for controlling the Smart Card Token.



ROSCO is a network-aware application that interfaces with the client browser to act as a secure Smart Card Token controller

ROSCO is a technology which allows millions of Smart Cards to be managed as if they were simple clients doing transaction with a web server. The ROSCO technology puts a small footprint on the client which allows the user or the service provider to communicate with the Smart Card using any browser. Issuers can directly communicate securely with any Smart Card they have deployed in the field from any browser. Unlike other technologies Active X components or Java applets are not loaded into the browser. ROSCO is written in Java. All content is synthesized to simple HTML eliminating browser compatibility issues.

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