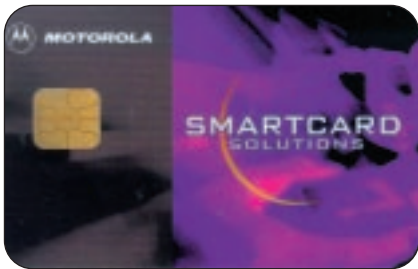




SMART CARD NEWS

June 1999
Volume Number 86



ERG Motorola Alliance Awarded US Contract

Australia-based ERG Group and Motorola Worldwide Smartcard Solutions Division (WSSD) have been awarded the largest Smart Card fare collection system contract yet in the United States.

Commuters will be able to pay for train, light rail, bus or ferry public transport throughout the nine-county San Francisco Bay Area using a single regional Smart Card by the year 2002.

The contract for the system, called TransLink, has been placed by the Metropolitan Transportation Commission (MTC). According to the terms of the agreement, the ERG Motorola Alliance will receive between \$114 million to \$157 million - depending on rider usage - to install and operate the system for 10 years.

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A San Francisco Trolley Bus and Cards

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Don't Forget!

Our On-Line Website, containing On-Line News, a Library of Smart Cards and information about the full range of SCN services, can be found at the following addresses: www.smartcard.co.uk • news.smartcard.co.uk

ERG / Motorola Contract

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The TransLink system, which incorporates 26 different transit agencies, is the largest Smart Card fare collection system contract ever awarded in the United States.

The Smart Card will be able to determine the correct fare from a range of variables, including different fare structures for every transit operator, transfers, route, length of trip, time of day, and discounts for students, elderly and disabled riders.

“Motorola and ERG’s state-of-the-art Smart Card fare collection system will lead to greater efficiencies in our transit system and increased benefits for our riders,” said MTC’s Russell Driver, TransLink project manager. “By installing a Smart Card system that allows riders to pay for transit fares in under half a second - by simply waving their Smart Cards near readers - we will greatly simplify payment for our customers.”

MTC - the planning, co-ordinating and financing agency for public transit in the San Francisco Bay Area - will conduct a six-month trial of the TransLink system starting in fall 2000 with AC Transit, BART, Caltrain, Golden Gate Transit, San Francisco Muni and (Santa Clara) Valley Transportation Authority.

About 5,000 transit riders will have an opportunity to participate in the trial. More than one million transit riders are expected to reap the benefits of full system implementation, anticipated by 2002.

The ERG Motorola Alliance will design, supply and implement the turnkey, integrated system solution; provide the infrastructure for Smart Card and back office operations; and manage the operations of the entire system.

The TransLink electronic Smart Card fare collection system will be based on the Alliance’s highly automated and sophisticated central clearing house and data processing network, while the front end will be driven by the M-Smart Venus card and reader platform.

The Alliance will also provide customised support services, including card distribution, systems maintenance and the operational management of the card reload network and payment clearinghouse. It is estimated that approximately 500,000 cards will be

issued initially, supported by Smart Card readers and ticket vending machines as part of the transit solution.

Cards will be available at participating merchants, through employers, at transit agency ticket offices and through the mail. Instead of waiting in line to buy tickets, tokens or passes, riders can sign up for an “autoload” feature that automatically transfers value from their bank accounts or credit cards to their TransLink cards whenever the stored card value dips below a certain amount.

The Smart Cards can support multiple applications such as public telephone payment and electronic cash, which will allow riders to pay for parking meters, taxis and to purchase items such as newspapers and coffee from participating vendors.

Francois Dutray, Motorola Vice President and General Manager, WSSD, said the system would use Motorola’s dual-interface contact/contactless SmartCard operating system, which allows multiple applications to reside on a single card.

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Hitachi / SmartDisk Alliance

SmartDisk Corporation has announced a strategic alliance with Hitachi Software Engineering, the leading software company in Japan, to manufacture and distribute SmartDisk’s SmartyO Smart Card reader/writer.

Under the agreement, Hitachi will distribute the device around the world and also sell it into banks affiliated with the Mondex electronic cash system.

SmartyO acts as a bridge between a Smart Card and a PC. It has the same dimensions as a 3.5 inch disk and includes a slot into which a Smart Card can be inserted.

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ID Data Buys GPT Assets

ID Data Systems, which recently formed a joint venture with Toshiba and Toppan (SCN May 1999) has acquired the assets and staff of GPT Card Technology's Smart Card operations based in Coventry, UK.

The deal gives ID Data the capacity to produce some 150 million Smart Cards.

Peter Cox, Chairman of ID Data Group, said: "This acquisition has given our company in one move, critical mass where we have substantial orders, excellent manufacturing people, assets, and on-going partnership with a world leader in telephony and vending applications."

ID Data will be GPT's card supplier under a five-year agreement. "This move of production responsibility is a true partnership deal, where all partners win," said Ian Wilson, Managing Director of GPT Payphones. "We at GPT gain significant advantages through an effective, out-sourcing of manufacturing, whilst maintaining our ability to support and develop existing and new customer opportunities in telephone and cash management systems.

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Loyalty Scheme for Small Retailers

A Smart Card loyalty scheme for small retailers has been announced by PubliCARD Inc. Called Smart Reward it has been developed by PubliCARD's subsidiary, Amazing! Smart Card Technologies, of Santa Clara, California.

SmartReward points may be issued by a single retailer or in co-operation with selected other retailers, providing the option of a comprehensive loyalty scheme operating over a wide geographical area. It also has an electronic purse option that retailers can offer to their customers. Cash stored on the card can only be used at the issuing retailer, giving the customer a reason to return to the store.

Richard Phillimore, Executive Vice President for Smart Card businesses at PubliCARD, said: "Smart Reward combines marketing and customer database management into literally one function."

The loyalty package includes a point-of-sale loyalty terminal, a cardholder database program, a card reader for the PC and associated software as well as application forms for customers and 500 SmartReward colour-printed Smart Cards.

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GemCombi/MPCOS Card

Gemplus has announced the availability of its two best selling Smart Card products in a single card for the multi-application market.

Called GemCombi/MPCOS, it combines the MIFARE contactless technology with MPCOS contact technology mainly used in banking applications. The new card offers easy extension of existing MPCOS and MIFARE applications without any modification on the current Smart Card readers.

Gemplus claims it has sold 20 million MPCOS Smart Cards and supplies 60 per cent of the contactless market.

"Interest in the GemCombi/MPCOS is already strong," said Edmond Tuilier, Gemplus' Marketing Manager, Transport Business, "and Gemplus is involved in several projects in Asia and Europe, including the VIGIKR program in France, where GemCombi/MPCOS will be used to give access to buildings."

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Ascom to Renew NZ's Payphones

Ascom Monétel has won a FF 45 million contract to replace Telecom New Zealand's existing network of public telephones with 6,000 chip card payphones and an off-line management system. Until now, Telecom New Zealand has been operating magnetic card payphones.

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Asia Mobile Services Alliance

An alliance known as the Asia Mobile Electronic Services Alliance (AMESA) was announced simultaneously in Hong Kong and Singapore last month to spearhead the development of mobile electronic services across Asia.

Led by Standard Chartered Bank, AMESA aims to harness the power of the Smart Card, mobile phone, Public Key Infrastructure (PKI) and open standard.

AMESA partners are expected to roll-out their services by the second half of 2000 giving customers access to electronic services through a multi-function bank card using Smart Card technology, based on Visa's Open Platform.

By combining the card with the mobile phone customers will have access to a range of services including banking, e-commerce, bill payment, trading, secure e-mail and information, anytime, anywhere.

Security of transactions and the protection of data will be enhanced through electronic certification based on the PKI.

Participants and their contributions to the alliance are as follows:

Mobile phone operators SingTel Mobile and SingNet in Singapore, and SmarTone in Hong Kong will bring to the alliance their extensive mobile and Internet networks.

Gemplus' Smart Card expertise and Microsoft's Smart Card for Windows will be combined to develop the multi-function Smart Card based on the Visa Open Platform.

Ericsson, Motorola and Nokia will bring their mobile communications technology to the alliance and provide the handsets.

Hongkong Post and Singapore Post and their certification authorities will provide domestic and cross border electronic identification services.

Hong Kong University of Science and Technology, Hong Kong Open University and the National University of Singapore will conduct the research and development and market surveys, and run pilot tests in their campuses.

Standard Chartered will provide the regional financial infrastructure and introduce new financial services to AMESA's customers. In addition to its Open Platform, Visa will provide Visa Smart Credit, Visa Smart Debit and Visa Cash.

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ERG Wins Westbus AFC Contract

Australia's largest private bus operator, Westbus, is to equip its fleet of 400 buses with ERG's Smart Card-based Automated Fare Collection (AFC) system.

The move is another step towards an integrated fare collection system across public transport in Sydney. ERG has already supplied AFCs for all State Transit Authority buses and currently supplies STA ferries. The majority of other private operators also use ERG fare collection equipment.

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ERG Brand for Subsidiaries

Australia-based ERG is bringing two of its subsidiary companies under the ERG brand name. AES Prodata, which specialises in automated fare collection, has become ERG Transit Systems, and the recently acquired telecommunications infrastructure provider Australian Power Industries (API) is now ERG Connect. The other subsidiaries which represent the core activities of the ERG Group are ERG Card Systems and ERG Telecommunications.

Chief Executive Officer, Peter Fogarty, explained: "ERG has evolved into a strong global enterprise over the past 15 years with its core business areas of automated fare collection, Smart Cards and telecommunications now rapidly converging. The company names now reflect that convergence.

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Toll Collection Project in Malaysia

Over 200,000 contactless Smart Cards have been issued to the public so far in the roll-out of a non-stop electronic toll collection (ETC) scheme covering most of the Malaysian highway network, including the world's longest toll road, the 800 km Plus-Highway.

Philips Semiconductors who are supplying their MIFARE contactless technology in a co-operation with Austrian company EFKON, says that within the first 10 days of the roll-out, 50,000 on-board units (OBUs) were sold to the public and estimate that one million are scheduled to be in operation upon completion of the project.

The EFKON system works via an infrared transceiver in the toll booth communicating with a battery-operated OBU based on a MIFARE read/write device with an LCD display and mounted inside the car's windscreen.

The open concept allows toll operators to start with cash collection and touch/go reader lanes and upgrade to multi-lane freeflow traffic where the card is read automatically without the driver having to stop at a toll booth.

Mobile Payment Pilot

A pilot using wireless technology and mobile phones to make payments over the Internet or at merchant point-of-sale is to be started later this year by Merita Nordbanken Group, Visa and Nokia.

The pilot will involve the use of Wireless Application Protocol (WAP) technology, Secure Electronic Transaction (SET), the Visa Open Platform and Nokia dual-band GSM phone.

Jon Prideaux, Executive Vice President New Products, Visa EU, commented: "Personally, I can't wait to be able to use my mobile phone in my car on the way to work to order cinema tickets on-line without having to wait on the phone or in line."

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Pathways Licenses Proton

Proton World has announced it has signed a non-exclusive licensee agreement within the US with The Pathways Group which specialises in hardware and software for electronic transactions.

Pathways plans to offer credit card, debit card and Smart Card transaction processing on a single terminal through one provider. Carey Daly, President and CEO, said: "All of our future Smart Card offerings will be based on the Proton technology."

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Stelio On-Street Parking System

Schlumberger Smart Cards & Terminals has announced the availability of its Stelio on-street, multi-space parking system in North America.

Stelio enables private operators, cities, colleges and other parking authorities to implement cost-effective, efficient parking management. It features a streamline design, enhanced collection system, solar power capabilities, centralised administration, radio data frequency transmission and multiple payment acceptance.

Since the system also accepts Smart Cards for electronic purse applications, it allows merchants to implement loyalty programs that provide free parking benefits to customers.

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Home Use Keyboard from Cherry

Cherry has entered the on-line home market with a new Smart Card keyboard for secure home shopping and banking transactions over the Internet. Called the 6700, it has a built-in Smart Card reader conforming to the latest PC/SC specifications.

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Philips to Develop MobiChip

Philips Semiconductors is developing a Smart Card IC called MobiChip for an integrated transport project in Germany.

The WAYflow transport project, funded by the German Ministry for Education and Research, is for the Rhine-Main region which includes Frankfurt-am-Main airport soon to be connected to the new ICE high-speed railway line between Frankfurt and Cologne, linking up with another 150 transport companies in the Rhine-Main Public Transport Association.

The project brings together public and private partners including transport associations, German railways, Frankfurt airport and important cities in the area.

MobiChip will be based on the open MIFARE contactless technology and will allow future developments to combine banking and electronic purse facilities.

Alexander Harrer, Philips' product line manager Chipcard ICs, explained: "We are developing the MobiChip to create an open platform for a wide range of future applications such as electronic ticketing in public transport, e-purse, loyalty programs and access to information at kiosks. Basically it will be a multi-application and multi-provider card for passengers to use all services and information offered within the WAYflow project."

Pathways Campus Card in Hawaii

The Pathways Group is to implement a Smart Card system at Radford High School in Honolulu, Hawaii.

Each student will receive a personalised card which will provide photo identification and the means to purchase school lunches, concession stand items, school supplies and special items such as yearbooks and school-sponsored events.

The school lunch program is based on a prepayment system where parents pay in advance for school meals and other events. As items are purchased, the cost is debited from the funds deposited in the card's electronic purse.

In addition, the campus cards include an application programmed specifically for a promotion agreed to between Pathways and the Coca-Cola Bottling Company of Hawaii, allowing students to earn loyalty points each time they purchase a school meal or Coca-Cola product using their campus cards. Points can be redeemed for merchandise discounts at participating merchant locations, such as local surf shops or video rental stores.

The system includes Pathways' existing Smart Card technology as well as terminals and other PC-related read/write devices, transaction processing and backroom support services.

It also provides the school with database management, security, card stock management, personalisation, clearance and the facilitation of account settlement. Customised reports can be generated to provide the school with daily and monthly Hawaii DOE Food Service forms, student card balances and daily transaction logs.

Pathways implemented a similar Smart Card program in September 1998 at the Lanikila Elementary School in Honolulu, Hawaii.

Carey Daly, President and CEO of The Pathways Group, said: "We are pleased to extend our involvement with the Hawaii School System and the Coca-Cola Bottling Company. We feel confident that our experience in a live school environment has proven the reliability of our system. Future plans include working with Coca-Cola to develop a network of participating merchants."

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Mag-Tek Hybrid Card Readers

Mag-Tek Europe, based in the UK, has launched Intellistripe 60 and 65, a range of vandal resistant, hybrid card readers for unattended terminal applications such as payphones, vending machines, ATMs and kiosks. Users can choose the options they require without paying for those they may not need.

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Award for Securing Air Cargo

Chicago O'Hare International Airport's Universal Air Cargo Security Access System combining Smart Card and biometric technologies won the Innovative Security Application Award at Card Tech/SecurTech '99. The system uses Smart Card technology from Schlumberger and finger-print biometric identification from Identix.

Mary Rose Loney, the City of Chicago's Aviation Commissioner, accepted the award and explained that the system combines Smart Card and biometrics for authenticating truck drivers via their fingerprints when they deliver cargo to the airport.

O'Hare is one of the busiest airports in the world with 50,000 employees handling a quarter of a million passengers every day.

Safety is a high priority and the latest in high tech security systems screen passengers and baggage for dangerous items, and no traveller can reach an aircraft without encountering several security checks.

However, in the last decade, air cargo shipments has presented a new threat to air safety with more and more freight being carried in passenger aircraft. Loney said it was estimated that about 60 per cent of air cargo shipments in Chicago are carried on passenger planes.

"The fact that we are co-mingling passengers with large volumes of freight activity really places the challenge upon us to ensure that we are balancing the security needs of both," she explained. With terminal security tight, it was felt that terrorists could be looking for security loopholes elsewhere.

The system, which was integrated by SecurCom, Inc., uses biometric fingerprint technology from Identix, Schlumberger Smart Cards and readers, and Oracle database technology to replace the earlier authentication method that depended on a written manifest and copied drivers license.

The pilot phase of the program, which started in January 1998 through March 1999, included 700 truck drivers and 24 cargo sites.

In the award-winning application, Schlumberger Smart Cards and readers are used as the platform for secure, easy-to-use authentication and data management. The MultiFlex 8K bytes micro-processor cards enable cargo drivers to carry a high tech form of ID that can be biometrically verified.

At the same time, the cards' memory capacity allows them to also store information about the shipper and the cargo.

The main component in the security plan is the use of fingerprint biometrics to verify identity. Warehouse attendants activate the system by logging on biometrically. The security process for clearing a driver begins at the shipper's dock where the driver's Smart Card is updated and the load is sealed.

On arrival at the air cargo facility he approaches the counter and is instructed to insert his Smart Card into an Identix TouchNet II reader. What looks like a driver's license appears on the PC screen. It has his photograph and personal and employer information. He then places the appropriate finger on a scanner which searches the card and verifies that he is the person entitled to use that card and belongs to that load.

The operator views the manifest which shows what the cargo is on the truck, and the seal number that has been placed on that trailer.

The driver is then authorised to make the delivery at which time one of the dock attendants verifies that the seal on the trailer matches the seal number that was on the manifest loaded into the computer. When that has been completed, the cargo can be delivered into the facility.

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Electronic Toll Project Award

Singapore LAN Transport Association was awarded the Outstanding Smart Card Award presented by the Smart Card Industry Association at CardTech/SecurTech '99, for its use of contactless Smart Card technology for an electronic road toll system.

A Phone Specially for Children

Greek cellular network operator Panafon has launched a new phone specially for children - and parents who want to keep track of them at school, in the playground or at any other place.

Called the Panafon á la Carte Junior, it is a bright green colour and is programmed with up to six pre-defined numbers such as school, neighbours, relatives or other emergency numbers making it easy for a young person to use the phone while parents have control over costs. Although the children can only call pre-defined numbers they can receive calls from any telephone.

The new phone uses a prepaid SIM (Subscriber Identity Module) Smart Card and there is no subscription.

Parents can change the pre-selected numbers on the phone by calling Panafon's customer service which carries out the alterations using AU-System's AviSIM OTA (over-the-air) services.

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Barclays Orders 6,000 Terminals

Barclays has placed an initial order for 6,000 Eclipse TT41 terminals from Scottish manufacturer Ingenico Fortronic.

The terminals are designed to accept both magnetic stripe and the new chip payment cards being introduced by the UK banks.

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Loyalty System for Small Retailers

Star Micronics has announced a new customer card loyalty system designed for implementation without the need of a PC.

Called the MCD300, it has a numerical keypad which works independently of a PC or existing point-of-sale system. It operates in conjunction with the

Star Visual Card reader/writer system, features a modem for downloading customer information and a removable PCMCIA memory card which stores up to 512K bytes of customer data.

The UK company says the system minimises the costs associated with loyalty scheme implementation, thereby appealing to smaller and independent retailers.

Star's Visual Cards feature a display panel which can be written to up to 10,000 times at the point-of-sale by the card issuer to display three lines of information, for example, the number of points gained or special offers.



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Swiping Out Child Cruelty

The National Society for the Prevention of Cruelty to Children has become the first charity to employ hand-held credit and debit card swipe terminals at major events in England and Wales to raise funds for its Full Stop campaign aimed at putting a stop to cruelty to children. The charity is targeting the 18 million adults who regularly use payment cards.

Crypto Controller for GeldKarte

Philips Semiconductors and Smart Card manufacturer ODS Landis & Gyr have announced that the German Central Credit Control Committee of Banks (Zentraler Kredit Ausschuss, ZKA) has approved the hardware/software combination based on the new P8WE5032 high security crypto controller for the German GeldKarte purse.

“With this approval Philips Semiconductors is proud to offer the first Smart Card controller fully hardware-resistant against recent threats. We have achieved this through sophisticated and dedicated chip design based on leading edge 0.35µm process technology and our experience in high security products,” said Alexander Harrer, product line manager Chip Card ICs at Philips Semiconductors.

“As one of the main suppliers of the German eurocheque card with chip, ODS Landis & Gyr has gained a long-term expertise in the field of mask development. This know-how enabled us to perfectly integrate the excellent hardware features of the Philips Semiconductors’ WE controller into our GeldKarte operating system,” says Andri Laux, Managing Director of ODS Landis & Gyr.

In the first quarter of this year, Philips introduced the WE range, the first Smart Card controller family based on 8-inch wafers with 0.35 µm feature size. It is targeted at high security applications in banking, GSM and Pay-TV.

The WE family features a triple-DES co-processor which reduces execution times considerably, enabling a triple-DES operation to be completed in less than 110 ns. As a result, the overall time required for a triple-DES operation within a transaction can be reduced by a factor of up to 400.

For cryptographic key generation, Philips’ FIPS 140-1 evaluated True Random Number Generator (TRNG) is also available in the new controllers. The WE-Family can also offer Philips’ 32-bit FameX crypto coprocessor for public key encryption.

Promotions Expert Sues Shell

Businessman John Donovan, who claims Shell stole his ideas for its Smart Card loyalty scheme, is suing the oil company in a multi-million pound lawsuit in the High Court in London.

The case alleges breach of contract and misuse of confidential information and is expected to last three weeks.

Donovan claims that Shell took his ideas - which he gave to it in confidence - and developed them without consulting or paying him.

Shell denies the allegations and is counter-claiming £100,000 for breach of a confidentiality agreement.

People on the Move

Datacard Group has appointed Jerry E Johnson as President and Chief Executive Officer to succeed Glenn Highland who has resigned to pursue other activities. Previously, Johnson was Vice President and General Manager of the Onan division of Cummins Engine Company.

ORGA Kartensysteme GmbH has appointed Udo G Fölling as its new Chief Executive following the resignation for personal reasons of Winfried Gottwald. Previously he was head of banking business for Siemens Nixdorf.

Australian electronic technology company, Omnitel Holdings, has appointed David Samways as Managing Director of its Smart Card operating division - VFJ Technology.

Landis & Gyr Communications Group has announced the appointment of François Gabella as Chief Executive Officer following the resignation of Joël Bourez who is to pursue other business opportunities but will continue as a consultant. Mr Gabella joins L&G from the ABB Group, the global engineering and technology company.

Three SESAMES Awards in 1999

Three SESAMES Awards will be given at Cartes '99 in Paris in November - Best Technological Innovation, Best Application with awards in each major sector - Transportation, Loyalty, E-commerce, GSM, Banking/Finance and Healthcare; and Identification/Security.

Entry forms are available from

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Schlumberger Expands Into Brazil

Schlumberger has purchased an 80 per cent share in CardTech, a Brazilian magnetic card company for financial markets.

Schlumberger has 10 Smart Card manufacturing facilities around the world, including one in Mexico. CardTech's strong market expertise in the banking and financial segments was one of the main reasons for Schlumberger taking an equity stake in the company.

"Our goal is to combine CardTech's local market expertise and human resources with our global technology and investment capabilities," said Gerard Leger, President, Schlumberger Test & Transactions Europe. "This equity stake reinforces our commitment to the Brazilian and South American markets at a time when the demand for Smart Card technologies is gathering momentum throughout the region.

"An industrial presence is critical to the Brazilian banking community as it undertakes a strategic shift from magnetic stripe cards to Smart Cards."

CardTech, which was founded in 1983, has headquarters in Curitiba and facilities in Sao Paulo and Curitiba. It currently supplies magnetic cards specialising in credit and debit and is certified by Visa and MasterCard for card personalisation.

Neri Fontoura of CardTech commented: "We are now well positioned to become a leading player in the region as the Smart Card market gains momentum."

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HyperSecur/Oberthur Contract

HyperSecur Corporation has signed an International Agency Contract for Canada with Oberthur Smart Cards USA giving it exclusive Canadian rights and non-exclusive worldwide rights to sell Oberthur Smart Cards' magnetic stripe, memory and micro-processor card products and personalisation services.

HyperSecur recently acquired HyperSecur (Canada), and its HyperProximity chip which will be implemented in the ST16HF52 contactless Smart

Card from STMicroelectronics.

The chip is a dual proximity level contactless solution based on ISO 14443 Type B. Samples of the HyperProximity chip should be available by the end of this month with deliveries of chip orders at the end of the year.

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NEW Loyalty Card for Singapore

A new loyalty card programme based on a business platform is to be launched in Singapore by Access Management Group (AMG), a newly set-up business unit by National Computer Systems.

Called NEW (Never Ending Wishes), it will offer cardholders benefits such as a redemption scheme and monthly lucky draws with top prizes including first-class air tickets on Concorde from London to New York, shopping trips to malls in America, the latest mobile phones and a car.

Gemplus is supplying 450,000 GemClub Memo Smart Cards and 1,000 GCR500 card readers for the initial phase of the project which aims to reach a potential of 2.4 million adults in Singapore.

Chou Fang-Soong, Executive Vice President of Gemplus Asia Pacific, said: "I believe with their approach of a business platform more than just a standalone loyalty programme, AMG will create a new era in the application of Smart Cards in the industry."

The GemClub memo card features distinct counters on its chip, allowing multiple applications to run on the card either independently and secure of each other, or interactively.

It is also compatible with the PC/SC standard and supports the T=O communication protocol common to most terminals.

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Integrating Payment and Loyalty

Visa has announced an industry working group to integrate financial and retail loyalty applications for more efficient, cost-effective Smart Card solutions.

“While the relationship between loyalty and payment go hand in hand, the two functions have rarely been linked,” explained Diana Knox, Senior Vice President of Smart Card Applications at Visa USA.

“Visa and its member banks look forward to bringing the payment expertise, combined with our partners’ loyalty and Smart Card industry expertise, to offer real-life business solutions to merchants.”

A Smart payment/loyalty card program could allow earned awards to be redeemed immediately at the time of purchase.

The Visa-led working group includes Chip Application Technologies, Cyberpro Technologies, De La Rue Card Systems, IBM, VeriFone, Smart Card Solutions and Welcome Real-time.

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Oberthur Wins 12m Cards Order

Oberthur Smart Cards is to supply 12 million cards to GIE Sesam Vitale, the French national health insurance scheme.

The cards will be sent to the personalisation plants of CNAM TS and MSA starting next month and will be manufactured on demand over a period of three years.

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EMV Approval for GemCore

Gemplus has received EMV (Europay/Master Card/Visa) 3.1.1 level 1 certification from Europay International for its GemCore 1.2 Smart Card InterFace Module as implemented in the Gemplus GCR700-MS4 reader.

GemCore is designed to simplify the integration of a Smart Card interface into devices such as Personal Computers, network computers, keyboards, ATMs, vending machines, terminals, payphones, consumer electronics, handsets and set top boxes.

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De La Rue Selects Prism

De La Rue Card Systems has selected Prism Card Technologies, part of the specialist secure payments group Prism, as their Southern African GSM distribution channel.

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Swedish IT Company of 1999

AU-System has been named the IT Company of the Year, 1999 by Swedish weekly business magazine Veckans Affärer.

AU-System Mobile is a company within the AU-System group that develops and sells software for value-added services based on Smart Card technology (SIM cards) to GSM operators.

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Gemini Terminal from Card Clear

The Card Clear Group has launched a new EFT (Electronic Funds Transfer) terminal, called Gemini, which can handle transactions using magnetic stripe and chip payment cards.

The terminal has been designed and manufactured by HTEC, which became part of the group early in 1998.

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Smart Cards in India: Emerging Trends

From our correspondent in India

The state of Gujarat will be the first to issue electronic chip based Smart Driving Licence Cards in India. The project is being implemented by the New Delhi based Smart Chip Ltd in collaboration with ORGA of Germany. This project is by far, the largest Smart Card project to be undertaken in India.

The Chief Minister of Gujarat Keshubhai Patel recently inaugurated the first modern computerised Smart Card licence-issue centre at the Ahmedabad regional transport office (RTO). The centre has integrated facilities for on-line capture of individual photographs, signatures and fingerprints, along with other identification details.

All RTO offices across Gujarat will be similarly equipped over the next 12-16 weeks. During the next 24 months, it is proposed that all existing 10 million driving licences will be converted into Smart Cards.

With the Gujarat Driving Licence Project, India has leap-frogged into the global club of Smart Card users. "It is indeed true that India holds the maximum potential for Smart Cards in the world," says Capt.(IN) Vinod Bhardwaj (Retd.) of Smart Chip Limited.

"This vast potential for Smart Cards has to be exploited to the fullest and the market has to be systematically developed to reap the results. Our endeavour at Smart Chip for the past three years has been exactly this. It is pertinent to mention that we have won an order from the Government of Gujarat for Smart Card based driving licenses, the order quantity of which is 10 million Smart Cards."

ORGA is specifically geared-up to provide strategic and logistic inputs to roll-out and sustain large Smart Card projects in India says a press communique from Smart Chip. This is amply proven, as together with Smart Chip Limited, ORGA has already successfully implemented more than 20 Smart Card projects in the country.

Incidentally, ORGA is also one of the largest suppliers of SIM Smart Cards in India through another group company, Syscom Technologies.

First smart payphone network

Tata Teleservices Limited (TTL), the basic

telephony services provider in Andhra Pradesh (a state in India), has established the country's first Smart Card payphone service network in the state based on Schlumberger's Smart Card technology. "TTL aims to provide world class payphone systems." says the company. "This system provides better accessibility with fraud proof and reliable payphone service to the customers."

The company will be providing the telephone booths. The booth owner will buy a Smart Card from TTL paying a certain fee up front. All the calls made by the customer will be adjusted from this fee. The customer will pay the Booth owner the call charges.

The basic idea of the system is to make the payment cycle smoother while at the same time ensuring that the metering of the calls is not rigged at the booth. Once the booth owner exhausts his pre-paid limit, he gets his account recharged by TTL. The Smart Card can be programmed to adapt to various customised needs, benefiting both the end-user and the trade.

Tata Teleservices, is the first and only company with a Smart Card payphone network contract in India. The network will cover 1,500 telephone booths in major cities in the first year of its operation, and will be extended throughout the state in a phased manner.

Bank cards

Banks that put the Smart Card into the pockets of their cardholders will reap the benefit of market leadership well into the 21st century. Citibank India, has recently made its first moves on the Internet banking front with the launch of an India-specific Web site. It is learnt that the bank will soon allow its credit card customers to view their statements through the site.

American Express Bank's recently launched campaign, enticing customers with a low rate for balance transfers, is also a sign that a NextCard-like game is afoot in India. One of the unique features of the NextCard is that the entire application and approval process is done through the company's Web site. It will be interesting to watch whether the other new and potential entrants - from State Bank of India-GE, Kotak mahindra to ICICI - also adopt NextCard-like strategies.

Cellular market

The acceptance of cash cards has grown rapidly in the Indian cellular industry. Anybody can buy a cellular phone and start making calls - no credit checks, no monthly bills, no deposits. And when you consume the stored value, you can recharge your card for any amount.

Making all this possible is a new kind of SIM (Subscriber Identity Module) card called a stored value card (also called cash card), and some nifty software put in by the operators. First introduced by Calcutta-based Usha Martin Telecom, cash cards are enabling operators to create new consumer packs, and vend them through a variety of alternative distribution channels - including large stores and electronic equipment dealers.

Cellular service operators in Delhi estimate that cash card sales, in 1998, amounted to 30 per cent of the total subscriptions. In Chennai, pre-paid cards accounted for 25 per cent of the total.

Cash cards are expected to increase the segmentation of the cellular market. Delhi-based Hutchison Max launched a cash card system with a two-fold objective. The company not only hoped to attract new subscribers, but was looking at motivating existing subscribers to purchase an extra card - for long distance and international calling.

Customer cards

In yet another development, two completely different ventures have made a debut into the world of triumph cards. The kind that fits snugly into wallets. The French hospitality major, Ancor Group, and the homegrown Enbee Group are talking "advantage" for their customers. Both have plans to launch customer privilege cards, or discount cards. Benefits on offer include discounts at hotels and restaurants, special offers at retail outlets, and lucky draws with huge prizes.

The real differences lies in what the cards offer to their promoters. While Embee Advantage aims to link service providers with their direct end-consumers, and then build on the base for future merchandising, Acor is taking its existing services to a different level. It plans to introduce its Privilege card with a view to keeping its corporate clients hooked.

The software content in Smart Cards and machines that make them is set to increase in proportion over

the hardware content. This would be direct outcome of the new uses cards of all kinds are being developed for. Global card giant Datacard Group expects that in the next few years the software content will increase to 75 % vis-a-vis the hardware content of 25 %, up from the 50:50 split at present.

The relationship between credit card issuers and banks is also likely to come under strain. "There will be a fight for the relationship with the customer," said Glenn Highland, former President and CEO of the Minnesota-based Datacard Group (see People on the Move, page 110).

In India, where Datacard has a distributor in CMS Computers, Mumbai, the business is growing. He said the development of a "secure enterprise authentication system" a software that helps prevent unauthorised access to personal computers by biometric mapping of palms or fingerprinting, is "absolutely key to the future." The software was developed at DataSmart Software, Bangalore, a 50:50 joint venture between Datacard Group and SaveSmart Inc, USA.

Shailaja V.R.

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Web for Loyalty Card Information

Welcome Real-time, supplier of loyalty software for Smart Cards, has launched a Web site - www.welcome-rt.com - providing detailed information for card issuers and merchants who want to better understand the marketing and technology benefits associated with integrating loyalty programs on Smart bank cards.

Describing loyalty cards as a "hot topic" in the financial services industry, Aneace Haddad, Welcome Real-time President and CEO, said: "Card issuers have set their sights on multi-application Smart Cards and they see loyalty as the cornerstone in the emerging Smart Card landscape."

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Smart Cards in E-commerce

Widespread penetration of Smart Cards for e-commerce is unlikely in the next five years, according to a new report, Smart Cards in European E-commerce Markets, from Datamonitor.

It says that Smart Cards are often put forward as the technology that will revolutionise consumer spending habits. Their versatility, allowing the use of Personal Computers, set top boxes and mobile phones as platforms, suggest they will bring convenience to on-line transactions, but in reality, the infrastructure has yet to be put in place.

In 2003, \$8.6 billion will be spent on-line in Europe, of which just 7 per cent will be accounted for by e-commerce Smart Cards. This, says the report, is due to consumer perception, the lack of supporting infrastructure, and the result of a cost/benefit analysis of Smart Cards for on-line payments.

Datamonitor believes the benefits of Smart Cards will be acknowledged primarily for authentication - not payment.

Compared to the benefits of using magnetic stripe cards for on-line payments, most on-line shoppers gain little from using Smart Cards instead, says the report. The argument of ease of use does not justify the \$30 - \$150 a Smart Card reader costs. These prices may go down as they are incorporated into Personal Computers or as mobile phones and set top boxes increase in e-commerce functionality. However, this will rely on IT vendors, large organisations or consumers themselves taking on the initial investment.

Datamonitor predicts that by 2003, 3.3 million on-line households across Europe will be equipped with PC Smart Card readers with Germany and the UK leading.

Set top boxes will be a more significant area of opportunity with 18.7 million Smart Card-enabled boxes forecast for 2003. The UK will be a large market with significant shares also in France and Italy.

However, mobile phones show the greatest potential in e-commerce. The majority already use chip cards for the SIM, and the platform is in place to expand into further services. By 2003, there will be 32.3 million Smart Card-enabled mobile phones in circulation. Germany will be the largest market followed by Italy and France.

Datamonitor analyst Jonathan Tikochinsky, said: "Consumers are unwilling to provide credit card details on-line given the inherent security risks of an open network such as the Internet.

"Smart Cards could go some way to overcoming the fears holding back on-line payments and could play a crucial role in the digital signature framework allowing people to carry their digital "identities" on them as part of the public key infrastructure. This additional layer of security with regard to authentication may encourage the consumer towards the use of on-line payment mechanisms," he said.

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EMV Certification for Racal

Racal Transcom's Smart Card memory module, common to its Cardmate 2 and Cardmate 3 electronic payment terminals, has been certified by Europay, MasterCard and Visa to the latest EMV standard.

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Chipper and ChipKnip Agreement

Banks in The Netherlands have agreed that the number of points-of-sale equipped with both the Chipper and Proton electronic purse applications will be increased to 150,000 by April 2000.

The existence of two schemes - the Postbank and ING Group Chipper Card and the Dutch banks' (except Postbank) ChipKnip Card based on Belgium's Proton technology - has made consumers and merchants reluctant to use the electronic purse.

Chipper International described co-operation between the two groups as "inevitable". However this co-operation has taken some time as the rival groups each strived for mass market domination. The new move will make the infrastructure transparent (interoperable) for both consumers and merchants.

Cross Border EMV Chip Interoperability Becomes Reality

by Severine Percetti

It took four years for the UK to move its banking cards and terminals to EMV compliant chip technology, the Slovakian Republic has achieved such migration in less than 2 years, thanks the combined efforts of Slovenska Sporitelna, Europay and Bull.

At a restaurant in Bratislava in June Barry Fergus, Director of International Development at Barclays used his personal EMV compliant MasterCard chip card¹ to pay for a bottle of local wine. This cross border transaction was greeted as "tangible proof that EMV chip interoperability is now a reality within and beyond the boundaries of the UK".

Slovenska Sporitelna launched its EMV project in February 1998, involving the bank's Maestro cardbase, ATMs and terminals. The first chip-based transactions were successfully conducted in late-October. The bank plans to convert its entire cardbase of 300,000 by 2000. Also by the end of this year all the bank's POS terminals and 200 ATMs open to Europay brands will be fully up-graded and able to accept EMV chip cards. This impressively rapid conversion is explained by the fact that Slovakia, in common with the rest of Eastern Europe, is a relatively new market with no heavy heritage hindering the adoption of new technology. Bank Security in Eastern Europe is also critical in the face of expanding fraud. Banks have no choice but to be pro-active to protect their infrastructure. Finally the "Off the shelf solution" developed by Bull ensured a quick and easy migration.

Europay is pleased with its progress and now hopes that this world's first cross border transaction will be followed by others. Javier Perez, General Manager, Regions and Business Europay International said: "Plans are already very well advanced with other major banks in each of the key markets across Europe including the Eastern Europe region-Czech Republic, Hungary Poland and Russia". Cross border payments between the UK and the Slovakian Republic might remain scarce, and Mr Perez joked on the unlikelihood of "a mass Slovakian/British payment card invasion". However the strong interest shown by the Czech Republic for a chip based migration would give cross border interoperability its true meaning. A trial could be on its way there as early as September.

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¹Issued by Barclays

The Only Smart Card Directory You Will Need

The International Smart Card Industry Directory 1999/2000 V1.0 CD-ROM is the only Directory needed by the Smart Card professional. With 500 Smart Card company listings which are fully searchable, this Directory will prove to be an invaluable tool for increasing contact lists and gaining information about the major Smart Card companies throughout the world. The Directory contains contact names, contact addresses including e-mail and web sites, telephone and fax numbers, company profiles and products and services. Over 700 pages of invaluable information. It is published exclusively on CD ROM, in Adobe Acrobat PDF format, the readers for which are included on the CD.

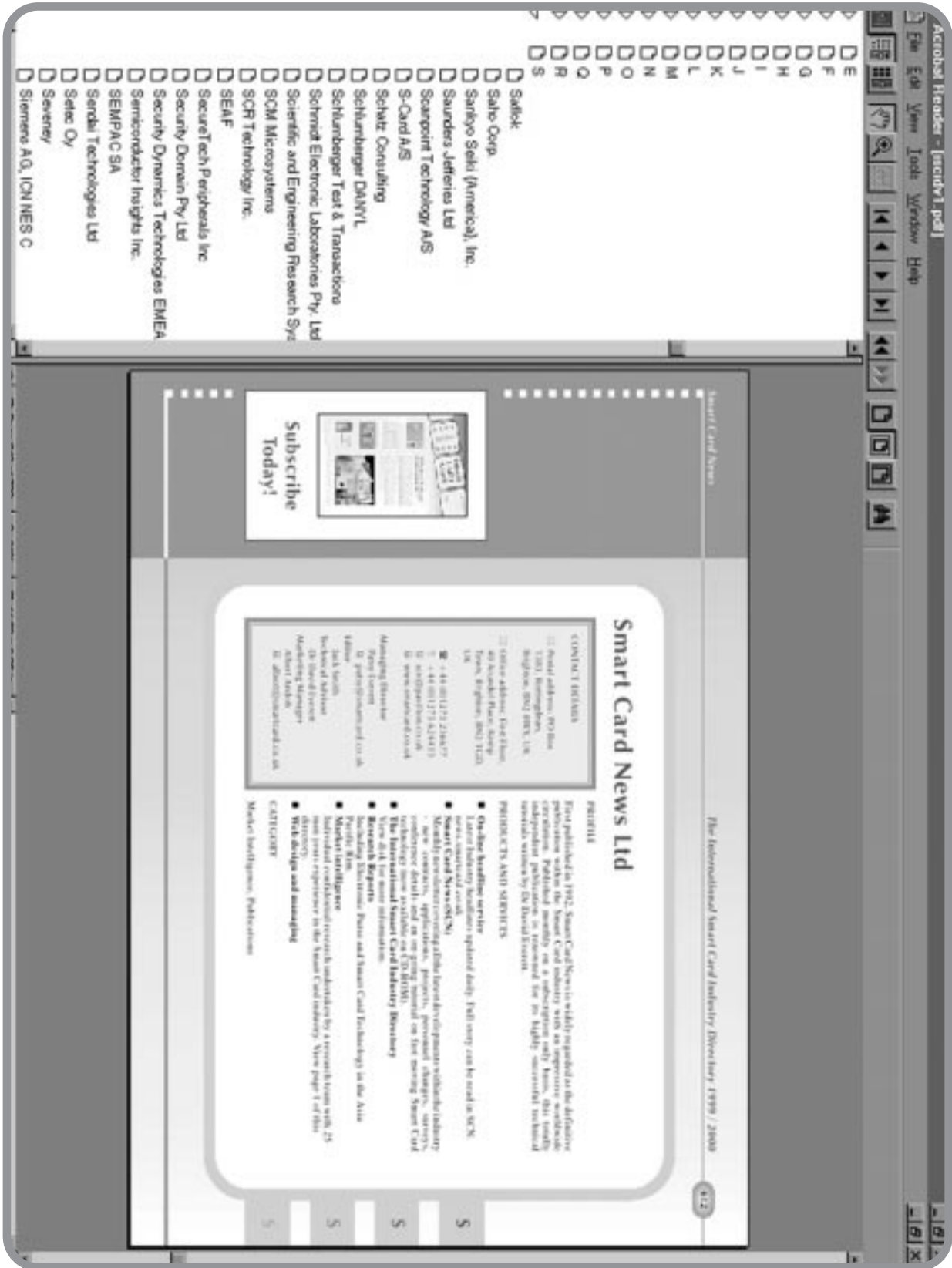
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To view one week's worth of news, please access www.smartcard.co.uk and see the type of news that you could be receiving daily, to your desk.



A sample page from *The International Smart Card Industry Directory 1999/2000*, showing the entry for Smart Card News Ltd

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Contact

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Chasing The Blues Away In Chicago

By Norrie Blackeby

Americans really know how to put on a show. Image is everything. At the CardTech/Securtech '99 Conference and Exhibition held in Chicago in May, this was certainly the case. Details like all-day free shuttle services from major hotels to the impressive McCormick Convention Centre located at the South side of the city made it convenient for people to head for the show. The exhibition had all the big companies fighting for visitor memory space. Big and not-so-big players pitched their latest wares (and gimmicks) to the hardened and often Smart Card-wise customer.

First up, ICL, the IT services company, was the main supplier for the smart card system for the show. According to the organisers, up to 10,000 conference and exhibition attendees received the official CTST 99 Conference Card which used ICL's SmartCity on the chip. Now, what did that offer?

The contact chip application on the SmartCity card allowed visitors use of the electronic purse, which is preloaded with money. Other contact applications included attendee registration and identification. The smart card also had lunch ticket functionality, giving the 2,500 seminar registrants easy access to catering during the show.

It sure comes in handy when one starts experiencing those hunger pangs.

Gemplus was the supplier of the smart cards. Also, by working with Cubic Transportation Systems, a contactless chip application allowed cardholders access beyond the conference boundaries to the Chicago transport system for the first time. Attendees loaded value at transit revalue stations, located in the exhibition hall, activating the card for use on the city's subway.

Integration was the key word at the exhibition.

What's the buzz?

Microsoft was one press conference that was an SRO event.

The buzz was Microsoft's choice on Atmel's AT90SCXXX family of cryptocontroller for their Smart Card for Windows operating system. If we are to believe the hype, Smart Card for Windows is expected to become the de facto Smart Card standard. Easy to believe considering the company's penchant for industry domination. A chat with Microsoft's Product Manager Mike Dusche echoed a popular sentiment within the industry.

"Technology-driven hasn't worked for 25 years," he said. "It's time for us to ask the customers what they want. We think we've heard them."

Loud and clear, we hope.

Philippe Goetschel, director of Microsoft's Smart Card group said they developed Smart Card for Windows OS because the company believed it is a growth market.

"We expect that by the 2000 all new PC will have Smart Card readers as standard equipment. The Smart Card market is expected to grow at a 300% annual growth rate for the next several years. By the year 2002, as many as two billion Smart Cards could be using the SC for Windows operating system."

An interesting feature of this year's conference was a series of hands-on workshops for Smart Card application developers and programmers presented by Microsoft, Sun Microsystems and MULTOS. Smart Cards for Windows application developers had the opportunity to run live desktop and card-based applications with hands-on instruction. The Developers' Workshop showed how to include Smart Cards in applications such as secure network access, e-commerce, payment and

loyalty, and medical solutions. The sessions included lecture and lab work, and attendees received Smart Card developer kits, including Smart Cards and sample applications on both the PC (host) and card sides.

Exciting times, huh? The potential is certainly gargantuan in terms of sheer numbers and applications.

Look into thine eyes

The other segment of the market that was making some headway was biometrics. Considering that a few years back, the idea of passing physical information via some whizz-bang technology as a form of access or identification proved to be a contentious issue, this year's show seem to negate all that. More and more, people are getting used to the idea of this alternative form of identification. The iris is the most personally distinct feature of the human body that is available for precise mathematical analysis and non-intrusive, non-contact automated identification. It is believed that the iris recognition process rivals DNA in reliability, yet identifies an individual in seconds using a video-based imaging process. The applications for iris recognition technology include virtually anywhere positive identification is required to minimise or eliminate fraud, deception, theft, error, unauthorised disclosure, or violation of privacy. At the show, iris recognition technology was demonstrated in a number of camera platforms for a variety of uses, including IriScan's new PC Iris system, the IrisAccess access control product designed and manufactured by LG Electronics of Korea, and the SensorSecure ATM-based product designed and manufactured by Sensor, Inc. IriScan's PC Iris system can be used for computer and network security, log-on control, data and records protection, and a number of other applications.

There were other practical applications presented at the show that are being used for the first time in the United States across a wide range of diverse fields that included transportation, finance and business, higher education and government. Chicago O'Hare Airport's Cargo Handler Fingerprint System: Jim Sachay, assistant commissioner, Department of Aviation, described how the airport is tracking baggage handlers with fingerprint biometrics and Smart Cards to protect passenger safety and property. Chicago Transit Authority's Contactless Smart Card Fare System: Joe Simonetti, general manager, Revenue Equipment Technology, discussed the recently completed equipping of all CTA buses and rail stations to handle contactless smart cards for convenient and secure fare collection. Compaq Computer Fingerprint PCs: Michael F. Angelo, Principal Member Technical Staff, talked about the integration of fingerprint biometrics into the Compaq line of PCs and workstations for enterprise security. The Illinois Biometric Verification of Welfare Recipients: Barry Beckwith, chief, Bureau of Operations Support at the Illinois Department of Human Services, described the roll-out of fingerprint ID and matching capabilities to ensure that people do not enroll for benefits under different names.

However, one should consider that in the future human clones might just pose a challenge to this industry.

Eh, commerce?

E-commerce is a compelling scenario. Even if consumers do not use e-commerce everyday the key is to try to make them use it as often as possible. And some companies are aggressively heading that direction. Keycorp's John Wood commented that "the boundaries between physical EFTPOS and virtual payments on the Internet are going to breakdown completely." The future, he said is providing a complete solution but with a difference.

"In the last two-and-a-half years, it became evident that the path to differentiate yourself is by concentrating in multiple applications Smart Cards and on new architecture for payment delivery at the physical point of sale based on the web. So all our new terminals are web-enabled terminals, rather than just being payment terminals."

The Internet, he said, had a huge impact in the industry but it is only the start of it. Wood reckons that the next wave that would be the question of what and how much content can be disseminated.

"The PC was once a passive device until the Internet came along and connected information which was accessible everywhere. The Web is an area that you only entered when you use the Internet. In this way, if you extend the Web beyond that into your wallet by way of Smart Card, then the Web reaches out to you in your daily life rather than just the Web being there when you turn on your computer or when you go on your web browser.

"If you want to get two minutes worth of information, you stick a Smart Card into a kiosk and whatever you're looking for will be presented to you there. Your environment will be customised to you based on the information on your card. The card will have an impact on the Web and the Web has an impact on the payments environment. The whole concept of terminals changes. You're not just able to connect terminals that just passively gather transactions. If you're not a web-based services and pushing services applications out in a virtual environment then you are going to find yourself left behind."

Wood also welcomes Microsoft's entry into the industry.

"I think SC for Windows Smart Card will have the guys at Microsoft thinking from the perspective of how can cards affect the web and vice versa. What it creates is a quickly changing environment. It will be a volatile environment for a number of years. And volatile environments create opportunity if you've got creative people."

But the key to all this Dusché said is the world wants an 8-bit, low cost, high performance type Smart Cards to enable customers to improve their existing infrastructure. The industry should focus on what the developing community wants and what the consumers want and not what the technology companies want.

But that won't deter chip makers from producing the Roll Royce of chips at Daewoo prices.

The usual suspects

The major players acquired the usual real estate at the exhibition but the prime position was cornered by no other but Gemplus with a cheeky slogan, "Yes I am Smarter than Most, Thanks for Noticing". The company attempted to recreate the Gemplus headquarters at the show. Actually, it was not hard to notice them. Teams of uniformed Gemplus personnel showed up in full force. However, not to be outdone, DataCard also took out pretty much the same square meter space. It may just be the American thing but the DataCard booth dominated the front left-hand side of the exhibition with most of the personnel from Minnesota flying in for a day or two.

Then of course IBM, ST Micro, Schlumberger, Bull Worldwide Information Systems, Philips, Trintech, Sun Microsystems, ORGA, NEC, Elva, Oberthur, ProtonWorld, Mondex, Chipper and just about everyone in the Smart Card business that side of the Atlantic were all accounted for.

Yet, the company that wowed a lot of exhibitors and visitors alike was Motorola's Blues party bash. It was the in thing to do. The event was oversubscribed due to a late tidal wave of interest from the exhibition floor and, according to worn partygoers the next day, the venue was packed to the gunnels. After a hard day's work, nothing could beat a hard night's rage. But that's what exhibitions and conferences are for — work hard and party hard.

See you at the next one!



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