





www.omniperception.com

## OmniPerception

OmniPerception has revamped their website with a new look. The front screen gives a brief description of the company and a useful latest press release section about the company's achievements. Using a simple white background, the company has used a more visual format to make the website look more stimulating. They have now streamlined their website for easier access to information and have kept information to a brief but highly relevant status. This new website portrays OmniPerception's professionalism and the new design gives them greater credibility against their competitors within the biometric arena.

- Navigation
- Content
- Appearance



www.carezone.org.uk

## CareZone

This website is aimed at giving children in need the chance to come together and interact in a fully moderated environment. The only way to access this site is via an issued Smart Card with the added security of PINS and security questions. The aim of the site is to prevent them feeling isolated and to create a forum for children in need to discuss issues around being in care. The site offers information, support, chatrooms, educational resources and fun games. The website is a fantastic, visually stimulating and fun virtual world. Characters in the virtual world can walk around and can carry out different actions on the site. SCN want to congratulate The Who Cares? Trust and hope this site can make life better for children currently in care within the UK.

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www.itso.org.uk

## ITSO

The ITSO website has been designed to assist those that wish to develop and use public transport Smart Cards. The website has a very useful navigational system, making it easy to access the sites information. The website content features a range of information about ITSO, FAQ and the costs of membership. The website has a striking subway image as its background and information pages appear highly visible in the foreground. A very useful online PowerPoint presentation is available on the site which explains what ITSO is about and what it can provide. Overall a very good site for those trying to learn more about ITSO, and the inter-operability of UK public transport Smart Card schemes.

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# NASA Test Smart Cards

The U.S. General Services Administration (GSA) recently awarded a \$93 million task order to Maximus, Inc, to assist NASA in developing a state-of-the-art Smart Card for agency employees and contractors to access facilities and information systems. NASA is spearheading this government pilot program, which has been in the planning stages for two years with the National Institute of Standards and Technology and a working group of the federal government Interagency Advisory Board. GSA awarded the task order on January 8 2004, through its Smart Common Access ID Contract managed by the Federal Technology Service (FTS) Centre for Smart Card Solutions.

Approximately 90,000 personnel at 15 major NASA facilities are expected to receive "One NASA" identification cards over the next two years. The enterprise Smart Card system will support both contact and contactless transactions, and allow NASA employees and contractors to conduct business using a single card for both physical and logical access, including PKI-enabled applications. It will also provide a higher level of identity assurance for the agency's information technology systems. With the Smart Card, employees and contractors need only to swipe it across or insert it in a reader to access a NASA centre, facility or computer system. The "One NASA" Smart Card will be deployed in compliance with the Government Smart Card Interoperability Specification (GSC-IS), allowing NASA smart cards to be fully interoperable with other Federally issued smart credentials.

"NASA plans to run a small field trial in May at its Marshall Space Flight Centre in Huntsville, Alabama. If that is successful, the trial will be expanded to 2,000 employees," said David Saleeba, NASA's Assistant Administrator for Security Management and Safeguards. "If the field trials are successful, and we receive the approval of the Office of Management and Budget, we plan to deploy more than 100,000 Smart Cards before the end of the financial year 2005." "GSA's FTS is providing NASA with cradle-to-grave services on this task order including card management, enrollment, logical and physical access capabilities," said FTS Commissioner Sandra Bates. "We look forward to working with NASA on this Smart Card deployment."

MAXIMUS's primary team member for this project is EDS. Other key team members include: ActivCard, a provider of secure smart card software, Risk Management Associates, a security consulting firm, and ISR Solutions, experts in physical access control. "The NASA Smart Card award is the latest in our strong history of wins in the Smart Card integration marketplace, and reaffirms our status as the nation's top integrator of Smart Card solutions for government," said Dr. David V. Mastran, CEO of Maximus. "However, I want to be perfectly clear on what the task order means to Maximus. This does not mean that this is a contract for \$93 million dollars. What this really translates into is that we will do the initial work with NASA and the remainder of the task order will be funded incrementally based upon NASA's needs. So the initial value of the NASA card deployment is probably more in the \$10 million range over two years."

*Smart Card News* is published monthly by Smart Card News Ltd Columbia House, Columbia Drive, Worthing, BN13 3HD England  
Telephone : + 44 (0) 1903 691 779 • Fax : + 44 (0) 1903 692 616 • General Enquiries : [info@smartcard.co.uk](mailto:info@smartcard.co.uk) ISSN 0967 196X

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## Honolulu's Smart Card Fare System Delayed

Jeremy Harris, the Mayor of Honolulu, Hawaii, has announced that the city's new Smart Card fare system for city buses will now not be in operation until July or August 2004, which is a year behind schedule. Commuters are already using Smart Card technology in cities like New York, where the technology is a way of life for subway riders. It's also being used in the Washington D.C. area as well. Smart Cards can be purchased at transit stations and retail shops.

## Australian Defence Force to use Biometric Smart Card

The Australian Defence Force have announced that there is a 12 month delay in their proposed \$34 million e-Defence project which incorporates Smart Card-style access passes. Currently the e-Defence project has been put on hold while further investigations into the business case and scope of the project are being examined.

However the Australian Defence Force is still going ahead with its proposed Smart Card pilot. These new Smart Cards will encompass the use of biometric technology for access control. The scope of this Smart Card pilot has not been finalised and technology providers have not yet been engaged but they aim to introduce the card scheme towards the end of 2004 and run the pilot for at least a year.

## China to Issue New Smart ID Cards

The Chinese Ministry of Public Security has announced that they are planning to issue new intelligent ID cards to China's 1.3 billion population. The new card is a direct replacement of the old ID cards which are currently in use. The Smart Card based ID card will contain a module that integrates a special chip containing information on the card holder.

This chip-module was jointly developed by the Institute of Microelectronics under elite Qinghua University and Qinghua Tongfang Microelectronics Co. Ltd., a subsidiary controlled by Qinghua University. The card will be put into use in March in Beijing, Tianjin, Shanghai, Shenzhen and Changsha, according to ministry officials. The ministry expects that the nationwide replacement program will be fully completed by the end of 2008 when a total of 1 billion ID cards will be given out.

## Royal Dutch Football Association Selects Bell ID

Bell ID B.V., a subsidiary of London-based Bell Group plc, has signed an agreement with the Royal Dutch Football Association for the implementation of a nationwide Smart ID Card solution for season tickets and so-called Club Cards. Both parties signed a 7-year contract. Bell ID's ANDiS Management Systems will serve as a turnkey platform for all Dutch professional football clubs, enabling them to issue and manage multi-application Smart Cards for spectators and staff. These Smart Cards will replace the magnetic strip cards, currently in circulation, estimated to be around 700,000 in number.

## Cubic to Support Chicago Transit Authority

Central computer system enhancements and engineering services from Cubic Transportation Systems Inc., a subsidiary of San Diego-based Cubic Corp., were instrumental in the launch of the Chicago Transit Authority (CTA)'s newest touch-and-go electronic farecard, "Chicago Card Plus". The new farecard offers customers the convenience of automatic reloading and online account management. Chicago Card Plus is a travel Smart Card that can be used on CTA trains and buses as well as on Pace buses, a neighbouring suburban bus operator. Cubic made modifications to the Smart Card data format and device software in all fare collection machines at CTA rail stations and on CTA and Pace buses so that the new card would be recognized by the fare collection system and function according to agency business rules.

## ORGA and PPP Supply Asia's First Colour Shift Smart Card

ORGA and Perfect Plastic Printing (PPP) have announced the delivery of a first of its kind, Asia's first colour shift Smart Card to Malaysia's Public Bank. The unique characteristics of the card include a translucent plastic and changing colours on the face of the Smart Card. When the angle of the card is tilted, the colours change to lavender, pink, green, turquoise, and gray.

Dubbed with the theme of "Colour Your Life Executive," the Public Bank Executive MasterCard utilizes the M/Chip Smart Card platform, offering its members multi-application capabilities and enhanced security features.



## World's First Smart Card Solar Drinking Water Delivery System

WorldWater Corp., has announced the installation of the world's first commercial Smart Card solar drinking water delivery system. WorldWater subsidiary, WorldWater (Philippines) Inc. inaugurated the world's first commercial solar powered, prepaid municipal water distribution system in September 2003, in Ronda, Cebu, Philippines. The Company's proprietary AquaCard system enabled the Philippine National Bank to finance the project, which, because of its commercially sustainable economics, may be replicated in rural communities

## Siemens Receives Smart Card Order from Italian MOD

Siemens Business Services, has announced that following practical tests, the Italian Ministry of Defense in Rome has placed an order for a further 140,000 Defense Multipurpose Smart Cards in addition to the 110,000 cards which have already been delivered to the army. The Defense Multipurpose Smart Card contains not only personal data and a photo of the holder, but also a fingerprint, medical health data and the necessary digital certificates. These are needed for authentication, encryption of e-mails and electronic signature.

The card has a 32-KB memory capacity and is certified according to the highest European security standard for digital signatures (ITSEC e4 high). With the aid of a PC with a suitable drive, it is possible to verify beyond doubt the authenticity of the card, the identity of the holder and the correctness of the stored data from any location. Conversely, military personnel can use the card to access information on the network without any risk. Siemens Business Services supplies the Smart Cards via Siemens Informatica and is responsible for installing and configuring the Public Key Infrastructure required for authentication and digital signatures.

## Cubic Receives \$2.8m Contract

Cubic Transportation Systems, Inc., a subsidiary of San Diego-based Cubic Corporation, has received a \$2.8 million contract from the City of Los Angeles Department of Transportation (LADOT). The contract is to provide the agency with bus fleet ticketing equipment.

The new equipment will be interoperable with the Smart Card public transit ticketing system Cubic is delivering to the Los Angeles County Metropolitan Transit Authority, now referred to as Metro. LADOT becomes the ninth County bus operator to join the Universal Fare System, the Smart Card-based automatic fare collection system that Cubic is developing for Metro under an \$84 million contract awarded in 2002. Including the LADOT contract, Cubic to date has received \$17.9 million in contracts from County bus operators who are joining the regional system. By next summer, the Universal Fare System will offer a single payment system to the participating agencies in the region, which will allow commuters to pay for subway, light rail, bus, and bus rapid transit services with one Smart Card

## ACI Awarded Frost & Sullivan Prize

ACI Worldwide, has announced it has won the 2003 Frost & Sullivan Global Market Excellence Award in recognition of its performance in the Smart Card market. ACI's chip card technologies, notably ACI Smart Chip Manager (SCM), support more than 20 million multiple-application cards on different operating systems and Smart Card platforms worldwide.

## Globalplatform and STIP Consortium Plan Merger

GlobalPlatform, a Smart Card infrastructure developer, has announced that it has signed a Memorandum of Understanding (MoU) with the Small Terminal Interoperability Platform (STIP) Consortium, a developer of interoperable software platform specifications for secure transaction devices. The intention is to merge the operations, administration and membership of the two bodies, which have worked together closely since 2001, in order to improve communication and avoid any legal complications which may arise in the future due to joint intellectual property ownership.

For more information visit ...



**Australian Defence Force**

[www.defence.gov.au](http://www.defence.gov.au)

**Institute of Microelectronics**

[www.ime.a-star.edu.sg](http://www.ime.a-star.edu.sg)

**Cubic Transportation Systems**

[www.cubic.com](http://www.cubic.com)



## Cubic and EDS Team for Smart Travel Card

Cubic Transportation Systems Limited, the European headquarters and subsidiary of San Diego, California-based Cubic Corp., and EDS, have pre-qualified for a new system tender that will link all of Denmark's rail and bus operations to a smart national travel card. The bid will include system design, development, project management, delivery, installation, operation, maintenance, financing and additional business opportunities arising from the use of a single card in Denmark.

Cubic and EDS formed a new consortium specifically to bid on the system, and have added the Denmark-based division of Siemens to the team as a major subcontractor. Cubic and EDS are the two major shareholders in the TranSys consortium that delivered London's "Oyster" Smart Card project, the world's largest automatic fare collection implementation and operations contract for mass transit.

## First Silicon-based Capacitors for Smart Card Applications

Vishay Intertechnology, a manufacturer of semiconductors, has announced the release of the industry's first silicon-based capacitors optimised for Smart Card applications. Based on a semiconductor process developed by Vishay, the devices set a new standard for high capacitance in a compact package with a very low profile. The new silicon-based HPC0402B and HPC0402C are high-precision capacitors that operate at higher frequencies with higher performance than conventional low-profile capacitors.

The devices' high capacitance range and compact package result in a greater circuit Q and a longer transmission range. Because a smaller capacitor is less likely to be delaminated due to flexation stresses, Smart Card reliability is improved.

## INSIDE to Protect Weapon Use

Due to illegal weapon use, governments across the world are looking for an effective and secure means to positively identify an individual's authority to possess arms. INSIDE Contactless has been solicited to develop a system allowing generation of secure weapon permits for the country of Honduras. Teamed with its partner BNC S. de R.L. de C.V. in Mexico, INSIDE will provide 400 000 PicoPass contactless memory chips for this project.

The system proposed by BNC and INSIDE to the Honduras Government is based on the premise that securing a weapon permit takes out any fraud possibility of document duplication or alterations.

The chip placed on each Weapon's Permit will authenticate the permit holder's fingerprint identification and the weapon ballistics information. INSIDE's reader technology will enable the chip to verify the stored data matching it with the weapon's and the permit holder's characteristics without requiring access to the centralized database. The permit, encompassing the PicoPass secure contactless chip, enables the storage of the holder's personal data as well as weapon information.

A constantly updated computer database is created to monitor all the happenings in terms of weapon movement throughout the country. As well as personal data, pictures and fingerprints of the applicant, the weapon's picture will be securely stored within the secure memory chip.

## Sun Unveils New Security Solutions

Sun Microsystems, Inc., has announced new security solutions and technologies to address the growing tide of costly network security threats. The new offerings include features of the next-generation Solaris Operating System, Sun Managed Security Services, a Reference Solution for building secure global government computing networks and advanced features for the Sun Crypto Accelerator 4000 board.

"Dealing with security breaches is costing businesses and government more every year," said Scott McNealy, chairman, president and CEO of Sun Microsystems, Inc. "With the Java security model; Solaris, the gold standard for defense agency-grade operating systems; Java Card technology for secure Smart Card authentication; and the world-class Sun Java System Identity Server, we're delivering the industry's leading end-to-end strategy and architecture for trusted network computing."

## JCB Offica Solution Goes Mobile

JCB Co., Ltd., an international payment brand, is offering a trial service for Mobile Offica™, a contactless chip and mobile solution that offers corporations cashless payment and office access control functions through 'NTT DoCoMo's i-mode FeliCa Preview Service' for mobile phones.



The trial service, available until July 2004, marks the first time that a credit card payment service has been made available for mobile phones with a contactless chip in Japan. JCB's Offica solution is designed to meet the increasing security needs of corporations and the increasing demands for employee convenience and usability. Built around Sony's widely-used FeliCa contactless IC chip technology, Offica offers a diverse menu of functions including office access control, employee attendance tracking and network authentication as well as a cashless purchasing function that is more advanced than older prepaid card systems.

## 8 Million Chip and PIN Rollout in UK

The UK Chip and PIN Programme has released figures showing that 8 million chip and PIN credit and debit cards have been rolled out so far in the UK in an attempt to tackle card fraud. This means that about 1 in 6 UK cardholders will have received the new style secure chip and PIN card. The initiative, piloted in Northampton is aimed at reducing credit and debit card fraud in the UK, which reached £424.6 million during 2002, up by 70%.

## Philips and IBM Join Forces

Royal Philips Electronics and IBM have announced a major initiative to jointly develop customer systems for radio frequency identification (RFID) and Smart Card applications. Working together, Philips and IBM will combine their industry expertise to address the growing need for advanced high-security Smart Cards and RFID technology in day-to-day business processes, operations and consumer lifestyles. The key end-application areas that the companies plan to address are RFID solutions for supply chain management, retail and asset management, as well as Smart Card solutions for finance, e-government, transportation and event ticketing. Within the scope of the joint cooperation, IBM Global Services will also build an RFID system for Philips Semiconductors division manufacturing and distribution facilities in Taiwan and Hong Kong.

## Biometric Fingerprinting for Visitors to UK

The UK Home Office has announced that all visitors to the UK from five east African countries and those travelling on refugee documents issued by other countries will have to provide fingerprint data before they enter the UK.

The regulations are expected to come into force at the end of February. Visa applicants of all nationalities will be required to give fingerprints when submitting applications from March 2004 in Addis Ababa (Ethiopia), Asmara (Eritrea), Dar Es Salaam (Tanzania), Djibouti and Kampala (Uganda). It is also proposed to extend this to Nairobi (Kenya) in due course, regulations will be laid to allow this at a later date.

## Precise Biometrics wins State Pilot

Precise Biometrics AB, a developer of biometric security solutions based on fingerprints, has received two orders for a US state pilot ID program. The orders are primarily for licenses of the company's technology for fingerprint matching on Smart Cards, Precise Match-on-Card. Under the terms of the US state pilot ID program, Precise Biometrics will supply licenses for the company's technology for fingerprint matching on Smart Cards, Precise Match-on-Card, for a total of 90,000 users. Initial pilot programs will be deployed and run until the end of 2004. From that, the official solution for the state will be chosen and start during 2005. This rollout will assist several million users. The Precise Match-on-Card fingerprint technology makes it possible to store and match fingerprints directly on a Smart Card.

## BIO-key Named 'Product of the Year'

BIO-key International, Inc., a provider of finger-based biometric identification, has announced it has received a "Product of the Year Award" by BiometriTech, for its finger matching algorithm which can be used for identity management, authentication and physical access security.

For more information visit ...



**Vishay Intertechnology**  
[www.vishay.com](http://www.vishay.com)

**Inside Contactless**  
[www.insidefr.com](http://www.insidefr.com)

**Sun Microsystems Inc**  
[www.sun.com](http://www.sun.com)

**Precise Biometrics**  
[www.precisebiometrics.com](http://www.precisebiometrics.com)

**BIO-Key International Inc**  
[www.bio-key.com](http://www.bio-key.com)



## TietoEnator Chooses Thales' P3

Thales e-Security has announced that TietoEnator, a leading IT services provider in the Nordic countries, has chosen P3, a solution for the Smart Card personalisation and preparation process, as its solution of choice when issuing EMV Smart Cards. The first bank to benefit from the solution is Hansabank, one of the largest financial institution in the Baltic countries, which issued its first Visa Smart Cards in August 2003.

With this implementation, Thales e-Security and TietoEnator have taken an important step in the provision of EMV standard Smart Card processing infrastructure for the European banking sector. EMV migration in the Baltics is moving fast: The first EMV Smart Card in the Baltics was issued in December 2002, and banks have issued more than 200,000 cards to date. Given the size of the domestic market, this figure ranks Baltic banking in the forefront of EMV migration in Central and Eastern Europe.

## Japanese Card Issuers to Implement Cardholder Authentication

NTT Data's hosted Verified by Visa platform is to be used by Japanese credit card issuers, Sumitomo Mitsui Card, Nippon Shinpan, DC Card and Aeon Credit Service. Under the agreement, NTT Data, using technology from Irish payments security firm Orbiscom, will provide these four Japanese credit card issuers with a Visa and MasterCard online cardholder password-based authentication solution.

## Nokia Optimistic About Higher Sales

Nokia, the Finnish telecommunication company, has announced that the global handset telecommunication market has grown by 23% in the fourth quarter to about £145 million. This has allowed Nokia to increase its global market share to more than 38%. Their total sales in the three months to March 31st 2004 is expected to be 3-7% higher than in the same period last year.

## The Arrival of CitySim

Gemplus International S.A., a provider of Smart Card-based solutions, and Landmat International, a purveyor of mobile applications, have announced the arrival of CitySIM - real-time location-based services via the security identification module (SIM) card, targeting Singapore's busy tourist industry.

Offered by Singapore Telecommunications Limited (SingTel), CitySim is Singapore's first visitor-oriented prepaid mobile phone service, offering location-based information about the island. This service is powered by Gemplus' GemConnect On-line technology and operated by Landmat. The service offers visitors to Singapore, tourist information linked automatically to their location, via their mobile phone and prepaid SIM card, which they can purchase on arrival.

## Axalto Receives Market Leadership Award

Axalto, the former Smart Cards and Terminals division of Schlumberger, has been honoured with the "Frost & Sullivan Global Market Leadership Award" for "its exceptional performance in the global Smart Cards for GSM market over 2002 and 2003." In 2002, Axalto accounted for 28% of worldwide SIM card unit shipments.

## GSM Market Growth Attracts Wireless ISPs

New figures show that currently the global system for mobile communication (GSM) now accounts for 70% of the global mobile phone markets including Europe, Latin America, China and Southeast Asia. The rise in demand within this sector has leading wireless Internet solution providers such as Softelexware, Filink, Telcoware and Infracore all aiming to harvest some of this demand which brings a future promise of success.

## AMEX Pushes Ahead with Retail Payment Technology

American Express's new ExpressPay has the ability to cut payment transaction time by as much as 42%. This latest payment technology uses Radio Frequency Identification chip (RFID) technology. Customers simply wave a keyfob in front of a POS reader to make a payment transaction. With the new ExpressPay system, typical payment transactions average just 8.9 seconds - about 28% faster than cash and 42% faster than credit card transactions. In just a few months, the initial launch programme that began with 175 retail and service locations, has doubled to more than 350 outlets in and around Phoenix in Texas, USA. Altogether over 200 merchants have now opted into the ExpressPay programme which is undergoing a major public launch in the Phoenix, Texas area.



# Protective Wallets for Smart Cards



by Peter Tomlinson, Independent Consultant, Iosis Associates



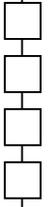
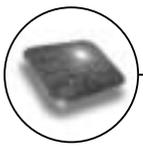
Peter Tomlinson

The Smart Card is susceptible to hidden dangers. Here we look at those factors whose effect can be mitigated by storing the card in the right kind of wallet or other type of holder. For many years the banking industry, the issuers of corporate security passes, and the issuers of plastic cards for promotional purposes, have been aware of the factors that can affect the durability of those cards. We put them in our money wallets and purses, of course, but they are also carried in many other ways. The most unusual story came out in a newspaper article: it was about a school sixth form doing business studies. A group of girls set up and ran a company as part of their course. They manufactured and sold knickers that featured a pocket specifically designed to hold a debit card.

The most commonly used base material for bank cards and many other cards is poly vinyl chloride (PVC). Indeed, because it can easily be formulated with suitable mechanical properties, PVC is de rigueur for cards that have to be embossed. But fabricating Smart Cards brings other problems: cutting the cavity for the chip and 'stamp' (contact area), laminating the aerial coil inside a contactless card, providing a suitable surface for printing a photograph at personalisation time (and then attempting to protect that photo with a film overlay or a liquid varnish) - when embossing is not needed, the other requirements will strongly influence the compound used. There are other materials available for manufacture of Smart Cards. They are mostly more stable than PVC compounds, and often more environmentally friendly, but they tend to be more expensive to purchase and to use in the manufacture of cards. Thus PVC remains the dominant material for the smart card. PVC plastics as manufactured are not simple polymers. They are a mix of polymerised vinyl chloride, stabilisers, plasticisers, fillers and perhaps a colouring dye. Perhaps also a copolymer (another plastic material) is included in the mix. Thus there are many variations in the composition of PVC sheet. But surprisingly, considering the volume that is used, PVC is neither environmentally friendly nor a very stable compound: It is an interesting paradox that one of the least stable of commercially available polymers should also be, in terms of tonnage consumption at least, one of the two most important plastics materials available today (Plastics Materials, J A Brydson, 2nd ed 1969). The position is very similar 35 years later.

In contact with other materials (directly, or via a porous medium such as paper), chemical components of one compound may migrate into the other and cause degradation and premature failure of the recipient. Put two different formulations of PVC together and one may aggressively attack the other. Money wallets, and the wrong kind of supposedly protective wallets or holders, can be troublesome here. Other important sources of damaging chemicals are cosmetics - these can affect cards carried loose in pockets or handbags, or can be transferred during handling. For those who have not experienced the problem, the failure mode is often cracking (which can be particularly disturbing in a contactless card). There are also problems with fading of surface printing. Sometimes it is the protective wallet that cracks - that could be chemically caused, or it just could be that the wallet is designed for a very short life, such as holding a conference or exhibition pass. Suppliers often sell protective wallets that are themselves made of PVC. Again, the reason is obvious: cost and convenience and manufacture. Polypropylene and copolymers of propylene and ethylene are also offered, with superior chemical resistance, but suitable grades are more difficult to work than PVC and so cost is higher and choice of configuration lower than for PVC. Rigid holders are also available in a selection of suitable plastics. One obvious trap is to convert a pass from a paper base to a smart card, and expect the user to keep the Smart Card in the same protective wallet that previously protected the paper pass. The recommendation is therefore to offer with a newly issued card a suitable protective wallet, perhaps free of charge. Prices for a quality protective wallet start at under 10p each in high volume. The final recommendation is obvious: the purchaser must take care to ensure that in the contract the supplier is obliged to provide a suitable grade of plastic. The purchaser should also ask the supplier for references to satisfied customers - and follow those up before placing the order.

*The work from which this technical note is derived was part funded by the ODPM National Smart Card Project.. Their WP3 group will be publishing further information and a suggested list of suppliers.*



# Turnaround Plan Improves Gemplus

By Jason Smith, Production Editor, Smart Card News



Jason Smith

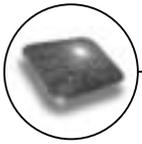
According to industry experts such as Gartner-Dataquest and Frost & Sullivan, Gemplus International S.A is currently the world's leading player in the Smart Card industry in both revenue and total shipments. The company's mission is to be a pioneer in both the development of Smart Card technology and its implementation in a wide and growing range of applications. Currently Gemplus has re-thought its strategy within the Smart Card industry and has made a series of adjustments to its internal organisation in order to adapt to evolving market conditions, and to better serve its customers. Decisions made by multiple U.S. government agencies early this year have raised the profile of Smart Card's considerably in North America.

For example the General Services Administration in the USA initiated a \$1.5 billion Smart Access Card program, while the US Department of Defense is in the process of deploying four million Common Access Cards. The Transportation Security Administration is targeting 15 million transportation workers with a "smart credentialing" project, and the Department of Homeland Security made Smart Cards one of its first-year priorities. Gemplus is now aiming to take advantage of these new trends and capitalise on them to increase their revenues. Gemplus recently appointed two new members to their Operations Committee, reporting to Alex Mandl, CEO. Ernie Berger joined Gemplus as the President of Gemplus North America and is based in the Philadelphia, Pennsylvania. Mr. Berger has 15 years experience in the financial services sector with American Express and First USA, a Bank One company, where he held senior management positions. Remi Calvet has also joined Gemplus as their new Vice President Corporate Communications. These new appointments Gemplus has made to its structure are in line with their restructuring plan which was announced during December 2002.

The company has made an overall headcount reduction of 777 during 2003. The estimated annualised saving of this restructuring and cost cutting initiatives are estimated at being close to 100 million euros by the end of 2004. These measures have helped Gemplus to further reduce their operating cost to 55 million euros at the end of the fourth quarter 2003, which contributed to further lowering their break even point. In streamlining the company's offerings and organisation, Gemplus has taken a number of one-time charges in order to fully capitalize on the emerging recovery. They include asset write-down and information system rationalisation, legal and advisory fees and other various items. As a result, operating expenses, excluding restructuring, increased 14.5% quarter-on-quarter to 62.2 million euros. Correspondingly, operating profit before restructuring improved by 5.2 million euros compared to the third quarter 2003.

In their fourth quarter published financial results, Gemplus reported a year-on-year growth in the Americas of 54.7%, 20.6% in EMEA and 22.0% in Asia. Their revenue was up 22.4% from 190 million euros in the third quarter of 2003 to 232.6 million euros in the fourth quarter. This increase was led by overall growth in telecom's and the record growth in wireless cards, both in volume and in average selling price. Wireless card revenue was up 39.4% quarter-on-quarter and 59.9% year-on-year and wireless shipments were up 23.0% quarter-on-quarter and 59.6% year-on-year. This increase in wireless card shipments was driven by the rapid adoption of SIM cards in the US, strong growth in South America and solid demand in Europe during the fourth quarter of 2003. Gemplus's revenue from telecom's was also driven by wireless cards, partly offset by a decline in phonecards (down 19.5%).

The European market has also seem a gain in momentum as carriers resumed investments to improve cost efficiency. Gemplus shipments of cards rose 46.1% quarter-on-quarter and 55.4% year-on-year. This resulted in strong revenue growth helped by Gemplus's new sales organisation which is focused on key accounts. Shipments of high-end cards (including 64 Kb and 3G) doubled quarter-on-quarter, sustained by strong demand for 3G cards from European carriers.



High-end cards accounted for 22.3% of total shipments in the fourth quarter compared with 13.5% in the third quarter. Another area Gemplus has benefited from is the EMV market. Their EMV card shipments saw an increase of 50% quarter-on-quarter. These sales were mainly driven by the UK market, but were also supported by South America and Malaysia. Government ID and corporate security solutions also brought Gemplus an increase of 30% of revenue quarter-on-quarter led by successful acceptance tests and the shipping of the first batch of ID cards to the Royal Oman Police.

To date, Gemplus has been involved in the launch of every 3G network worldwide. This makes Gemplus clearly the world leader in providing 3G technologies to mobile network operators and in helping them migrate their subscriber base towards 3G services. In Europe and Japan, demand for 3G cards and associated solutions grew with Gemplus delivering over 2 million USIM cards to its 3G customers, including Vodafone D2, in the fourth quarter 2003 alone. Vodafone D2 has also deployed Gemplus Point-of-Sale solutions for copying and backing-up SIM data, both for 2G and 3G, in Vodafone stores. Demand for Dynamic SIM ToolKit services and Over-The-Air (OTA) platforms was underpinned by the industry's interest in maximizing revenue in GSM. In the fourth quarter 2003, Gemplus saw increased demand for telecom services through the deployment of over the air platforms, with seventy six active platforms installed world-wide, including four out of Hutchison 3G's five installed platforms. Gemplus has become the leader for OTA platform deployment.

Making the most of this connection between the operator and the end-user, and in order to address operator challenges for next generation wireless services, Gemplus launched GemConnect Device Manager. This is a new solution to ease set-up of advanced services such as WAP, MMS and GPRS. This reduces the cost of customer care for operators, encourages adoption of advanced mobile services and helps operators manage the growing complexity of the handset platform in order to offer better returns on investment.

As EMV migration gathers pace in the banking sector, Gemplus won an important UK contract in November to provide Halifax Bank of Scotland (HBOS) with 15 million EMV Smart Cards over three years to replace the magnetic stripe system on the bank's debit cards. HBOS, one of the UK's largest cards issuers, was among the first UK banks to accomplish EMV migration, which all banks are required to do by January 2005. Outside the UK, Gemplus are well-placed to benefit from a faster pace of EMV migration. Gemplus have been chosen by JCB, Japan's largest card issuer, to supply multi-application microprocessors equipped with JCB's EMV application, J-Smart. Japan currently issues more EMV cards than any other country worldwide except the UK. JCB's new cards are due to be rolled out in 2004. Also in November, Gemplus formed a strategic partnership with Plastkart, a Smart Card manufacturer in Turkey. This move was aimed at delivering Gemplus technology to the Turkish banking, Government and retail markets using their partner's flexible local production. In Brazil, Gemplus was chosen to supply Sao Paulo Transporte with GemEasy 8000 cards for its Smart Card-based fare system. Production of the 2.5 million contactless cards has begun and the system will go live this year. Sao Paulo's public bus system serves over five million commuters every day.

Commenting on Gemplus's recent performance, Alex Mandl, President and Chief Executive Officer, said: "Reporting an operating profit before restructuring for the fourth quarter is the best measure of delivery against the turnaround plan we announced in December 2002. Our decisive action on costs, along with a greater emphasis on customer focus and revenue growth, enabled the company to make further progress toward our strategic objectives. Our continuous effort to increase customer recognition of the strategic value of the SIM card is reflected in our higher-value product mix. The staff of Gemplus worked hard during 2003 to lay the foundations for long-term growth and profitability. We look forward to reporting further improvements in performance as the year progresses, taking into account usual seasonality."

Worldwide, there is profound interest from companies in using Smart Card technology in both Government ID and corporate security systems. A recent survey by Gemplus indicates that 39% of "Fortune 500" companies plan to use Smart Cards by 2006. With the emerging markets and the major economies gathering pace, Gemplus are in a prime position to capture these market opportunities and to continue to enhance their competitive position around the globe.



# Fingers Ready Captain Kirk - Destroy All Passwords Enter Biometrics



by Steve Barnett, Chairman, ISL Biometrics



*Steve Barnett*

Street research carried out at Victoria Station earlier this year revealed that 90% of people were willing to give their passwords to Infosecurity Europe researchers as part of a survey on identity theft - the researchers did not give any verification of their identity their only tool was a clipboard.

This research illustrates how easy it is to steal a person's identity and all their passwords - a problem which has cost the UK alone this year £1bn according to statistics given out by Home Office Minister Beverley Hughes.

Identity theft and crimes resulting from obtaining passwords to get at information held on corporate networks or into someone personal account has never been greater. More high value information than ever before is now kept on the Internet or Intranet causing a proliferation of passwords, compounding the problems associated with hacking, cracking and general computer misuse. It is not helped by the fact that most people are happy to give out their passwords to perfect strangers or colleagues and have to remember so many passwords that they write them down on 'post-it' notes beside their computers or store them in their address books, or on unprotected laptops or PDAs.

The typical corporate user now has to remember between 3 and 5 passwords to access business systems and applications, plus many more for private use such as home banking and friends reunited. Add to this the increasingly common use "password aging". Then the user has in theory to remember between 18 and 30, eight character alphanumeric passwords in a year. None of which should include a dictionary word, nearly all of which do! The passwords shouldn't be written down, they invariably are. Is it any wonder that according to Aberdeen Group, large organisations spend as much as \$350 per employee annually on computer password management as employees often forget their passwords and need to rely on the help desk or IT department to reset them.

Password administration ranks alongside anti-virus and Spam as one of those thankless, expensive and time consuming IT issues. A recent security conference delegate was bemoaning the fact that users were continually calling his support team because they had forgotten to write their new passwords down, to his credit at the suggestion that users should be encouraged to check the "remember password" box he exclaimed "no that's just plain stupid!"

Given the amount of time, effort and money that is expended on passwords they give back so very little, they are an access control mechanism providing poor security, limited proof of identity and carrying no legal validity or possibility of verification.

Passwords have been around for well over 50 years and it would seem that most people are now weary of having to remember multiple passwords, which they have to change every few months or weeks.

At last, passwords can be replaced with a secure, affordable, and scalable management solution called fingerprint recognition biometrics. Already 11,000 NHS employees are currently using fingerprint technology in over 60 UK hospitals with a further 30,000 remote workers out in the field who are able to access patients records whilst on the move. Hundreds of NHS patients are also using fingerprint technology in Oxfordshire and Derbyshire to securely obtain access to their own medical records held within their Doctors surgeries, helping them to make sure their records are accurate and up to date as well as read over their notes and Doctor Consultations.



Although the NHS are early adopters of biometric authentication the banking and retail industries are set to be the next major sectors to embark on this solution for customers and employees who need an extra layer of security for the growing number of transactions that are taking place over the Internet and other data networks. Recent research has shown that the biometric market will go from \$900 million in 2002 to \$4.0 billion by 2007. It has recently become an attractive and viable option for the banking industry because the costs of producing the chips used in the fingerprint reader has dropped from £60 in 2001 to £4 in 2003 with a mouse combined with a fingerprint reader costing just £49.99.

Other benefits of fingerprint technology is that people can access multiple applications with just the touch of their fingerprint, they don't need to remember multiple passwords or pin numbers, and it's easy and non-obtrusive which iris or face recognition scanners can be. People are also accountable for their actions and transactions, no-one but themselves can access their systems without their unique fingerprint, therefore colleagues, friends or perpetrators cannot get onto another person's system while they are not physically present.

For e-commerce applications, fingerprint biometrics can potentially help to achieve easy-to-use, strong legally binding transaction processing. Some national regulations already authorise the use of biometrics for a high security level electronic or so-called qualified electronic signatures. Having legal status in many European member states, and in the USA, fingerprint biometrics are regularly used to digitally sign transactions covered by the e-Sign and Uniform Electronic Transactions Acts. On this basis, legally binding contracts can be signed online using digital signatures and public keys which can save a great deal of time, money and lawyers fees!

Given that most people can only remember the PIN number of one of their credit cards, and most don't bother with the PIN on their mobile phone. The writing down of PINs and passwords will continue to be common practice. As password corruption and fatigue will account for more and more fraud we will begin to see more sectors and companies taking on cheaper, more reliable and secure technology such as fingerprint biometrics, not just within the corporate environment on desktops, laptops, PDAs and phones, but for the consumer who can happily dispense with dozens of pin numbers and passwords.



[www.isl-biometrics.com](http://www.isl-biometrics.com)

## Events Diary 2004

### March

- 2 - 4 CIT 2004 - *Madrid, Spain*
- 2 - 5 IC Card World 2004 - *Tokyo - [www.apsca.org](http://www.apsca.org)*
- 9 - 10 Smart Cards in Government 2004 - *Hilton Crystal City, Crystal City, USA*
- 8 - 11 Integrated Intelligent Transport Solutions - *London - [www.iir-conferences.com](http://www.iir-conferences.com)*
- 16 - 18 Intele-Card Expo - *Miami, USA - [www.intelecardexpo.com](http://www.intelecardexpo.com)*
- 18 - 24 CeBIT - *Hannover, Germany*
- 21 - 25 APTA Fare Collection Conference - *New York, USA*
- 21 - 25 SIM 2004 - *Hilton Amsterdam, The Netherlands*
- 30 - April 1 ISC West Conference - *Las Vegas, USA*
- 30 - April 1 ASIS Emerging Trends in Security Conference - *Renaissance Hotel, Chicago, USA*

### April

- 6 - 8 Card-Ex 2004 - *Cairo, Egypt*
- 26 - 29 CTST 2004 - *Washington, DC - [www.ctst.com](http://www.ctst.com)*
- 27 - 29 Infosecurity Europe 2004 - *London - [www.infosec.co.uk](http://www.infosec.co.uk)*
- 12 - 14 6th Smart Cards + Smart Label China - *Shanghai - [www.scfc.org.cn](http://www.scfc.org.cn)*
- 21 - 23 Cards Asia 2004 - *Singapore*



# The Future of DRM: SIM Intelligence or Handset Intelligence?

By Mike Meyerstein, Numenor Consulting Limited



Mike Meyerstein

I wrote last year in SCN about the rivalry between Mobile Network Operators (MNOs) and mobile handset manufacturers (MHMs) concerning SIM card intelligence vs handset intelligence. Digital Rights Management (DRM) is another battlefield in this war which threatens to impede progress and to produce standards which don't meet the needs of the industry. DRM technology will allow Content Issuers to distribute digital content (software, CDs, MP3, etc) which cannot be digitally pirated. DRM content can't be played until the user buys the "digital rights". According to the new Open Mobile Alliance (OMA) phase 2 standards, DRM-protected content will be symmetrically encrypted using a Content Encryption Key (CEK). When you buy the Rights Object (RO) - e.g. downloaded from the website of the Rights Issuer (RI) - it will contain the CEK plus any licence conditions that have to be enforced, e.g. number of plays allowed.

Each RO will be uniquely encrypted using a public key, the private key being captive in that DRM player and no other. DRM is God's gift to the PKI industry! If your DRM player is not networked, then your mobile phone will work as a transparent store-and-forward device for the RO. An industry-approved DRM Agent (DRMA), i.e. a trusted hardware module, in every DRM player will guard the unique private key and recovered CEK and will not allow the content or CEK to be read or exported as plaintext.

So what's the problem with this model? Well - the user is inconvenienced. If he/she wants to play the content on other DRM devices, he/she must obtain a new RO. Also, the MNO is confined to the role of bit-carrier. But if the RO was issued to a DRMA in the user's PKI-enabled SIM card, that would allow the content to be rendered on many DRM players in the user's possession and the SIM card could also enforce the licence conditions. ROs could even be transferred and shared between users' SIMs if permitted.

The SIM-based solution would greatly enhance the user experience and allow the MNO to exploit the SIM card intelligence, e.g. to become a RI. So why isn't it happening this way? - after all, the MNOs are well represented in OMA. It's because they do not always realise the potential of their SIM card and do not sing from the same hymn sheet and are thus unable to resist the anti-SIM efforts of the well organised MHMs. But there's light at the end of the tunnel: proposals are now emerging from the leading MNOs which could see a SIM card solution for OMA phase 3. Let's hope that this seed is encouraged to grow and that Phase 2 is smothered before it gets the chance to take root.

**Biography:** Mike Meyerstein received his B.Eng with honours in 1972. After a varied career which included 7 years working in Canada he joined BT Research Labs in 1985. From 1990 to 2002 he worked on various aspects of smart cards and information security including projects such as Phonocard, corporate remote access, mobile commerce and wireless PKI. Since 2002 he has been an independent consultant and contractor, producing designs, specifications and reports in areas such as DRM, mobile digital ID, SIM technology roadmaps and SIM intelligence vs handset intelligence. He is married with two grown-up daughters and lives in Suffolk



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"Our mission is the application of Smart Cards and security to e- and m- services"





# ITSO - Compliant Schemes Take off in Wales and Cheshire



By Jason Smith, Production Editor, Smart Cards News



Jason Smith

The ITSO Organisation was founded in 1998 as a result of discussions between various UK Passenger Transport Authorities concerning the lack of suitable standards for inter-operable Smart Card ticketing. The ITSO Specifications set out the technical means by which interoperability of contactless Smart Card systems can be facilitated. In addition to the Specification, each Member of the ITSO organisation agrees to abide by a set of Regulations. The Regulations ensure that all parties behave consistently and fairly, both in interactions with each other and with users of ITSO Smart Cards. In the UK some Smart Card schemes have been emerging in the transport industry. Advances in technology were also starting to make inter-operability of these schemes more viable. ITSO was formed to build and maintain a specification for secure 'end to end' inter-operable ticketing transactions, utilising relevant ISO and emerging CEN standards.

The specially commissioned ITSO Secure Application Module (ISAM) resides in all ITSO compliant point of sale equipment and ticket franking terminals. It is similar in appearance to a SIM card and is fundamental to the operation of an ITSO environment. Currently in the UK more than 1700 ITSO security access modules (ISAM) from Ecebs are planned to be delivered to the transport consortia in South East Wales, North Wales and Cheshire as local authorities in those regions switch to transport Smart Card schemes compliant with ITSO - the "Industry Standard" for interoperable transport solutions. Mel Pashley, Business Development Manager at Ecebs said "The order is another significant milestone in the adoption of ITSO across the UK. The ISAM, in effect a 4-megabyte Smart Card, is a tremendous implementation of Ecebs core technology and is the key enabler of the highly secure ITSO framework. Ecebs is delighted to be working with transport experts such as MVA in order to exploit this exciting technology in the implementation of ITSO-based schemes." MVA is the advising body and managing consultant for the Welsh ITSO schemes.

The South East Wales Transport Alliance (SEWTA), a consortium of 10 local authorities, is implementing an ITSO-compliant transport system throughout the region following a pilot project in Caerphilly. Caerphilly Council is the lead authority for the project. So far, over 165,000 Smart Cards have been issued to eligible residents of 6 of the local authorities - a further 65,000 will shortly be issued to residents of the other four authorities in the consortium. "The Welsh Assembly Government has advocated that transport schemes throughout Wales should move towards ITSO. This is particularly important for free travel because we need to have an accurate recording of the journeys being made and cards are the ideal way to do this; they give us a far better audit trail than possible before." Said Huw Morgan, principle passenger transport officer for Caerphilly. Ian Robinson, principal consultant at MVA added ""Not only does ITSO ensure ultimate inter-operability, but it is essential for concessionary travel schemes and provides the flexibility for authorities to move on to commercial Smart Card schemes and a range of other possibilities."

In North Wales, the TAITH consortium of 6 authorities is about to introduce a concessionary Smart Card scheme and Cheshire County Council is working with TAITH to ensure that the cross-boundary interaction they have with their vehicles runs as smoothly as possible and that true interoperability is achieved. In addition, Smart Cards will reduce the possibility of fraud and enable payment to transport operators to be more accurate because they will be based on reliable, up-to-date data. While the transport operators are looking into which ticketing machines they are to install on their buses, because the schemes are ITSO-complaint the result will be a fully functioning system no matter which suppliers' equipment is chosen. Ian Robinson says "We want to demonstrate that inoperability has real benefits for public transport and these schemes show commitment to ITSO as a deliverable specification. Clearly, without components like Ecebs ISAMS, these schemes would not be possible."



# Smart Cards - Current Trends, Developments and Future Prospects in the Healthcare Industry

by HBS Consulting



Over the past few years, the European healthcare sector has seen major growth in the use of IT for delivery of healthcare services and for the management of the healthcare business. Uses include telemedicine, electronic medical records, electronic prescribing, appointments booking and information services. These systems are being introduced in response to cost and organisational problems facing healthcare providers everywhere. For many countries, one significant key to getting the best out of these applications has proved to be the use of Smart Cards.

Over the past twenty years, Smart Cards have become increasingly important in a number of European sectors: mobile communications, banking, corporate uses and transport. Now they are taking their place in healthcare and in other eGovernment applications such as identity. According to industry body Eurosmart, shipments of microprocessor cards to the whole government sector worldwide will rise from 32 million in 2002 to an estimated 60 million in 2004.

In general, cards can be used to store data, to prove identity and as a key to access information. In healthcare that translates to storing medical data on the card, proving entitlement to healthcare benefits and giving access to healthcare networks. Originally, cards were marketed to healthcare on the basis of the first application, for example storage of medical records or emergency data, but in fact data storage has become by far the least prevalent use in healthcare. As this research undertaken by HBS Consulting shows, cards are currently most often used in Europe to prove entitlement to healthcare services (for example in France and Germany) but increasingly their security abilities are being leveraged.

With one healthcare IT trend being towards using public key infrastructures to protect information stored on either centralised or (more likely in Europe) distributed networks, cards can be used to store the keys and certificates needed for PKI. They can also store pointers, linking data in separate databases, while at the same time protecting privacy. At present, it is more likely that PKI will be used with health professional cards, giving the doctor access to medical information but France, for example, is considering extending the use of PKI to patient health cards too. There is already actual or imminent healthcare use of Smart Cards in the following European countries: Austria, Belgium, Czech Republic, Finland, France, Germany, Italy, The Netherlands, Norway, Romania, Slovenia, Spain, Sweden, United Kingdom. Some of these systems are national, others are more specific either to a region or to a medical speciality. It is the latter type where data storage continues to be more important - for example the Parkinson Pass in the Netherlands.

HBS Consulting's latest report explains in depth how many of these systems operate, what benefits they provide and gives useful technical and organisational information about these schemes. It highlights obstacles faced and lessons learnt in implementing existing systems and places them within the context of the overall structure of healthcare provision within their country. It looks at some of the commercial structures and supply trends relating to companies providing these systems. It comments on the realism of some of the deadlines for schemes still in the planning stage. It also looks at certain non-European schemes that are viewed as especially significant.

In Europe healthcare is still primarily viewed as a separate application warranting the use of a separate card. Elsewhere, it is more likely to be a function, added to a general eGovernment services card, for example the soon to be issued Thai ID card. In the United States health insurers are even considering adding commercial applications to health insurance cards.



### **Selected schemes and their benefits**

<b><u>COUNTRY</u></b>	<b><u>SCHEME</u></b>	<b><u>FUNCTION</u></b>	<b><u>BENEFIT</u></b>
Belgium	SIS	Entitlement Card	Patient - acts as identification and speeds reimbursement. Insurers - reduces costs.
France	SESAM-Vitale	Insurance Card	Patient - speeds reimbursement. Insurers - reduces costs and simplifies processes.
France	CPS	Health Professional Card	Health professional - provides security and systems and information access.
Germany	Versichertenkarte	Insurance Card	Patient - identification. Insurers - process simplification
Germany	Health card	Health Professional Card	Health professional - provides security, ID and systems and information access. Improves communications.
Netherlands	Parkinson pass	Medication Alarm	Patient - helps management of chronic disease
Netherlands	NCMR card	Drug Monitoring	Health professional - eases care of drug addicts
Slovenia	Health Insurance Card	ID & Access	Patient - identification to health professional and to system via self-service kiosks.
Taiwan	Multi-application card	ID & Access	Patient - gains control over access to medical data. Health system payment providers - fraud and other cost reduction.



European attitudes to privacy and various organisational issues associated with running multi-application card schemes mean that adding health as an application to a multi-application card is unlikely to become a widespread trend in Europe. Nonetheless some countries, such as Belgium and Italy are examining this option. Smart Card usage is not just national or local in origin. The European Commission has taken an active interest in promoting the use of Smart Cards in healthcare for many years. Now they have mandated that the existing paper E111 forms, giving access to emergency healthcare in other European member states, should migrate to cards, starting 2004. Will these cards be smart though, and how will this impact individual national plans to roll out healthcare cards and existing programmes?

In theory, with the expanded European Union set to hit a population high of over 450 million from mid 2004, the potential market for health cards could be huge. In practice, not all countries will adopt national smart health cards, with or without an E111 function. The report names one particular European country where this seems particularly unlikely for commercial reasons. Another existing system is viewed by some as exemplary - we highlight it. Nonetheless HBS does predict a potential market size of over 220 million cards over the next five years across Europe, more than two thirds of which systems do not yet have defined suppliers. These are highlighted within the report. Where suppliers are active though there do seem to be defined trends in terms of commercial groupings and particular important players - the report highlights these too. This report by HBS Consulting places information about health cards within the overall context of Smart Card activity in Europe and of general trends within healthcare provision in Europe. Thanks to extensive primary research it features in depth information about specific schemes from their operators and it comments on specific trends within the industry, often from the point of view of existing suppliers.



**To order this Strategy Review (Price £1500) please contact:**

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# Who Cares? Smart Cards Help Children in Need

By Garth Hemmingsen, Journalist, Smart Card News



Garth Hemmingsen

The world's first range of secure Smart Card based online services for children in care called CareZone was officially launched by The Who Cares? on 17 February 2004 with special guest Rt Hon Paul Boateng MP, Chief Secretary to the UK Treasury. The Who Cares? Trust is a UK national charity working to improve the lives of children in care. CareZone is a secure, online world of resources to help children and young people in care achieve their potential.

"Through the use of high-level security community chatrooms, children will for the first time benefit from specific, tailored information in an environment that is fun, safe and aimed at reducing isolation and stigma" said Susanna Cheal, Chief Executive of The Who Cares? Trust. A young person can log on using high-level security - including passwords, security questions and Smart Card technology. Once authenticated, they are free to explore CareZone at their leisure. The child chooses a 'guide' or smartagent to help them navigate the town, answer questions and provide support. They can explore areas such as the library, the campus, the health centre, leisure centre or the bank. Each location features care-centred information to help young people discover their entitlements and realise their potential.

CareZones aim is to provide anytime, anywhere, anyhow access through the internet. So CareZone security is being designed by Hitachi, who have made the site as secure as possible. It provides a child with a next generation secure online environment, which is safer to access than current online services available in the UK today. CareZone and Hitachi have designed a solution to prevent children giving away their access details by using Smart Card technology with a sleeve device to read the card together and a PIN. A challenge/response mechanism will be used to authenticate access from a secure access server.



Once in CareZone, random scripted authentication will confirm a child's identity (similar to a bank when you call them on the phone) before allowing access to sensitive CareZone facilities such as their personal vault and communication tools. Without the knowledge to get into the vault and to open up the tools to communicate with others online, access to a single user part of CareZone is of limited or no value to an intruder. If a user's Smart Card is reported stolen the next time the Smart Card is challenged during the login the Smart Card is given a locking string to enter into the Smart Card so that the Smart Card is locked. A digital vault will be an attractive target for hackers when information is published on how CareZone is set up.

The digital vault will contain individually encrypted files behind ten layers or levels of security ranging from virus checking and content filtering for executables to physical and geographic security measures. Only an authentic user will even 'know' which bits of data are theirs to access, and only they will have the key to unlock them. CareZone will be working with companies who know how to secure vulnerable data, and anyone who does store CareZone information will have to comply with these stringent levels of security. CareZone's security is a type of Smart Card security that has been in the industry for quite a long time in various forms. But could this technology allow online purchases over the Internet in the future as it proves that the user must have the card and sleeve present to be able to make a purchase. Also could the card be used for more secure online banking. With the Chip and Pin requirements in the UK for 2008, this could very well be a possibility.



Currently the Local authorities that are piloting the CareZone scheme are Birmingham City Council, Blackburn Borough Council, Derbyshire County Council, Liverpool City Council, Wakefield Metropolitan District Council and the London Boroughs of Haringey, Hillingdon, Hounslow and Lambeth including 25 other confirmed post pilot deployments in local authorities within the UK.



On this new scheme the Rt. Hon. Gordon Brown MP, Chancellor of the Exchequer in the UK said "All too often the potential of many children - including those in care - has not been realised. This must change. Giving every child the opportunity to make the most of themselves cannot be achieved by government action alone - it requires us to work in partnership with community and voluntary organisations, charities, faith groups and the private sector. CareZone is exactly the sort of initiative the Government is keen to encourage."

The team here at Smart Card News wish to say well done to CareZone for the wonderful online community you have created for children in care.



If you would like to know more about the Trust please contact:

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Tel: 020 7251 3117 Fax: 020 7251 3123 Email: mailbox@thewhocarestrust.org.uk Website: www.whocarestrust.org.uk

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