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NamITech

Although it isn't immediately obvious that the photographs on the home page are in fact navigation buttons, NamiTech's website is attractively designed in standard corporate styling, and pleasingly functional. Intelligent structure ensures that the visitor cannot get lost easily amongst the wealth of information on offer. NamITech's wide range of products is presented in rather basic, but easy-to-understand language, and is refreshingly unpretentious. The cross-linking between related sections is a useful touch, as is the archive of press releases, stretching back almost two years. Those with little or no knowledge of NamITech's activities will leave their website feeling more informed.

www.namitech.com

Navigation	■■■■■
Content	■■■■■
Appearance	■■■■□

Datakey

The home page features an imaginative take on the Smart Card chip image, which incorporates a set of links to the main pages of each section. Navigation elsewhere is good, making use of simple pop-up menus on the left of each page, which adds some movement into a rather static design. Datakey's website is packed with information on their products, with each given detailed descriptions and screen shot demonstrations clearly aimed at a technically minded customer base. Crucially, for a site with such dense content, the search engine is well designed and returns results with highlighted text based on the terms searched. Journalists will like the news and events section, which is regularly updated, as well as keeping an archive back to 1999.

www.datakey.com

Navigation	■■■□□
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Utimaco Safeware AG

Ultimaco specialises in IT security solutions, and their website benefits from a clean layout and well written content. Disappointingly, for such a well structured site, the design is rather bland and colourless, with blue and white yet again the dominant choice of technically based business. Navigation is very good, and it is encouraging to see that all three websites this month have employed Adobe's PDF technology for the longer articles and publications. Clearly, content has become a highly valued comodity amongst website authors in recent years.

www.utimaco.de

Navigation	■■■■■
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ERG to Sell Proton World After Group Losses

Australian Smart Card transport ticketing group ERG is in advanced negotiations to sell Belgian-based Proton World which it acquired only a year ago for A$112 million.

The news came as ERG reported an overall operating loss of $124.9 million for the half-year to 31 December 2002, compared to $199.4 million in the previous corresponding period. ERG recorded an EBITDA loss of $19.6 million (compared to a loss of $17 million in the previous year), before one-off write-downs and charges against an aggressive cost-cutting programme initiated last year. The half-year result includes a write-down of A$52.4 million on the book value of Proton World. An additional A$40.9 million due to ERG on an earn-out basis under the proposed sale has not been accounted for. As part of the deal, ERG will retain access to the Proton technology by taking a 20-year global licence for its technology.

Chief Executive, Peter Fogarty, said the disposal of Proton World is in line with the strategy announced at the 2002 AGM to strengthen the group's balance sheet and reduce cash outflow. The deal is expected to be signed this month and is expected to realise approximately A$110 million at settlement, excluding the A$40.9 million earn out payment. Selling Proton World will allow a significant amount of capital to be redeployed to ERG's core transit ticketing business, explained Fogarty, while ensuring long-term access to PW's core technology which will allow the group to continue with its multi-application Smart Card strategy.

"The proposed transaction will provide a positive impact on operating results by reducing ERG's operating cash outflows and eliminating annual goodwill amortisation charges of approximately $15 million," he said.

Recent ERG contracts

Last month, ERG was awarded a US $63 million contract to establish a regional fare collection system for Seattle and the Central Puget Sound area of Washington State, USA. The project involves the design and implementation of a Smart Card system across 2,065 buses and the commuter rail and ferry services, as well as the fare card and services management for 10 years after implementation. It is expected that 400,000 Smart Cards will be issued when the first phase of the project goes live in about two years.

Also last month, the company finalised a contract worth A$320 million with the New South Wales Government to supply, install and operate a new Smart Card ticketing system for Greater Sydney's public transport network. It is expected that some two million Smart Cards will be issued during 2005 with the system being fully operational in 2006.

As previously reported (SCN, February, 2003), ERG, along with Northrop Grumman Information Technology, was selected by the Washington Metropolitan Area Transit Authority to install and operate a new Regional Customer Service Centre for its SmarTrip Smart Card-based fare collection system in a deal worth US $20 million over the five-year contract.

Contact

🖳 www.erggroup.com

ORGA Sold to GW Card Holding

Bamberg-based GW Card Holding, a sister company of GHP Holding, has acquired the ORGA Group of Paderborn, including its system house, from the authentos group. The sale is subject to approval by Germany's Federal Cartel Office.

"We are delighted that the future of the entire ORGA Group has been secured by this acquisition," said Dr Ulric Wöhr, CEO of the authentos group. "Now ORGA can turn all its attention and energy to winning back its former market position and make use of synergy effects with the new owner to selectively expand its portfolio of products and services for Smart Cards."

"This acquisition is the next logical step in expanding and rounding out the range of services offered by our group," said Dr Jürgen Wolf, managing co-partner of GW Card Holding and CEO of GHP Holding. "We are already the European leader in interactive marketing. Together with ORGA and its products, we are now deepening our involvement in the promising Smart Card market and will be able to offer a full service that will set standards worldwide."

The partnership between ORGA and Bundesdruckerei and its sister company Security Printing and Systems (SPS) will continue.

New Chip Development

A single-chip for GlobalPlatform multi-function Smart Cards that supports Visa Smart Debit/Credit (VSDC) payment and contactless applications based on FeliCa and other industry standard contactless interfaces is being developed under an agreement between Visa International, Sony Corporation and Infineon Technologies.

Visa wants the new chip to be available by the end of this year for incorporation into the Visa Smart Card Program, making it easier for members to implement FeliCa-based transit, loyalty and e-purse applications on Visa payment cards.

Visa says that over 60 million Visa Smart Cards based on EMV contact payment technology have been issued worldwide and more than 35 million FeliCa contactless cards have been issued in many countries around the world, including Hong Kong, Singapore and Japan.

64K Microcontroller From Hitachi

Hitachi has a new low-power, high memory capacity, 16-bit microcontroller for the implementation of multiple large applications in one Smart Card.

Called the AE46C1, it employs an 0.18μm CMOS process that enables it to incorporate high-reliability memory technology and reduce power consumption to approximately half that of Hitachi's previous AE46C model.

The new microcontroller offers advanced security technology and is designed for use in Smart Cards that require increased functionality and memory capacity, such as W-CDMA-USIM cards for third-generation mobile phones and multi-application cards.

The AE46C1 incorporates 68K bytes of MONOS (Metal Oxide Nitride Oxide Silicon) type EEPROM. The device also offers 368K bytes of mask ROM which is large enough to store applications and data in addition to the operating system. This frees up space in the EEPROM, enabling the implementation of multi-application Smart Cards incorporating several large-scale application programs.

Atmel IC for New CB Card

Atmel Corporation has announced that its secureAVRT AT90SC9608RC has been selected as the silicon platform for the next generation of chip-based French bank cards being developed by Sagem for Groupement des Cartes Bancaires (SCN, February 2002).

The AT90SC9608RC microcontroller has 96K of ROM, 8K of EEPROM, 3K of RAM and a 16-bit high performance RISC co-processor.

Currently there are in excess of 45 million CB cards in circulation, which will be replaced by the new EMV (Europay/MasterCard/Visa) specification cards starting in 2004.

Contactless White Paper

The dual advantages of fast and convenient payment using contactless technology is generating more interest and numerous implementations and pilot trials in the United States, according to a new Smart Card Alliance white paper.

"Anyone who has ever seen a contactless payment take place at a highway tollbooth understands two

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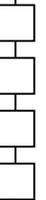
things about it - it is fast and convenient," said Randy Vanderhoof, Executive Director of the Alliance. "Places where speed and convenience are important are the places where the trend to use contactless payment is starting - gas stations, convenience stores, fast food restaurants, transit systems and other venues where people are on the go."

The white paper provides a comprehensive look at several existing contactless programs around the world, presenting details on the numbers of cards issued, the technology used, the transaction model and any additional applications involved. Other topics include: benefits and costs of contactless payment for retailers and issuers, the case for using contactless technology for payment, business case and technology considerations, contactless payment technology options and contactless payment transaction models The report, Contactless Payment and the Retail Point of Sale: Applications, Technologies and Transaction Models, is available free of charge.

Low Cost Contactless Tickets

European ticket printer Paragon Identification of France and Rafsec of Finland are co-operating to develop low cost contactless ticketing applications for the transit market. Paragon will convert and personalise Rafsec's family of new ticketing transponder packages which are available on either ISO 14443 A or B platforms.

Smart Card Software for US Army

RSA Security has announced that it has been selected by the US Army to provide its RSA SecurID Passage Smart Card software for the signing and encrypting of e-mail, cryptographic network logon and client authentication to Web sites.

The contract, awarded to Northrop Grumman to support the DoD's Common Access Card (CAC) program, was competitively procured through the Army Program Management Office SET-D. The US Army has allocated $9 million to the project, and RSA Security has the opportunity, along with two other vendors, to compete for this amount.

GAMBIT Support in Caribbean

Monaco Information Systems USA (MIS-USA) has announced the opening of their Caribbean Regional Support Center, located in San Juan, Puerto Rico. MIS-USA officially celebrated the new office on 19th March, 2003 during a grand opening ceremony held in the new office. The ceremony included a demonstration of how casino operators in the area can use GAMBIT, an advanced technology gaming system includes advanced CRM functionality, cashless Smart Card technology and fast ethernet to the slot machine communications, to drive incremental visitation to their properties.

Controlling Road Transport

Fábrica Nacional de Moneda y Timbre (FNMT) has been selected by the Transport Ministry of Spain to develop a road vehicle transport control system using a digital tachograph.

The digital tachograph will be compulsory for trucks and buses of more than 3.5 tons from August 2004 in all EU countries. It will store information on speed, distance, driving and resting times and any incidents of exceeding speed limits, as well as personal data on the driver. This information will be stored securely on a Smart Card for 28 days.

It is expected that 300,000 cards will be issued to drivers. The driver card will be white, the authorities card will be blue, while transport companies will have a yellow card and the workshop card will be red.

EMV 2000 Level 2 for Dione

Dione has announced certification to EMV (Europay/MasterCard/Visa) 2000 version 4.0 (level 2) for its Payment Application Kernel.

TSA to Pilot Smart Cards

The US Transportation Security Administration has almost completed the planning phase for its Smart Card program and is finalising a set of requirements for two pilot sites in Philadelphia and Los Angeles.

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Growth for Mobile Payments

Revenues from mobile payments will grow dramatically worldwide to US $20 billion in 2005, according to a new report from ARC Group. This represents an annual growth rate of over 100%, and will come mainly from new types of transactions such as pre-paid top up via automatic teller machines (ATMs).

Current forms of mobile payments include premium SMS messages and these will be followed by pre-paid top up services, either direct from linked accounts or from ATM networks.

Virtual payments are the next generation of mobile payments, and will be used for a wide variety of digital content which is purchased remotely online. Finally, as the retail infrastructure is built out, local point of sale payments (proximity payments) will begin to develop, allowing mobile users to pay for goods and services in retail outlets and at vending machines.

The newer generation of ATMs and vending machines will increasingly be able to communicate with mobile phones, giving consumers the opportunity to gain access to virtual cash and to build up loyalty bonus points. This will mean a repositioning of the players in the value chain, with mobile network operators partnering with credit companies and banks to offer an integrated package of content and payment facilities.

Longer term, ARC Group sees the option of being able to use a virtual credit card as offering significant potential in the macropayments sector (transactions where the value is over US $15). This may favour the larger credit card operators, which already have international brands and technical infrastructures and are moving in the direction of multi-access payment systems.

In both the micro and macropayments sectors, new business models are key to growing the market for mobile services by offering alternative ways for consumers to pay easily, and for value chain players to share revenues profitably.

Smart Cards Can Protect Privacy

Smart Cards can strengthen the security of personal identification systems and help to protect the privacy of individuals and the personal information they entrust to businesses and government agencies, according to a new Smart Card Alliance white paper released last month.

"Individuals, businesses and government agencies all want better protection for individual identities and personal information," said Randy Vanderhoof, Executive Director of the Alliance. "At the same time, our wired world opens possibilities for privacy abuse and identity fraud on an extraordinary scale, as the recent theft of tens of thousands of credit records vividly demonstrated. Smart Card technology can solve these problems today, and our new white paper shows how."

Privacy and Secure Identification Systems: The Role of Smart Cards as a Privacy-Enabling Technology, examines the privacy and data security issues that must be considered when developing a system for individual identity verification, and provides practical guidelines to assist in designing processes and using Smart Cards in these systems. The report, written for executives and managers, is available free of charge.

Cubic $16m Service Contract

Cubic Transportation Systems has received a five-year, $16 million service contract from the Los Angeles World Airports (LAWA) for maintenance of the computerised parking control systems at Los Angeles International, Van Nuys Airport and Ontario International Airport public parking facilities. Cubic has been providing maintenance at the three airports since the late 1980s. The company offered a lifetime warranty to help transportation operators manage costs by extending the operational life of their existing systems while continuing to deliver efficient fare collection and other services.

"For years Cubic mainly has been providing parking control services as a complement to the automatic fare collection system contracts we have had with mass transit operators in the US and abroad. Now we are expanding our service offerings beyond that traditional market to all transportation parking facility operators throughout the US, and including this unique lifetime warranty program," said Richard Johnson, COO for Cubic Transportation Systems.

Biometrics

New Long Range ID Security

New long range identity technology has been developed by Axcess which it claims can eliminate people bottlenecks at building entrances and high traffic security checkpoints while pin-pointing intruders within the facility.

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Called the Axcess ActiveTag RFID (Radio Frequency Identification), it can read cards up to eight feet away from a control point giving "hands-free" access, precise locating of critical personnel and the automatic identification of people not carrying authorisation cards.

Bioscrypt Protects Cash Handling

Kaiser-Permanente, America's largest health plan provider, has announced that it is installing FKI Security Group's NKL Cash Handling systems equipped with Bioscrypt fingerprint access readers throughout its facilities in California at a cost of $3 million dollars.

"We made the decision to replace existing drop safes with intelligent safes that offer cash dispensing and biometrics entry," explained Project Manager Jeri Bennett of Patient Business Services for Kaiser Foundation Health Plan. "Our primary goal was to decrease the distance an employee had to travel in a building to make deposits. We see this as a very real life safety issue for employees."

The Kaiser Permanente southern and northern California operations serve more than 6.3 million members and employ close to 100,000 people including 8,000 physicians. The region is served by 11 major medical centers.

Biometric Security for Amex

Bioscrypt, of Toronto, Canada, has announced that American Express has integrated Bioscrypt fingerprint readers into its security system at its worldwide headquarters in New York City.

ID Specialist Joins Bioscrypt

Oscar Pieper, founder and former CEO of Identicator Technology, has joined Bioscrypt as an advisor to the management team. He is a specialist in identity management, including fingerprint recognition.

Integrated ID System

Motorola is upgrading Harris County's integrated identification network in Texas under a $5.9 million contract which will include Motorola's Automated Fingerprint Identification System (AFIS), LiveScan and photo imaging technologies.

"As the third largest county in the United States with a population of over three million, we needed a system that could meet our current identification needs, while providing the ability to expand to accommodate our growing population," said Pete Schroedter, AFIS Manager for the Harris County Sheriff's Department.

Harris County is responsible for maintaining the largest jail facility in the state of Texas, including all pre-trial arrestees and those convicted of misdemeanours. The county also provides court services for all County and District courts.

As part of the system upgrade, the County Sheriff's Department will utilise Motorola's Omnitrak AFIS/ Palmprint Identification System which includes fingerprint matching. Future plans include implementation of a regional AFIS, system expansion to adjacent counties and mobile fingerprinting capabilities in Harris County patrol cars.

Access and ID Management

Datakey has announced Datakey Axis, its solution for simplifying access and identity management throughout large and medium-size companies.

Datakey Axis consolidates all credentials (passwords, certificates, shared secrets, biometric templates) on one Smart Card and automates user access to corporate applications through a single Smart Card sign-on. Administrators can enforce strong password policies and automatically push updated credentials to user Smart Cards without the user knowing the password or taking any action.

Family Finance Card In Kenya

The Family Finance Building Society in Kenya has launched a new Smart Card. A new Automated Teller Machine (ATM) has been introduced by Family Finance, and is the first to bring Smart Card banking to Kenya.

Guardian Angel Protects Children

Oberthur Card Systems and Alcatel demonstrated their Guardian Angel, which allows parents to keep track of their children on their way home from school, at the 3GSM World Congress in Cannes last month.

To set up the service, the parent first accompanies the child on the chosen route, using the Oberthur SIMphonic Pico SIM-based application on the child's mobile phone to mark checkpoints intermittently throughout the journey. Alcatel's location server then defines the area in which the child should walk.

The Guardian Angel tracking system regularly sends messages to the child's phone which then sends a reply which is cross-checked, the route being compared to the predefined one. If there is any disparity between the two routes, the Guardian Angel server sends an SMS to the parent's mobile phone. The parent is also alerted if the child does not reach home within a predefined time frame.

Mobile banxafe, the first national mobile payment and banking service in Belgium, was announced at the show. It has been launched by Belgian mobile network operator Mobistar and was developed in conjunction with Banksys, Belgium's electronic fund transfer operator and Smart Card provider Gemplus.

Mobistar customers will be able to use their prepaid account with their mobile phone which utilises Gemplus' Java Card technology-based SIM ToolKit and the Banksys payment platform.

SchlumbergerSema chose the 3GSM World Congress to announced its latest feature of dual mode capability in its Usimera Smart Card for mobile and contactless transactions.

The company says that the Usimera 3G card marks a decisive step towards multi-usage cards and paves the way towards offering both local and remote services. Customers will use it for phone calls, ticketless travel, building access and other services to come. Eventually the Smart Card - combined with new handsets - could provide a replacement for many of the cards that customers currently have in their wallets.

Gemplus OTA Platform for 3 UK

Gemplus is supplying an Over The Air platform and USIM cards for 3 UK's multi-media communication services in the UK.

ST/Aspects Software Agreement

STMicroelectronics and Aspects Software have signed a license agreement to provide a system solution for a Java Card technology-based GSM SIM aimed at cutting development time and speeding up time to market for card manufacturers and network operators.

The companies will combine the ST19WG34 secure microcontroller in ST's 0.18μm EEPROM with Aspects' OS755 GlobalPlatform compliant Java Card operating system.

According to Robert Brown, Aspects' CEO, the existing mobile phone population is expected to require 1.5 billion new SIM cards by 2004. "We expect most of these, new and replacement, to be Java Card technology-based SIM cards," he said.

GSM-R for Deutsche Bahn

SchlumbergerSema has announced that it has implemented the user management IT system for the new GSM-R (Global System for Mobile Communications - Railway) communications system for Deutsche Bahn, the German railway company.

The GSM-R standard for mobile voice and data communications is a modified version of the GSM mobile radio standard, which has been specially designed for the European rail traffic. Switching to digital technology enables new services, boosts performance and enhances European interoperability.

GSM/GPRS for Sri Lanka

Ericsson has been awarded an order from Mobitel, Sri Lanka as sole supplier for migration of their network from TDMA to GSM 1800 based cellular mobile services and introduction of GPRS. The network will be rolled out in three phases starting in Q2 this year.

G&D Stake in NamITech Holdings

Giesecke & Devrient (G&D) of Germany and NamITech Holdings based in South Africa have announced that G&D will exchange its interest in the NamITech subsidiary Integrated Card Technology (ICT), a local Smart Card supplier, for a stake at the NamITech Holdings level. The deal is due to be completed within a few weeks.

The acquisition will strengthen G&D's technology

partnership in the area of Smart Card technology and solutions for NamITech, and thus its activities in East, West and sub-Saharan Africa.

According to Rex Tomlinson, CEO of NamITech, his company and G&D have shared a partnership of 40 years originating in the automatic currency processing business, and for nearly 10 years they have been co-operating in the Smart Card business, primarily in the telecommunications and financial services sectors.

"This deal is a natural progression of our existing relationship and I am excited about the appointments of G&D managers to the NamITech Board, as they will enhance the technology direction of NamITech in the Smart Card and solution arena," he said.

ActivCard Loss of $45.5m

ActivCard reported a net loss of $45.5 million for the year ended December 31, 2002 compared to $16.7 million for the year 2001.

The results for 2002 include a write-down of other intangible assets of $5.1 million, restructuring charges of $8.6 million and a loss from discontinued operations of $16.8 million. Net loss for Q4 of 2002 was $9.2 million compared to a net loss of $9.8 million for the same period a year ago. However, revenues for the year 2002 increased 34% to $41.8 million compared to $31.2 million for 2001. In Q4 2002, ActivCard reported its fourth consecutive quarterly revenue increase, achieving revenues of $12.1 million, an increase of 79% over the $6.8 million reported in Q4, 2001 and 1% higher than the third quarter of 2002.

Chief Executive Officer Steven Humphreys commented: "We are very pleased with the revenues we achieved in the fourth quarter and our 2002 growth rate of 34% is at the high end of the objectives and guidance we provided at the beginning of 2002."

Markets on-hold Says XIRING

XIRING, a provider of Smart Card based secure transaction solutions, has reported a turnover of €11.1 million, an increase of 33% compared to 2001. This is the fifth consecutive year that XIRING has reported an increase in turnover.

But Georges Liberman, President and CEO, warned that markets were on-hold. "The end of 2002 has seen a strong slowdown of the activity in Europe.

Moreover, the launch of the Moneo electronic purse in France has proved to be slower than what the banks had originally planned. This is why we think 2003 will be a year where we will consolidate our current positions.

"Markets are on-hold, waiting for potential conflicts to be resolved and for the economy and the financial markets to recover."

Keycorp Reports Profit

Australia-based Keycorp has reported a $1.1 million net profit for the half year to December 2002 against a net loss of $27.6 million in Q1 2002 and a $321.5 million loss for 2001-2002. Revenue for the six-month period was $52.3 million, compared with $45.8 million for the corresponding period.

Keycorp CEO Bruce Thomson said: "We are on the path to reporting, as promised, a profitable result for the full year." He said the turn around was due to a successful cost reduction programme and improving revenues, with growth in access devices and Smart Cards picking up.

FDC to Acquire TeleCash

First Data Corporation is to acquire TeleCash Kommunikations-Service from T-Systems International, a division of Deutsche Telekom, subject to regulatory approvals. TeleCash is an electronic payment network operator that enables merchants to accept debit, credit and charge card payments through a network of 166,000 point of sale terminals.

Pam Patsley, President of First Data International, explained: "The acquisition of TeleCash expands our commitment to meet the payment processing needs of banks and merchants across Europe."

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Gemplus View on m-Commerce

by Patsy Everett, Managing Director, Smart Cards Now

Smart Cards Now talks to Jerome Nadel, Vice President, Market Intelligence and Communications Manager, Gemplus

PE   I would like to get Gemplus's view on Samsung joining the Symbian GSM operating system camp. What does this mean to Microsoft? What are your views on Java in GSM: do you think it will be the main approach, or will it still be the SIM toolkit? I would like to hear the Gemplus view on the GSM business for 2003. Do you think it will increase or stay steady?

JN   When you say GSM we can look at cards only or the totality of our business, within the GSM market.

PE   We've been looking at your press releases coming out this week from the 3G World Congress, and it looks like Gemplus is really heavily involved in mobile telephony.

JN   Yes, clearly the majority of our revenue comes from the telecom business. Are you are aware of our other two core business units? Both security and financial services, the other focusing on mobile telephony and wireless; and within telecom, the majority of our revenue comes through cards both proprietary and Java, with an increasing move towards high end Java. This is one of the topics for discussion. In 2002 we grew the application services business revenue over 180%, so we see an increasing contribution coming from the applications base, and also through an ecosystem of partners going beyond our own offering being able to provide the value that this m-platform brings. This is a cultural shift, clearly, where the GSM specifications supported the SIM to provide authentication and network access to provide roaming and all the good things that are standardised by GSM. But with that the role of the SIM especially connected to OTA (Over The Air) services and remote file management and interoperability around Java allows for other types of solutions. I understand you picked up on our Apeera and digital rights management (DRM) press release. This I find very exciting.

Note: Gemplus announced a collaboration with Apeera, Digital Bridges, and esmertec at the 3GSM Congress 2003 in Cannes. This is a solution that allows for securing distributed Java applications in the GSM world. Apart from the secure download of applets the solution allows for peer to peer sharing.

Talking about Java J2ME, more significantly talking about a simple and elegant solution to digital-rights management, what we are trying to focus on is how do we take the existing infrastructure that is in place with this hand held device that securely identifies the subscriber, and add other small footprint applets and cardlets on the SIM - but with the communications infrastructure that OTA and the gateways can provide.

For example I have a Napster model that allows peer to peer sharing, but it's not a free for all and in this case there would be some rights associated with how I would use that digital content. In this case that digital content comes from Digital Bridges, who is one of our partners.

Note: Digital Bridge's J2ME game, "Men In Black IIÓ: Same Planet. New Scum"

And the scenario here is that I'm interested in downloading and playing this game. There are associated sharing rights based on what I've paid, we would simply send these rules to the SIM. And the SIM is now controlling access / permissions associated with my own use and also the permissions associated sharing that contact with other friends. This enables me to manage who of my friends I pass it on to, etc. The next step of this demonstration, which is focusing on DRM, is the payment. The next step in the sequence and another capability of the solution we have in place is that if I say if I want to play the next level or I want to add more people that I'm sharing with, I need a mechanism to pay. Leveraging on the security of the SIM to do some digital signature, where I would enter a PIN and that enables me to complete the transaction. Here we are seeing a more complete mobile data/commerce role, a scenario where the SIM plays a humble but pretty fundamental role.

PE   How would the payment be made? Would it be pre-paid or post billing?

JN   There are varying models that depend on regions. Like Banksys in Belgium you have basically a clear-ing house that co-operates. They could provide that clearing and then money could be debited form your account. A less elegant interim solution would be the network operator who would hold the invoice and you would receive a docket and be a subscriber. There's a flexible approach but fundamentally there's a secured mechanism to say yes I will accept this given transaction. It goes through a security gateway, and then can either go through a bank or basically can be connected at the operator level.

PE   So, when do you see these ideas happening?

JN   Well, at the device level, Java phone and J2ME, this is really evolving. On the payments side we already have implementations from various parts of the world, so accessing ability to view your account to do in-bank transactions and some level of payment either through debit of your account or through the operator, is in place. J2ME is a more robust way you would be looking at seeing at the beginning of next year, or more optimistically may be Q4 this year. I think that these fundamental capabilities are key; we ask ourselves, what are the enablers that allow for true mobile commerce? We can identify these. You have got to identify the subscribers; there needs to be fundamental security; you need a mechanism for payment: such as digital rights management, even things like profiling and CRM become important. So there is a set of these core enablers and at a white board level this is expressed in our existing architecture infrastructure. How could we support this? What I find so exciting about the DRM solution proposed here is that it's not that complex.

It's on top of an existing platform for which we now have another announcement: the 128K Java. With the security of EAL 5+ we have dynamic memory management, so we have the ability with the Over The Air platform to do remote file management on the SIM in a very efficient way. So we are able to repeatedly update the files on cards, and not only add more, but write, erase, write, erase, write, erase etc. Even if we migrate to 128K and beyond, cards will put more in Flash, less in EEPROM, more in the ROM and open up the space for flexible, writable memory. It will always be a requirement to be dynamic.

PE   Do you see Flash becoming more and more important?

JN   Yes, we clearly have road maps leveraging on Flash. One of the things that we have announced is that we are an international and multinational company with a local presence. The dynamics in China, for exam-ple, are very different to those in Latin America. What we're trying to do is reduce the overall number of product offerings and provide the flexibility to make it regionally specific. Here's a case where with Flash and ROM there are some core enablers, like GemConnect-online (SIM Toolkit application for SMS servic-es), and the ability to have dynamic browsing. It's a tribute to an architecture whereby the SIM could help the user interface in a more dynamic way, to manage his/her own account. To establish a provisioning level set up to do services, and this is leveraging on this dynamic SIM toolkit framework. With that, there would be some of these core enablers for other products that have been announced a while back with GemCon-nect at the customer. So you have a profiling routine in the SIM which enables you to track and assess vari-ous types of usage patterns. This can be used to detect fraud, to use as a clever agent, help you navigate through options available on the device, etc. So these types of core enablers we have envisioned would really re-assess Flash. Pull activated by customer request or pushed by the operator. So in its two parts, one is bet-ter leverage, with the clever architecture that Flash and ROM can provide, but it also frees up more space with very efficient dynamic memory management. And being able to free up more room is what will always be relevant to computing today.

PE   What is your view on Sony joining up with Symbian?

JN   I haven't really got a corporation perspective on that. I think we move towards open standards, we are banking a lot on Java. I am somewhat surprised by that decision. The other thing to appreciate, is that in parts of the world we have 100%, market share, there are some threats when you talk about open interoper-ability so what does that do to your position? Clearly our road map is moving to higher end cards, with a very strong representation of Java. The security perspective of EAL 5+ is important also in terms of dynam-ic memory management and the opening up to the third party development community. We believe in Java.

Industry Insight

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PE   Do you think SIM toolkit will dominate GSM rather than Java?

JN   Yes, but SIM toolkit is almost too narrow a definition. When you talk about the capabilities of what SIM toolkit provides, having a case, a development environment to develop SIM based value add applications there's an equivalent type of toolkit for Java. We continue to see the development of value added services for SIM based applications, as well as in the Java environment, but what we will see is the two grow in parallel. We have road mapping products, 32K size, that are both proprietary and Java, clearly moving to the higher end we are supporting Java.

PE   What are your predictions for GSM business this year?

JN   Going up, clearly. About 6% growth. If you equate that with GSM and other network technologies we look at SIM as being in 418M range as opposed to 393M. The model has shifted somewhat to the acquisition of the subscriber at any given cost. The evidence was that last year we focused on churn and maintaining subscriber loyalties and in fact renewing them, with capabilities to access rich data services. From the network operator perspective due to some replacement because of the cost of voice pressure and they're looking to replace the ARPU (Average Revenue Per User) view that came from voice, with data services. And with that we do continue to grow based on other third party estimates like TMC for example. In 2001, we were on a worldwide basis of about 8% with ARPU, which was coming from data services. Primarily SMS, mind you. We see a continued uptake in our data services still today, with SMS being the primary area of access to data service. But we also see a continued update of that in a linear way, which continues to be high. So I think it's not a luxury to have subscribers take up these data services. It's really a business case requirement.

PE   As you know China is issuing 3G licences. Is this a market area that Gemplus wants to get into?

JN   Well we have already a strong position in China. Historically we have a challenge with a substantial market position in China supplying low-end cards for a minimal margin, so what's the value?

We talked about enablers and dynamic SIM toolkit capabilities. There is a product especially designed for the Chinese market called ADE (Application Download Environment). This is really a mechanism with a high level interpreter on the SIM that enables you to receive instructions through SMS that improves the MMI (Man Machine Interface) through the IOG game experience. The intent in promoting this is that you can start with low end 8K chips up to16K, but you need to redefine that the low end is primarily 16K. We are going to supply the Chinese market to provide access to the network. They are seeing the value of data services and will quickly come up with a more mature market with higher end cards. In Q1 we are shipping 10M cards with half of them 32K so we are seeing an uptake in higher end products that means that there is a perceived value in such products.

Last week we announced the appointment of a dedicated president to that region, which is part of our strategy for regional presence. We are looking at a better corporate product roadmap, more standardised yet customisable for regional operator productisation. This gives better customer management.

The ARP factory also has better access for content. We believe that multi implementations of different solutions are reinforced with core bricks or components to better meet requirements. Mobile banking in Belgium for instance is different for each operator. The architecture is the same, the components are the same, some might be Java some might not, but there are differences in how the clearing might be done. There might be regulatory and other issues. We continue to redefine the model for better efficiencies and the implementation of standard solutions.

Contact
■ **Jerome Nadel** Gemplus
   💻 www.gemplus.com

One Card System for University

Delaware State University will this autumn introduce one Smart Card which will integrate different technology systems on campus and enable students and staff to access campus buildings, buy food, borrow library books, check their e-mail and travel on public transport.

The university has partnered with Siemens USA to use its Smart Card identity management solution and DelDOT to make the Smart Card a one-stop user service for its 3,300 students and 600 staff.

Dr Charles Fletcher, assistant provost for technology and information systems, said that combining all of the university's databases into one card would reduce the need for passwords. He said campus buildings were being wired in preparation, and DelDOT would fit buses servicing the campus with readers compatible with the Smart Card.

The university and DelDOT are currently negotiating a plan to deduct public transportation for students and employees from their accounts.

"By linking meal plans and transportation to the card, students will not have to carry cash," said Fletcher.

There are also plans to link the card with the campus telecommunications systems, enabling students and staff to make long-distance calls through phones equipped with card readers.

Web-4-All Pilot in Canada

Canada has announced the launch of a pilot project called Web-4-All to make Internet technology available to people with disabilities or literacy challenges, as well as senior citizens.

Participants are given a Smart Card, which contains their individual preferences such as having text read aloud or type faces magnified. When they log onto a public access computer, users simply insert their card into a reader and the computer adjusts to their preferences.

Web-4-All is being pilot tested at public Internet access sites in selected communities across Canada. These sites provide people with affordable access to the Internet in places such as community centres, schools, disability and literacy resource centres, drop-in centres and seniors' facilities.

Industry Canada's Web-4-All pilot program was developed by the University of Toronto's Assistive Technology Resource Centre and is funded through the Government On-Line initiative.

In addition to providing the technology, Industry Canada contributed more than $40,000 to help start up this new service. Bell Canada, Hitachi Canada and the Royal Bank of Canada donated Smart Card technology used in the pilot projects.

JCB Launches DualPlus

JCB Co., the largest credit card issuer in Japan, has developed DualPlus which it claims is the first Smart Card of its kind. The card, developed with Sony Corporation and Toppan Printing, combines Sony's FeliCa non-contact interface and EMV contact interface capability in a single IC chip.

The combined technology eliminates the need for two separate chips and enables more functionality at a lower cost, said JCB officials.

The company will initially launch DualPlus in May as a multi-function ID card for its employees. Staff will use the card for building and floor access, as well as cafeteria and vending machine payments.

Connexions Card for Students

The new UK government Smart Card, called the Connexions Card, has been issued to Dudley College students, aged 16 to 19 years to record and award attendance. The aim is to encourage young people to stay in learning after school by rewarding attendance and achievements.

It can be used to obtain discounts and a pilot scheme will see it reward attendance through points for special offers over the Internet and national prizes including the chance to meet pop stars backstage and behind the scenes visits to sports venues.

For more information visit ...
💻
Delaware State University
www.dsc.edu
Web 4 All
www.web-4-all.ca
JCB International
www.jcbinternational.com
Connexions
www.connexions.com

News in Brief

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Analyst Briefing: Profit From EMV

by Barry A. Maidment, Business Development Manager, ACI Worldwide (EMEA) Limited

The original business case for introducing EMV was founded primarily on the need to control and reduce the escalating level of card fraud seen in the increasingly vulnerable magnetic stripe environment. Now that the rollout of EMV infrastructure and cards is gathering pace, banks need to look beyond fraud reduction for ways to get an acceptable return on their investment in EMV. This brief describes recent EMV related developments that create opportunities to drive revenue from new business and reduce bad debt losses.

Barry A. Maidment

Pre-authorised Offline Spending

The recently released MasterCard M/Chip Version 4 and Visa VSDC Plus specifications provide issuers with new facilities for managing the credit risk associated with transactions at offline terminals. Until now, the offline risk parameters in the card's EMV debit or credit application only allowed the issuer to control the maximum number and aggregate value of consecutive offline transactions. The value of individual transactions is governed by the terminal floor limits set by acquirers. A cardholder could, for example, make purchases at offline terminals and then, before those transactions can reach the issuer, go to an ATM and draw all the available funds from the account. When the issuer receives the offline transactions, the account will go out of order.

MasterCard's Pre-authorised Debit and Visa's VSDC Plus give the issuer full control over offline spending by limiting the cumulative value of transactions that can be authorised offline and placing a hold of equivalent value on the cardholder's funds. That hold is released as offline transactions are received and posted to the account. The amount on hold is tracked by a memorandum account, which facilitates managing the release of the hold if a card is lost or stolen. All transactions, online and offline, require PIN verification. The new card application parameters can be adjusted during online interactions.

Clearly, these new initiatives will enable issuers to reduce bad debt losses on existing debit and credit card related accounts. They also open up new business possibilities for card issuers in relation to higher credit risk market segments, including the unbanked; low value payments; and prepaid products. For acquiring banks, the availability of secure, no credit risk, offline authorisation as an alternative to online authorisation widens the base of merchants who can economically accept cards.

Lower Tier Card Market

The close control of card spending against available funds provided by pre-authorised cards obviates the risk of unauthorised borrowing arising from offline card usage. This feature makes pre-authorised cards ideal for new cardholders with no banking history. Consequently, pre-authorised products can be used for

Events Diary

April

1	Captive Audience Networks Digital Broadcast Media Solutions 4 Retailers, SAS Radisson Portman Square London, UK
	Website: www.retailevents.co.uk
1 - 2	SIM 2003 Conference, The Annual Meeting Place of the SIM Community, Amsterdam, The Netherlands
	Website: www.ibctelecoms.com/sim?src=CR1654-sce
2 - 3	Voice World Europe, Olympia Conference Centre, London, UK
	Email: jaimie.brook@terrapinn.com Website: www.terrapinn.com and www.voice-world.com
3 - 4	Cards & Payments 2003 Conference & Expo 'Sharing the Rewards', Amsterdam, The Netherlands
	Website: www.cardsandpayments.com
8 - 10	4th Annual Global Retail Technology Forum, Palais des Congres and Hotel Concorde la Fayette, Paris, France
	Website: www.retailsystems.com/grtf
13 - 17	RSA Conference 2003, Moscone Center, San Francisco, USA
	Website: www.rsaconference.net/rsa2003/
23 - 25	Cards Asia 2003, Suntec, Singapore
	Website: www.cards-worldwide.com
28 - 29	Smart Tagging in Healthcare, Institution of Electrical Engineers, London, UK
	Website: www.idtechex.com

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making welfare benefit payments and to facilitate moving workers from cash to electronic payment of wages.

Low Value Payments

With the pre-authorised offline-spending concept, EMV cards become an attractive alternative to Stored Value (Electronic Purse) Cards. To date, the big drawback with SVCs has been the need for a separate ICC infrastructure to that for debit and credit cards. The ability to operate a purse-like product on the same infrastructure as EMV debit/credit cards has obvious and significant cost advantages. In addition, a pre-authorised EMV card offers important consumer benefits compared to SVCs. Unlike SVCs, it is not real money that is stored on the card but an authorisation to spend up to a certain amount. This key difference provides two main benefits to the cardholder:

☐ if the card is lost or stolen, the cardholder need not suffer any monetary loss (with many purse cards, the cardholder would lose the value on the card);
☐ the real money stays on the cardholder's account. Consequently, if the account pays interest on credit balances (or notional credit interest to offset against account charges), then the cardholder continues to receive that benefit on the amount of spending power put on the card.

In Version 1.4 of the Visa ICC Specifications, Visa introduced the Visa Low-value Payments (VLP) feature for Visa smart debit and credit cards. VLP facilitates fast, low value offline transactions. Whilst PIN and other cardholder verification methods are supported, they are not mandatory. No hold need be placed on cardholders' funds. All VLP transactions are offline (any online transactions are treated as normal VSDC transactions). VLP and VSDC Plus could be implemented on the same card.

Prepaid cards

Pre-authorised cards could be used as secure Gift cards.

At the Member's Forum in June 2001, Europay introduced the prepaid Maestro card. This product uses vulnerable magnetic stripe technology and requires expensive online authorisation for low value transactions. Pre-authorised Smart Cards provide a secure alternative that can be authorised offline.

Multi-application Smart Cards

The concept of multi-application Smart Cards has been given a boost by the launch of the MasterCard Open Data Storage (MODS) specification. Research by MasterCard has revealed that consumers would like to store personal information on their cards, provided that they can control what is stored, ensure that it is released only with their permission and use it to simplify their lives and connect their personal and business lives. MODS has been designed to satisfy these requirements. With MODS, Issuers will be able to develop and offer additional services and rewards to cardholders. MODS applications will enable merchants to provide personalised services and offers based on the stored personal information and buying history. The increased utility of the card should lead to increased spend, reduced account attrition and lower cardholder recruitment costs.

Conclusion

As well as creating new opportunities, the above developments also raise complex, new challenges. For example, issuers will need to set personalised card application parameters and adjust them dynamically during online interactions. The priority of pending application parameter changes must be managed. The use of PINs at offline terminals must be supported. Card applications involving third party organisations must be managed. The right applications (and right versions of those applications) must be loaded onto each new card issued. Online download of applications to cards via the internet or in-branch store based self-service terminals could be required. Cards will need to be renewed with the right applications and parameters.

☐ **About the Author:** *Barry has deep experience in the payments industry, gained working for two major retail banks, a consultancy specialising in the innovative use of technology in finance and two software suppliers serving the industry. His payments project experience covers the telecommunications, petroleum, retail, leisure and banking sectors. Originally a commercial banker, Barry acquired IT knowledge to become a hybrid manager who understands both business and IT issues. Today, at ACI, Barry is focussed on creating innovative e-payments solutions that can be used profitably by payments providers. Contact Barry via email: maidmentb@aciworldwide.com, telephone: +44 (0) 1923 812760 or website: www.aciworldwide.com*

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WiFi And 3G: A Bridge Or A Barrier?

by Anthony Behan, Founder and VP of Business Development, Am-Beo

Wireless LAN, or WiFi technologies have received much hype in the past twelve months, as hotspots roll out across the maturing wireless marketplace. Concurrently, arguments have sprung up on the question of interoperability with existing and planned networks, and whether or not public access WiFi as a business proposition challenges or complements existing and planned networks. As the dialogue has developed, it has become clear that whatever the answer, both will co-exist; that they may do so co-operatively or competitively remains to be seen.

First, some basics. WiFi is a local area high speed broadband wireless technology that allows users within the range, or hotspot, network access at up to 11 Megabits per second. The range of the hotspot, depending on issues such as line of sight, is anywhere between 100-600 feet, or 30-180 meters. It is proliferating in what Starbucks' Chairman Howard Schultz refers to as 'the third place', where people are not at home and not at the office. This means coffee shops, airports, hotels, railway stations, convention centres, and so forth. It is based on the 802.11 standard, which has various versions identified by the trailing letter. The most commonly referenced are:

- ☐ 802.11b is the current predominant standard, operating in the 2.4GHz range, and offering up to 11MbpS access speeds
- ☐ 802.11a is the next version, which operates in the 5GHz spectrum, and offers up to 54MbpS
- ☐ 802.11g will ultimately deliver up to 54MbpS in the 2.4GHz band, and will deliver other as yet undefined benefits

In order to access the service, the user requires an 802.11 enabled laptop, using either a WiFi card, like a network card with an antenna, or on-board 802.11 that is beginning to proliferate (see Intel's Centrino product, and Dell's recent announcement that all latitude laptops will come with 802.11 as standard, as examples — all other major manufacturers have similar programmes).

Usually, access will be on a subscription basis, or via a prepaid scratch card or credit card account. Authentication is most often based on the RADIUS (Remote Authentication Dial-In User Service) standard, using a username and password. There are at present thousands of hotspots around the world, and these are increasing at a rate of knots. Aside from the often referenced hotels, cafes and convention centres, 802.11 is facilitating broadband access in many other locations, such as around phone booths in the UK, and even an outdoor public plaza in Australia.

The bandwidth deliverable is indeed impressive — with wired LAN speeds at 100MbpS, even 10% of that is impressive on a wireless network. There are a number of limitations, however, that isolate and differentiate the technology from, particularly, its wide area network competitors like UMTS.

First of all, the theoretical speeds are compromised by volume of users, and therefore do not represent a true picture of the product. It is likely however that WiFi will in general be significantly faster than UMTS. Second, it is static. Most wide area mobile network standards are designed to function adequately on bullet trains, and therefore allow for in-motion operation. Third, it is a non-phone experience, and there is a requirement for significant user hardware that exceeds the requirements associated with UMTS. It is also, significantly, a very *different* experience. Fourth, WiFi operates in a noisy space that is less secure than the 'conventional' networks. Amongst other things, garage door controls and baby monitors in the US use the same frequencies. Fifth, the operational area of WiFi is very small, and does not represent a realistic proposition for wide area coverage.

It is important to note that WiFi is a widely available technology, with access points at this time well under the $100 mark. Many householders now have personal live hotspots in their homes, leading to widespread adoption and acceptance of the technology. This helps to promulgate the public access network.

WiFi has the advantage of being first to market in terms of wireless broadband public access. In addition, its potential as a driver for the coming PC (or more specifically laptop) upgrade cycle has seen the aggressive entry of industry giants such as Intel and Dell in driving the technology forward. This impetus guarantees

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that WiFi will have a momentum that will not go quietly into the night. The innovators have come, and the early adopters are already on board. WiFi is crossing the proverbial chasm in early 2003, and will succeed or fail this year. So will it be successful?

Every major telecommunications company in the world has a WiFi strategy. At the extremes, some are monitoring its progress carefully, and some (like T-Mobile in the US) are rolling out so fast that they're barely pausing for breath. In every major economy, hotspots are rolling out, site rights are being negotiated well in advance, and entrepreneurs are taking advantage of this early stage opportunity (before you start thinking about it, the secret's out, guys!). In many cases, it's a hedging of bets rather than a core long-term strategy. Whatever the motivation, the involvement of the carriers, both wireline and wireless, is hugely significant.

Almost every new laptop in 2003 will have 802.11 on board. Nokia and other switch vendors are preparing integrated solutions where WiFi can collaborate with and augment data networks. The infrastructure is getting cheaper and cheaper, driven to the lowest possible price point by larger companies (such as Intel and Cisco) with broader agendas. Hotspots will be concentrated in high volume, easy access locations, without the regulatory percentage coverage requirement. All of these factors will contribute to an availability and core user base that pre-equip WiFi for success as new wide area networks battle for the hearts and minds of consumers.

Having said that, integrated WiFi networks offer the best of both worlds. Users can access WiFi at the hotspot, UMTS (or another wide area 3G technology) outside the hotspot, have an always available data connection, with the benefits of hotspot access *and* the wide area network in one. Indeed, the early adoption of WiFi bodes well for the potential success of 3G, as these users will be presented with that technology as an upgrade rather than as a replacement. Similarly, efforts are underway throughout the world to upgrade GPRS offerings, using emerging technologies like SIM based authentication, presenting an upgrade on GPRS, as opposed to the projection of 3G as an upgrade on WiFi. The interoperability of these two *businesses* as opposed to *technologies* presents an interesting challenge, one that will inevitably be shaped by consumers.

One of the most significant threats to the WiFi market is the stability of the entrepreneur group. With international markets suffering what can best be described as volatile fortunes, the availability of venture funding is limited, and the palatability for risk is low. Investors burned by, in particular, the ISP sector are looking at the same problems again, and with potential exits limited, growth in the independent sector is restricted. That appears to have been circumvented as a potential barrier by the involvement of the wide area network operators, although larger companies, being more risk conscious and implicitly, therefore, less innovative. The widespread adoption of technology, while not yet inevitable, will drive this forward.

A significant point to make is that 3G networks are about much more than high speed broadband access on the laptop, which is essentially where WiFi takes a bow. 3G networks allow for significantly more voice traffic than existing networks, and in their mobility deliver opportunities for in-motion services with which WiFi cannot compete. This means that there will always be a massive market for wide area networks that WiFi does not compete with – voice is still king, and won't be going anywhere soon!

Ultimately, however, users want services, not technologies, or networks. Users want to be able to access the Internet seamlessly, transparently, wirelessly, and fast, anywhere at any time. They want services that make their lives better or easier. They want to be able to communicate with home, with the office, and with other people. However, they do not care about WiFi, or 3G, or GPRS, or UMTS. Nor do they care about bits or bytes, but rather they care about movies and conversations.

All of the technologies and networks have their advantages and disadvantages. Each will contribute to the deployment and availability of these products and services, and telecommunications companies will sell and profit from these products and services. Professionals in this market all too often tend to get lost in the jargon, and lose perspective on the bigger picture. People will pay to make their lives better, and to make their jobs better. In this context, we should examine the development of next generation networks, products and services, and ensure the delivery of what people want!

☐ *For more information on Am-Beo please see www.Am-Beo.com Am-Beo are an exhibitor at Billing Systems 2003, 13th – 16th May 2003 at Earls Court Conference & Exhibition Centre. www.iir-billingsystems.com Now in its 10th year, IIR's Billing Systems Conference and Exhibition is firmly established as the largest and most important event in the European Billing calendar. For further details contact billing@telecoms.iir.co.uk or visit www.iir-billingsystems.com*

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Smart Card News On Line: Round-Up

Smart Card Group's *Smart Card News On Line* service is emailed to subscribers every working day, reporting on industry events as they happen. This service is available FREE to *Smart Cards Now* subscribers (£100 per year for non-subscribers). For further details and to sign up please contact Amanda Pearce — amanda.pearce@smartcard.co.uk; tel: +44 1273 515651 (further contact details are available on page 43). Here's a selection of the headlines we covered in February:

Corporate

- STMicroelectronics and Aspects Software Sign Agreement
- Gemplus Results Announced - Loss Increases By 155%
- Catuity Makes Interesting Claim
- PCCW Eyes Up Energis
- Siemens Wants To Play With The Big Boys
- Sagem And Gemplus Sign Co-operation Agreement
- Another First for Gemplus
- Oberthur Reports Sales In Line With Forecasts
- Fujitsu In Extended PO Contract
- First Data To Lose Key Team Member
- STMicroelectronics Expands In Morocco
- Atmel Wins Groupement des Cartes Bancaires Contract
- Activcard Fourth Quarter Results
- Gemplus Q4 2003 Results Finally Published
- Oberthur Claims World Leadership in 64K Cards
- Gemplus Management Appointments
- Bull's Results Exceed Expectations
- XIRING Continues Its Turnover Growth
- Shareholders Shown the Future
- VASCO Adds New Distributors
- Keycorp Reports Strong Cash Flows
- First Data to Acquire TeleCash of Germany
- Cubic Lands $16M Service Contract
- Burall InfoCard/Burall InfoSys now Burall InfoSmart
- US Company Purchases Major European Retail Events
- ACG Expands Sales Force
- Buyout Bid for AmaTech in Ireland

Banking and Finance

- Smart Credit on the Internet
- Valicert Software Supports NewBACS
- Trintech Launches PayWare Acquirer 5.0
- Visa Cardholders and Merchants Invited to Join MobilHandel
- Level Four Software Supports EMV
- Five Million Accounts Hacked
- Postpayment Project in Sapporo, Japan
- Dione achieves EMV 2000 Level 2
- Baltimore Selected by MasterCard to Provide PKI Solution

Government

- Work For The US Government? You'll Need A Bigger Wallet
- Victorians Adopt Smart Cards
- Smart Card Tenders Invited by Indian Government
- Critical Summit on Card Technology for US Government

ID and Authentication

- Identity Card Consultation Breaches Government Code of Practice
- Secure Identities from Gemplus and Sagem
- Dutch Biometric Passport
- American Express Chooses Bioscrypt
- No National ID For Ireland
- Biometrics to Replace PIN and Passwords
- Information Commissioner Worried Smart Cards Will Aid Identity Theft
- Smart Cards Secure NAM Summit
- Huge Increases in Biometrics Forecast
- WLAN Needs Smart Cards for Security
- Simple Access and Identity Management
- Protecting Identities and Privacy with Smart Cards
- PINs Not Safe From Mr Bond
- Cash Handling Protected by Bioscrypt
- Under 15s To Get ID
- World's First Seafarer's ID Card
- ID Cards to Curb Underage Drinking

Telecoms

- China to Grant 3G Licenses
- Gemplus to Supply OTA to 3
- India First With 128k SIM
- SchlumbergerSema Push Their 128k SIM
- Mobile Payments to Increase to $20 Billion by 2005
- Staff Cuts at Ericsson and Nokia
- Giesecke & Devrient Offers Secure Mobile Solutions For Enterprises
- Navini Networks Launches PCMCIA Wide Area Wireless Broadband Modem Card
- Smart Card for Mobile and Contactless Transactions
- First National Mobile Payment Application for Belgium
- Record Number of SMS Messages
- Gemplus, Apeera, Digital Bridges and esmertec Secure Java Applications for Mobile Telephony
- Gemplus Launches MySIMcopier
- SMS Based Pre-Paid Top-Up
- Highly Intelligent Roaming with On-line Call Control
- Visa and Bank of China Launch Mobile Authentication Services
- $50,000 Worth of Pre-Paid Calling Cards to be Distributed
- Payments Expert Heads Mobile Payments Group
- Motorola Awarded Harris County Contract

Technical

- Gemplus Roadmaps Its JavaCard (TM) Technology

- SchlumbergerSema Helps Stamp Down On Software Theft
- Datakey Launches Model 330J
- Ninety Days to Develop a Solution
- New Datacard Desktop Card Printer
- Japanese Smart Label Unit
- New Microcontroller From Hitachi
- PKI on the MyKad Card
- AXIOHM Invents POS Bluetooth Printer
- Smart Card on a CD
- TDK Introduce System on-a-chip

Retail

- iBonus Loyalty Card Kiosk Launched
- PegaCARD CUSTOMER CARE For Improved and Differentiated Customer Service
- Give a Gift Card For Valentines
- Buoyant Internet Consumers
- Smart Tagging in Merchandise
- Texas Instruments Develops Platform for Proximity Payments

Transport

- Three Major New York Airports To Install Biometric Security
- Co-Branded Smart Card for Petrol Companies
- Brunswick Naval Air Station Goes Smart
- Contactless I-Ticket Launched
- FNMT Develops New Road Transport Control System

Healthcare

- Smart Tagging in Healthcare

Leisure

- Always-On Broadcasting
- Rugby Fans to Carry Smart Cards
- Coffee on a Smart Card

Misc

- Datacard Group and LogicaCMG to Implement World's First National Multi-Application Smart Card Program
- SchlumbergerSema Wins Olympic Award
- BCS Responds to White Paper
- Japanese See Great Future for Smart Cards
- White Paper from Smart Card Alliance
- Incard's MoKard Certified by SmartTrust
- Digital Angel Looks After Animals
- First for SchlumbergerSema
- A Guardian Angel for Children
- Domain Dynamics Joins ARM's PrimeXsys Community Program

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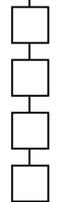Credit Card

Number

Expiry Date

Signature

Name

Company

Address

Telephone

Email

Smart Moves At Felixstowe As Port Deals Its Cards

by Cindy Duffield, New Impressions

Cindy Duffield

The Port of Felixstowe is the largest container port in the UK, the fourth largest in Europe and the 13th largest in the world. It is responsible for connecting the UK with over 360 other ports across more than 100 countries worldwide. When the port implements an IT solution, its reliability to deliver promised functionality is critical.

Owned by Hutchison Ports (UK) Limited, the port has been innovative in its adoption of technology, implementing systems to computerise customs clearance, control inventory and to manage ship and yard planning, amongst others, to improve its productivity. Efficiency has also been improved by automating processes to enable shipping lines, agents, freight forwarders and hauliers to carry out the majority of their business transactions electronically in real-time, eliminating where possible time-consuming paperwork.

And it is in this latter area, that the IT department recently examined and identified a solution to provide security ID with a link into the port's computer systems to track the progress of its roll on/roll off freight.

The UK's second largest freight roll on/roll off port, Felixstowe 'processes' an average of 850 trailers daily, clearing them for import or export and managing their passage through the port, as effectively as possible.

The entire process for each trailer used to be based on a paper ticket system, which identified drivers and loads, and was checked at various stages of the freight's progress. Steve Cole, IT operations support manager for the port, explains, "We reached a stage, where the existing system was becoming untenable. Tickets could only be used once, quickly became worn, the print was sometimes illegible and they were prone to jams."The adoption of a plastic Smart Card-based system seemed to be the logical solution and after considerable system evaluation, the organisation opted for the TCP2000 system, developed by point-of-sale solutions manufacturer, Star Micronics, and for implementation by systems integrator, DED. The low cost system is based around thermal cards, the entire front side of which acts as an instantly re-writable display. Given that the cards can be re-written to up to 500 times, the TCP2000 provided an obvious potential benefit to the port, in their re-usability. That said, Cole had initial reservations, "The cards are quite flimsy-looking and we weren't sure that they would be sufficiently robust for the application." The cards have however, proven their worth, some having been re-used more than 300 times within the first few months of the system going live.

Typically, the haulier issues his driver with instructions together with the TCP2000 card displaying basic details of the shipment. On entering the port, the driver presents his card at the gate security who 'reads' it using the system. The location of the specific collection is then written to the card, in addition to unit ID and vehicle number, destination, date of shipment and weight. The card is returned to the driver who then collects his load. Leaving the port, the vehicle and trailer are photographed to check on the condition of the vehicle and its freight, and those details matched to those retained on the card. The driver returns the card at the security gate, where it is again read by the TCP2000 system before clearing the trailer for departure.

Discussing the port's use of technology, Cole says, "We do not adopt technology for its own sake, but view it as an essential tool in delivering a fast and efficient cargo handling operation. In essence, the IT Department delivers a service to improve the performance of the organisation, and by implication, its profitability."

Of the cards, he adds, "The cards are extremely reliable. They are also cost effective given their ability for re-use. The environment can be dirty and drivers have been known to scribble on the cards, but they continue to remain dependable."

The port is of course, a busy working environment and one of the issues that Felixstowe had to overcome, by working with DED, was maintaining the cleanliness of the reader/writer systems to ensure their ongoing functionality. A solution was quickly identified, in the regular replacement of cleaning pads for each of the 11 TCP2000 systems located throughout the port and Cole says, "Dirt was always going to be a problem, but we have worked together to overcome it and the card-based system has now proved itself to be an extremely viable means of retaining secure and effective passage of freight in what is an extremely fast moving environment. Linked to our management systems, it is also part of an effective infrastructure to manage our business in the most efficient and safe way possible."

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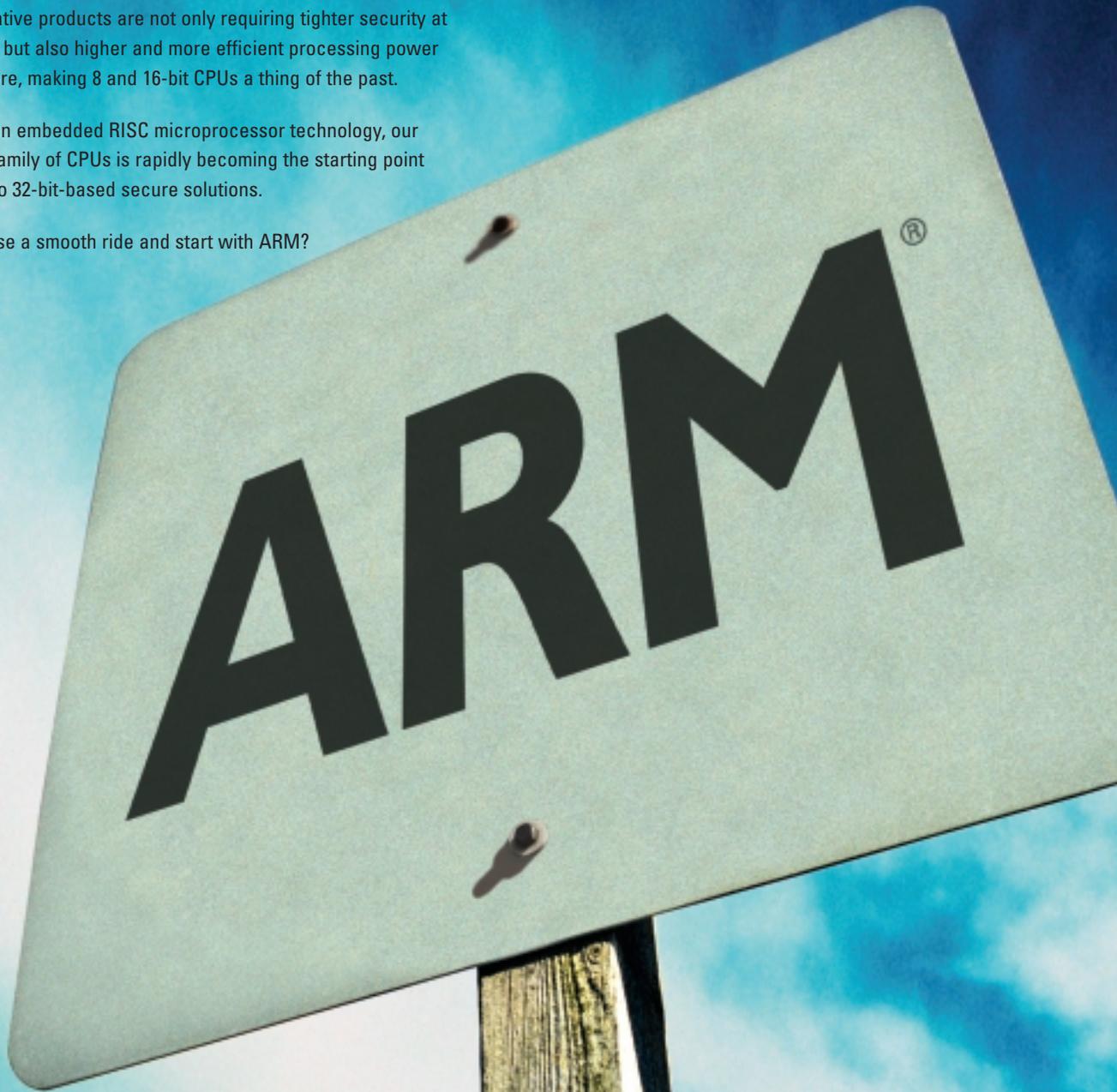
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