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Smart Card News

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Dear Subscribers,

Well its happened, consolidation on a large scale with the announcement this month of the merger between Gemplus and Axalto who between them have over 50% of the smart card market. I wonder how the European Commision's Competition Directorate will handle this one? Much more in this months lead story but you can't help but wonder about the background to this initiative.

So the UK Government is thinking of increasing the legal age for the purchase of tobacco from 16 to 18 years. Poor old retailers, how is the average shop assistant to know if a young person is 18 if they are not carrying a proof of age card. I suppose the answer is for the local authority to issue citizen cards with proof of age functionality, this would get around the problem and would be the start of an ID card rollout. People seem to spend all their time criticising the concept of an ID card and yet our everyday life constantly requires us to provide some proof of identity. When it comes to accessing my bank account I'm very happy such controls exist as they do in so many other ordinary events. It seems to me that an ID card where I only have to register once, just makes this so much easier.

The discussions amongst academics about ID cards continues. Gerry Crossman from Liberty recently stated at a discussion organised by Elsevier, that the Government needs to prove the positive case for them and that they haven't. He thinks that the ID scheme will change our relation to the state in a fundamental way, that information will be passed on unless there is a reason not to. He also made the point that terrorists are known to the authorities and as far as crime is concerned identity is not the issue. A recent survey commissioned by AuthenTec showed that stolen passwords and lost laptops were the major security concern of PC users and that a biometric such as fingerprint would rate highly in the decision as which PC to purchase. I would certainly welcome a fingerprint sensor on my laptop, I use the same password for everything as I have a dreadful memory. But come to that why wouldn't I just carry around a smart card or token, then I could use any PC?

As this goes to print we will be closing for the Christmas break. Everyone at Smart Card News wishes you all a peaceful and happy Christmas.

Patsy Everett

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Axalto and Gemplus Merge

The boards of Axalto and Gemplus have unanimously approved the merger of the two companies to form Gemalto. This new merger brings together the Smart Card Industry's two biggest players. Gemplus generated 865 million euros in revenue in 2004 and according to Gartner Inc have an estimated market share of 29.9%. Axalto earned 800 million euros in the same year and held a market share of 22.7%. With the current merger this would mean that the newly formed company would have an estimated combined market share of over half the market - 52.6%. With an expected combined 2005 pro-forma revenues of 1.8 billion euros (US$ 2.1 billion), the combination will create the world's largest Smart Card marker. The combined companies will have operations in over 50 countries, will have large operational centers in the Paris and Marseille areas and employ approximately eleven thousand people. Gemalto will be registered in the Netherlands.

Alex Mandl, the President & CEO of Gemplus, will assume the position of Executive Chairman and Olivier Piou, the CEO of Axalto, will be the CEO of Gemalto. Mr. Mandl and Mr. Piou will jointly constitute the Office of Chairman that will be responsible for integration, M&A, strategy, budgeting and the top 30 managers. Frans Spaargaren will assume the position of Chief Administrative Officer with responsibility for integration, procurement, supply chain and IT, and Charles Desmartis will be the Chief Financial Officer of Gemalto, with both reporting to Olivier Piou. The Board of Directors of the combined entity will be comprised of 11 members, 5 proposed from the current Axalto Board, 5 proposed from the current Board of Gemplus and 1 other independent member will be jointly nominated. In light of the strong financial position of the combined group, it is the current intention of both CEOs to recommend to the Board of Gemalto that a share buyback program covering up to 10% of Gemalto shares be instituted post-closing.

Gemalto believes that after the merger it will be in a strong position to capture future industry growth. In particular, the combined R&D and Sales & Marketing efforts should create a compelling platform to develop new markets and pursue high growth opportunities, such as Identity, ePassport, Healthcare, IT and corporate security, and payments. Furthermore, in its largest product lines of mobile communication and banking, the combination is expected to allow faster development and commercialisation of high-end products. This new company has also redefined their industry by stating they are now a provider of "Digital Security".

Gemalto anticipates benefiting from enhanced scale, translating into improved manufacturing processes, efficiencies in the supply chain, and greater ability to support client-dedicated projects. The companies have announced that they have made this decsion to merger to increase their eroding market share and revenue. They believe that the Smart Card industry is now a mature one and so to compete they need to formulate a stronger operation to develop new applications using new innovation and bring them onto the marketplace quicker. The merger allows them to collectivly address their markets in a more robust and aggressive way.

Recently there has been a slow down in the Asian market. Axalto has seen its revenue in the Asian segment fall by 28% in the third quarter of 2005 and Gemplus saw a simliar decline in revenue of 14% within this region. This significant drop in revenue for both companies was due to lower demand from the leading Chinese telecommunications operators engaged in a major reorganisation in preparation for the opening of their market to international competition following China's decision to join the World Trade Organization. This proposed merger of some of China's biggest telecommunications operators poses a real threat for both Gemplus and Axalto within the SIM market and Asian segment.

Alex Mandl, Gemplus' President and CEO said: "This transaction is an important development for Gemplus, Axalto and the digital security industry as a whole. This merger, with a sound industrial logic, is a win-win that will create value not only for our respective shareholders but also for our clients and employees. We are confident in our ability to deliver significant value to our shareholders." In their offical press conference Olivier Piou called the merger a "merger of equals".
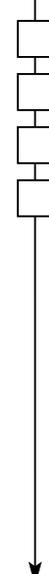
The Merger transaction will be executed in two steps. Texas Pacific Group and the Quandt family entities, Gemplus' largest shareholders, representing in aggregate 43.7% of Gemplus' share capital, have agreed to contribute their shares to Axalto at an exchange ratio of 2 Axalto shares for every 25 Gemplus shares. Immediately prior to this contribution in kind, Gemplus will distribute 0.26 euros per share to all its shareholders including Texas Pacific Group and the Quandt family entities. The distribution represents an amount of approximately 163 million euros based on current Gemplus shares outstanding. Gemplus shareholders will receive about 50.2 million newly issued Axalto shares, representing 55.4% of the combined group, with Axalto shareholders representing 44.6% of the share capital.

Following the completion of the contribution in kind, Axalto will launch a voluntary public exchange offer for the remaining Gemplus shares at the same exchange ratio of 2 Axalto shares for every 25 Gemplus shares. The exchange ratio, taking into account the distribution payable to Gemplus shareholders, represents a nil-premium transaction when measured on a 30-day trailing basis. The contribution in kind and distribution are subject to anti-trust and other regulatory approvals, the approval of shareholders and certain other customary contractual conditions. On Tuesday 6th December Gemplus shares closed at 2.30 euros and Axalto ended the day at 22.88 euro, giving the combined group a market capitalisation of 2.374 billion euros.

Management of the companies expect to realise joint annualised net operational synergies of approximately 85 million euros (US$ 100 million) by the third year after closing on a fully phased basis. Gemalto predict an operation margin of 8% each raising to 10% once the companies synergies have been fully implemeneted. Most of these synergies will accrue from volume effects, supply chain efficiencies and sharing of best practices. Gemalto anticipates limited job reductions in its general overhead due to current high capacity utilisation and the need for further human capital to service the anticipated industry growth. The anticipated one-time IT, relocation and other restructuring costs necessary to realise these synergies are expected to total approximately 43 million euros (US$ 50 million).

Olivier Piou, Axalto's CEO said: "This merger is wholeheartedly supported by both management groups. Once shareholder, regulatory and other approvals have been obtained, the combined management team will rapidly implement the combination and integrate Sales, Marketing, R&D and Manufacturing on a global basis. A major priority of the Board and management of Gemalto will be to achieve a successful and expeditious integration of Axalto and Gemplus that preserves the key strengths of the culture, management and business practices of each group and allows the efficient realisation of the expected synergies."

But the expansion of this giant does not stop there! After a one-time cost of 43 million euros for re-oganisational and re-structing of the two companies, Gemalto will still have $450 million available to it. Some of this money maybe used in a share buy-back covering up to 10% of Gemalto shares, but the rest, as stated by the company, will be used for further investment and acquisitions creating further consolidation.So the Smart Card Industry's juggernaut has started moving and plans to potentially buy out companies that get in its way.

Because of this, this merger between these two massive Smart Card players will be most definitely looked at and reviewed closely by competition authorities. But if this merger does go ahead, and Gemalto are saying there will not be any issues and the deal should be finalised by summer 2006, then where will this leave Oberthur Card Systems. Oberthur are the third biggest player in the Smart Card market but is still a smaller rival to both Gemplus and Axalto. This new move will mean Oberthur will be facing an even bigger rival now and is now out in the cold amid fierce Asian competition.

Dr David Everett, CEO of Mircoexpert and Technical Advisor to Smart Card News gave us his opinion of the new merger. "I have long commented on the consolidation in the Smart Card industry. A merger of the two largest players is intereting, is this the start of a new growth phase expounded in the merger statements or is it a totally defensive move in reaction to the Asian market. I believe it is the latter"

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Smart Cards

Banks to Charge on IC Card Next Year

Korean Banks plan to impose service charges on smart integrated circuit (IC) cards next year. Commercial lenders have stopped issuing magnetic strip cash cards for security reasons under the financial authorities' guidelines. They have been issuing IC-imbedded cards since October 2004 without imposing extra fees on the customer. The Financial Supervisory Service (FSS) has required banks to adopt IC Smart Cards, which better protect cardholders' identification than the existing magnetic strip cards. Despite the FSS's drive, the card change rate of local banks is lower than expected, hovering between 30 to 50% , according to officials from banks and the FSS. To encourage banks to speed up the change to IC cards, the FSS has allowed banks to impose charges on Smart Cards. Banks plan to charge 2,000 won (1.6 euros) per card change or Smart Card issuance from next year. Kookmin Bank and Woori Bank said they will impose services charges on clients changing their magnetic strip cards to IC cards next year. They have already issued service charges for Smart Card issuance. Shinhan Bank and Chohung Bank will continue to change cards for free, but will charge for new Smart Card issuance.

New ID's for Macedonia

The government of the Republic of Macedonia has awarded Giesecke & Devrient (G&D) a contract to provide the country with electronic passports, personal identity cards, and driver's licenses, as well as a corresponding, combined system for personalisation of the documents. Work on the project is scheduled to begin this year, with the project itself expected to take a total of 11 years to complete. The first electronic passports and ID cards are due to be issued to the citizens of the Republic of Macedonia as early as 2006. The order covers delivery of 1.5 million passport documents with integrated microchips, 1.8 million personal identity cards, and 500,000 driver's licenses. The Republic of Macedonia is one of the first Eastern European countries to introduce a passport containing a chip. The e-passports meet both the specifications of the International Civil Aviation Organisation (ICAO) and the guidelines of the European Union. The ICAO, a United Nations' special agency, is tasked with, among other things, the standardisation and security of air traffic and formulating rules and recommendations for machine-readable travel documents such as chip passports.

ORGA and Setec Team in Denmark

ORGA Kartensysteme GmbH has been chosen by Setec Danmark A/S, (a Gemplus company), as its Smart Card partner for the nationwide tachograph system in Denmark. The ID solution provider Setec is the general contractor and will be responsible for personalising the Smart Cards from ORGA and then supplying them to the Danish police authorities. ORGA will supply a major part of the Smart Card technology to its Scandinavian neighbour: the card body with special security features, the tachograph module and the software for electronic personalisation of the cards, as well as the practise statement and crypto concept.

Axalto and MetaPass Team

Axalto and MetaPass, Inc have teamed up to strengthen IT security and simplify the user's experience. The new solution couples Axalto's Cyberflex Access Smart Cards with MetaPass Single Sign-On (SSO) software. It allows users to access multiple computers, networks and applications without having to remember and type multiple passwords. It is fully compatible with Axalto Smart Card technology used for building security and ID credentials, so organisations can use one ID card for physical and information security.

Collaboration on New Java Card

GlobalPlatform and Sun Microsystems have announced the establishment of complementary technical specifications designed to fuel the next generation of Java Card development. The complementary industry standard specifications have a common focus on contactless applications - a significant area of market growth for Smart Cards. GlobalPlatform and Sun Microsystems have formed this alliance to ensure their respective specifications are compatible.

New Hybrid Chip and PIN Solution

Thales has launched their Artema Hybrid payment terminal. Artema Hybrid is the first all-in-one card payment terminal on the UK market that incorporates a dual function "hybrid" chip and magnetic stripe reader which can read most payment cards in a single action. This facility makes the whole card transaction process more straight forward. The Artema Hybrid has experienced considerable success in Europe, especially within the security conscious German market.

Microelectrónica Española Aquired

M-Systems has aquired Microelectrónica Española, a prominent European Smart Card and Smart Card operating systems company. The transaction will expand M-Systems' technology, security and manufacturing capabilities as well as geographical reach. It will also enhance M-Systems' mobile product portfolio and broaden its channel access to the mobile market. Microelectrónica Española, which began operations in 1989, has focused on the development of fundamental Smart Card technology. Currently, Microelectrónica Española's technology is utilised in the telecommunications industry, as well as in the security and banking industries.

UK's First ITSO Smart Card

Novacroft, working with co-contractors ESP Systex, has been chosen by the Scottish Executive Improvement Service to provide the UK's first ITSO compliant Smart Cards, for concessionary travel on Scotland's public transport, to elderly and disabled citizens across Scotland. The cards will be provided under the Scottish Citizen's Voluntary Entitlement Card scheme. The scheme will be implemented in April 2006 with Novacroft's card management system, Innovator, as the central repository for the citizen's account data. At Novacroft, a contact centre will also be available to handle cardholder and other stakeholder enquiries. It is anticipated that up to 1,250,000 cards will be issued in the contract period and that other applications, such as education registration, cashless catering, access to leisure facilities and library membership will also reside on the card.

Bank Cards Issued in a Few Minutes

Axalto has launched Instant Issuance, a secure end-to-end solution that allows banks to immediately issue personalised EMV (Europay MasterCard Visa) cards directly at their branches, with a design customised on request. With Instant Issuance, not only do bank customers get their new microprocessor card on the spot, but they can also have a personal picture inserted onto it and choose their card body and PIN code. Today, the usual process to issue a new EMV card may take up to one week after the customer's request. Now, Instant Issuance allows banks to provide their customers with an EMV card in a few minutes, with the same strong security level and quality of service that traditional personalisation centers offer.

2MB Smart Card IC for 3G Phones

Samsung Electronics Co., Ltd has introduced the first 2MB flash memory-embedded Smart Card Intergrated Circuit (IC) - S3FJ91L, raising the bar even higher by doubling the data storage capabilities. Samsung's new 2MB Smart Card IC meets all the industry requirements for 3G multimedia handsets by enabling higher memory density for SMS, telephone directory, games and Internet services as well as its typical subscriber identification function. The speed and reliability of user identification in the S3FJ91L is guaranteed by ARM-based 32bit SC200 Secure Core, a 3-DES encryption standard and a Public Key Infrastructure (PKI) crypto processor. Its fortified anti-hacking technology significantly reduces the risk of personal information leakage.

Airtime Reload Solution for Celtel

Gemplus has successfully deployed a flexible mobile top-up solution for Celtel Kenya's prepaid customers. The "Electronic Airtime Distribution" application, developed by Gemplus, was deployed in March 2005. Since then, over 11,000 SIMs have been deployed with an average of 100,000 reload transactions carried out per day. Within 3 months, electronic airtime vending has become the preferred channel and now represents 60% of airtime selling (Source: Celtel 2005).

Hitachi Partner MasterCard

Hitachi Ltd plans to established a joint venture in the US with MasterCard International Inc. to manufacture and sell multi-application Smart Cards worldwide. The venture will be set up in San Francisco by Hitachi, MasterCard and a US investment firm. It will promote the Multos multi-application operating system for Smart Cards by managing the issuance of Multos-based cards worldwide. The Japanese electronics firm also plans to establish by next spring a dedicated operation for its Multos Smart Card business in the US and start mass producing the cards through local subcontractors. In Japan, Hitachi intends to join hands with Dai Nippon Printing Co and Toppan Printing Co to develop the Multos Smart Card business.

ORGA Subsidiary Opened in Nigeria

ORGA Kartensysteme GmbH has opened a subsidiary in Nigeria, which includes a production facility. This will enable the Smart Card company to gain entry to this enormous market.

At the same time, this investment is another logical step in ORGA's pursuit of its internationalisation strategy. The subsidiary was officially opened y in Lagos by his Excellency, Chief Cornelius Adebayo, Nigeria's Minister of Communications. West Africa is growing steadily in importance in the world economic system - and with its 130 million inhabitants, or around 20% of the continent's total population, Nigeria occupies a crucial position. Particularly in the area of telecommunications, this market is of strategic importance. Up to now, only some 7.5 million Nigerians have been able to use mobile telephony. By the end of 2008, between 17 and 25 million mobile telephone subscribers are expected in Nigeria alone. ORGA also plans to profit from significant market growth in Ghana and Uganda.

ORGA's Growth in Telecoms

An industry survey has confirmed ORGA's upward trend when it ranked the company fourth among the top ten SIM card suppliers in 2004. Newly released figures for the first half of 2005 show this positive trend is continuing. ORGA started 2003 in fifth place, but now has advanced to number four in the SIM card supplier rankings. During the first six months it posted 50% volume growth in the SIM card field compared with the previous year, also topping the estimated market growth rate of about 35%. ORGA's goal is to ship 100 million SIM cards by the end of 2005. ORGA has enjoyed particularly strong business in India, which accounts for a significant share of the growth in unit sales.

Hawaii Joins the City Card Trend

The Hawaiian capital city has joined the city card trend thanks to ACT's (Applied Card Technologies) web-enabled destination management solution. ACT won their third contract from Travel Fun Card Ltd to deliver the Smart Card technology. The Honolulu Pass can be purchased up to a year in advance and will ensure tourists are able to make the most of their visit when and how they choose without a specific date and time required. The visitor product known as 'Power Pass' already boasts huge success in Las Vegas and New Orleans enabling visitors to plan trips to all three cities, all through the same single Smart Card. ACT's Discovery: Issue-Transact-Manage Smart Card solution powers the pass, giving visitors flexible and easy admission to every participating attraction with free, VIP or discounted entry. Over 35 of Honolulu's top sights have signed up, including Waikiki Aquarium, Honolulu Zoo and Hawaii Shark Encounter.

SafeSign Supports EMV Readers

Thales has announced that SafeSign, its end-to-end solution for identity management, user authentication and transaction security, now supports the use of XIRING Xi-Sign tokens and EMV card readers. Thales and XIRING are working together to deliver the security benefits of the latest MasterCard CAP (Chip Authentication Program) standard EMV cards. The MasterCard CAP standard has been put in place to combat the growing threat of transaction fraud conducted when the cardholder is not present, such as the online phishing technique. It allows EMV cards to be used in the authentication process of secure online service provision.

Thales Acquires Wynid Technologies

Thales has announced that its e-Transactions business line, has completed the acquisition of Wynid Technologies, a provider of integrated payment solutions. This strategic acquisition, marks Thales' commitment to developing its presence in the growing integrated payment market, and consolidating its position in the French market, where Wynid is a market leader. The full acquisition of Wynid by Thales, completes a period in which the two companies have worked in close partnership to supply integrated payment solutions to major players in the petrol retail market. Since the year 2000, Thales has held a 40% shareholding in Wynid Technologies.

Mokard Java Card Achieves EAL4+

Incard's Mokard Safe 2.2. Java Card software engine has received a Common Criteria security certification at Evaluation Assurance Level EAL4+. First on the market with the latest Java Card and Global Platform technologies certified to the industry's security standard for multi-application Smart Cards, the Java Card System Protection Profile (PP0305). Developed by Sun Microsystems for evaluations of Java Card products under Common Criteria, the Java Card System Protection Profile (PP0305) is the only set of security requirements accepted by all major players in the Smart Card industry.

This profile addresses the growing demand for Common Criteria certified products that meet the security evaluation standards required by governments, banks, and commercial enterprises. Incard's Mokard Safe 2.2 is a secure multi-application Java Card 2.2 runtime environment , using the Global Platform 2.1 card manager, as well as USIM (UMTS Subscriber Identity Module).

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Visa Program Grows

Visa International has announced an expansion of the Visa Smart Global Partner program to include a total of 21 offers for Visa member financial institutions migrating to chip. The new offers, which substantially increase the size of the program, come as migration to chip has gained momentum in many regions and represents Visa's continued commitment to bring a wide range of innovative products and services for issuers and acquirers implementing chip technology.

Biometrics

Verid+ Protects Ghana Telecom's

Ghana Telecom has installed TSSI's Verid+ iClass fingerprint reader at its facility in Accra, marking the first phase of a rollout programme that will eventually encompass all sites across Ghana. The Verid+ fingerprint reader will be used in conjunction with HID's iClass Smart Cards to secure telephone exchanges, equipment rooms and repeater stations - thereby ensuring unauthorised access is prevented.

The combination of TSSI's Verid+ fingerprint technology and HID's iClass cards allows 2 templates and a PIN to be stored on the smallest, lowest cost iClass card. This template-on-card feature means that the user's fingerprint data travels with him or her on the card. Hence, no networking is needed to transfer the correct templates to each site. This reduces costs and administration time providing a simple, secure and robust system.

Biometric Certification Program

Addressing the demand for independent certification of biometric products, the International Biometric Group has announced its Biometric Performance Certification program. Biometric Performance Certification certifies biometric product accuracy and usability for applications such as border management, visa and passport issuance, access control, network security, and point-of-sale.

The biometric industry has historically lacked benchmarks against which performance could be evaluated and compared. Biometric Performance Certification addresses this gap by certifying commercial systems against benchmarks for accuracy and usability.

It provides detailed yet easily-understood information essential to engineering teams, product developers, sales and marketing staff, and organisations managing RFPs and government tenders.

Thousands of commercial and government organisations rely upon the groups performance evaluations to make deployment and partnership decisions. Biometric Performance Certification is based on results generated through the group's ongoing Comparative Biometric Testing initiative. Round Six of Comparative Biometric Testing, beginning in early 2006, will evaluate commercial biometric systems such as fingerprint, face recognition, iris recognition, voice recognition, and emerging biometric technologies.

Labcal Installs Security Infrastructure

Labcal has deployed its first SmartProfile solution, a two-factor authentication version of its Single Sign-On (SSO). This contract was awarded by the CGI Group Inc. The activation of the solution on all workstations was completed without interrupting the services and the number of calls to the helpdesk did not increase during the installation process.

Essar Selects Bioscrypt V-Smart

Essar Group has selected Bioscrypt's V-Smart readers with MIFARE support to strengthen access control to restricted areas. Honeywell Automation India Ltd. was awarded the project and will be installing the technology.

Rapid Id Terminal for Border Control

RIMCO-XXI has developed (Russia Patent # 49323, 06.06.2005) a new technology 3D Face Recognition unit for Border Control. The Advanced Rapid Identification Terminal for Border Control contains Wi-Fi, contactless Smart Card reader for e- Passport, Fingerprint and 2D or 3D facial reader.

CardSystems Acquired

Biometrics payments company Pay By Touch has announced its intent to purchase all the assets of the third-party payment processor CardSystems Solutions Inc. following CyberSource Corp.'s withdrawing its offer for the company. After several weeks of negotiations, terminating the deal was fundamentally an issue of valuation.

CyberSource spokesman Bruce Frymire said. "After a fair amount of due diligence, we arrived at a certain price, then another bidder, we now know who, came in with an offer that we weren't willing to meet."

Radio Frequency Indentification

Omron's Targets RFID Market

Omron Corporation is set to invest $20 million worldwide over 2005 and 2006 as a first step in seizing a larger share of the US and global RFID market. The company's investment signals a major RFID growth initiative targeting Wal-Mart Suppliers and other markets. The company's aggressive entry into the US marketplace focuses on its RFID label inlay and reader products. It aims to take advantage of Wal-Mart Stores' RFID shipping tag mandate to its top 100 suppliers while leveraging Omron's web sit,e 20 years of global RFID product development and application experience.

Wal-Mart's RFID mandate now requires its largest 100 suppliers to put RFID tags on shipping crates and pallets. Starting in 2006, this mandate will be rolled out to Wal-Mart's next largest 200 suppliers. Omron President and Chief Executive Officer Hisao Sakuta, who has appointed himself as project leader, said "RFID is an important, global initiative which requires a large investment. I believe RFID could be a major growth engine for the company.

Goodyear's RFID a Success

The Goodyear Tyre & Rubber Company, the first to implement Radio Frequency Identification technology on a production scale, says RFID is the future for tyre identification in the manufacturing, supply chain management and tire/vehicle integration. This month, Goodyear's RFID technology passed its first major real-life test when NASCAR used it for the-Craftsman Truck Series race at Homestead - Miami Speedway in Florida. Goodyear began exploring RFID technology in 1984 and in 1993 began the first field trial with more than 3,000 tryes.

"Through this program, we can demonstrate the effectiveness of our technology, while encountering the same issues we would experience with any original equipment or retail customer," said Steve Roth, Goodyear's director of vehicle systems."We expect this successful application with NASCAR to help advance our RFID efforts on a far broader scale

"Roth said he expects RFID to have a huge impact on trye production, warehousing, sales and service, and Goodyear is at the forefront of the movement. The tags provide for automated reading by RFID scanning equipment and are capable of carrying large amounts of information."

Goodyear says RFID is the quickest method available to log in the thousands of new and used tyresbeing returned at the end of a race before teams can depart the track. Goodyear is the exclusive tyre supplier to NASCAR's top three series. Goodyear is an advocate for the use of the EPCglobal Unique Identification (UID) format for data contained on the RFID tag. Roth said " providing a standard is one of the most important steps in getting new technology adopted, easing implementation for both customers and suppliers."

U.S. Navy Selects Zebra for RFID

Zebra Technologies has been selected to provide radio frequency identification professional services and engineering support, as well as RFID smart label printer/encoders, software and media, to the Department of the Navy (DoN) Automatic Identification Technology (AIT) Program Office. Zebra was included as a subcontractor in a five-year contract the Navy awarded to CACI International Inc, a member of Zebra's PartnersFirst government reseller program. The AIT Program Office is responsible for the implementation plan to promote the use of RFID technology for supply chain, logistics, maintenance, materials management, warehouse management and other operations on ships and ashore.

Financial Results

ICE Reports Third Quarter Results

International Card Establishment, Inc. (I.C.E.) has announced its third quarter and nine month results for the period ended September 30, 2005. For the quarter ended September 30, 2005, the company generated net revenue of $7,739,666 as compared to net revenues of $3,760,392 for the quarter ended September 30, 2004. For the quarter ended September 30, 2005 and September 30, 2004, the company reported net losses of $(1,884,202) and $(362,682), respectively.

For the nine months ended September 30, 2005, the company reported net revenues of $12,248,662 versus $10,681,308 for the comparable period a year ago. For the first nine months of 2005, the company reported a loss of $(3,550,822) versus a loss of $(1,322,433) for the nine month period ended September 30, 2004.

I.C.E. is actively seeking additional financing to implement measures that Management believes will increase operating margins and enable the company to continue its rapid revenue growth. There is no assurance that the company will be able to obtain additional capital as required, or obtain the capital on acceptable terms and conditions. Management believes that without additional capital, operations would need to be curtailed significantly with a corresponding reduction in revenue growth.

SuperCom's 3rd Quarter Results

SuperCom Ltd has released their unaudited financial results for the third quarter ended September 30, 2005. Revenues for the third quarter of 2005 increased by 47% to $2,069,000 compared to $1,407,000 in the third quarter of 2004, marking the Company's fourth consecutive quarter of substantial YOY quarterly revenue growth.

Net loss for the period according to U.S. GAAP was ($850,000)compared to ($663,000) the third quarter of 2004. Revenues for the first nine months of 2005 increased by 76% to $6,857,000 compared with $3,891,000 for the first nine months of 2004. Net loss for the period according to U.S. GAAP was ($2,985,000)compared to ($2,323,000) for the first nine months of 2004.

OTI Reports 3rd Quarter Results

On Track Innovations Ltd. (OTI) has announced its consolidated financial results for the nine months ended September 30, 2005. Revenues for the first nine months increased by 72% to $26.4 million from $15.4 million for the same period of last year. Revenues for the third quarter increased by 120% to $12.1 million from $5.5 million for the same period of last year.

The Company incurred in the nine months ended September 30, 2005 expenses of $1.8 million related to the Company's extraordinary activity in the Far-East.Net loss for the first nine months of 2005 decreased by 4% to $(6.8) million, from $(7.1) million for the same period in 2004.

Charles Fote to Retire from First Data

First Data Corp has announced that Charles T. Fote, Chairman and Chief Executive Officer, has advised the Board that he is retiring from the Company for personal reasons. Fote, 56, has been CEO since 2002 and Chairman since 2003. He will continue as Chairman until year-end and as a Director until the 2006 Annual Meeting. He will also serve as a consultant for the next eighteen months.

Visa Strengthens Commercial Team

Visa Europe has appointed to new members to the Visa Commercial team: Brian Byrne as the new Head of Market Development and Cynthia Spencer as the new Head of Product Development.

New Sales Manager for UPM Rafsec

UPM Rafsec has appointed Didier Monchot to Area Sales Manager, South Europe. Effective October 10, 2005, Didier Monchot is responsible for expanding UPM. Rafsec's business in the Southern European area, with a particular focus on France, Italy, Portugal and Spain.

New VP of Marketing at Precise

Precise Biometrics AB has hired Ulf Hagglund as Vice President Marketing. Ulf Hagglund will also be a new member of the management group. At the same time, one of the company's founders and vice President, Marten Obrink, will gradually be leaving his operative role in the company early next year.

Pay By Touch Appoints New EVP

Pay By Touch has appointed Gus Spanos as executive vice president of business development. Spanos led the company's recent fundraising effort that secured more than $130 million in new financing. In his role as executive vice president of business development, Spanos will lead corporate development activities and will continue his fundraising efforts.
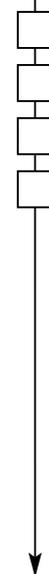
Diversity in Smart Card Markets Fuels Rapid Growth in Smart Card Alliance

By Randy Vanderhoof, Executive Director, Smart Card Alliance

Membership of the Smart Card Alliance has grown by over 45% in the last year, with 54 new organisations becoming members. The Alliance's rapid growth highlights the strong growth that is predicted for the Smart Card industry in the Americas. The Frost & Sullivan Americas Smart Card Market Analysis report published in September predicts that the Smart Card industry will grow rapidly in North America, at a 27.7% compound annual rate over the next five years, from the 132.2 million cards shipped in 2004. The report predicts even greater growth in Latin America, a 59% compound annual growth rate over the next five years, from 136.4 million cards shipped in 2004.

Randy Vanderhoof

As the Smart Card industry grows, we are growing with it. What is particularly exciting about this growth is that we are pulling members from new industries and technologies. This really demonstrates how widespread the adoption of Smart Cards is becoming. Fast growing categories of new members include organisations involved in computer hardware and software, card technology, security products and services, healthcare, financial services and transportation.

In mainstream computer products and services, large blue-chip organisations that have joined the Alliance this year include Adobe Systems, Cisco Systems Inc, Sony Electronics and Sun Microsystems. They join existing computer products and systems integration members that include VeriSign, Lockheed Martin, IBM, RSA Security, Northrop Grumman and Unisys. Card technology companies that provide secure chips, cards, operating software and devices such as Texas Instruments, Sharp, Inside Contactless and MULTOS have found value in the Alliance as the number of applications for smart cards in the Americas has increased.

Security and identity solutions providers, such as Viisage, LEGIC Identsystems, Digimarc Corporation, Identification Technology Partners, Inc., HIRSCH Electronics, Tyco Software House, GE Security, CoreStreet, and Lenel Systems, have joined with other security market leaders to work together in Smart Card Alliance industry councils. Likewise in healthcare, solutions providers Healthmeans, EMIDASI and Competech Smart Card Solutions have joined.

Smart Cards for payment is another growth sector in the Americas. The United States is quickly becoming a leader in the adoption of contactless smart chip technology for fast and secure retail payments. New members in this sector include American Express, Chase Card Services, SMART System Technologies, PayZy Corporation and Visa Canada, who join existing members Visa USA, MasterCard International, Bank of America, First Data Corporation and JCB. POS terminal manufacturers Ingenico and Keycorp are new members, joining existing Alliance members VeriFone, Hypercom, ViVOtech and OTI.

Contactless payment is growing for transit as well. Major cities around the United States are moving to contactless Smart Card based fare collection systems as they upgrade their payment infrastructure. New members in transportation and parking include ACS Government Solutions, Parcxmart Technologies, Massachusetts Bay Transportation Authority, TriMet, the Southwest Ohio Regional Transit Authority and the Utah Transit Authority. In addition, the Smart Card Alliance expansion into Latin America has resulted in the formation of a new Latin America chapter, led by founding members Oberthur Card Systems, Rede Ponto Certo, Axalto, Visa International, Daruma Orga, ASSA ABLOY ITG, Atmel, STMicroelectronics and Fargo Electronics.

The Scottish National Entitlement Card

An Interview with Sid Bulloch, Senior Project Manager, Scottish Executive's Improvement Service

David Everett, Chief Executive Officer of Microexpert and Technical Advisor to Smart Card News discussed the National Entitlement Smart Card with Sid Bulloch over a pint! Earlier this year Sid Bulloch become the manager of the Dundee Discovery Card and is the past Chair of both the European SmartCities Interest Group and the Scottish Citizen Account Smartcard Consortium. He is currently seconded to the Scottish Executive's Improvement Service where he is Senior Project Manager with specific responsibiltiy for delivering the Scottish National Entitlement Card.

Dr.David Everett

DE: When you come up for air, maybe you could explain the thinking behind the choice of the Mifare 4k card for the National Entitlement Card.

SB: Sorry David, I was quite carried away with the bouquet of that pint. The simple answer is that we reserve our position on the question of the National Entitlement Card. We chose the Mifare to deliver the short-term, time-critical elements. We were familiar with the card as we already had an established user base. We had also done a lot of work on card migration, comparing current applications, and likely requirements with the available technologies.

It was clear that the foreseeable demand was for low-security, simple applications with low storage requirements. The card was also ITSO approved and we believed we could force the unit price right down to make the whole thing a bit of a no-brainer at least for the first phase of the programme. That's exactly what we've done.

DE: So what will be the National Entitlement Card and how do you get to it?

SB: For the foreseeable future we're probably looking at a family of cards - horses for courses. Why pamper the purists by issuing an expensive java card to someone who only wants to join the library? To be blunt, apart for the arguable case for future proofing, what incentive is there for me to go from a 56p card to a £3.50 card. I could even argue that given the state of the Smart Card marketplace, the longer I leave the decision on what card should be deployed, the cheaper, more powerful and better field tested the available solutions will be. We know the triggers that will lead to a new card. Technically they are things like more complex applications, faster communications requirements, higher security, applets running on the card and financial transactions but it's not clear whether if there is a real demand from citizens or if it's a classic case of an answer waiting for a question. Personally, I think it likely that the need for a portable, secure authentication device will create a demand sooner rather than later but then again someone was suggesting a new "purse" application to me just today so maybe that'll do it.

DE: What about the chip map for the Mifare 4K? Some of the people on my courses have been asking whether it's mandatory.

SB: It is mandatory in the sense that we needed something to present to Councils. You need to remember that I didn't pluck the card out of thin air. The Councils opted for the model which we had been rolling out through SCASC and the mapping is designed to protect that work which had gone before. We shouldn't however treat it as being in tablets of stone. It's important that we now work together to create the model for the future. It is after all a single national entitlement card scheme.

DE: Any concerns about the Mifare security?

SB: I think everything is relative and as you've said yourself expressions such as "low security" are thrown around in a way that could confuse or even misrepresent the platform. In any scheme it is the overall security that matters not the individual components.
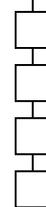
If the applications can be contained in a strict business environment with secure trusted terminals and with little incentive for people to attack the card, the Mifare can probably do the job. If we want to adopt a more open model we'll need cryptographic protection.

DE: What are the issues in migrating from a 1K to a 4K?

SB: The issues are not so much to do with technology more to do with the applications and the fact that in securing the SCASC specification there are one or two Councils who had been using smartcards outside of that group who now find difficulty porting their systems over. The priority is to work together to get single applications for Scotland for libraries, leisure, etc. and agree the functionality and use of card space, irrespective of the application provider. We're not trying to resolve every problem by April next year but we've already started this work. The problem, which some people seem to be missing, is that if we permitted each supplier to transfer their single application specification onto the multi-app card they would be contending for the same space. Basically, if we allow them to dictate the specification, it will not work.

DE: You know you could if you wished, get a migration to a CPU card by emulating the Mifare on something like a JCOP41. Even although the Mifare emulation isn't ITSO supported now there's no reason why we can't go down that path. In fact there's no reason why we can't take this issue straight to ITSO.

SB: If we want to retain backward compatibility we'll have to include emulation. Whether it needs to be 1 or 4k is the question. At the moment we could simply protect the 1K - the non-ITSO stuff, but we've allowed in the specification for expansion of non-ITSO entitlement card use into the extended card. A lot depends on what consensus we can get from Councils regarding the future development of the mapping. You could argue that there is scope for combining applications on the card to contain the non-ITSO stuff but that would be limiting to system expansion and might cause problems with inappropriate data sharing. In any case it's probably just delaying the inevitable.

DE: So are you up to answering some more questions?

SB: Another beer first I think.

Events Diary

January 2006

18 - 20	Omnicard 2006 - *Berlin - www.omnicard.de*
25 - 26	Security Printing & Alternative Solutions in Central/Eastern Europe & Russia/CIS - *Bucharest, Romania - www.security-printing.com*
24 - 26	Wincor World 2006 - *Paderborn/Germany*

Febuary 2006

13 - 16	3GSM World Congress - *Barcelona - www.3gsmworldcongress.com*
13 - 14	TechMecca 2006 - *The Woodlands, Texas - www.techmecca.net*
14 - 16	*RSA Conference San Jose, USA*

March 2006

07 - 10	IC Card World - *Tokyo - www.iccard.jp*
14 - 15	Citizen Cards Conference - *London Marriott Kensington*
20 - 22	Prepaid Mobile - *Prague Czech Republic*
21 - 23	The 14th Convergence India 2006 international exhibition & conference - *New delhi, India - www.convergenceindia.org*
23 - 24	Smartcard ID Summit - *London - www.informa.com*

The War Against Identity Theft Evolves

By Paul Meadowcroft, Head of Transaction Security, Thales e-Security

Identity theft is the top security issues facing banks today. While efforts to tackle fraud have begun to show positive results, for example, the introduction of EMV saw a reduction of 13% in the first half of 2005 in the UK according to APACS, identity theft levels are growing. ID theft has increased by 500% since 1999 and now costs the UK economy £1.3bn a year, forcing defences against this crime to evolve rapidly. In the past few years this has led to the emergence of Smart Card based integrated authentication networks.It is worth pointing out that one of the main reasons that techniques to defend against identity fraud have not already been widely deployed is the cost involved.

Paul Meadowcroft

Organisations, be they banks, other enterprises or the public sector, have struggled to justify the extensive costs that are associated with mass-deployed and flexible identity systems that are required to meet the identity fraud challenge. Yet there have been high profile examples of extremely successful deployments such as the award-winning BACSTEL-IP system. Identity security has developed beyond the simplest form of authentication where one party issues and verifies identities within a closed group of users. While easy to do, this approach is extremely hard and costly to scale upwards and offers no interoperability with other authentication networks. As such, a more common technique being used widely today is the use of a federated identity network. This allows individuals to use one form of identity to authenticate themselves to a range of different organisations. As such, an individual could use one username/password, token/PIN, digital certificate/passcode issued by one organisation for authenticating themselves to a completely different organisation. This approach solves many of the problems associated with the closed group identity security approach. For a start, the enormous investment involved in issuing digital certificates on smart cards, for example, can be recouped to some extent, by deriving revenue from allowing other organisations to authenticate their users with the same identity. There are also benefits for the users themselves as they do not need to carry or memorise a wide range of different passwords, PINs or tokens such as smart cards. In addition, co-branding and other marketing opportunities can be used to generate extra revenue within the community of organisations that are using the same federated identity group.

There are, however, significant challenges with this approach. Central to this is the level of trust that must be given by an organisation using another organisation's authentication network. Essentially, an organisation that is joining another's authentication network must have confidence in the checks that have been carried out to guarantee the identity of the user. Privacy laws have further compounded this as one organisation is unlikely to be able to share any meaningful information with another organisation to prove that these checks are robust. The result is that such schemes tend to rely upon the lowest common denominator authentication (typically username/password) and are used within small communities of interest. The ability to use a federated identity approach in a highly scalable environment is limited because of the levels of risk involved in relying upon the work of the issuing organisation. However there have been notable implementations such as the USA CAC programme where the departments are required to use a universal registration process.It is for this reason that a new integrated identity approach has emerged in the last two to three years. In this approach the focus is on a single application being used at the hub of the authentication network which allows all participating organisations to be issuers. The key lies in the use of an authentication platform that is flexible enough to accept the digital credentials of any participating organisation. A good example of this is the new BACSTEL-IP system. When BACS (now VOCA) wished to deploy a Smart Card based digital identity solution, it needed to be able to authenticate a variety of different trust schemes, including Identrus and various member banks' own PKI certificates. It therefore faced head on the need to have one platform that could authenticate any trust scheme.

The success of the system that was eventually deployed has since received critical acclaim. An additional advantage of the integrated approach is that it need not err towards the lowest common denominator digital identity solution - i.e. username/password. Therefore, should an organisation within the integrated identity group want to be able to use stronger identity for some, if not all, of its transactions then this is possible without interfering with the requirements of other participants.
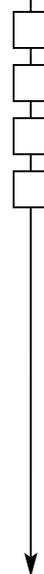
As such, one organisation may consistently have high transaction values that would justify and require a more robust authentication solution than lower value transactions would. This is based upon a financial risk versus cost of solution basis but does allow for the widespread use of a single Smart Card based solution. Integrated identity also circumvents the data privacy issue as each organisation need only access the particular information required during the authentication process for that transaction to take place. If the user wished for personal information to be held for use by multiple parties then this can still be done. However, it is much more likely that each application will hold the minimum amount of information required. Other, more sensitive details such as trading limits can then be held completely independently of any other party within the community.

It is envisioned that both federated and integrated identity networks will be increasingly deployed. The federated approach is thoroughly suitable for small communities that have rich, intensive interactions with simple risk management requirements. For large application owners who want a simple means of deploying and managing applications across a range of communities, the integrated approach will be preferable. This is especially because it also allows for a tiered authentication and risk model, and addresses privacy issues. Furthermore, it has the advantage of allowing any digital identity credentials that are already deployed to be used.

Cartes 2005 - Reminiscing

It seems like only a few days ago but Cartes 2005 is fast passing into the background as does all matters associated with leading technologies. What is new today becomes history in a matter of months. Before time passes too far along here are a few thoughts of the more thought provoking events at the show. Point of Sale terminals, the major players were all there, Ingenico, Hypercom, Verifone, and many other smaller companies. In principle they are all doing the same things, EMV in portable and counter footprints. Very much in vogue this year was pre-authorised debit cards (from both Visa and Mastercard), an epurse in disguise. The differentiation comes in the ways in which these companies can handle the particular requirements of the retailers for their own individual networks.

A core part of the business of these companies is the necessary tailoring of the product, Ingenico who have been at the forefront for the last few years and in that sense can only lose market share, hold this work close in hand, Verifone by comparison are creating an active integrators market for tailoring the products. History shows us that the 'Open approach' usually ends up being the winner. Perhaps more significant to me was the inhouse enthusiam and confidence exhibited by Verifone's staff - they really believe they are going to win! See more details on their latest figures elsewhere in the newsletter. M-Systems were expounding their MegaSim, A SIM card with memories up to 1Gbyte or more. An approach being adopted by many of the SIM chip suppliers. The question here is do we need this much memory? One still remember Bill Gates who in 1981 was reported as saying "640K ought to be enough for anybody." Not wishing to make the same mistake but one has to question why you might need a Gbyte of memory in a SIM card. The SIM (and USIM) is the Network Operators security endpoint, i.e. it is a cryptographic security token. It is not normal to store large amounts of data in a security token because you can so easily apply the neccesary security services for confidentiality and data integrity and store the protected data in a cheaper and possibly more portable memory device. I would have thought that security and communications speed were far more important characteristics.

Near Field Communications (NFC) was very much in evidence at the show although not yet really available in the marketplace, I'm still struggling to communicate with Nokia who were happy to sell the shells but don't seem to want to make the development software available. Anyway its clear I have been worrying too much, both Visa and Philips gave a good account and convinced me that NFC really is just around the corner, although I noticed that Samsung with the D600 seemed to be the preferred route. And the Smart Card multi-application market? Well Multos is still there, now owned by Keycorp and the venture capital fund but seems to be really only thriving in niche markets, will there now be a change of direction? In the mobile space at least, Java card dominates, and that's an awfully big market.

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Near Field Communication: The Intuitive Link Between Consumer Devices

PHILIPS

By Taoufik Ghanname, Marketing Manager Consumer & Multimedia, Business Line Identification, Philips Semiconductors

Taoufik Ghanname

Picture this example: You have seen a poster advertising of a concert with your favourite band. By flashing your mobile phone or PDA near the poster, you are able to download information about the event from a smart chip in the phone. You can then immediately and securely buy tickets and store them electronically on your handheld device. On the night of the concert, you can access the venue without ever having the need for a paper ticket and payment is just an item on your phone bill. All in a manner as easy as this sounds, it is not impossible and will be a reality soon.

With trials underway now, Near Field Communications (NFC) technology, a combination of contactless identification and interconnection technologies, is set to drastically change the dynamics of consumer electronics by opening up myriad new opportunities. It will significantly impact the way consumers shop, travel and exchange data. Consumers will be able to seamlessly connect different electronic devices including PDAs, mobile phones, video set top boxes, digital cameras, laptops and PCs via a fast and easy wireless connection that operates in the 13.56 MHz frequency range. Mobile payment and transactions with NFC exploits two basic principles of modern society: everyone needs to pay for products and everyday services and just about everyone carries a phone. Results from worldwide implementations demonstrate that consumers everywhere like the convenience of mobile payment. In fact more and more consumers are today using mobile phones to download paid content such as ring tones to their phones. NFC offers a standardised next generation connection that will enable consumers to access digital content such as ring tones, songs, games, web links, discount coupons etc from items such as posters, magazines, kiosks and also enable device to device transfer among NFC equipped cellular phones. With the majority of electronics equipped with Bluetooth today and Wi-Fi in the future, NFC can act as an enabler to facilitate data exchange transfer among consumer devices.

While NFC's intuitive character makes it extremely easy for consumers to use, its built in security makes it ideal for mobile payment and financial transaction applications. NFC is a short range technology. Compared to Bluetooth for example, it is just a few centimetres. While carrying out a Bluetooth transaction for example users have to typically go through many steps and identify devices that talk to one another but owing to its short range intuitive nature, NFC enables pairing of devices rather quickly. At the same time, NFC can also be combined with Bluetooth for exchange of data. Consumers can use their Bluetooth enabled mobile phones for downloading pictures from their PCs or TV by bringing the two devices in close proximity of each other. As soon as the NFC link is established, the secure download process with be continued and completed by the Bluetooth enabled mobile phone. In an environment rich with wireless enabled devices, NFC is the easy way to set up connections without the need to go through complicated menus. It provides the convenience factor to consumers. Consumers will also be able to make online travel reservations using a PC. Reservations can be downloaded to a mobile device (cell phone or PDA) by bringing it close to the computer and simultaneously checking-in for vacation or hotel reservations by holding the mobile device to the terminal or kiosk at the departure gate. No printing of documents, such as tickets and hotel receipts is required.

Jointly developed by Philips and Sony, NFC has taken major steps towards market acceptance. It is already standardised for global interface and communication protocols such as ISO (18092), ECMA (340) and ETSI. In 2004, Nokia Corporation, Philips and Sony founded the NFC Forum, a global standards development and advocacy group with more than 60 leading companies promoting the technology from around the world. The Forum is dedicated to advancing NFC technology, educating the public about its benefits and furthering its implementation worldwide. Already, Philips NFC-enabled high end mobile phones are available from Nokia (3220) and Samsung (D500). In its current form, numerous field trials are being deployed around the world to understand how this technology will benefit the lives of consumers.

Industry Insight

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One such trial is currently being undertaken in the City of Caen in France. In October 2005, Philips in collaboration with France Telecom, Orange, Samsung and retailers Group LaSer and Vinci Park commenced a major multi-application NFC trial in Caen in Normandy, France. During the six month trial, 200 Caen residents will use Samsung D500 mobile phones with an embedded Philips NFC chip as a means of secure payment in selected retail stores, parking facilities and to download information about famous tourist sites. Another trial underway since December 2005 is at the Philips Arena stadium in Atlanta, Georgia, allowing sports fans to easily buy goods at concession stands and apparel stores using their NFC-enabled mobiles as contactless payment tool. Additionally they are able to access and download mobile content such as ringtones, wallpapers, screensavers and clips from favorite players and artists by holding their NFC phones in front of a poster embedded with an NFC tag.

Moreover, NFC offers a unique link to the contactless smart card world. It is compatible with the broadly established smart card infrastructure based on ISO-14443 A (i.e. Philips MIFARE technology), ISO 14443B as well as Sony's FeliCa card used for electronic ticketing in public transport and for payment applications. NFC devices can operate in a reader mode that allows communication with a wide variety of contactless smart cards or RF transponders (tags). NFC devices can also work in a card emulation mode, which enables NFC devices to act as a smart card towards Smart Card readers, such as public transport and point of sale terminals. NFC creates new opportunities for mobile commerce and has the potential to change consumer behaviour and spending habits. Its unique intuitive operation makes it particularly easy for consumers to use. When combined with a smartcard IC, it is also ideal for payment and financial applications. The many field trials around the world with NFC enabled mobile phones are an essential step for bringing NFC into everyone's mobile phone. In times to come, NFC will revolutionise the way people access and pay for information and services. With the mobile communication industry working closely together to ensure interoperability between devices and services, it will only be a matter of time before people can access content and services in an intuitive way by simply touching smart objects and connecting devices just by holding them next to each other.

Dishonest Britain

By Dr David Everett, Chief Executive Officer, Microexpert Limited

TSSI Systems Ltd recently conducted a survey of UK citizens to test their honesty assumed to be among the best in the world. The survey was conducted on 1000 citizens between the ages of 18 and 60 comprised of a cross section of workers in the financial, government, retail, civil services, healthcare, education, professional services, manufacturing and services sector. Questions were divided into three main areas, access control laxity, computer identity abuse and citizen dishonesty. Questions included: Have you ever lent or borrowed a work access pass, password, or passcode, if you or a colleague had accidently forgotten it?Have you ever charmed your way into a building where access controls are usually required or in place? Have you ever used somebody else's email account to send emails without their knowledge or consent?Have you ever deliberately looked over someone's shoulder to watch them entering their computer PIN?Have you ever used a fake ID card?Have you ever exagerated your educational qualifications? Have you ever forged any of the following:· Signature, ID card or document, Doctor's note, Reference letter, Letter on company letterhead, Travel tickets and/or Concert tickets. Now before I give you the results what would you expect?

A criminal psychologist once explained to me that the population (I think of any culture) can be broken down into 3 sectors; Totally honest (25%), Totally dishonest (25%) and will do what they can get a way with (50%).In other words 75% of the population are dishonest. Unfortunately however nobody in the commercial world seems to recognise the totally honest sector. As a trusted bank manager of many years experience explained to me, the totally honest people are just the ones that haven't yet got caught! So 100% of the total population are to some extent dishonest. It is tempting to say well of course we all take the odd pencil or pen but it is my experience that the degree of dishonesty is proportional to the authority that an individual commands. School children may deal in sweets and pencils but company directors may abuse assets worth millions of pounds.
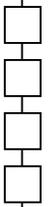
- ❑ Dishonesty and fraud are widespread in the UK
- ❑ 45% of people admitting to forgery
- ❑ 10% admitting to low level identity theft
- ❑ 32% of people conned their way past the security personnel
- ❑ 21% of the people admitted to using fdake identity cards
- ❑ 26% admitted to exagerating their educational qualifications

The report concludes that businesses and consumers need to take action quickly to prevent identity abuse affecting them, identity fraud is now a major risk. The report helpfully provides recommendations for companies to improve their ID security; (1) Identiy a role holder responsible for physical and logical access control, (2) Audit the movement of staff into and around your building and (3) Avoid the the copying and borrowing of PINs and passwords by employing cost effective biometrics

Only by implementing a measurement of something you are - a biometric - can high levels of security be assured. TSSI is not new to the world of biometrics having recently won the IEE Innovation in Engineering Security award (September 2005). So where does all this leave us? The fact that identity theft is a (the) major risk in today's world is not in doubt and the propensity for people to be a little casual over obeying the organisation's rules and regulations is an accepted fact. Are biometrics the solution to this problem? No! they are part of a solution and this is the important point, biometrics on their own are not better than a PIN or password in fact I would argue they are worse. There are two factors that relate to this discussion; Transferability and Error rates

In principle biometrics are not transferable compared with say a PIN or password, however in practice the reverse may be true. It is possible to take your fingerprint (for example) without your knowledge and create a false finger which has been shown to fool most commercially available fingerprint recognition systems (see Professor Matsumoto, Yokohama University), A password however if reasonably managed requires an absolute consent and transfer process.Error rates are another issue with biometrics, the human body is under constant change and any biometric template will need to be refreshed, in practise a biometric comparison is a statistical measure about some confidence level that the presented biometric matches a stored reference value. PINs and passwords by comparison are absolute (assuming you remember them) and don't have such statistical properties.

Now all of this is not to say that you shouldn't use biometrics only that in technical terms it should be part of at least 2 Factor (2-F) authentication, e.g. possesion of a Smart Card and a fingerprint. More particularly the management of this biometric is critical and for a short discussion we can say it should be managed with at least the security sensitivity we would apply to a PIN. What better then than to have the smart card actually do the verification, this is usually called 'Match on Card'. Here is where the TSSI fingerprint solution starts to look particularly attractive, the Verid+ scheme claims to have the world's smallest fingerprint template with 52 bytes of data. It's not only the storage space that matters but also the processing overhead of matching the data which ideally is better done on a smart card. In general the smaller the template the less processing overhead for the matching. TSSI's patented solution is based on Moire Fringes.

In the end we are really talking about ID cards which at one extreme can be part of some closed group (e.g. the local health club) or at the other end of the spectrum can be international as in the case of an ePassport. The purpose of these cards is to provide a non-counterfeitable object with cryptographic capability for authentication by parties sometimes different to those that issued the card and for providing some method of linking the cardholder to that particular card. In some environments that might be a PIN (e.g. credit card chip & PIN) or in the wider sphere a biometric such as fingerprint might be deemed more appropriate. TSSI also have a presence in this area with their National Health Service (NHS) Occupational Health Smart Card Scheme (OHSC) which uses a smart card and PIN to verify a Doctor's identity and credentials to practice safely with their patients. While on the subject I would like to take this identity problem one stage further since we now have a 14% identity error problem with patients (for their treatment or tests). This means that one in seven patients will have the wrong surgery or treatment because of mis-identity of them or their tests. Smart cards and tags would seem to provide an attractive solution here!

Market in Figures

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ID Data's Road to Recovery

By Jason Smith, Staff Reporter, Smart Card News Limited

Jason Smith

Formed in 1988, ID Data has recently re-valuated its postion within the smart and magnetic card industries, due to the need to recover incurred losses and lower its cost base. In recent years the Smart Card industry has been challenging for ID Data. Their pre -tax loss for 2004 was £2.7 million. However, with the roll out of EMV Chip and PIN, the rise of the GSM market, the gift card concept and the government push with ID and other cards, the market is now buoyant. In their interim report for the six months ended 30 September 2005, ID Data showed that they had more than halved their pre-tax loss to £1.2 million. They expect their second half performance to improve further. Their turnover fell to £6.6m from £10.3m the year before.

"The outlook remains encouraging with major contract negotiations taking place in the banking, retail and government sectors." Said Peter Cox, CEO of ID Data. To achieve this increase in ID Data's incurred losses, the company has made movements to reduced their production costs and raise additional working capital by exploring a number of alternative options.

To help build on the company's recent success in gaining significant contracts to reduch their losses, ID Data has issued, on the London Stock Exchange, a new share issue of £5.0 million. Investors have further signalled their commitment to the company by agreeing to convert £3.7 million of long-term debt into equity, giving them shares in ID Data. "We see our new funds and conversion of debt as a major vote of confidence in our strategy. Our objective now is to place our focus on our marketing and sales activities and to gain the appropriate business to ensure our company is a leader in its chosen fields." Said Mr Cox.

As part of an ongoing review of the business the Directors of ID Data decided, in 2004, to close down their Lewes production factory, in Sussex (UK), in order to consolidate their manufacturing capabilities, after the acquisition of Mids & Horsey Limited. Subsequently, since that date ID Data has shipped their Lewes plant and equipment to a new manufacturing facility in Poland. "This move is just one of the many major operational changes in the business that have led to improved operating margins and lower base costs." Said

This new manufacturing facility is based in Bydgoszcz, Poland and is a joint venture with Ortis, a Polish print group, and Argo, a Polish card services company. Initially, the plant has the capacity to produce 150 million cards per year with this figure rising to 250 million cards over the next 15 months.

The joint venture will provide a cost effective source of card bodies for distribution throughout both Western and Eastern Europe. ID Data will use this capability and relationship to develop business through existing and new channels to the market. The name of the new joint venture company is Artis ID. ID Data and Argo Card will jointly generate the card business to fill this facility. Argo Card already has a significant presence in their home market of Poland. ID Data will work with Argo to build financial card sales there but will also add new sales resources in other East European countries.

Factory Opening Ceremony

The equity split of the joint venture is Ortis 44%, ID Data 44% and Argo 12% with ID Data providing the production equipment on a sale and lease back basis. With the increased capacity now available through this new manufacturing plant, ID Data intends to supply cards to customers based throughout Europe, the Middle East and Africa. ID Data believes that, due to Poland's position within Europe and Euro-based pricing, the Company will be able to capture additional market share in Eastern Europe.

Commenting on the opening of the Polish facility, Peter Cox said: "The move to Poland, and associated cost reductions, will be an important factor contributing to ID Data's move towards profitability. Poland's lower cost base gives ID Data a competitive advantage that puts us ahead of our European competitors."

The purchase of the new facility in Petersfield, Hampshire, UK in 2004, has given ID Data a modern EMV approved facility in the UK. The facility is set to be expanded to provide not only card production using digital processes, but also advanced card personalisation and delivery systems. The facility has a capacity to personalise and mail over 80 million cards per annum. This new capacity will be used to forge a strong position in the rapidly expanding retail payment card markets in Europe.

In its new drive for lower costs, ID Data has implemented a 30% reduction in its head count since December 2004 and most of this reduction has come from the Corby, Northants personalisation plant. From rumours and looking at the balance sheets of the company it appears that the overall closure of the Corby plant could be a potential next step for ID Data, however this possibility is denied by the company.

Last year's acquisition of CardBASE, the Irish software company, has begun to add to the company's ability to move into the systems integration space. The company has secured a contract with Bracknell Forest, a leading local UK authority, for the Government's National Smart Card Project. This contract together with the existing contract for the supply of the Post Office Card Account, makes ID Data one of the largest suppliers of Smart Card solutions to the UK Government.

The company's banking activities are also seeing an increase through its joint venture with TTi and Toshiba and Toppan, two of the world's biggest names in advanced technology. Through this joint venture ID Data has secured and delivered 23 million EMV chip cards to the sector, and has personalised many of these cards on behalf of its clients.

ID Data has also recently won major contracts with Citigroup, for their launch of Chip and PIN bank cards, and GE Capital. In retail ID Data has renewal contracts for the launch of a key fob product and the reissue of 11 million Tesco Club cards with new branding together with the patented 22 million key fobs.

With the move to Poland completed and ID Data's new business strategy model now in place to make money, the challenge now for ID Data is to build a sales network with the skills to exploit their new capabilities. The global card business is estimated to reach US$4 billion by 2006 so the business is there, its now up to ID Data to increases their share. However with the merger of Axalto with Gemplus we will see how this will effect ID Data in the long term. To conclude I leave you with a quote from Mr Cox "We are now in a solid position to expand our global coverage and reinforce our ambitions to become a profitable market leader in our industry."

Merry Christmas
and a Happy
New Year

Company Spotlight