

BIOMETRIC INSIGHT

Inside this issue:

- 4** *EC Promotes Common Visa Application Centres*
- 5** *Europeans Want Biometrics*
- 6** *Finland Biometric Passport Set for August 2006*
- 7** *New Standards Support Biometric Technologies*
- 10** *Live Test for International ePassport*
- 11** *Facial Recognition for New Zealand ePassport*
- 12** *Traveller Identity Cards Spark Debate*
- 15** *Biometric Acceptance Grows*

Biometric Smart Cards for Qatar National ID

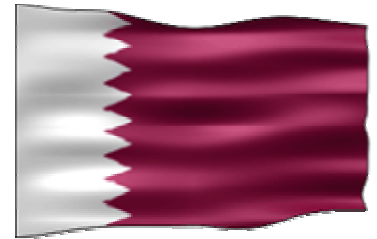
Axalto is to contribute to the Qatar national ID program with the delivery of fingerprint match-on cards, associated readers and services. Qatari citizens will use these high-end cards, combining a built-in biometrics feature, contact and contactless technologies as their national ID document as of the first quarter of 2007.

This biometric smart card will serve as the official ID document for Qatari citizens above 16, as well as foreign residents. In addition to the personal data available in usual ID documents (such as name, birth date, address etc), the microprocessor will also store the person's fingerprint.

The biometric data remains on the chip and never leaves the card even when the identity verification is being performed, respecting privacy of the cardholder.

Thanks to the security features embedded in his/her ID card, the cardholder will be able to access e-government services and perform transactions in a simple and secure manner. Using an Axalto smart card reader connected to their home computer, citizens could use their smart ID card to declare a household employee, change of address, or obtain civil records.

Moreover, the contactless technology built in the card together with



"This biometric smart card will serve as the official ID document for Qatari citizens above 16.."

the match-on card capability allows this ID card to be used as a travel document, increasing speed, convenience and security of identity verification at border crossing.

Regular Features

- Products/Services
- News Briefs
- Schedule of Events
- Final Thought

Singapore Unveils Biometric Passport



Singapore's Deputy Prime Minister and Minister for Home Affairs Wong Kan Seng, has unveiled the BioPass, Singapore's new biometric passport. The e-passport will contain a polycarbonate page that is embedded with a contactless chip which will carry the owner's facial and fingerprint biometric identifiers.

This new e-passport is compliant with the standards set by the International Civil Aviation Organisation (ICAO). According to Singapore's Immigration and Check-Points Authority, the BioPass carries enhanced security features, such as multiple laser images, that are difficult to tamper with. Multiple laser images have been incorporated into Singapore identity cards since 1991. The cover of the BioPass carries the International Civil Aviation Organisation's e-passport logo.

Mr Seng said that the BioPass has achieved Level II certification under the United States' Visa Waiver Program, which requires participating countries to issue e-passports by Oct. 26 this year.

The BioPass will be issued firstly to government officials and Singapore Airlines crew members as part of a "careful and calibrated approach" in implementing the new e-passports and will then be available to Singaporean Citizens August 2006.

News Briefs >> Products/Services

Artemis Solutions Group has released the BioCert ClipBio Pro 1GB Secure Fingerprint Flash Drive. Developed in conjunction with Symwave using their BioPrint swipe fingerprint technology,. The BioCert ClipBio Pro 1GB Flash Drive uses advanced encryption methods and a secure biometric algorithm to authorise users access to their data on a secure partition on the ClipBio Pro.

BIO-key International along with **identiMetrics** have delivered a system that automates student attendance, as well as cafeteria processes at Visitation BVM Catholic School in Philadelphia, PA. Visitation BVM has been successfully running the identiMetrics software platform, identiFi for over a year with exceptional results. identiFi, a comprehensive biometric fingerprint identification and security platform, utilises BIO-key's WEB-key technology to provide fast, accurate and secure student identification.

InfoTronics has released IDpunch 5, a biometric data collection device. The IDpunch 5 Fingerprint Terminal is a time recorder which provides accuracy and identification for any organisation. As employees punch in and out, advanced optical scanning technology instantly identifies the employee and records attendance.

Silex Technology America, Inc. has released Bio-NetGuard, an industry-first fingerprint-based access control system for WiFi local area networks (LANs). WiFi networks provide a tremendous solution to the demands of an increasing mobile workforce, but there are still concerns about verifying who can and cannot access the network.

There have been ways to protect WiFi-enhanced equipment in the past, but no methods to authenticate those who connect to the wireless system. Bio-NetGuard allows an IT Manager to secure the network against unauthorised users by requiring biometric fingerprint authentication prior to gaining access to the network.

VoxGen has launched an identification & verification (ID&V) product for the financial services sector, underlining the potential applications of voice verification biometrics. The voice banking protection system enables a user to record a voiceprint via an automated telephone service and use it to access their bank account details.

Cross Match Technologies has released PIV One, a Personal Identity Verification (PIV) solution to help federal agencies meet the requirements of President Bush's Homeland Security Presidential Directive-12 (HSPD-12). With PIV One, federal government agencies will be able to create verified biometric personal identity records of employees and contractors in compliance with the federal standard.

Ultra-Scan Corporation will integrate its TouchPoint biometric-enabled single sign-on (SSO) solution with the TouchChip TCS1 Fingerprint Sensor from UPEK. TouchPoint utilises Ultra-Scan's Livescan Ultrasonic Identification System (LUIS), a biometric technology that uses high frequency sound waves, or ultrasound, to capture high quality fingerprint images across all user populations and operational environments.

Ceelox has released Ceelox ID Online, a strong biometric authentication solution to meet recent guidelines issued by the Federal Financial Institutions Examinations Council (FFIEC) requiring financial institutions to move beyond single-factor authentication in the verification of user identity. Ceelox has chosen to focus their solutions around biometric authentication because it provides the highest level of security with the least complexity for the user.

Verifying an individual's identity by matching facial images and signatures against archived biometric information is central to **National Identity Security's** (NIS) new suite of software products. The suite includes the National Identity Personal Profile (NIPP Secure), which authenticates and validates the individual, not the credit card or information used to identify the person.

RC Group (Holdings) has launched the S9 Next-Generation Fingerprint Access Control Device. It is designed especially for use in luxury homes and hotel resorts where aesthetic appearance is an essential component of function.

UPEK has announced that **DAP Technologies** is integrating UPEK's TouchChip TCS1 fingerprint authentication solution in its MICROFLEX CE3240 rugged mobile computer for government, military and industrial organisations. The CE3240, with security solution features, is a handheld device that combines UPEK's fingerprint sensor and companion processor with a smart card reader and barcode reader to enable identification validation at secured locations.

News Briefs >> Products/Services

Identix Incorporated has recently been awarded contracts from California state and local government agencies for Identix TouchPrint Enhanced Definition 3000 line of Full-Hand and ten print Live Scan Systems. The purchase orders are from agencies in California that primarily plan to use the new live scan systems to upgrade and expand their existing network of legacy Identix live scan systems. The systems will also help the law enforcement agencies meet the requirements of California's Proposition 69, which requires law enforcement officials to capture the hand prints of certain felonious registrants and parolees. The orders, which have a total value in excess of \$700,000, are expected to ship and be installed in the quarters ending June 30 and September 31, 2006.

Northrop Grumman Information Technology has selected **Cross Match Technologies** as a subcontractor for the IDENT1 programme in the UK. Cross Match will help deliver and install more than 200 Live Scan booking systems for the "National Live Scan Business Case," part of the IDENT1 programme. The contract was awarded by the Police Information Technology Organisation to Northrop Grumman Information Technology. Northrop Grumman will provide advanced biometric identification technology as part of an integrated computer system that links more than 50 police forces.

Sequiam Biometrics has entered into an exclusive distribution and manufacturing agreement with CJCC of Shanghai, China. During the term of the agreement CJCC will act as the exclusive distributor of certain Sequiam biometric products and services in China and Greater Asia. In addition Sequiam will act, during the term of the agreement, as the exclusive biometric designer and manufacturer of biometric products for CJCC.

CrossMatch Technologies, Inc has announced the release of L SCAN Guardian, a ten-print livescan hardware and software system. Measuring 6 inches wide, 6 inches deep, and 4.7 inches high, and weighing only four pounds, Guardian addresses the mandatory physical and performance requirements specified in the federal government's Challenge to Industry issued in September 2005. The Guardian automatically captures and segments an individual's ten-print images, evaluates the image quality of each fingerprint image, displays on a computer screen the fingerprint images, and formats the captured data into FBI compliant electronic fingerprint transaction records, all in less than 15 seconds.

Cogent Systems is deploying UPEK's TCS1 TouchChip Fingerprint Sensors with Cogent's fingerprint algorithms to provide secure fingerprint authentication solutions for a variety of government, physical access and commercial applications. UPEK's TCS1 fingerprint sensor, the only silicon fingerprint sensor optimised for Federal Identification Processing Standard (FIPS) 201 compliance, delivers high quality fingerprint images. Cogent Systems has integrated UPEK's TCS1 TouchChip Fingerprint Sensor across a broad set of products including the Smart-Gate, Search-Gate, Mag-Gate and SC-Gate physical access control devices requiring on-device, network-based or card-based access control applications.

BIO-key International, Inc has announced at the International Association of Chiefs of Police, Law Enforcement Information Management (LEIM) conference that it has released the next major upgrade of its mobile messaging and query software products, InfoServer and MobileCop.

This release is the next step in providing fingerprint biometric integration to BIO-key's customers, delivering a high level of security combined with ease of use and a lower cost of ownership. BIO-key, a bronze sponsor of the conference, is showcasing InfoServer V5.1 (formerly PacketCluster Server) and MobileCop V5.1 (formerly PacketCluster Mobile) at the conference. These products contain significant new features helping our over 1200 law enforcement agencies to do their jobs more efficiently and with greater safety

Identix Incorporated has introduced the TouchPrint Enhanced Definition 4100 Slap & Roll Live Scan. The product delivers enhanced definition capabilities in a more compact unit - a 6 inch by 6 inch footprint that weighs less than five pounds. The unit goes beyond simply meeting physical size requirements to fit tabletop spaces, kiosks and portable applications by adding superior image detail and clarity when compared to standard definition systems. The product also incorporates a number of new features designed to enhance usability and performance for dual criminal and civil applications.

Multilink Access Control Systems have introduced a new high capacity biometric fingerprint reader - the KF2000, which has been integrated directly into the Amadeus 5 software and the Toplock 4 control system, giving the end user a fully programmable system from one complete package. The KF2000 fingerprint reader is able to hold the templates for up to 1000 users and has further options up to 4000 users.

EC Promotes Common Visa Application Centres



Common Visa Application Centres and the introduction of biometrics in Visa Information System (VIS) aim to reinforce internal security and facilitate

legitimate travelling to EU. The European Commission has adopted a proposal for a Regulation introducing biometric identifiers in the Visa Information System (VIS). This proposal also includes different options allowing Member States to jointly organise the reception and processing of visa applications.

Vice-President of the European commission Franco Frattini, the Commissioner responsible for freedom, security and justice, declared: "This Proposal will have a knock on effect; it will facilitate the visa issuing procedure, prevent visa shopping, facilitate checks at external borders and strength the fight against fraud and, within the territory of the Member States, assist in the identification and return of illegal immigrants and the prevention of threats to the internal security of the Member States".



Mr Frattini added: "Common Application Centres" will have the advantage of reinforcing and streamlining local consular cooperation between Member States as resources can be pooled and shared, which will be of benefit to both states and visa applicants. One central access point will even ensure that the data protection requirements, to which I attach the greatest importance, are more easily met."

The objective of the proposal is to adapt the Common Consular Instructions (CCI) to the use of biometrics in the area of visa policy.

The obligation to enrol biometric identifiers from visa applicants is the logical consequence of using biometrics in order to enhance security. This proposal creates the legal obligation to collect fingerprints from visa applicants. In order to avoid all Member States having to install the necessary equipment for enrolling biometric identifiers in every consular office, the idea of creating "Common application Centres" was born. This is the reason for dealing, in the second part of the proposal, with the organisation of Member States' consular services. In addition to the existing form of representation, there are new forms of organisation of consular offices suggested:

"This Proposal will have a knock on effect.."

Co-location: This means that consular staff of two or more Member States are sharing the equipment of a host Member State in its consular post.

Common application centres: This means that consular staff of two or more Member States are pooled in one "neutral" building in order to receive visa applications.

Outsourcing: This means collaboration with external service providers for the possibility either to function as a "call-centre" for giving appointments or for the reception of visa applications including biometric identifiers. In all cases, the treatment and the decision on the application is taken by the Member State responsible. Especially outsourcing raises very important questions of data protection and these issues will be discussed in-depth with the European Parliament and Member States as this is an entirely new development in the common visa policy.

This proposal could be a first step to the further enhancement of the harmonisation of the application of the CCI and in view of future Common Visa Offices.

News Briefs

Gemplus has integrated its GemProx contactless reader into the SureAccess all-weather biometric smart card reader from Saflink. The integrated Smart Card reader solution is designed to comply with the US government's stringent Federal Information Processing Standard (FIPS) 201 requirements. GemProx is a range of contactless interfaces that are already in use for a range of applications including access control, transport, payment and border control.

AuthenTec has shipped more than 1 million fingerprint sensors to the PC market in the first quarter of 2006 alone. Of the 1 million sensors shipped, more than 80% were integrated into laptop and tablet models. AuthenTec has now shipped more than 8 million sensors across its PC, wireless, and access control markets - more than any other fingerprint supplier. "Biometrics has become an important tool for the protection of sensitive business information, particularly for the mobile user," said Walter Hamilton, chairman of the International Biometric Industry Association.

BIO-key International has announced, after a successful pilot, it has been awarded a \$370,000 contract from the Association of American Medical Colleges (AAMC) for deployment of a fingerprint biometric identity solution to assure the identity of test takers both before and after they take Medical College Admission Test (MCAT). The new computerised MCAT will also include BIO-key's technology to capture an examinee's fingerprint electronically, rather than on paper as is the current practice.

News Briefs

Frost & Sullivan predict that revenues in the world voice verification biometrics market are set to rocket to a \$533.7 million by 2011.

CryptoMetrics has announced that the New Zealand Passport Office has deployed its facial recognition technology as part of that country's ePassport initiative. The new ePassport system requires that the face biometric be encoded in a contactless microchip securely embedded in the Passport, allowing officials to confirm the identity of the person presenting the Passport. To be effective, each face biometric encoding must comply with the International Standard established by ICAO.

Sequiam Biometrics has received a substantial purchase order for the BioVault 2.0. The order is for delivery of 10,000 units of the BioVault 2.0, constituting sales of around \$2 million. BioVault 2.0 is a storage safe that can only be opened by unique fingerprint.

Hitachi has announced that Tajima Bank has adopted its proprietary finger vein authentication system and begun offering a biometrics service for customers. The bank will issue a cash card embedded with an IC chip to its customers and replace its automated teller machines (ATMs) with finger vein authentication terminals by the end of fiscal 2006. This is the first time that a finger vein authentication system has been used in a bank based in Hyogo prefecture.

UPEK Joins Initiative for Open Authentication (OATH), a consortium of device, platform and security application companies, as Coordinating Member; UPEK, Inc has joined OATH to contribute to a growing industry-wide vision of common authentication solutions for open, yet secure, network access

Europeans Want Biometrics



Europe has a positive outlook on biometrics and expects a wide range of benefits from electronic identity technologies, according to research carried out by Vanson Bourne on behalf of global IT services group LogicaCMG.

The survey finds that convenience and safety when travelling and managing financial transactions are now more important for Europeans than perceived privacy issues. On average, 84% of Europeans would be happy to have their fingerprint taken and iris scanned when travelling abroad as they believe this will speed up and ease the travel procedures. 88% believe that biometric technology will reduce identity theft while 85% believe it will reduce financial fraud.

France leads on the acceptance of biometrics with 92% of respondents happy to have a fingerprint and iris scan when travelling abroad. By comparison the Czech Republic is most reluctant with only 67%. Portugal leads the anticipation of a reduction in identity theft and financial fraud with a staggering 95% of people in both cases expecting biometrics to help cut these crimes.

Tim Brew, director of LogicaCMG's electronic identity practice outlines the drivers for such high levels of acceptance: "Accuracy and the consumer's belief in the accuracy has been the number one issue. Continuous development of the underlying technology has seen significant improvements from the early days of biometric solutions together with a much improved and less intrusive experience for users. Consequently the focus has moved to the real benefits of these

systems and how real world solutions are delivered. We have reached a tipping point where most Europeans now highly rate the advantages of biometrics in terms of safety and convenience."

"88% believe that biometric technology will reduce identity Theft.."

71% of respondents would feel more secure using a fingerprint or biometric identity card to pay for goods and services abroad. Again Portugal leads Europe with 85% whilst in the Netherlands acceptance drops to 46%.

Tim Brew explains the reasons for some of these national differences: "Portugal currently has five different national cards so the Portuguese are well aware of why their Government has such a desire to integrate these into one single document and what benefits such a programme will yield.



"There has always been high public awareness of biometric technologies and this has played a key role in acceptance. As far back as 1996 there have been studies from the US showing

similar levels of acceptance of fingerprint technology: 87% in the case of using fingerprints as a legitimate form of identity verification and 77% believing fingerprints were justified in establishing identity when cashing large personal Cheques."

"Much of the acceptance across Europe can be explained as the regions 'catching up' and becoming more aware of the security and convenience benefits enabled through biometric technology. Any interaction between man and machine can be a potential application for biometrics and this ubiquitous nature may well prove to be a further catalyst throughout the continent for the uptake

News Briefs

Gemplus has supplied well over half a million personalised and biometric Setec ePassports to four different countries over the last 6 months. Taking into account both the number of personalised biometric passports issued and the number of countries using Setec ePassports, Sweden and Norway were the two first pioneers worldwide to start nationwide roll-outs with biometric passports. Both countries migrated successfully to Gemplus's Setec ePassports at the beginning of October 2005. In addition, Gemplus also supplies Sweden with biometric national eID cards suitable for travel within the Schengen area.

Lockheed Martin has announced that it has received a \$3.6 million contract from the US Military Entrance Processing Command (USMEPCOM) for fingerprinting technology that enables background checks for prospective military recruits. The contract calls for Lockheed Martin to maintain and enhance fingerprinting hardware and software, as well as provide help desk support to the Command.

Digital Defense Group has begun production of the Factor4 on-card self-enrolling biocard to meet demand in Aruba, Australia, Canada, New Zealand, Russia and the US. Digital Defense Group said production is ramping up to 10,000 units per month as the company's integration partners place orders for Factor4 biocards to enable physical and logical access, and time and attendance tracking.

Finland Biometric Passport Set for August 2006



Finland will start to introduce biometric passports as from 21 August 2006. The new passports will be more secure than the existing passports, thanks to biometric identifiers. The introduction of biometric passports is a joint project of all EU Member States which helps to fight passport fraud and forgery. With the reform, the Finnish passport will get a new design with additional security features and its period of validity will change. Moreover, the processing period for passport applications will shorten and children can no longer be included on the passport of a parent.

The new biometric passport's data page will contain a microchip storing the same data that is printed on the data page: facial image, personal data and passport data. The chip will also contain security features which help to prevent passport fraud and forgery and the misuse of data stored on the chip.

As from 21 August 2006, Finnish citizens can apply for a biometric passport at any police service point or Finnish mission abroad. Applicants must have with them a photo which meets the requirements set in the passport photo guidelines issued in June 2005 and shows their features clearly, thus making them easily identifiable. The new guidelines specify, for example, that the expression must be neutral and the face must be free of shadows. New biometric passports are issued for a maximum of five years. The passport fee will not rise significantly. The average processing time for passport applications is one week from the date of submitting the application. For an additional fee, it is even possible to obtain a passport within 24 hours through fast track or express service. The fee for a passport issued by a Finnish mission abroad is 80 euros.

"Following the terrorist attacks of 11 September 2001, the European Union took urgent action to improve security features in travel documents and to make related regulations legally binding. One way of strengthening security is to make use of biometrics. With this in mind, the Council of the European Union adopted in December 2004 a Regulation on standards for security features and biometrics in passports and travel documents issued by Member States", says Minister of the Interior Kari Rajamäki.

Under the Regulation, passports must contain a chip which stores the passport holder's facial image and fingerprints as biometric identifiers. The transition period for the introduction of a facial image is 18 months and for the introduction of fingerprints 36 months following the adoption of the technical specifications for passports. The facial image must be included on passports by 28 August 2006 at the latest. As regards fingerprints, technical specifications have not yet been adopted but it is expected that they be adopted in spring 2006. Thus, fingerprints will not probably be introduced until early 2009.



According to Mr Rajamäki, Finland has, from the very beginning, been actively involved in making travel documents more secure. Finland will introduce biometric passports in accordance with the timetable set

out by the EU. "I am very pleased that the new Finnish passport with improved security features will not be significantly more expensive than the existing passport", emphasises Mr Rajamäki. A few other EU Member States have already started to issue biometric passports and others are trying to comply with the timetables set by the EU and the United States. However, all EU countries will probably not meet the deadline set for the introduction of biometric passports. In fact, some countries may be at risk of being excluded from the US Visa Waiver Programme.

New Standards Support Biometric Technologies



The International Organisation for Standardisation (ISO) and the International Electrotechnical Commission (IEC) recently published two highly anticipated standards to promote interoperability among biometrics technologies. Aiding in the identification and verification of individuals based on physiological or behavioural traits, biometric applications such as signature, fingerprint, and eye recognition systems are currently used to address concerns such as homeland security and passport control, identity theft, and electronic commerce.

The standards were developed by the ISO/IEC Joint Technical Committee 1 on Information Technology (JTC 1) and its Subcommittee on Biometrics (SC 37). INCITS M1 serves as the US Technical Advisory Group for JTC 1/SC 37, and is responsible for establishing US positions and contributions to the subcommittee. The new International Standards are largely based on US submissions of relevant standards and documents.

US Library Drops Finger Scanning System

A year after announcing its libraries would be among the first in the US to require a fingerprint scan to use public computers, Naperville's library system has cancelled the controversial project. Library officials insisted the plan was scuttled because of software compatibility problems and not because of objections raised by civil libertarians over privacy rights.

Last May, the three-library system signed a \$40,646 contract with U.S. Biometrics, a Naperville firm, to install fingerprint scanners on 130 computers with Internet access or a time limit on

ISO/IEC 19784-1:2006, Information Technology - Biometric Application Programming Interface - Part 1: BioAPI Specification, defines a function that allows software applications to operate with one or more biometric technologies. The standard makes use of a high-level authentication model suited to a wide array of biometric technologies, enabling biometric system components from different vendors to interoperate. Covering the enrollment, verification and identification of basic biometric functions, the standard also includes a function that enables applications to store and manage biometric records.

ISO/IEC 19785-1:2006, Information Technology - Common Biometric Exchange Formats Framework - Part 1: Data Element Specification, defines a three-part structure for biometric records within the Common Biometric Exchange Formats Framework (CBEFF)—a file format that promotes interoperability among different applications and systems. The standard establishes a means by which organisations can specify format requirements for biometric information records. Part two of ISO/IEC 19785, Procedures for the Operation of the Biometric Registration Authority, specifies requirements for assigning unique identifier values to biometric organisations, formats, and products.

usage. At the time, the library said the technological investment was necessary to ensure the library knew who was using the computers. The scanners were supposed to go on line in August, then December. When software compatibility problems still could not be rectified by this spring, the library decided to cancel the project, said Frances Tong, information technology manager. U.S. Biometrics released a statement noting that its technology has been successfully used around the country and internationally by financial, educational, health care and retail businesses

News Briefs

Saflink Corporation, Microsoft, JPMorgan Chase, Johnson Controls, Inc, ID Technology Partners and The Paradies Shops, have announced their intention to deliver and market FLOT (Fast Lane Option) - a solution for the Transportation Security Administration's (TSA) Registered Traveller (RT) Program. The FLO Alliance plans to offer an integrated Registered Traveller solution that leverages the industry-leading expertise, relevant experience and marketing reach of its member companies.

U.S. Biometrics Corporation has been awarded a second GSA contract for the Government's newly developed "Authentication and Services" category. This places U.S. Biometrics in an elite group of GSA contractors for a category that was not offered prior to last year. There are currently only eight contract holders within that category. U.S. Biometrics offers systems that utilise fingerprint biometrics in its authentication solutions.

Imprivata, Inc. has been chosen by Yell, the international directories business behind the Yellow Pages directory and Yell.com local search engine, to help enhance its network security. Yell's UK operation is rolling out Imprivata One-Sign ESSO to 1,500 non-office based staff as part of ongoing measures to support greater efficiency, combat security risks and protect customer data.

News Briefs

Cross Match Technologies has completed the acquisition of C-VIS GmbH. By combining C-VIS' facial recognition technology with Cross Match's existing fingerprint based Personal Identity Verification solutions and Visitor Management Systems, Cross Match will enable its customers to further increase security at correctional facilities, corporations, hospitals, government facilities, schools, day care centers and other facilities deploying identification and identity verification systems. In addition to the facial recognition capabilities and new products obtained through the acquisition, Cross Match will also retain the services of C-VIS's founder Prof. Dr. Thomas Zielke, a scientist from the Institute of Neurocomputing at Bochum University.

Viisage Technology, Inc. and **Identix Incorporated** have announced they have entered into a definitive agreement to merge in an all stock transaction. The combined company will blend two complementary approaches to solving the challenge of protecting and securing personal identities by establishing the industry's most comprehensive single platform for multi-modal finger, face, skin and imaging identity solutions. The combination has been approved by the respective boards of directors of each company. The combined company, on a pro forma calendar 2006 basis, is expected to have revenue of approximately \$220 million and EBITDA of at least \$40 million, including synergies and operating efficiencies.

Biometric ID Card For Port Workers

The Transportation Security Administration (TSA) and the US Coast Guard have signed off on proposed regulations to develop a biometric-based identification card for the nation's approximately 750,000 port workers – a key component in the larger effort to create a Transportation Worker Identification Credential (TWIC). The TWIC proposal calls for collecting worker's biographic information including: ten fingerprints, name, date of birth, address and phone number, alien registration number, if applicable, photo, employer and job title.

It also would require background checks, including a review of criminal history records, terrorist watch lists, immigration status, and outstanding warrants, said TSA Assistant Secretary Kip Hawley. Hawley added that all individuals with unescorted access to secure areas of port facilities and vessels regulated under the Maritime Transportation Security Act would be required to have a TWIC, which including longshoremen, port operator employees, truck drivers and rail workers.

The TWIC card itself will be equipped with smart card technology so it can contain a

worker's photo, name, biometric information and multiple fraud protection measures, he noted. TSA expects user fees to cover the cost of this ID program, with port workers paying an estimated \$139 to receive a TWIC valid for five years, with workers holding current, comparable background checks paying a reduced fee of \$105 for the credential.



Hawley stressed that port facility and vessel owners and operators will be required to implement the TWIC into their existing access control systems and operations, purchase and utilize card readers, and update their approved security plans under this proposed plan. He added that TSA extensively tested

the TWIC concept last year, issuing more than 4,000 TWIC card prototypes to workers at 26 sites in six states last year.

In addition to this effort, Michael Chertoff, secretary of the Dept. of Homeland Security (DHS) – the parent agency for both TSA and the Coast Guard – said name-based background checks will begin immediately on approximately 400,000 port workers within the US to help expedite the rollout of the TWIC.

Biometric ID for Filipino Seaman

The government of the Philippines will start issuing biometric identification cards (ID) to Filipino seafarers by the middle of this year, Labour Undersecretary Manuel G. Imson said. "We are in the final stages of adopting this seaman's ID. I think the POEA [Philippine Overseas Employment Administration] has already bid this out so we will be one of the first countries in Asia to issue this... by June this year," he said at an Asia-Europe Meeting.

The ID, the seafarer's equivalent of a passport, was adopted under Convention No. 185 of the International Labour Organisation as protection to about 1.2 million maritime workers. Almost a

quarter or about 250,000 of deployed seafarers all over the world are Filipinos.

"Filipino seamen will be better accepted in many shores with the least inconvenience in documentation... The advantage is they would be accepted in many shores and leaving their ships would be least inconvenient," he said, adding that the ID will be provided free. "The proposed time frame [for renewal] is five years... Seamen normally like to have their records [at the POEA] updated," he said. The ID will include information such as name, age and home address. It may also contain the job promotions given to the seafarer.

Biometric Authentication Gains Momentum



New research report by Mercator Advisory Group predicts market for biometrics to approach \$7 billion

By 2010. Mercator Advisory Group research shows that the market for all forms of biometrics from fingerprint scanning to voice verification is growing and anticipates that the global revenues for biometrics will approach \$7 billion by 2010. This report examines the role of biometrics in payments both as a single source of authentication or as an additional authentication factor.

"Biometric technology will continue to grow in adoption as an authentication technique, states Melanie Broad, Analyst in Mercator Advisory Group's Emerging Technologies Service. "Implementations of biometrics across the board have been slow but steady. However, biometrics will have an important role to play in the future as the technology continues to be used as a second form of authentication for online authentication, ATMs, and in devices such as PCs, laptops and mobile phones."

Luggage Thieves Face Fingerprint Crackdown



Baggage handlers are to be fingerprinted at Johannesburg International Airport, South Africa, as part of a radical new plan to

crackdown on luggage thieves. The Airports Company of South Africa (Acsa) has launched a hi-tech R27-million security facility, dubbed Charlie Gate, to stop baggage thieves in their tracks.

Luggage theft costs the airline industry a whopping R15-million a year in South Africa. Baggage-handling staff in the employ of private companies at the airport will now go through a stringent screening process when entering and leaving the airport.

They will be dressed in a distinctive uniform, to be instantly recognisable to security personnel, and will only be granted access to secure areas via biometric screening -- scanning their thumbprints. Other measures to reduce baggage theft include the deployment of an undercover police

unit and an electronic baggage tracking system.

Chris Hlekane, general manager of Joburg International, said baggage theft at the airport was reaching "frightening proportions. It's a huge problem and negatively affecting our country as a brand." Hlekane is confident that the new measures will help cut down the theft, which mostly involved valuable items such as jewellery, laptop computers, mobile phones, leather goods and clothes.

"There can be nothing as inconvenient as arriving at your destination only to find that your bag has been broken into and important items stolen," Hlekane said. He said staff would not be able to take any personal belongings, other than a lunchbox, through to the secure area.

The Airline Operators' Committee, an organisation dealing with airlines' operational issues, says at least two bags per 1000 passengers get stolen at airports globally. Until now Joburg International has relied on surveillance cameras and the occasional blitz by private security companies to fight baggage theft.

News Briefs

Iridian Technologies and 4G Informatics have announced that they have signed an agreement that allows 4G Informatics of India to design and build a range of iris recognition cameras. 4G Informatics plans to develop a high-volume "public-use" camera for use in airports and kiosks, a handheld camera to be used in law enforcement and other mobile security applications, and an inexpensive entry access camera.

Mr. Paul E. Cook, Director of the New Mexico Department of Public Safety (NM-DPS) Technical and Emergency Support Division (TESD), has announced the award of the new statewide Automated Fingerprint Identification System (AFIS) to **Sagem Morpho Incorporated**. New Mexico's new system is composed of the MetaMorpho Automated Fingerprint and Palmprint Identification System (AFPIS),

Bulgaria will start to issue biometric identity smart cards, as of January 2007, when the country is scheduled to enter the European Union, the government decided. The card will contain the holder's digital picture, ID number and a digital signature. From 2005, EU countries began to introduce biometric data into newly-issued passports in a bid to improve the security of travel documents in the fight against terrorism and illegal immigration.

News Briefs

ImageWare Systems IWS Biometric Engine Border Management solution has been selected as part of the Citizenship and Immigration Canada (CIC) biometrics field trial. Under the terms of a subcontractor agreement, valued in excess of \$500K, ImageWare's IWS Biometric Engine Border Management product will be deployed as part of a biometric field trial to test the operational impact of using multiple biometrics in the CIC immigration program. The CIC field trial will involve temporary resident visa applicants and refugee claimants, allowing CIC to help determine how biometrics could be used to enhance security and reduce the potential for identity fraud.

Royal Philips Electronics has announced that France is the latest country to select secure contactless smart card chip technology from Philips for integration into its new electronic passports. The e-passports are initially being issued in Hauts-de-Seine, West of Paris and will be rolled out across the country by the end of June 2006. The French government is to produce 20,000 e-passports a day to meet the June deadline. The new passports have been issued to comply with US border regulations - or Visa Waiver Program (VWP) - which means that some countries' passports have to store biometric data and a digital image for visitors wishing to enjoy visa-free travel to the country.

Live Test for International ePassport



Department of Homeland Security (DHS) Deputy Secretary Michael Jackson has announced important progress in the development of biometrically-enabled technologies to prevent the use of fraudulent or stolen international travel documents. DHS is testing ePassports and ePassport readers in anticipation of an upcoming deadline requiring all Visa Waiver travellers issued a passport after October 26, 2006 to present an e-Passport to enter the United States under the Visa Waiver Program (VWP).

The use of the new ePassports and deployment of ePassport readers to US ports of entry will help to ensure the authenticity of international travel documents and provide US Customs and Border Protection officers with another invaluable tool for use in the border inspection process.

“We are adopting biometric, electronically-based, and secure travel documents that are tamper resistant, yet provide a very convenient way to move back and forth across our borders,” said Mr Jackson. “We have now successfully completed e-Passport technology testing in a live environment. Working with Visa Waiver countries, we will begin to deploy these important security enhancements this year.”

The US anticipates the deployment of ePassport readers for processing VWP visitors by October 26, 2006. Recently, US-VISIT conducted a successful test of e-Passports and ePassport readers with Basic Access Control (BAC) at San Francisco International Airport.

BAC enhances the security of the document and protects the privacy of the traveller by preventing the unauthorised reading, or “skimming,” of information.

The test, which was conducted between January 15, 2006 and April 15, 2006, evaluated the operational impact of reading and verifying information embedded in the ePassports on the border inspection process. This test was a collaborative effort between the US, Australia, New Zealand and Singapore. A total of 1,938 e-Passports were successfully processed during the test in San Francisco. A similar test was conducted in 2005 at Los Angeles International Airport.

E-Passports contain an individual’s biographic information and a digital photograph on a contactless chip embedded in the document. DHS requires that any passport issued after the October 26 deadline, and used for VWP travel to the US, must be an e-Passport. In addition, DHS will have the capability to read and authenticate these ePassports.



Travellers applying for admission under the VWP are allowed to enter the US for up to 90 days without obtaining a non-immigrant visa. Those VWP travellers that are issued a passport after October 26, 2006, must present an e-Passport. The 27 countries participating in the VWP include: Andorra, Australia, Austria, Belgium, Brunei, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Japan, Liechtenstein, Luxembourg, Monaco, the Netherlands, New Zealand, Norway, Portugal, San Marino, Singapore, Slovenia, Spain, Sweden, Switzerland and the UK. Approximately 15 million VWP travellers visit the US annually.

Facial Recognition for New Zealand ePassport



The New Zealand Passport Office has deployed its facial recognition technology as part of that country's ePassport initiative. The ePassport will enhance security in its passport issuance process and to comply with the new ICAO ePassport Standard and US visa waiver requirements.

New Zealand chose CryptoMetrics' SecurIDent echnology to carry out advanced face biometric based "Watch List" Checks on all passport applications. When these Checks were initially deployed nearly a year ago they were believed to be the first use of facial recognition technology for lookout checks by any Passport Issuing Authority. The has performed exceptionally throughout that period. The Government will also use CryptoMetrics' Photo Quality Assessment and Assurance technology to review all photographs submitted by Passport applicants to ensure they comply with established photo guidelines. The technology also produces the globally interoperable face biometric sample recorded on the new ePassport.

Robert Barra, co-CEO of CryptoMetrics, stated, "Our technology will significantly increase the accuracy and efficiency of the work of Passport officials as they review applications for new or renewing Passports and help ensure that people who attempt to commit identity fraud using Passports do not slip through the cracks. As governments around the world accelerate their conversion to ePassports, we expect to be actively involved in providing the technology that ensures those systems operate at the highest possible level."

With increasing threats around the world posed by terrorism, countries must secure their Passport issuance process to ensure that those who have

been placed on "watch lists" are in fact detected and denied access to fraudulent travel documents such as Passports. A recent study in the United Kingdom concluded that potentially more than 10,000 Passports are issued each year to applicants who have lied about their details, half of which involve false identities.

The new ePassport system requires that the face biometric be encoded in a contactless microchip securely embedded in the Passport, allowing officials to confirm the identity of the person presenting the Passport. To be effective, each face biometric encoding must comply with the International Standard established by ICAO.

Mr. Barra added, "New Zealand will also use our quality assurance technology to perform an initial check on submitted Passport photos to ensure they are of sufficient quality to create the printed portrait for the data page of the Passport. This is a process that all nations will need to adopt and, given the uniqueness of our technology, we expect to be assisting a great number of them."

David Philp, Manager of the New Zealand Passport Office stated, "For those who are involved in international crime and possibly terrorist activity, obtaining a false Passport is often critical to success. CryptoMetrics' technology will greatly improve security at step one of the Passport issuance process, by automatically comparing every application's photograph against the departments Watch List of persons who have previously attempted identity fraud."

The International Civil Aviation Organization (ICAO), which oversees the safety of international aviation, established the International Standard governing biometrically enhanced passports (referred to as the 'ePassport'). This work was undertaken collaboratively with the International Organization for Standardization (ISO). ICAO requires all 189 member countries to use the facial biometric as the standardized, globally interoperable biometric for all official travel documents.

News Briefs

The National Institute of Justice (NIJ) has awarded **International Biometric Group (IBG)** a \$461,495 research grant to study the use of Level III fingerprint features for automated identification. IBG, along with teaming partners **Aprilis, Inc. and the Crime Scene Services** Section of the **Massachusetts State Police, are processing and** evaluating card-based and live-scanned fingerprint data at resolutions from 500dpi to 4000dpi. A central research objective is to determine how Level III features from high-resolution fingerprint images can be used to improve automated fingerprint identification system performance.

Cross Match Technologies successfully participated in this year's ePassport Interoperability test, which took place earlier this month in Berlin, Germany. The event was organized by the German Federal Ministry of the Interior (BMI), the German Institute for Standardization (DIN), and others. The aim of the test was to understand how well chip-based ePassports have been designed and how fast and easily they can be read by the passport readers from different manufacturers currently available on the market. Cross Match recognized as one of the top five companies from an interoperability standpoint in the results published from the last round of passport interoperability testing in Singapore.

Traveller Identity Cards Spark Debate



Technologies pushed attendance to a record level, attracting more than 600 government and technology leaders.

PASS Card: A new travel document to expedite land border crossings may include embedded RFID chips that can be read at a distance up to 30 feet, Jim Williams, director of the US Visit Program, Department of Homeland Security, told conference attendees.

The announcement created debate, however, as many meeting attendees questioned the privacy and security protections afforded by the RFID technology proposed for the new identity document, called the PASS card (People Access Security Services). Conference attendees who commented during the question and answer period urged DHS to consider contactless smart chip technology, like that used in the State Department's new electronic passport, in order to achieve additional privacy protections and security measures. Contactless smart card technology also uses radio frequency for communications, but is based on microprocessors with built-in security features, capabilities that are not present in typical long read range RFID chips.

Driven by the Western Hemisphere Travel Initiative signed by the United States, Mexico and Canada and a federal mandate that requires a passport or an alternative document to cross these borders starting in 2008, the State Department and DHS are working together to define the PASS card technology and the process for issuing them. The State Department would be responsible for issuing the new documents. According to Williams and Frank Moss, deputy assistant secretary of state for passport services, who presented later in the conference program, both long-range RFID technology and contactless smart chip technology are still being evaluated for the PASS card. "State and Homeland Security are still resolving if this will be a proximity or distance read," said Moss.

Plans to use long read range RFID technology in a new border crossing card, the latest on the US electronic passport and the re-emergence of a registered traveller program, were among the news highlights at the Smart Card Alliance's 5th Annual Smart Cards in Government Conference and Exhibition. Interest in government identity programs and technologies pushed attendance to a record level, attracting more than 600 government and technology leaders.

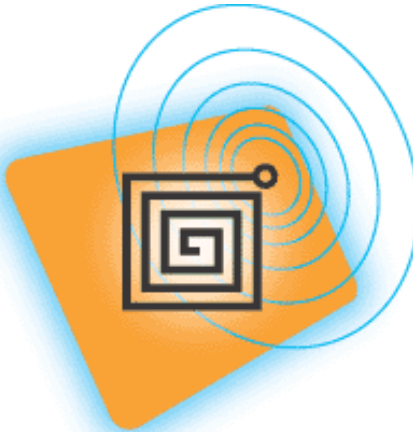
Providing the document as a card that can be carried in the wallet will make it convenient to carry and use. To increase security, DHS plans to use a digital facial image as a biometric, so border agents can make sure the person carrying the credential is the one to whom it was issued. But with \$1.8 billion in trade crossing the border every day, DHS needs to balance the goals of security and privacy protection with economic efficiency, which translates into a requirement for fast throughput at the land borders.

To speed things up, the current thinking at DHS is that they would use some form of RFID that could be read from up to 30 feet away, so when individuals get to the checkpoint their information has been pre-loaded for the agent to see. The card would contain a number that is a "pointer" to a confidential record on a secure central database with the information about the cardholder, including a facial biometric.

According to Williams, security and privacy is assured by the fact that any personal information is stored remotely, and no personal information is broadcast. DHS is currently testing such technology, although test results have not yet been released. Nonetheless, questions and comments at the meeting showed a strong concern to make sure everything is done in a privacy-sensitive way. One problem Williams sees with contactless smart card technology, however, is that the read range is only a couple of inches, and customs and border agents are concerned about throughput and people dropping cards or sticking their arms out of the car.

"We're very sensitive to privacy, but we're concerned about backups at entry points, too," said Williams. Williams also reported that since January 2004, the US Visit program has screened 53 million border crossings and stopped more than 1,000 people at the border. Sharing the data with the State Department for screening people has paid off, too. "They have had 16,500 biometric hits on people. These are people that have done something wrong," he said.

Electronic Passport: "The electronic passports have gone into pilot production," Moss announced at the conference. "We expect to start issuing tourist e-passports in August." Explaining why the program took longer to implement than planned, Moss said the passport was completely re-designed and the adjudication process strengthened. State also added a number of security features to the electronic passport over the last year, including an anti-skimming material woven



into the covers that greatly restricts reading the contactless smart chip in the passport when the cover is closed. There is also a printed data key inside the cover that must be scanned to unlock the ability to read the passport information.

"We went back to the drawing board and took a belt-and-suspenders approach to protect the identity and privacy of Americans," said Moss. The United States is the world's biggest issuer of passports, bigger than No. 2 U.K. and No. 3 Germany combined. "This year we will issue about 13 million, and we expect to reach 17 million in 2008," Moss said. The new electronic passport is based on international standards. It includes contactless smart chip technology with anti-forging features and a digital photograph to ensure the person carrying the passport is really the one to whom it was issued.

Registered traveller: The Transportation Security Agency is expected to announce new standards soon

for registered traveller programs that will be privately managed and selected locally by airports, according to Carter Morris, senior vice president of transportation security policy at the American Association of Airport Executives.

The TSA hopes the program will streamline airport security processing by allowing people to be pre-screened, qualifying them for an expedited screening process. This could be a big benefit to all travellers, since 8% of air travellers represent 40% of air traffic, according to Morris.

The AAAE organised the Registered Traveller Interoperability Consortium, a group of more than 70 airports representing 80% of all passenger capacity. All of the members agreed to do business the same way, and follow the rules for technical interoperability and finances established by the TSA and the consortium. "We took a collaborative approach, and we hope that it bears fruit," said Morris.



"To increase security, DHS plans to use a digital facial image as a biometric..."

Afghan Refugees in Pakistan Get Biometric ID Card

The Pakistani government and the United Nations have signed an agreement to issue registration smart cards to 2.6 million Afghan refugees sheltering in Pakistan. Under the agreement, Pakistan's Interior and Frontier Regions ministries, in collaboration with the United Nations High Commissioner for Refugees (UNHCR), will issue the cards. "The registration card will serve as an identity and travel document for Pakistan," Minister for States and Frontier Regions Sardar Yar Mohammad Rind told a joint press conference with the visiting UNHCR deputy chief Wendy Chamberlain.

"The registration is a step towards repatriation of Afghan refugees," Rind said. "This is a big step, not just for Pakistan but also for Afghanistan. The registration will give us a clear profile of Afghan refugees in Pakistan and will help both the governments develop policies for voluntary repatriation." Chamberlain said registration would help the UN refugee agency protect the Afghans. "To protect the people, you need to know who they are. It (registration) is very important in providing that protection," she said. "The information will also enable the Afghan government to target specific developmental interventions in potential areas of return and use qualified human resources like teachers in the nation-building process," said Chamberlain, who is a former US ambassador to Pakistan. She toured quake-hit areas and met survivors of the massive earthquake that killed more than 73,000 people last October.

The SAFRON Ministry will oversee the registration process to be carried out by the National Database and Registration Authority (NADRA), while the UNHCR will help raise \$6 million needed for the project, provide technical assistance and monitor the registration. Fingerprint biometrics and photo IDs will be used in the registration process. According to the census, 3.04 million Afghans are living in Pakistan and in the registration process the government will collect data on when each refugee arrived in Pakistan, his area of origin, ethnic background, obstacles in his return to Afghanistan and his profile in Pakistan.



National Biometric ID Card for Thailand

Precise Biometrics has received a follow-up order from the Thai authorities concerning biometrics for national ID cards. Precise Biometrics estimates that the expected revenue during a three-year period will generate about SEK 20 million. The Thailand project in its entirety means that Precise Biometrics, together with Smart Card Systems International Co, Ltd (SSI), will be delivering biometrics for the national ID card to all of Thailand's 64 million citizens.

In April 2005, Precise Biometrics received a breakthrough order in Thailand for licenses for 12 million national ID cards. The company ha

now received the follow-up order for the remaining licenses for Thai national ID cards.

The follow-up order for the remaining national ID cards has been obtained in cooperation with Smart Card Systems International Co, Ltd (SSI), the local integrator and service partner, in exactly the same way as the breakthrough order.

"The integration in the first phase of the project has functioned very well, and we are looking forward to further cooperation with Precise Biometrics," says Dr Sangchai Apichathanapath, CEO of SSI.

"Right from the start, our project has been ambitious, and the specifications for Match-on-Card biometry were very demanding," says Mr Suwit Khunkitti, Thailand's Minister of Ministry of Information and Communications Technology (ICT). "Precise Biometrics and Precise Match-on-Card have fully met and even exceeded our expectations."



Mr Suwit Khunkitti

July 2006

Schedule of Events

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
		91st International Educational Conference				
7	8	9	10	11	12	13
				Global Border Control Summit		
14	15	16	17	18	19	20
21	22	23	24	25	26	27
			Biometric Identification: Theory, Algorithms, and Applications Course			
28	29	30	31			

- **2 - 7** 91st International Educational Conference - The International Association of Identification (IAI) - *Boston Marriott Copley, Boston, MA, USA*
- **11 - 12** Global Border Control Technology Summit - *Selfridge Hotel, London, UK*
- **24 - 28** Biometric Identification: Theory, Algorithms, and Applications (Five-Day Course) - *University of California, Los Angeles, USA*

Biometric Acceptance Grows

The convenience of using biometrics for ID verification outweighs any concerns over lax security methods when using biometric-enabled smart cards, according to a new survey.

A global survey of consumer attitudes to using biometrics found a 5% increase in people who favour the use of biometrics as a preferred method of identity verification. Some 10% of individuals in the Asia-Pacific region would even prefer a chip implanted in their body.

The survey, conducted by Unisys, surveyed 1,661 people globally. Convenience, according to 83% of respondents, was the main reason for using biometrics on a smart card and three quarters said speedy verification is the main driver for biometric adoption.

Supporters of biometrics were mainly in the North American region (71%) followed by Europe (69%) and the Asia-Pacific region, where respondents showed a 68% approval rating.

Terry Hartmann, Unisys director of secure identification and biometrics, said the research is revealing because many people seem to question biometric adoption due to legitimate privacy concerns.

"Despite some geographical and cultural differences with certain specifics of the technologies, overall as

more and more people learn about biometrics, convenience seems to outweigh other concerns," Hartmann said.

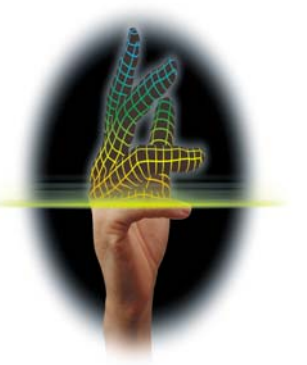
"Systems developers and owners must address those concerns so that these technologies can move towards the mainstream on a large scale, with appropriate protection and sensitivity."

Frost & Sullivan security analyst James Turner said while speed of identity verification may be driving people's acceptance of biometrics, the key issue is that biometrics can be a security block, rather than an enabler.

Turner added that what is more important in the biometric-enabled smart card debate is ratifying exactly where the identification data is stored.

"A faster and less frustrating security procedure, like using biometrics, would offer less resistance," Turner said.

"Smart cards or national identity cards will go ahead, but we need to talk about implementation, who can access the data and which government department will be in control of the repository, will the government then privatise that group or outsource. We need these issues resolved before we can move forward."



"..5% increase in people who favour the use of biometric as a preferred method of identify verification."

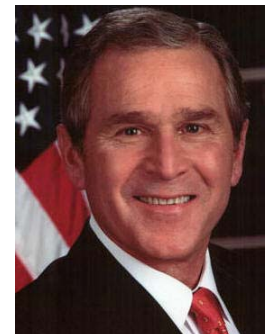
Bush's Biometric ID Feasible for Foreign Workers

Digital Defense Group has endorsed President Bush's call for biometric ID cards for legal foreign workers, insisting that privacy and security can be attained simultaneously and without undue burden to taxpayers. The company's Factor4 biocards are the world's only self-enrolling, credit card-sized fingerprint authentication device - technology that puts a user's unique biometric signature directly onto the card and eliminates the need for a centralized database or external software during enrollment and authentication.

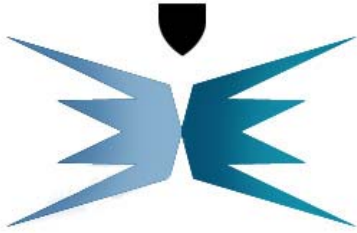
Bush's proposal would work especially well with Factor4 biocard technology according to Steve Campisi, president of Digital Defense Group, a subsidiary of Gabriel Technologies Corporation. "

Digital Defense Group envisions a system where foreign workers, after registering with the government, are mailed a Factor4 biocard for enrollment. Once enrolled on the biocard, the user can verify their identity wirelessly for employers, government agencies and others. Factor4 biocard can be used for door-to-desktop security inside organisations with foreign workers.

Campisi added that Factor4 biocards virtually eliminates fraud and identity theft. Digital Defense Group's biocards are encapsulated in a manner that renders them useless if someone tries to tamper with them. And, because a biocard only authenticates to its enrolled user, theft is meaningless.



George W Bush



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Final Thought - Viisage/Identix Merger

Equity Research analysts at Zacks.com have announced their views on the Viisages proposed merger with Identix." We expect Viisage Technology to be positively impacted by the growing demand for identity solutions, facial recognition, and biometrics. The company has sufficient capital to fund its growth initiatives into 2007. The proposed merger with Identix should allow VISG to provide an end-to-end identity solution to its customers. Nevertheless, organic growth remains negative and operating expenses continue to increase. We reiterate our Hold recommendation on the shares of Viisage."

"The merger will make Viisage a dominant player in the biometric security market. Man-

agement anticipates the combined company (to be known as L-1 Identity Solutions), on a pro forma 2006 basis, to have revenue of approximately \$225-\$230 million and EBITDA of about \$35 million. Assuming the transactions closes during the next quarter; management expects the combined company to record revenues in the range of \$120 to \$125 million and adjusted EBITDA (excluding stock-option expense) in the range of \$23 to \$27 million in the later half of 2006."

"However, over the last few quarters, internally generated growth remains negative when excluding acquisitions. In addition, the company's transition to a product-driven organisation will lead to a longer sales cycle.

Consequently, the volatility in Viisage's revenue stream is likely to increase.

