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Smart Cards Now

www.smartcardgroup.com

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www.rainbow.com

Rainbow

There is not much to get excited about here with a bland looking corporate site that doesn't attempt to do more than the bare minimum required. Basic product listings and specifications are in place and easy to find but if you want to know more you'll have to fire off an e-mail to customer support (although things are slightly better for existing users with a strong end-user support and secure download area). Perhaps the only area of interest for non-Rainbow customers is the 'Library' section which features a searchable database of presentations, white papers and product briefings. Inevitably, content is dominated by Rainbow's own PR materials but it remains the most interesting area of this otherwise insipid site.

Navigation
Content
Appearance

www.ealaddin.com

ealaddin

ealaddin's distinct branding within its own product range (eToken, Privilege etc.) works well here allowing the customer to find the right part of the site without problem. The company also operates a mailing list in a similar manner allowing users to sign up to their area of interest. Unfortunately, whilst the product information and support is strong there is very little else on offer. The press centre is packed and up to date but the only things available to download are company profiles and logos. A well designed and attractive site but it won't keep you interested for long.

Navigation
Content
Appearance

www.rsa.com

RSA

It is apparent from the impressive Flash animation on the homepage that RSA have put in a bit of extra effort with this website. The interactive demos on PKI (also Flash based) may be light on useful information but work well as a fun introduction for the novice. The product pages features unique resource libraries for each separate product which include white papers, case studies and tech specs, and are easy to navigate through. Extras include a conference diary and a strong cryptography FAQ. Pages appear cluttered at times, but navigation is sound. Well worth a visit.

Navigation
Content
Appearance

China Launches World's Biggest Smart Card Project

China is set to roll-out out the world's largest ever Smart Card project after giving the go ahead to issue all of its 1.3bn citizens with a national ID Smart Card. The Chinese Ministry of Public Security has said it is plans to issue 20m cards a month - a rate that requires a chip output equivalent to 8000 8 inch wafers a month. The project could take up to five years to complete.

It remains unclear when the long-discussed project will finally get underway but it is thought that pilot schemes will be set up in several big cities by the end of the year with the southern city of Shenzhen highlighted as a likely candidate. College students will also be among the first citizens to be issued with the card with students expected to use the card to apply for bank loans.

NEC's Chinese subsidiary Shanghai Hua Hong NEC Electronics has been named as the sole supplier of the chips for the project with the Chinese government allegedly reluctant to extend the contract to more than one chip supplier due to security concerns. However, due to the lack of any major local Smart Card manufacturers, Gemplus, ST Microelectronics, Philips and Motorola have all recently opened new facilities in China in an attempt to cash in on the demand for the cards.

The Smart Card will replace the current Chinese ID card which is simply a paper document encased in plastic containing basic citizen information such as name, sex, birthday, and ID number. The card has long been considered relatively easy to counterfeit and there have been problems identifying people from the photographs on cards that were issued a long time ago. Both cards will co-exist during the roll-out period.

The new cards will feature the same information combined with details from the national health insurance card which citizens are also required to carry. The card will feature a face portrait on its surface and will also carry a biometric such as a fingerprint. However, Qiu Xuexin, a Researcher at the Ministry of Public Security, said the biometric would be tested "only when the authenticity of a person is in doubt."

"By using encryption technology, it will be scarcely possible for unauthorised people to access information in the new card or to produce fake cards," Qiu said.

Commenting on possible public resistant to the cards analyst group Butler Group said: "As frequently happens when the topic of identity cards is raised, the questions of privacy and security are not far behind, although in a society that has already accepted the use of identity cards this may be less of an issue."

Website

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  - www.infineon.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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UK Consults on Identity Card

The UK Government published a consultation paper this month on a national identity card which is now being called an entitlement card. It is asking whether the public would find an entitlement card useful to access services and effective in tackling illegal immigration.

Home Secretary David Blunkett made it clear that any such scheme would be compulsory, but his official spokesman drew a distinction between it being mandatory to carry the cards and simply possessing one.

The Government is seeking views on potential uses which include: more effective ways to access services; combating illegal immigration and illegal working more effectively; a convenient travel card in Europe; a proof of age card; a way of tackling identity fraud; a card to promote new ways of voting and a way of fostering citizenship. Views will also be sought on issues such as cost, privacy and duplication of existing documents.

The card is also now involved in a government scheme to stamp out the growing threat of "identity theft" which, according to a Cabinet Office study released simulteneously, costs the UK more than £1.3 billion a year.

It called for a combination of measures to tackle the problem such as more secure processes for issuing documents used as evidence of ID; stronger checks of ID at point of use; and a more co-ordinated approach to detection and prosecution of ID fraud.

Blunkett said: "Following the events of September 11 there was a call to introduce a type of 'identity card' system. We said we would not be giving a knee-jerk reaction in the wake of this terrorism and we have stuck to that.

"We want to hear first and foremost from the public on whether they feel an entitlement card would be useful to them and to which services they would want it to give access.

"Identity fraud currently costs the taxpayer over £1.3 billion every year and there is no doubt that a secure universal card could play a part in reducing that bill. Equally, entitlement cards could be an important tool in cracking down on illegal immigration and illegal working, reducing the pull-factor to the UK to people trafficking gangs.

"As criminals become increasingly sophisticated at stealing or forging identities we have to position ourselves to respond, using biometrics and cutting edge technology as one way to defeat them."

However, the Goveremnt can expect opposition not only from opposition MPs and civil rights organisations, but from within its own party.

Visitor Management Service

An on-line Smart Card-based visitor management service, called iVisitor, is the first security product aimed at commercial and government applications to be released in a partnership between TDK Electronics Corporation and Infrasafe, of Orlando, Florida.

By using the TDK Smart Card technology in conjunction with iVisitor, building security systems will be able to recognise and track visitors and employees faster and more efficiently.

The TDK Smart Card is one third of the thickness of a standard credit card but is ISO compliant, with an additional security protection feature called a Z-ID stripe which prevents physical duplication of the card. The technology also enables image capture and re-printing of individual ID badges up to 200 times using the same card.

One Millionth Smart Card for DoD

Systems integrator EDS has delivered one million Smart Cards to the US military since it began issuing the cards in November for the Department of Defense (DoD) Common Access Card (CAC) programme which will ultimately include more than 900 DoD sites worldwide.

The CAC card provides users with access to sites, computer systems and networks. The cards combine identification, physical access and logical (computer) access capabilities on a single chip.

Homeland Security Issues in the US

Homeland security and public safety are major issues in the United States and biometric security solutions are becoming more attractive to authorities and public alike.

A recent nationwide survey by biometric security company, SAFLink Corporation reveals that 94% of Americans now support the use of biometric devices such as fingerprint scanners to enhance airline secu-

rity, and 84% would like to see biometric devices used to increase security at stadiums and public events.

American Airline employees are also demanding smarter, standarised security screening procedures at airports.

The SAFLink survey found that 41% of respondents had used a biometric device of some kind and fingerprint scanners were by far the most popular.

While privacy advocates have raised a number of concerns about biometric security, only 11% of those surveyed perceive biometric identification as an invasion of privacy.

"We believe these results reflect the influence of the September 11 terrorist attacks on public attitudes toward security strategies that might previously have been considered intrusive," said Joshua Grantz, SAFLink Vice President of Marketing and Sales.

"The answers seem to demonstrate that the majority of the American public is willing to sacrifice some perceived privacy to ensure their own safety and the safety of others.

"Because of recent events and government mandates, many people and businesses are taking a serious look at their own security," he said. "Many have found that biometric security offers a more protected environment than passwords, PINs, photographic identification, or key-based access devices. Biometrics are far more convenient since you can't forget them and you can't leave home without them."

The survey of 500 people, conducted in person with random participants, was designed to assess public sentiment toward the use of biometric devices such as fingerprint, voice, facial geometry and iris scanners.

Among the findings:

- ☐ Nearly 86% of respondents are willing to incorporate biometric technology in driver's licenses and passports to aid in identification of the bearer.
- ☐ 94% support the use of biometric devices to improve airline security, and 84% back the use of biometric systems to check their identity against a database of criminals and terrorists at the entrances of stadiums and public events.
- ☐ Of the 41% who have used a biometric device, 70% said they are most comfortable using fingerprint-based biometric devices, followed by facial (12%), voice (10%) and iris (6%) systems.

AA Employees Call for Smarter Screening

American Airlines employees last month called on Capitol Hill, Washington lawmakers to support universal ID cards and smarter, standardised screening procedures in airports for flight crews, agents and other airline ground employees.

The AA employees claim to be frustrated with an inconsistent and inefficient screening process for uniformed employees. The current process makes it difficult to focus resources on real security threats and leads to unnecessary delays for the pilots, flight attendants and other employees who are the backbone of the air travel industry.

"This is an issue of utmost importance to our employees across the nation who have always put safety and security first, and we ask Congress to take whatever steps necessary to help get this job done," said Will Ris, American Airlines' Senior Vice President of Government Affairs.

He said that the new system should:

- ☐ Create a universal identification card for aviation employees using Smart Card technologies and/or biometrics.
- ☐ Establish a centralised database to verify the identity of flight crew and employees who work in US airports every day.
- ☐ Establish screening portals for aviation employees separate from those used to screen passengers.

For more information visit ...

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American Airlines
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Saflink
www.saflink.com

UK MOT Contract for Burall

Siemens Business Services has awarded a £2 million contract to Burall InfoSys to supply Smart Card readers for the new Vehicle Inspectorate road worthiness certificate (MOT) system to be launched by the UK Government next year.

An initial roll-out of 40,000 Smart Card readers will be issued to garages across the UK, allowing Smart Cards to store MOT data and link to a central computer. The scheme will allow checks made against every vehicle registration and trace which MOT tester in which garage issued a particular vehicle certificate and help to prevent fraud.

The new Smart Card scheme is expected to process 30 million vehicle MOT inspections every year.

Visa Cuts Smart Card Costs

Visa International has announced further reductions averaging 10 per cent in the cost of a range of Smart Cards, for example, the price of a multi-application Visa Smart Card has fallen from over US $8 in 1998 to $2.60 today.

Through its low cost Smart Card program, launched in spring 2000, Visa has been working with chip and card manufacturers to reduce Smart Card costs for its member banks. More than 14 million Visa low cost Smart Cards have been issued.

Two new multi-application Smart Cards have also been added to the program bringing the total number of cards to nine. These range from simple, single application payment cards with a choice of security options to suit different market conditions to sophisticated Java-based GlobalPlatform cards that can carry several other applications, such as loyalty, transit, identification and site access.

Prices for entry-level, single application cards start at less than US $1 while GlobalPlatform multi-application cards range from US $2.60 to US $4.08.

Infineon Records Two Billion Chips

Infineon has announced that it has produced two billion chip card modules for Smart Card applications in Regensburg-Burgweinting where it began production ten years ago. The one billionth module was produced in 1999, some seven years after the start of production, but the second billion milestone has been reached after just another 30 months.

King Fahd University Card

Bell ID is to provide a multi-application Smart Campus Card system at The King Fahd University of Petroleum and Minerals in Dhahran, Saudi Arabia. The University will enrol some 20,000 students, staff and visitors.

The scheme will be managed by Bell ID's Web-based ANDiS Card and Application Management System (CMS/AMS), including the Bell Group Pacom access control system, using biometrics (digital fingerprint), an electronic purse for use in cafeterias, vending machines and the University's library and the campus' medical centre. More applications will be added in the future.

Late this year, the Campus Card will secure access to the 900 acres of the University, 28 buildings, and 375 entrances. To ensure the highest possible level of security, cardholder's identity is verified by means of a digital fingerprint, embedded in the chip.

Smart Cards for UK Football Club

London-based football club Millwall is to issue 15,000 Smart Cards to club members and season ticket holders in an effort to improve security at the ground. The card has been developed by Smart Card sports specialist Teamcard.

Visitors to the stadium will insert their cards at readers installed at each turnstile. The club also plans to introduce a range of Teamcard rewards and membership benefits within the next 12 months.

Club Chairman Theo Paphitis said: "We have had a lot of damage done to this football club thanks to people coming just to cause aggravation. 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."

Atmel's New Representative in India

Atmel Corporation has appointed California Card Systems, based in Bangalore, to handle its Smart Card product line in India which includes memory, secure memory, CryptoMemory, secure micro-controllers and crypto-controllers.

Row Over Boston AFC Contract

A major row has blown up over the decision by the Massachusetts Bay Transportation Authority to award a $75 million contract to a German company to install an automatic fare collection (AFC) system for the Boston area.

The company, March, Scheidt & Bachmann USA, is a German firm with offices and a manufacturing facility in Burlington.

Unfair, said San Diego-based Cubic Transportation Systems, the second-place bidder which has put a brake on the contract by filing a petition with the Federal Transit Administration.

Apparently, as the FTA is partly funding the project, federal law stipulates that American-built technology be used.

Cubic says the winning firm would use equipment manufactured overseas violating the federal "buy America" law. Not so, says Scheidt & Bachmann, claiming it will manufacture the equipment at its US headquarters.

The new Smart Card-based AFC system involves subways, buses, trolleys, ferries and commmuter rail trains and is scheduled to begin in January 2004.

ASK Wins Two French AFC Contracts

ASK has announced contracts for Smart Card automated fare collection (AFC) systems in the French cities of Tours and Grenoble.

In the Tours contract, ASK will supply 80,000 dual interface contact/contactless Smart Cards - the GTML and the CD97 - for use on the 400 buses of the region as well as in the regional SNCF trains. The system will be fully operational in October 2002. The three public transport organisations that operate this system are the city of Tours, the French Railway (SNCF) and the Indre et Loire local authority. ASK will also personalise the cards including printing a photograph of the cardholder on the card and mailing cards to the fare card users.

In Grenoble, ASK will supply 90,000 dual interface GTML Smart Cards and 1,000 GEN310 contactless couplers, which are integrated into the fare readers and AFC system on the buses and trains. Deliveries will start in June 2002 and the system will be fully implemented in November 2002.

Both the GTML and the CD97 cards are based on microprocessor chips, and are dual interface cards. ASK manufactures the GTML and CD97 cards using an innovative process that prints the antenna with silver ink on a paper support, which delivers the advantages of contactless technology at a more affordable cost for transit operators. The CD97 card has 2K bytes of EEPROM, and is designed for combining a ticketing application with an electronic purse and one other application. The GTML card, which has 576 bytes of EEPROM, is an affordable solution optimised for use in AFC ticketing applications.

Toronto AFC Goes Live

GO Transit's Smart Card automatic fare collection (AFC) system for its commuter rail and bus network in the Greater Toronto Area of Canada has gone live with the operation of Phase 1 on the Richmond Hill transportation corridor. The transit authority now intends to roll-out the system across its entire network of seven rail transportation corridors and an extensive bus network.

Up to 7,000 dual interface contact/contactless Smart Cards are being issued during Phase 1, and over 80,000 Smart Cards will be issued to regular travellers when the system is fully implemented. The system was supplied by Australia-based ERG. Inspectors will use portable handheld card readers to check the passenger Smart Cards and cardholders can purchase and load value on their cards at both agency ticket offices and third party retail outlets.

First USB-Certified Chip

STMicroelectronics has started volume deliveries of the ST19XT34, which it says is the world's first secure microcontroller to receive Universal Serial Bus (USB) certification for use in Smart Cards and tokens. The device integrates a highly secure microcontroller core, a large non-volatile memory and both USB and standard ISO 7816 interfaces.

Maurizio Felici, Group Vice President and General Manager of ST's Smart Card Division, explained: "In developing the ST19XT34, our aim was to bridge the gap to the PC world by offering a Smart Card chip that harnessed the simplicity of USB while providing both high performance at very low cost and backward compatibility with ISO 7816-3 solutions."

For more information visit ...

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ID Data Win Post Office Contract

ID Data plc has won a four-year contract with its joint venture company TTi to supply EMV cards and personalisation services to EDS for the Post Office card account in the UK. ID Data will supply the card production and personalisation for the multi-million pound contract.

The Post Office card account is offered as part of its universal banking service that will enable customers to continue collecting benefits in cash at local branches from April 2003. TTI and EDS have the option to extend the contract beyond the initial four-year period.

Commenting on the contract, ID Data CEO Peter Cox said: "This is a high profile account and we faced stiff competition in order to win it. Both ID Data and TTi are extremely pleased to be working with EDS and the Post Office on this project."

Miotec/Avian Signature Biometric

Miotec is partnering with Avain Technologies to develop a digital signature based on biometric technology. The new solution will combine Miotec's biometric PKI card with Avain Technologies' X-Sign application. The solution is claimed to be one of the first to combine biometrics with digital signature, with the signature verified by fingerprint instead of a PIN.

Pekka Kuosmanen, CEO of Avain Technologies, said: "The solution is applicable in governmental organisations as well as in private enterprises, and is being jointly marketed in Europe, the main marketing area for both companies."

Fingerprint Technology for Taiwan

Fingerprint Cards of Sweden has sold a non-exclusive licence to Hardware & Software Technology Co (HST) of Taiwan who will market and sell the technology in major Asian markets and re-sell Fingerprint Cards' components from its own stock in Taiwan.

AuthenTec Developers Kit

Biometric company AuthenTec has launched a new version of its FingerLoc Embedded Developers Kit. Based on AuthenTec's AFS8500 fingerprint sensor and Texas Instruments' Digital Signal Processor (DSP), the kit is aimed at enabling developers to easily integrate fingerprint security solutions into new products.

Taiwan Health Card

Taiwan is set to launch a new $120 million health card project and will issue over 24 million Smart Cards to its citizens. The chip cards will replace various paper cards that individuals present when seeking medical services. The scheme is being implemented by Taiwan's Teco Electric & Machinery Co and the cards are being produced in a joint venture factory owned by Teco and German Smart Card supplier Giesecke & Devrient, using chips from Hitachi and Infineon.

The 32K bytes EEPROM cards for patients will carry patient insurance and medical information. According to Teco, 8K bytes is available for new features such as a possible electronic purse for payment. Medical practitioners will be issued with 300,000 64K bytes EEPROM cards.

Drexler To Power Italian ID Card

The Italian government has ordered 39 Crypto 1 encoders from Drexler Technology's subsidiary LaserCard Systems to help with the issuance of its new national ID card. The encoders will be configured into a card initialisation and authorisation system, capable of encoding up to 40,000 cards per day, in support of Italy's national ID card requirements. The system was developed by German Smart Card IC supplier Muhlbauer.

The new Italian national ID card, known as the 'CIE' card (Carta d'Identita Elettronica), is based on the highly secure LaserCard optical memory card manufactured by Drexler, which has already delivered 200,000 of the cards for the scheme. Project roll-out in scheduled to begin in August.

New Services by Mobile Phone

Mobile payments provider, paybox, has teamed with bookmaker, Ladbrokes, to offer online customers a new payment method using their mobile phone, and Vodafone has announced it will launch a mobile phone digital photo service this Autumn.

Currently, anyone in the UK with a bank account and mobile phone can pay for bets at Ladbrokes.com, provided they are a registered paybox subscriber. As an alternative to using a credit or debit card when placing a bet online, paybox users are simply requested to enter their four-digit PIN code to authorise payment.

David Briggs, Business Development Director at Ladbrokes said: "Online gaming is a massive growth area and is expected to be a significant source of revenue."

Vodafone Group President, Chris Gent, announced plans to launch a digital photo service in seven European countries. The service will enable online transmission of photographs taken by a phone with a built-in digital camera.

Finland's Nokia Corp and Sony Ericsson Mobile Communications are expected to supply the new handsets. Gent said the service will be part of a package of multi-media services called Vodafone Life.

G&D Cards for DaimlerChrysler

Germany's DaimlerChrysler Bank has selected Giesecke & Devrient as sole supplier for its chip-based EMV Smart Card range. The cards will combine EMV functionality with customer loyalty programs. In the initial roll-out, 20,000 cards will be issued this month.

Motorola GSM Contracts in China

Motorola has won four contracts worth $100.8 million to expand and upgrade China Mobile Communications' GSM 900 and 1800 networks in the provinces of Hubei, Yunnan and the cities of Beijing and Tianjin. The network expansions will increase subscriber capacity for China's largest telecom operator by 1.2 million users.

Gemplus SIM Contract in Brazil

Gemplus is to deliver a Smart Card SIM (Subscriber Identity Module) solution to Oi, the Brazilian mobile telecommunications subsidiary of Telemar, for the first launch of GSM in Brazil. Oi is anticipating 500,000 subscribers in its first year of operation

The removable OiChip, developed specially by Gemplus, will enable Oi to offer services including global roaming and content delivery through SMS (Short Message Service). The chip will store important user data including subscription information, phone number and phone directories, eliminating the need for users to manually re-program this personal data every time they switch phones. Importantly, they can also keep the same mobile phone number.

The solution consists of Gemplus' latest range of SIM cards for GSM, a dynamic SIM Toolkit (STK) architecture and Gemplus' Over the Air (OTA) platform enabling the operator and user to remotely update the information and/or applications secured within the card.

Nokia GSM Contracts

Nokia is to supply equipment to Radiolinja Origo, the network operator of Radiolinja, in a multi-year agreement to expand Radiolinja's GSM and 3G Networks in Finland.

Nokia is also to expand Belgacom Mobile's Proximus GSM network in Belgium. The work will be conducted alongside the roll-out of Proximus' 3G infrastructure also supplied by Nokia.

In Singapore, Nokia has won an order from mobile operator MobileOne to supply an end-to-end multimedia messaging (MMS) system for M1's GSM network.

Telstra Purchase of CSL

According to Dow Jones & Company, Australia's largest telecommunications company Telstra Corp has agreed to purchase the remaining 40% stake, that it did not already own, of Hong Kong mobile telephony provider CSL Ltd.

Ericsson Contract in Nicaragua

Ericsson has won a contract with Empresa Nicaraguense de Comunicaciones (Enitel) in Nicaragua for GSM 1900 equipment, software and services. The GSM network will offer nationwide coverage and enable Enitel to offer advanced GSM services such as voice mail, automatic roaming, pre-paid and SMS (Short Messaging Services).

For more information visit ...

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Fingerprints
www.fingerprints.com
ImagineAuto
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Miotec
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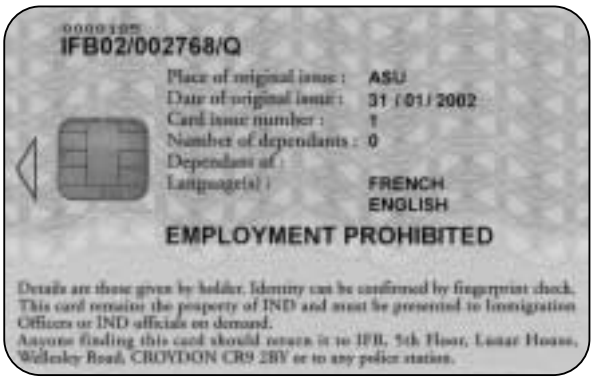
Mistaken IDentity?

UK Latest To Launch ID Card Despite Privacy Concerns

The events of September 11th really did the change the world. Within days of the tragedy governments on both sides of the Atlantic quickly drew up a series of regulations that it hoped would ensure an attack of such magnitude could never happen again.



Prototype of the UK's proposed ID card

In the US, the focus on 'homeland security' was principally concerned with tightening up airport checks, which – as the terrorist hijackers had proved - was worryingly ineffectual, especially on domestic routes. Whilst the US concentrated on installing state of the art security measures such as biometric check-in systems across its major airports, efforts in Europe focussed on ID cards, which in many countries had not been used since the Second World War.

In the UK the government had long proposed the idea of the ID card as an effective weapon against illegal immigration and benefit fraud. However, prior to September 11th the ID card had not been championed as an anti-terrorist measure and the widespread fear that such a card would be seen as an invasion of basic citizen privacy meant that implementation of such a scheme seemed a long way off. However, a fortnight after the terrorist attacks an opinion poll showed 86% in support of the card.

With the political environment irrecoverably turned on its head following the attacks, UK home secretary David Blunkett made sure the ID card was back on the agenda and the unveiling of the UK's 'Entitlement' Smart Card was finally presented to Parliament this month.

According to Blunkett, the card will be a powerful weapon in the fight against illegal immigration and illegal working, fraud and identity theft, as well as making it easier for people to claim benefits and services. Certainly, the rise of the 'bogus' asylum seeker has been a contentious issue in Western Europe for some time with new political refugees in the UK already issued with their own Smart Card in a scheme designed to replace a controversial voucher system that was previously in place.

The threat of Identity theft is also rapidly becoming a major government concern with recent research suggesting it is the fastest-growing form of fraud in the UK. According to a study carried out last month by the UK's Independent newspaper, cases of identity theft in the first three months of the year rose by 55% compared to the same period in 2001 with more than 10,000 cases recorded. Up to 40,000 people could be victims this year if the trend continues.

Blunkett said it would not be compulsory to carry the ID cards at all times and that police would not be able to demand their production – although it would be an offence to refuse to register.

Legislation could be introduced in the following parliamentary session, after which it would take three years for the system to be set up and 'five or six years' for all of the UK's 67.5m citizen's details to be collected.

The first major obstacle for the UK government is cost. Over the next 13 years it is estimated to cost £1.3bn for basic plastic cards and £3.1bn for the Smart Cards with chips capable of storing holders' fingerprints and iris patterns as an anti-forgery feature. Early budgeting plans to fund the scheme have proposed a hike of up to £30 in the cost of renewing passports and driving licences. The Home Office said the extra income would allow the poorer sections of the population (ironically those most likely to use the card most often) to be given the cards free of charge.

The Home Office stressed that no records would be kept on the cards of racial origin, sexual orientation, religious or political beliefs, health or criminal convictions but this has not stopped civil liberties campaigners voicing concerns over infringement of privacy, warning that government officials would have access to vast amounts of information about individuals at the touch of a button.

One such group, Privacy International, set up a new website this month dedicated to its opposition to the UK Entitlement card. Privacy International's

Director Simon Davies became one of the first high-profile opponents to the card when he wrote an article in the UK's Daily Telegraph just three weeks after September 11th.

Davies wrote: "This initiative will fundamentally change the nature of government and the character of the nation. This is inevitable because the modern ID card is no simple piece of plastic. It is the visible component of a web of interactive technology that fuses the most intimate characteristics of the individual with the machinery of state."

"No one has been able to identify any country where cards have deterred terrorists. To achieve this, a government would require measures unthinkable in a free society. The Government thus faces a choice. Either it introduces a high-security biometric card that will challenge every tenet of freedom, or it introduces a low-security card that will soon be available to criminals and terrorists on the black market."

Despite such vitriolic opposition to the scheme Blunkett claimed that he was personally 'enthusiastic' about the card although he emphasised that the UK government remained 'neutral' on the issue and would consider public responses before bringing forward its plans in early 2003.

The UK is not the only European nation currently debating a national ID card system. Italy is set to begin rolling out its 'CIE' (Carta d'Identita Elettronica) card next month at a rate of 40,000 cards per day and even so-called 'second-world' countries such as the Ukraine have had ID Smart Card projects in the pipeline for a number of years.

Of the other major European nations such as France and Germany, basic ID card systems are already in place. This means that governments should be at least spared the wrath of civil liberties organisations if they decide to switch to a Smart based system even if cost issues are likely to remain.

However, it is the other side of the world where the Smart ID Card is really taking off. In the Asia-Pacific region – ironically one of the areas least effected by the terrorist attacks – ID card schemes are already underway in Hong Kong, Macao, Malaysia, Thailand and China. The latter set to be the biggest ever roll-out of Smart Cards ever undertaken (see Page 123). The Hong Kong government has awarded its national Smart ID Card contract to a group led by Pacific Century CyberWorks (PCCW) in a deal valued at $163m which will see the cards phased in from July next year. Hong Kong's Deputy Director of Immigration, Wong Tat-po said that holographic pictures of the cardholder would be a distinctive feature that would be "almost impossible" to forge and that the card will be used by employers to spot illegal immigrants.

David Blunkett, Home Secretary of the UK Government

Inevitably, cost was once again the principal issue with the total roll-out expected to cost $400m. Tat-po also noted that an additional 200 police officers would be needed to cope with the card roll-out, alongside an extra 560 staff at the immigration department. The chip will contain gender, photographic and residential data but previous plans for the cards to carry medical and financial records were scrapped due to privacy concerns.

Links

- **UK Home Office**
  www.homeoffice.gov.uk/cpd/entitlement_cards.pdf
- **Privacy International**
  www.privacyinternational.org/issues/idcard/uk/

See Also 'Identity & Entitlement Cards – A Security Perspective' Pages 136-137

Datacard to Acquire Gilles Leroux

Datacard Group is to acquire the assets of Gilles Leroux, manufacturer of plastic card production, control and personalisation systems and leading supplier of solutions to the GSM Smart Card market. It will continue manufacturing the Gilles Leroux product line at the Orleans, France production facility.

Datacard was awarded the right to purchase by the Commercial Court of Orleans, France, which has been overseeing Gilles Leroux since it filed for bankruptcy protection last year. Details of the acquisition terms were not disclosed.

"The card manufacturing and personalisation systems we are acquiring, along with Gilles Leroux's impressive intellectual capital, greatly accelerate our ability to meet the needs of our customers and satisfy specific strategic objectives," said Jerry Johnson, Datacard's President and CEO. "The product lines and engineering talent of the two organisations are extremely complementary - especially in the Smart Card arena.

"The Gilles Leroux Smart Card manufacturing system opens entirely new doors for Datacard," he said. "Gilles Leroux chip embedding systems are best-in-class and adding those offerings allows us to make the natural extension into card manufacturing. In addition, Gilles Leroux Smart Card personalisation systems are the preferred solution for the GSM market."

MasterCard Merges with Europay

The long-awaited merger of MasterCard International and Europay International has now been completed. The conversion of MasterCard into a private share corporation and its merger with Europay creates a unified, shareholder-owned global payments company.

Europay, MasterCard's strategic ally in Europe, is being integrated into the global organisation as MasterCard's Europe Region which will continue to be based in Waterloo, Belgium. Dr Peter Hoch, Europay's CEO, will continue as President of MasterCard's Europe Region, reporting to Robert W Selander, MasterCard's President and CEO.

"Europay has just marked another critical milestone, with over 300 million cards now issued in our region. It is a proud moment at which to enter into this merger," said Hoch. "Our members have always benefited from our strategic alliance with MasterCard but the benefits of working as a truly integrated global company will now be all the greater."

"As a private share corporation, we provide a tangible benefit to our principal members, who are now our shareholders," said Selander. "They own stock in our company and have a vested interest in enhancing the value of that stock by moving more volume, revenue, and share to MasterCard."

As part of the merger, MasterCard is launching three global Centers of Excellence. Debit and Chip and Mobile Commerce will be located in Waterloo, Belgium, to utilise Europay's expertise in these areas, and e-Commerce and eB2B, will be located in Purchase, New York.

Gemplus Divided Over CEO

Gemplus is expected to announce soon who will lead the company as its Chief Executive but the Board is currently split over whether to continue to search for a new leader or to retain Ronald Mackintosh who was appointed as interim CEO of the French group last December as part of a Boardroom battle which saw Marc Lassus ousted as Chairman and other key executives shown the door.

Originally expected to stay only until a permanent successor was found, Mackintosh offered to stay on in the job. However, as the dispute continues he is reported as saying: "but I can't hang around for an indefinite period." The deadlock has also hindered the search for other key people, notably a Chief Operating Officer and Chief Financial Officer.

Gemplus did announce the appointment of Dominique Vignon as Chairman taking over from Hasso von Falkenhausen, who was also appointed in December and is retiring as planned.

Aged 54, Vignon became Chairman and CEO of the Framatome Group in 1996, a position he held until the end of 2001.

Infineon Appointment

Robert LeFort as has been promoted to President of Infineon Technologies North America from Vice President (Automotive and Industrial). He succeeds Jan du Preez, who has left the company.

For more information visit ...

DataCard
www.datacard.com
Infinion
www.infinion.com
MasterCard
www.mastercard.com
Gemplus
www.gemplus.com

The Lonesome Highway

by Allen Gilstrap, Vice President & General Manager, Smart Chip Services, American Express Global Network Services

Allen Gilstrap

We increasingly take for granted evolution in technology which ever-changes the way we conduct our daily lives. Within recent days, World Cup fans have been tracking football scores, in real time over the Internet, of games being played on the other side of the world. At the conclusion of the game, many of those fans exchanged SMS text messages with co-workers enthusiastically reminding them of lost wagers. One-by-one, they went to the nearest bank ATM with a card and PIN number, to get cash to pay off their debts.

The long-awaited evolution to the smart chip-enabled payment standard, known as EMV, appears to have finally begun. American Express Global Network Services (GNS) works closely with card issuing and merchant acquiring partners around the world from Canada to Europe to Japan. In communications with our partners over the last several months, we have experienced a dramatic increase in the urgency around EMV deployment. It's almost as if the industry has awakened from a deep slumber, induced by years of EMV denial. With the completion of Y2K and Euro conversions, EMV has finally made its way to the launching pad.

The mantra of skeptics has consistently included favourites like, "the infrastructure costs are prohibitive", "the cards are too expensive", "merchants will resist deploying terminals". It is the identical mantra that was voiced nearly 30 years ago when the industry evolved away from paper-based payment transactions, using embossed credit cards, to electronic transactions utilising newly developed point-of-sale terminals and cards with magnetic stripes. The skeptics will soon have to find new targets for their energies and will surely claim that the arrival of smart chip-enabled payment was "obvious all along".

Significant challenges, however, lie ahead. Country-by-country, an extraordinary investment is being made to deploy the EMV 'highway' which is currently intended to support only a single 'vehicle', smart chip-based payment. History records that winners in the marketplace are those competitors that best anticipate and then succeed in delivering value to their customers. The opportunity to deliver greater value to consumers and merchants by leveraging this EMV highway must be articulated. Other smart chip-enabled applications like merchant loyalty, ticketing and customer identification are prime candidates for expanding this value.

The deployment of the EMV highway will accelerate and its return on investment will be enhanced as the industry initiates additional smart chip applications. Opportunities that greatly increase the value of a merchant's business to its customers are particularly important to identify and develop. To facilitate this dynamic creation of value, Smart Card products will need the flexibility of adding or deleting content, post issuance. It is equally important that the consumer is enabled to compose this dynamic content on his or her card. Merchants, with the consumer's permission, will need the ability to download new capabilities onto their chip at point-of-sale terminals.

American Express and its GNS partners believe in the approach of leveraging the coming EMV investment for multiple application functionality. Most recently, CIBC launched Entourage, the first mass-issued smart credit card in Canada. The Entourage card is branded both CIBC and American Express and has EMV as its baseline application on its chip. Additionally, the Entourage card supports LockIt, which is a smart chip-enabled solution for secure Internet payment which utilises a Smart Card reader attached to the Entourage Cardmember's PC. While the PC reader currently enables LockIt secure Internet payment transactions, in the future, it will enable the download of new Smart Card applications from American Express' Card Life-cycle Management platform to the Entourage Cardmember's chip.

Success on the competitive landscape certainly requires patience and perseverance. The opportunities presented by leveraging the coming deployment of EMV are enormous.the hard part is to help others believe before they can see.

Thorough Testing Needed Before EMV Graduation

by Martin Macmillan, CEO of Level Four Software

Martin Macmillan

Deployment of Smart Cards and ATMs to meet the new EMV specifications are well underway. Pilot groups have been formed, and planning has begun for new products and services that banks want to offer. But with such a radical change in card and network functionality a robust testing regime is needed to ensure everything goes smoothly once banks graduate from their pilot programs, writes Martin Macmillan.

EMV is an agreed standard, driven by Visa and the recently merged Mastercard and Europay, designed to ensure interoperability between chip cards and terminals on a global basis. Many industry players are eager for the EMV specifications to come into effect earlier than the much-publicised deadline of January 2005 to help combat rising levels of plastic card fraud. As a result, in most European countries banks are in the process of rolling out the chip cards, ATMs and host switches required to support the EMV standard.

However not all banks are ready for the monumental step change in functionality that comes with EMV. Old magnetic stripe cards and the functionality of ATM and POS networks haven't changed much since they were first introduced. It has been a stable, static network where the functionality has remained constant, so there is a risk that banks may become complacent over the introduction of a significant new technology into the network.

This won't be possible once EMV Smart Cards go live. Initial applications will cover payments, cash and accounts, and is managed by the bank or card issuer. Subsequent applications on the card can be much more diverse, such as loyalty schemes, and these will likely involve joint ventures with the banks who are issuing the cards.

The future challenge for banks is how to deploy these applications quickly into their ATM networks where they can be accessed by customers. Picture the scene - the bank's marketing team has struck a deal with a big supermarket chain to get a loyalty point scheme on to its bankcard. They have an agency lined up for it, and have a launch date in three months. They take it to the IT department who say, "Sorry, we can't do it. It will take months to create, and even longer to test".

In order to meet the ongoing and increasing pace of demands from business areas, banks need a framework where they can shorten the deployment cycle. Shortening the time it takes to test EMV applications and infrastructure is one of the best ways to achieve this.

When the first ATMs were deployed back in the early 80s, the cash point was an added convenience for bank customers, rather than a mission-critical service. Today ATM and POS terminals have become a fundamental part of our daily lives, making customers far less tolerant of system failures.

Until recently, virtually all testing of the machines and network was performed manually. Today testing rooms still have real people and real cards and machines, but the smartest financial institutions have realised that an automated testing regime is a more efficient use of resources.

An automated system that creates virtual cards, and simulates all the components in the network - from host switches to ATMs and the banking interface - can provide fast, repeatable testing processes that involve the entire network from end to

Events Diary

August

19 - 21 Cards Australasia, Sydney Convention & Exhibition Centre, Darling Harbour, Sydney, Australia

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September

4 - 5 SmartLabels 2002, Churchill College, Cambridge, UK

IDTechEx
Website: www.idtechex.com

9 - 10 Retail EPOS & Cards - Moving Towards EMV, The Hatton, London, UK

Andrew Gibbons
SMi Conferences
Tel: +44 (0) 20 7827 6156
Email: agibbons@smi-online.co.uk
Website: www.smi-online.co.uk/retailepos.asp

16 - 18 e-Safety Congress and Exhibition, Lyon, France

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Website: www.lyon2002.itscongress.org

end. With such a system it is possible to perform sequential testing by simulating what happens on any of the components during a transaction, and to look at where errors have occurred in relation to other processes that the ATM or switch may have been conducting.

Some banks have estimated that with the move to EMV the number of tests required will multiply tenfold. Introducing the new chip card adds complexity to the dialogue between the card, the ATM and the rest of the network, so much so that it is almost impossible to test on a purely manual basis.

This will especially be the case when specifications change or new ones are introduced. This often happens at the later stages of testing, after practical experience in a pilot results in requests from users for minor modifications.

Therefore banks not only need the capability to run all the necessary tests, but they also need to be able to run them again quickly. Once specifications have changed, even if only slightly, all tests have to conducted again, because Murphy's Law dictates that if you re-run 99 out of 100 tests it will be the last one that kills the system.

Taking into account the time and staff resources required for manual testing, it has been demonstrated that investments in automated testing for ATM networks can easily show a return on investment (ROI) in less than a year.

Once a bank has gone live with its chip card it has to be confident the adoption by customers will be smooth. If a card encounters any problem on an ATM or POS terminal, or if there are any discrepancies or internal errors, it will shut down the chip and block access. This makes criminal activity much more difficult, but also means that if a bank had any errors in its system in a live situation, the customer's card would be blocked incorrectly. The card would need to be unblocked by special equipment at the bank, which is frustrating for the customer and embarrassing for the bank - especially if the errors have affected thousands of customers.

Among those banks that have progressed beyond manual testing, many are using testing tools provided to them by component vendors. A key problem with using testing software provided by an ATM or host switch vendor is that it tests components in isolation rather than as part of a wider network. Its testing tools are generally not designed for end users; product developers build them as part of the development cycle. They usually have no GUI or usability considerations and output test results in code or raw text, which is time consuming to evaluate.

Successful testing is not just a matter of finding a problem, it's fixing it too. It is easier to resolve a problem when your testing solution provides a visual view of the entire network. In a manual process or when using single component test tools, you have to determine the cause of an error by downloading the contents of the chip, by checking the status of the ATM and by determining what was happening at the host. This takes time. The quicker you can sort the problem out, the quicker you can move on to sorting out the next one.

Equally, if there are any errors in the product that the vendor has supplied, chances are that the same mistakes will also be replicated in their testing tools. A better approach is to use a third-party, independent testing platform that is designed to see the problem like the bank does - across the whole network, rather than just the individual components.

If banks are going to take EMV seriously they should be investing in a complete testing solution, independent from any vendor, that can be customised and adapted to future developments. Banks that leave things to chance on something like an ATM or POS network, which customers have come to rely on, will get burned. Testing is too important to be left to the customers.

Website

- **Level Four Software**
  - www.levelfour.com

17 - 18 Carriers World Europe, Royal Garden Hotel, London, UK

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19 - 20 eSmart 2002, Grand Hotel Aston, Place Masséna, Nice, France

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23 - 25 Telecoms Fraud and Security Seminars, Ciurtyard Marriott Köpenick, Berlin, Germany

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Email: registration@iir-conferences.com
Website: www.iir-conferences.com/fraudseminars

24 - 26 Mobile Commerce World, Europe 2002, ExCel Centre, London, UK

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Identity and Entitlement Cards - A Security Perspective

by Dr David B Everett

This month the UK government published the consultation paper on entitlement cards and identity fraud. This paper is discussed elsewhere in the newsletter but here we will look at the security issues surrounding the use of such cards in the electronic era in which we exist today.

The first issue surrounds what do we mean by an identity or entitlement card? The latter term is more precise in that it clearly refers to verifying an individual's right to some service. Whether you are referring to the rights to access some social service or just the rights to physically access some building the meaning is clear. All the cards that we use today are really some form of entitlement card, to access our bank account, to drive a car, to receive or redeem loyalty points; in all cases the concept is clear.

An identity card is a more difficult concept, there needs to be some frame of reference. You might consider a passport to be an identity document but it is in one sense a form of evidence that the individual is entitled to the rights bestowed upon the citizens of the country that issued the passport. In another way it provides evidence that the individual is a member of a set with a particular unique reference number. The actual identifier is an abstract handle arbitrarily chosen by the owner of the set. Clearly in the case of a passport there are agreements between countries concerning these identifiers to ensure the mutual acceptance of such documents.

In all these cases the card or document holds information or attributes relating to the chosen identifier, a name, and an address, date of birth, a photograph, and such similar data. The verification of the identity of the holder of the card can only be against the data held on the card such as the photograph or perhaps the individual's signature. A fundamental part of the identity verification process is the assurance with which the individual can be linked to the card. The attributes are secondary and in a network centric world arguably do not need to be on the card but can be held elsewhere on the network. It equally follows that these attributes can be scattered across the network residing only with the service provider who needs to know their value.

So the first security problem is one of identity verification. It is well known that this can be based on one or more 'factors':

- ☐ Something the individual owns (e.g. a card)
- ☐ Something the individual knows (e.g. a password)
- ☐ Some physical property of the individual (e.g. a biometric such as a fingerprint)

When the risk exposure is limited to a single factor (1-F) authentication may be adequate but for the more general case 2-F or even 3-F may be a necessary requirement.

It all sounds so easy but its not. Implied by these conditions but often overlooked are some security conditions:

- ☐ It should not be possible to transfer, modify or counterfeit the card
- ☐ The biometric and/or password should not be deterministic or transferable
- ☐ The biometric should have a false accept/reject error rate of zero

In practice these conditions cannot be achieved so we need to resort to adequate assurance the card is 'fit for purpose'.

The first condition relating to the card may be restated as 'it should not be economically viable to modify or counterfeit the card or for the card to be successfully used by an unauthorized person'. This requirement has been explored by countless experts over the last 20 years at least. We will not review here the numerous proposals during this time but will only state the result of every such review of which we are aware and that is "Smart Card and PIN".

No matter how many attacks appear in the media against Smart Cards the truth is that a modern, well designed card is more than fit for purpose. The qualification of modern says that you have to keep up to date. The tech-

nology used 10 years ago would probably not be considered 'fit for purpose' today. This means that the technology needs to be constantly refreshed on a cycle that is increasing to the detriment of the hacker. Today this cycle is about 5 years but we believe it will double within this decade.

The problem with passwords and many biometrics is that they are transferable. In the case of a password, education of the user is the only real solution. Users need to carefully choose non deterministic passwords and to keep their passwords secret. Biometrics at least can be partially protected against transfer by using additional features or by attended operation. In a remote situation such as the internet such protection techniques fail. Biometrics are always subject to two error rates, false accept and false reject. You can usually trade one against the other such that a low false reject is accompanied by a high false accept rate or vice versa. The point here is that the human body is constantly changing, no biometric will remain static with time. There will always be an error rate and even if you could achieve a 99.9% success rate that still leaves a problem with one person in a thousand and in practice one in a hundred is not unusual.

This doesn't mean you shouldn't use biometrics it's more a statement of how you should use them. As a PIN (Personal Identification Number) alternative it is a viable concept with different error characteristics. If you remember your PIN it will always be verified correctly with 100% accuracy. The biometric will be wrong perhaps one time in a hundred no matter how hard you try and even this figure seems optimistic in the real world for the user's first attempt. Accordingly the business model needs to be designed to handle these error conditions. Although biometrics have been around for a long time their application seems in many ways quite immature. Combinatorial techniques with confidence metrics seem commercially more viable.

The success of business on the internet is going to be largely dependant on identity verification techniques. The concept of 'single sign on' still remains an elusive goal. The requirement here is even more about providing a user's entitlement to some service. The identity as such is abstract and can even allow an individual to have multiple identifiers, even one for each service. Microsoft has developed its .Net Passport scheme while the Liberty Alliance with members including Sun, General Motors, Citigroup, Amex, United Airlines, Sony and many others has produced its first specification for a federated network identity scheme. In both cases an Identity Provider (Microsoft or some member under the Alliance scheme) effects the identity verification and is then able to provide the pre-registered user attributes to service providers (Alliance Members) as required.

Both of these schemes seem to confuse the identity verification with the attributes that determines a user's rights. In a practical situation the service provider will have pre-determined a user's rights either because he has paid for a service or because he is entitled by membership of some set. Arguably there is no need in a network world to store these rights on the card since it is only necessary to prove one's identity to the service provider. The point here is that there is no advantage in storing the data on the card as long as the data held by one service provider is not shared with other service providers. There is a security simplification in not storing the data on the card which can otherwise lead to complex data access controls. The second requirement in this situation is to be able to issue provably authentic and authorized instructions to the service provider.

Without really having to try too hard it is clear that the requirement here is for a Smart Card that can verify the cardholders identity (e.g. PIN) and that can digitally sign messages using some public key infrastructure (PKI). Without wishing to get into the ups and downs of PKI what we are really saying here is that the service provider needs to trust the Smart Card (or token which is a Smart Card in a different form factor) and the public key certificate. Since the rights or entitlements are preserved in the service provider's domain the biggest commercial obstacles are removed. Curiously the humble EMV (Europay, Mastercard, and Visa) bank payment Smart Card is already a long way towards meeting just this requirement. The Entitlement Card consultation paper talks about a driving license with no entitlement to drive, I wonder if you can have an EMV card with no entitlement to make a payment. The consultation paper also talks about sharing applications on a single card. Well there are two major infrastructures to consider, the financial market and the mobile telecommunications market. Just at the moment the latter from a Smart Card point of view is clearly in the lead but the burying of the SIM card in the handset may make it difficult to share a general purpose identity program.

Our review of the identity and entitlement card world would suggest that the UK government is up to date on its Smart Card thinking but hasn't yet accepted that the Smart Card is not an option, there is no other way! To Microsoft and the Liberty Alliance we would also advise that the Smart Card (or token) cannot be avoided so why not move that way now?

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 03). Here's a selection of the headlines we covered in June:

Corporate

- ☐ Corporate
- ☐ ITC Systems Take Over Cybermark Customer Sector
- ☐ Global Chip Sales Set To Rise
- ☐ First Data To Acquire ECG
- ☐ ORGA Zelenograd Builds New Smart Card Facilities
- ☐ Nokia Comeback Lifts Tech Stocks
- ☐ G&D Post Mixed Results For 2001
- ☐ Ericsson Sell Off Microelectronics Business
- ☐ Oberthur Remain Calm Over SIM Card Crisis
- ☐ Motorola Turn The Corner
- ☐ Sagem To Acquire Ascom Subsidiary
- ☐ Cryptomathic Appoint New CEO
- ☐ MasterCard And Datacard In Smart Card Agreement
- ☐ Management Reshuffle At CardBASE
- ☐ Motorola, Infineon And Agere Create New Chip Company
- ☐ ORGA Parent Company Under Fire
- ☐ Nokia Growth Forecast Cut Again
- ☐ New Appointment At Infineon
- ☐ Atmel Outsource Indian Smart Card Operations
- ☐ Iris Corp IPO To Reduce Company Debt
- ☐ OneTel Enter UK Mobile Market
- ☐ Gemplus Management Still Clouded in Confusion
- ☐ Datacard Acquire French Card Company
- ☐ STM Takeover Given Green Light
- ☐ NEC Get Set For Chinese Roll Out
- ☐ WorldCom Affair Rocks Telco Stocks
- ☐ Thai CDMA network Hits Cash Crisis
- ☐ HHP Snap Up @pos
- ☐ ON Semiconductor Boost Revenue

Government

- ☐ New Contactless City Card For Osaka
- ☐ Infineon Supply Chips for Hong Kong ID
- ☐ UK To Use Smart Cards In Fraud Battle
- ☐ Nokia Handset Combines Hong Kong Card
- ☐ Drexler To Power Italian ID Card
- ☐ UK Public Warm Toward Smart Cards
- ☐ e-Government Schemes Gaining Pace Says Report

Banking

- ☐ SK Telecom Eyes Up Credit Card Market
- ☐ BT Ignite Selects Verified By Visa Partner
- ☐ Gemplus Launch EMV Upgrade
- ☐ Fall in Cost For Visa Smart Cards
- ☐ Malaysian Banks Get Smart
- ☐ Oberthur Win Korean Identrus Contract
- ☐ Xiring Form Alliance In Norway

ID & Authentication

- ☐ Bioscrypt Upgrade Access Control Solution
- ☐ XIRING And Cryptomathic In Digital Signature Alliance
- ☐ AuthenTec Launch New Biometric EDK
- ☐ Miotec And Avian Launch Signature Biometric
- ☐ KPMG To Test DoD Biometric Features
- ☐ IR Launch Access Control On Windows XP
- ☐ US Warm To Biometrics

Telecoms

- ☐ Gemplus and KT ICOM Offer World Cup 3G Trial
- ☐ Microsoft In Bluetooth Delay
- ☐ Orange Crack Down On Cut Price SIMs
- ☐ Gemplus Extend US SIM Card Contract
- ☐ Asia Pacific Set For Huge Mobile Growth
- ☐ Hutchison Looks Forward To Euro 3G Debut
- ☐ Nokia Secures AT&T US Contract
- ☐ 200 Companies Involved In New Mobile Alliance
- ☐ Gemplus Launch PrePay Mobile Solution
- ☐ Infineon Focus On Bluetooth
- ☐ NTRU Launch Wireless Java Security System
- ☐ UK Users Give 3G The Cold Shoulder
- ☐ Setec Deliver 1m SIM Cards To Thailand
- ☐ interWAVE Wireless Solution Piloted In Europe
- ☐ MMO2 Make First Move On 3G
- ☐ Motorola Win Chinese GSM Contracts
- ☐ Nokia Expand Belgium GSM Network
- ☐ Caradas Launch Mastercard UCAF Solution
- ☐ Nokia And Hutchinson Make 3G Progress
- ☐ BT Wireless Project Goes Live

Technical

- ☐ Atmel's Smart Card ICs Chosen For CDMA USIM Card in China
- ☐ Hitachi Adopts Sony Smart Card Technology
- ☐ TDK Integrate Smart Cards Into Security Products
- ☐ Samsung Develop New GSM Network Standard

Retail

- ☐ UK Retailer Adopts RFID Tagging
- ☐ paybox Strike WorldPay Deal
- ☐ French Get Set For E-Cash Scheme
- ☐ Ingenico Launch New Payment Terminal

Transport

- ☐ Miotec To Supply MultiFLYe Contactless Cards
- ☐ SchlumbergerSema Install Parking Solution In Aspen
- ☐ Cubic To Install Smart Card Rail System In Canada
- ☐ Burall InfoSys Win UK MOT Contract
- ☐ ACT Launch Smart Techometer For Fuel Company
- ☐ Airline Staff Push For Smart Cards

Healthcare

- ☐ UK Blood Test Smart Card In the Pipeline
- ☐ Philippines Island First To Adopt AquaCard
- ☐ Taiwan Introduces Health Smart Card

Leisure

- ☐ Visa And Bank One to Launch Disney Card
- ☐ Beijing Gets Smart For Olympic Games
- ☐ Hotel Chain Rolls Out 50,000 Loyalty Cards
- ☐ UK Football Club Gets Smart
- ☐ paybox And Ladbrokes Launch Mobile Gambling

Misc

- ☐ Smart Card Alliance Publish White Paper
- ☐ New Smart Card CRM Solution
- ☐ Mobile Payment Forum Announce New Board
- ☐ New ATM Solution Targets Terrorist Money Trail

US Government Ahead of Private Sector On Smart Cards

A new report from Giga Information Group has claimed that e-government initiatives in the US are quickly catching up with the depressed private sector and in areas such as Smart Cards, biometrics and electronic records management, government is actually ahead of business.

In the report - "E-Government in 2002: Initiatives for Transforming Public Services Using Internet Technologies", author Andrew Bartlets claims that the e-Government sector has benefited from its late entry into the market by learning from the initial mistakes made by the private sector and being able to exploit more advanced technology. Other reasons for e-Government success were revealed to be its focus on economically viable applications which has been achieved due to the adoption of 'proven, tested and more easily implemented products'.

"E-government initiatives are a top priority for governments, which are making efforts to keep up with their Internet-enabled constituents and to do more with fewer taxpayer resources," said Bartels. "As a result, the government sector will be one of the few areas with increasing budgets for portals, Enterprise Resource Planning (ERP) systems, Customer Relationship Management (CRM) applications and other enterprise applications during 2002 and 2003."

Smart Card development in the US has traditionally lagged behind the advanced schemes underway in Europe and Asia but the reports highlights the much lauded US Department of Defense (DoD) Common Access Card (CAC) program as a major breakthrough for Smart Cards in the country. Also mentioned is the federal government's e-authentication initiative run by the US General Services Administration which aims to set up a core federal PKI to enable a secure channel between the public and government. The various Smart Card based transit schemes operational in the US and Canada were also cited as projects well advanced of those in the private sector.

The report remarks that federal defence and security agencies have always been leaders in adopting biometrics for physical access to high security facilities but that the events of September 11th have speeded this process. The installation of facial recognition and other biometric solutions at airports, for example, has risen dramatically over the last six months in an attempt to tighten up security procedures.

Table 2: Citizens Use Government Web Sites Mostly for Information Gathering

Type of Citizen Interaction With Government Web Site	Percent of Visitors to Government Web Sites
Information Gathering	
Get tourism and recreational information	77%
Do research for work or school	70%
Find out what services a government agency provides	63%
Seek information about a public policy or issue of interest to you	62%
Get advice or information about a health or safety issue	49%
Get information about potential business opportunities relevant to you or your place of employment	34%
Get information about elections, such as where to vote	22%
Get information that helped you decide how to vote in an election	21%
Get information about a lottery	21%
Transactions	
File your taxes	16%
Renew a driver's license or auto registration	12%
Renew a professional license	7%
Get a fishing, hunting or other recreational license	4%
Pay a fine	2%

Source: Pew Internet & American Life Project, Government Web Site Survey, September 5-27, 2001

"E-Government in 2002: Initiatives for Transforming Public Services Using Internet Technologies," by Giga Information Group

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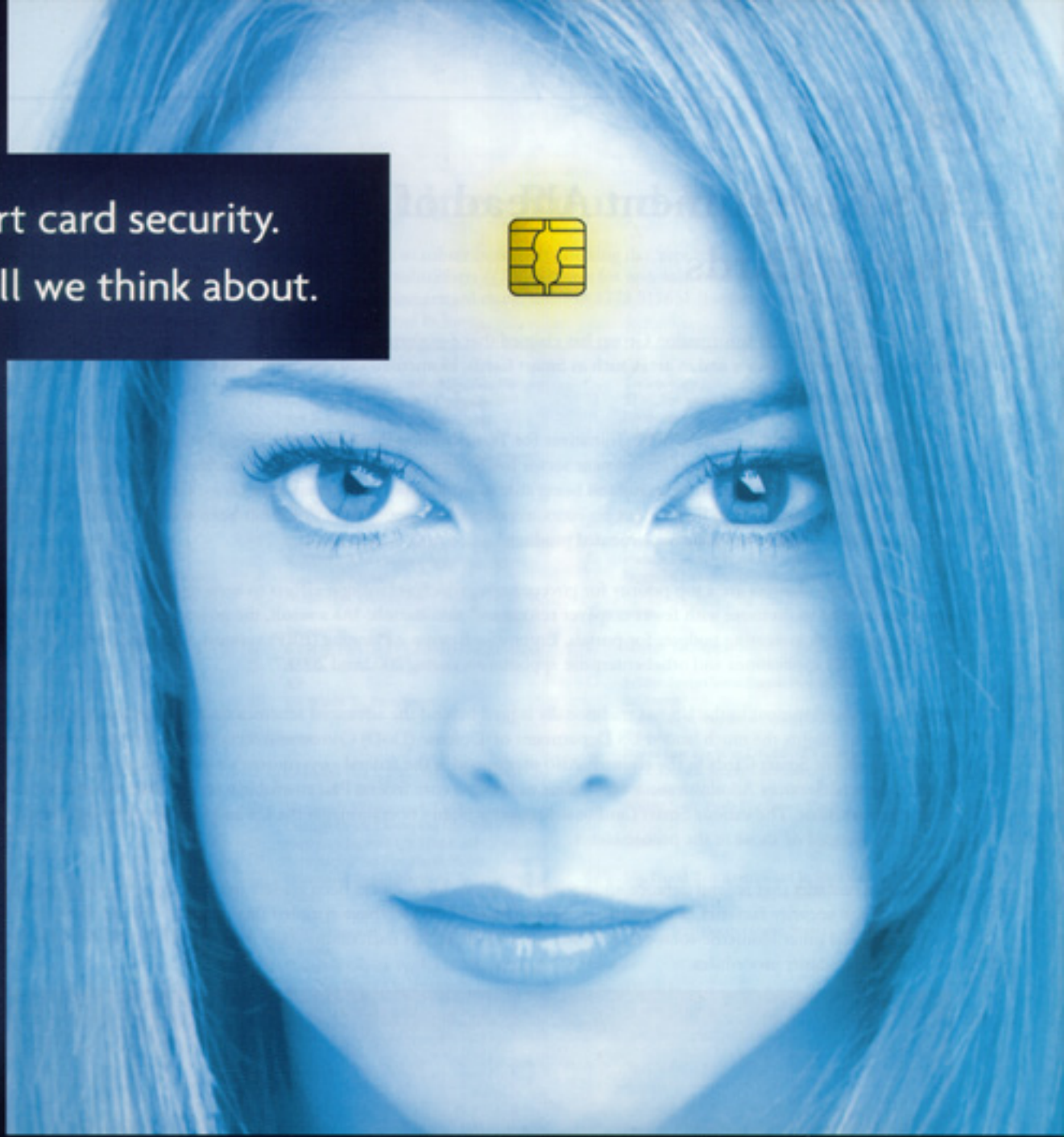

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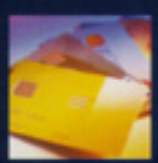

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