

16 January 2007

Committee Secretary
Senate Finance and Public Administration Committee
Department of the Senate
PO Box 6100
Parliament House
Canberra ACT 2600
Australia

Dear Sir/Madam

Access Card - Inquiry Into Human Services (Enhanced Service Delivery) Bill 2007 [Provisions]

I present the following submission.

The Honourable Ministers, over time, and the Honourable Member for Longman, in the second reading speech, have all covered the economic and efficiency benefits in detail, so I will not dwell on them. Suffice to say the efficiency prospects are, in their own right, a powerful justification. Neither do I intend to address the incongruities of "identity in hiring movies", "applying for loans or an in store credit card", neither the intrusion of the Internet, a drivers licence, what we are giving away of our identity when we shop and so on.

It is a great pity indeed that vested interests seek to gain notoriety, and public exposure, or simply to inflame, for political and other objectives presenting their arguments in a "smoke and mirrors" context of convoluted irrelevancies, even fantasies. It also says something that citizens are skeptical, and untrusting, of their government and are willing to cast a blight upon the integrity of the public service. It is as if the incumbents of the public sector have no face and do not live amongst us. Are they really Orwellian dwellers in our society?

Instead, I wish to focus on the real definition of "Identity" and the "disingenuous and mischievous" labelling of the Access Card as an "Identity Card". The proposition linking this instrument to the Australia Card clearly indicates that the critics, and opponents, have little knowledge of what actually constitutes an identity card.



It is not as Professor Greenleaf of the University of New South Wales states, in his paper, "'Australian ID Taskforce Report: A sheep in wolf's clothing', 11 November 2006, "therefore informative to compare the current proposal with that of twenty years ago". Terms such as "still quacking like a duck" are emotive, and sensational, and when added to the ill informed media and public statements, including some in the parliament, demonstrate a level of immaturity in approaching important public issue debates in Australia. Similarly the Privacy Foundation's web site headline, may well work against their credibility for in-depth analysis, research and commentary.

"The Federal government calls it a 'Human Services Access Card' We call it for what it is: a National ID Card System"

Datacard **invented "identity" technologies and standards** well over thirty years ago. It is the world's leading inventor, designer and manufacturer of equipment and software dedicated to, among other things, "identity". **We know very well what identity cards are and the Access Card is not an identity card.**

The greater number of pieces of plastic, you have, credit cards (100%), drivers licences, gift cards etc. are produced and delivered into your hands via Datacard products and Datacard equipped bureaus.

In demonstration of the claim to an unmatched expertise I have appended details of Datacard and a wide range of implementations, some of them identity related and some of them related to economic and societal efficiency improvements, particularly in government services. These will inform Honourable Members of the Senate Enquiry as to the fundamental differences and the standards.

Before I describe what is a "real identity card" I refer you to the Standards Organisation set out in the Appendices and to the participation of Datcard, particularly in relation to international agencies that agree on what constitutes an Identity Card. I also advise that every Access Card that will be produced in Australia will be done so on a Datacard product. Datacard is a Primary bidder for the Enrollment and Systems Integration tender so I have an in-depth knowledge, and understanding, of the intent, design and use.



THE TOPOLOGY OF AN IDENTITY CARD – MULTI-FACTOR AUTHENTICATION

In the examples provided, in the Appendices, you will see both a description of the government's intent and the details of the product, including a selection of facsimiles of examples. Note the extensive personal information on the face of the card. You can relate the examples to the following.

Features of an identity card:

An identity card deals with the primary proposition of ensuring the person is in reality who they say they are. The Access Card's underlying philosophy is one firstly of efficiency and management of public funds.

The ultimate objective of the Access card is that there should only be one card in the system for Mr. Robin Smith of such and such location and date of birth. If another Robin Smith applies, and is denied registration, then there are not two or more claiming benefits as happens now. The eligibility issue, or potential fraud, by the other/s is a separate matter for investigation or referral to police under the Criminal Code.

In an identity card, a complete background check is undertaken by multiple agencies. The enrollment process for the Access card is nowhere in "cooee" of a complete background check. The Access Card process is what is called a first line process – looking at and scanning presented documents to see if Robin Smith actually is the real owner of the presented drivers licence, or it is one of the many fakes permeating Australia.

• An identity card has a high definition photograph on the card. The Access Card photograph described in the Systems Integration (tender 1) RFT, is not a high definition image, and as such is open to tampering and copying. This is a separate matter for the government, around security and the ability of a criminal to use that factor. The Access Card is primarily about giving service to a single individual and ensuring that there are not multiple cards of that individual. It is not about looking at or scanning the image on the card. If the chip were not the primary instrument of getting the benefit then the photograph would become a major identifier.



- An identity card carries a full name with a designator such as Dr. Ms, Mrs etc.
 An identity card is not likely to allow Robin Smith, since Robin has female or male connotations. The Access Card does not have the identifier.
- Identity ranking, specifically relates to the status of the card in a system of identity rankings. The Access Card would be ineligible for ranking since it does not pass the "identity topology" test.
- Portable data files are contained in an identity card. These may be a two dimensional bar code. They contain all sorts of information such as birth, mother's maiden name, identifier questions, fingerprints, all sorts of other stuff. The Access Card has no such portable data file in the form of a bar code. The chip has no commensurate data sets and is a very basic, information set that only establishes a communications link to the relevant agency to enable a transaction. The basic electronic hand shaking is somewhat crude in comparison to a n identity smart card chip.
- An identity card does not transact through EFTPOS, ATM and financial systems. The Access card actually enhances the owner's interaction and they can actually get their benefits without the need to even have a bank account. A bank account is one of the ultimate identifiers in society.
- An identity card has an affiliation in that it relates to a very specific and ongoing relationship. The Access Card's affiliations are limited only to the extent of what services n owner wants or is eligible for and the affiliation ends when the eligibility ends.
- An identity card has a clear and defineable header, which is a security feature. The Access card header is not a ranking factor identifier.
- An identity card carries the agency or issuer seal; there is no seal on the Access card.
- An identity card will include footers and photo borders, which are a key feature of security. The Access Card has limited security features to stop fraudsters but none as extensive as a national identity card carries.



- An identity card normally carries an issuing date, and expiry date and other relevant dates, such as birth, and can also include "deliberate errors" (see the Alberta example in the Appendices). The Access card carries no such multiple factors.
- Identity cards carry colour coding for differing classes. The closest we might say that the Access card may come to such a characteristic is the request by Veterans Association for the retention of the Gold and Orange colour.
- An identity card is not issued to someone on the authority of another person. The Access Card will be issued to people who have no adequate proof of identity, many of them aboriginal or refugees and immigrants, some wil be in nursing homes with dementia and others will be aged and infirm and will not know where their birth certificates are and they will not have a drivers license. A statutory declaration or some other form of validation will be in place. The number of people who are in the category measure in the hundreds of thousands.
- A smart card chip in an identity card has a sophisticated set of PKI (keys), which are extremely broad and can be extensively interrogated. The Access Card can only to be tracked in transactions i.e. benefits or updating of eligibility or removal from the system. This occurs when the card is used in a service terminal.
- A person carrying an identity card cannot write to the chip and put personal things on it. They can write their own personal data to the Access Card chip and this cannot be interrogated on line. This is not to say that if they lose the card that an enterprising hacker cannot break it. If they break an Access Card chip what have they got? No personal information in there from the government side. That which is on the chip they can get out of a phone book, a motor registry or a birth and death search.
- When a government is preparing an identity card there is necessarily a very sophisticated network of devices in place in agencies, police stations and other surveillance style networks. Police stations in Australia are considered to be high technology if they have a typewriter let alone a network connected smart card interrogation device. The cost to fit out a surveillance capability suggested by conspiracy theorists would be billions. Australia is not equipped for such sophistication on the scale implied in the "science fiction" style" commentary.



Australia does not have any agency with a private slush fund the size of Australia's federal government budget whose task is to monitor identity. Why would they bother interrogating the card anyway when they have more information in their own state and territory databases about individuals than is contemplated on the Access Card?

- An identity card carries a signature this appears on the front or back and also on the chip. In the Access Card the signature is on the chip to allow the authorising public official to pay the benefit.
- An identity card indicates the specific agency/s. In a identity card all agencies can access the script on the chip. In the Access Card they cannot. The script also carries specific agency data; the Access Card merely has a reference to the agency against which the card owner is registered to receive benefits.
- An identity card is owned by the issuing agency. The person entitled to the benefits owns the Access Card.
- An identity card is not a "short run" card. The Access Card provides for the
 "issuance of a temporary card" for specific purposes including disaster relief.
 It enables our fellow community members to receive food and money aid
 when they are afflicted by hurricane and the terrestrial communications are
 down.
- Some categories of persons are excluded from holding identity cards, namely terrorists. A terrorist can actually apply for an receive an Access Card but they cannot fund a terrorist cell because they only get one card.

Finally, an identity card does not tolerate the following proposition, and challenges to its authority, particularly legislative:

- (a) The information being collected is minimal in nature and source. This is the case with the Access Card.
- (b) The information is not intended for limited purpose, and lifecycle, particularly eligibility for benefits of a temporary nature. This is the case with the Access Card.



- (c) Information sharing is very limited, and very specific, as is the case with the Access Card. In an identity environment it is unlimited in scope.
- (d) There is no opportunity to decline enrollment and one is not invited to apply. They can decline or accept the invitation for an Access Card.
- (e) There are no overarching privacy acts and legislation deliberately limiting the nature and use of an identity card. The Access Card legislation is stringent, and prescriptive, about security and access particularly with fines and jail for unauthorised public officials, and private person, demanding to see the card. A policeman can be fined or go to jail for demanding someone produce his or her Access card.

From the perspective of good governance I am at a loss to understand why members of the alternative Australian government would state categorically they would dispense with the Access Card. Is elimination of a growing fraud, measured in billions, not a core obligation of a Prime Minister, Minister and Member of Parliament? Perhaps an alternative core obligation, of opposition members, is to pander to populism with the prurient objective of frustrating the government of the day in an election year?

One might assume that critics might first educate, and inform, themselves as to the fundamental differences between the Access Card and an "identity card" by asking an expert. Propositions of discrimination, and racial profiling, if the nationality is listed as far fetching as the surveillance that is purportedly available via this somewhat "dumber" version of a "smart" card.

Yours Sincerely

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A.2.1 About Datacard Group

Company Profile

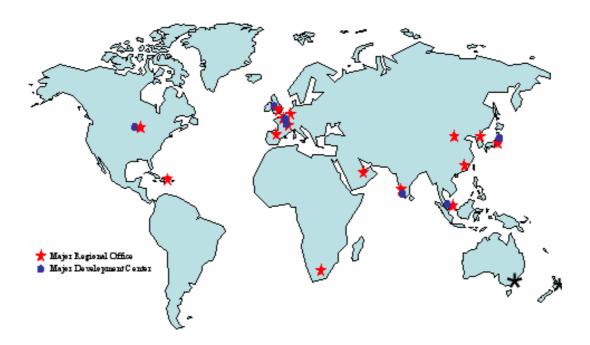


Datacard Group is an **international inventor, manufacturer, marketer and service provider** of integrated solutions for card programs. We are one of the world leader's in secure identity and card personalisation solutions and a driving force in virtually every major card program around the world. Datacard solutions provide issuance of millions of identification documents and financial cards each day. We serve customers in a variety of markets, and our portfolio includes systems for high-volume card issuance, card delivery, secure ID issuance and passport production, plus extensive service and supply offerings.

Strong Global Presence

Our global presence successfully builds on a strong foundation of expertise, trust, commitment to quality and mutual respect for each customer we serve. Each of our colleagues and sales channels live by a singular promise: to optimize business outcomes for our customers and enrich the lives of cardholders around the world. With more than 1,400 employees worldwide, our sales, service and support network covers more than 120 countries, which include development centers in Germany, France, India, Japan, Hong Kong, the United States and the United Kingdom. Demonstrating ourselves as a proven leader within the card solutions industry, Datacard serves and fulfill the needs of corporations, governments, financial institutions and other markets located throughout the world.





Datacard South Pacific Pty. Ltd

Datacard South Pacific is an Australian registered company. Up until December 2006 the company was 19.1% owned by Datacard and 80.9% by interests in the hands of Mr. Colin Cesa. Datacard sought to increase its presence in the Australia Pacific region acquiring a further allocation of Mr. Cesa's stock in December 2006 to take the relationship to an equal 50/50 holding.

Datacard South Pacific represents Datacard products, and services, in Australia, New Zealand Papua New Guinea and Fiji, operating as a full subsidiary of Datacard Group leveraging the international resource base.

Datacard South Pacific is involved in critical operations

Datacard South Pacific plays a critical role in the Australian financial industry. Every day the banking system relies upon the quality, and reliability, of the output from Datacard product. How can we state this with absolute confidence? Consider that Datacard Group, through Datacard South Pacific, underpins Australia's financial card systems personalisation and issuance bureaus and is responsive to their critical operational needs, 24 hours a day, 365 days a year.

Privacy Statement

Datacard South Pacific Pty Ltd seeks to comply with Australian Privacy Legislation, as it relates to selling and providing Datacard products and services to



Datacard product personalises 100% of the Australian and NZ financial card sector. We have in the range of 35% - 40% of the other card market product output.

Datacard South Pacific provides on site technical support and 24-hour technical assistance to Giesecke and Devrient (Sydney and Melbourne) and American Express Sydney, the latter establishment provides financial cards to the whole Amex Asia Pacific region. Datacard personalisation equipment is vital to the operations of to Leigh Mardon, Placard, Giesecke and Devrient, Leigh Mardon, PTC and Security Plastics production sites in New Zealand and to Oberthur Card Systems.

(Inter alia) Coles Myer, Deakin University, Department of Defence, Swinburne University, Medicare (Pilot) Tasmania, Queensland Department of Transport (drivers licence assessment project and short listed for the smart card), Australia Post, Western Australia, South Australia, Victoria and Tasmanian as well as New Zealand driver's licences, Box Hill Tafe, Federal Police (ACT), ACTEW AGL (ACT) and thousands of locations across Australia and New Zealand and the Pacific.

Pioneer in Identity Market

More than 30 years ago, Datacard made mass issuance of credit cards economical when we invented systems for high-volume plastic card personalization—forever changing the way consumers conduct transactions. Today, Datacard[®] high-volume card issuance solutions outsell all other brands combined.

Datacard built on this heritage to redefine secure identity technology, introducing our first digital photo ID systems more than a decade ago. Since then, corporations, governments and other security-minded organizations have made Datacard the world's most popular brand of secure ID solutions, trusting Datacard to integrate all the elements of secure ID, including visual identity, access control and secure access to PCs, networks and databases.

Industry Standards and Associations

Datacard collaborates with industry and market leaders to drive industry standards and create proven, refined processes that make card issuance faster, more secure and more cost-efficient.





Datacard contributes to the development of international standards through participation in ISO-related technical committees. Sub-committee 17 (SC17) operates under directives issued by ISO/IEC JTC1 (International Organization for Standardization/International Electrotechnical Commission, Joint Technical Committee on Information Technology), and it has responsibility for standardization in the area of identification and related documents, cards and devices associated with their use in inter-industry applications and international interchange. Datacard participates in SC17 Workgroups **focused on identification cards**; travel documents, contactless cards, driver licenses, and related technologies.



The International Committee for Information Technology Standards (INCITS) is the primary U.S. focus of standardization in the field of information and communications technologies. INCITS is accredited by ANSI, the U.S. ISO-member organization, and it serves as the Technical Advisory Group for ISO/IEC JTC 1. The INCITS B10 Technical Committee is responsible for **standardisation of identification cards** and related devices for use in inter-industry applications and international interchange. **This committee is currently chaired by a Datacard colleague, and several Datacard colleagues participate on B10 subcommittees.**



Our smart card experts serve on the board of directors and on key technical committees for GlobalPlatform. A major goal of Global Platform is the creation of standards to ensure smart card success. Its mission is to establish, maintain and drive adoption of standards to enable an open and interoperable infrastructure for smart cards, devices and systems that simplifies and accelerates development, deployment and management of applications across industries.



Datacard also has executive representation on the Smart Card Alliance, a not-for-profit association formed by the combining of the Smart Card Forum and the Smart Card Industry Association. The Smart Card Alliance is a multi-industry association working to accelerate the widespread acceptance of multiple application smart card technology



Datacard collaborates with the International Civil Aviation Organisation (ICAO) and is an advisor to the ICAO Machine Readable Travel Documents (MRTD) New Technologies Working Group. As standards are solidified, we are positioned to update our solutions to be in accordance with these standards.

Datacard is a member of the International Card Manufacturers Association (ICMA), a worldwide non-profit association of plastic card manufacturers that promotes the plastic card industry and the value of its products and services.

Other organisations that Datacard collaborates with include the American Association of Motor Vehicle Administrators (AAMVA), EU standards committees and the **International Association of Financial Crimes Investigators** (IAFCI).



A.2.2

Datacard Passport Solutions



Each issuer of travel and **identification documents** has unique needs based on different document information content, adjudication processes and work environments. Still, there are similarities between issuing processes. Information must be collected, applications must be queued, applicant identities and privileges must be confirmed, the visual and machine-readable data elements must be formatted, documents must be efficiently and accurately issued and documents must be managed over their life cycle for updating or revocation. Between all these stages, data integrity must be maintained, and audit trails and quality control must be maintained. Physical and logical security must be maintained as well. Datacard has considerable expertise in all of these areas, has designed, and implemented a number of systems for identification document and financial card issuers.

New international standards are emerging for interoperable biometrics. ICAO will incorporate these standards into the Logical Data Structure and ICAO Document 9303 Machine Readable Travel Documents (MRTD). This will greatly facilitate intracountry data exchange and permit international interoperability of biometrics encoded on travel documents. For this reason, a number of countries **have decided to base all of their identity documents** on the emerging ICAO standards. Datacard makes it easy for operators to capture ICAO-compliant biometric data. Data are sent and stored in .XML format. The ICAO data generator converts the .XML data into the required LDS structure.



Secure Identification

Governments, corporations and the public rely on the accuracy, reliability and privacy of data stored on or in a personal ID document. Datacard understands how to protect that data from alteration or substitution. Whether it's the visible data on the document; the machine-readable data stored in magnetic stripes, bar codes and smart cards; or data captured at enrollment and stored in a central database, we have a variety of proven technologies available to ensure document security.

Datacard[®] Smart Card Consulting offers a secure and vertically integrated suite of software, hardware and integrated systems for smart card security and issuance, and for updating smart card data and applications through the life of the card. Our solutions group has designed a wide range of systems that **protect personal data** stored on central databases or Web-enabled secure servers.

A.2.3 Examples

Dutch Passport and National ID Project



Compare the following identity card to the topology of the proposed Australian Access Card.





Requirements

The Dutch Government, confronted with a rise in forged or altered identity documents, faced the challenge of issuing highly secure documents for the citizens of the Netherlands. Criminals frequently target the Dutch passport for fraud because its multi-cultural society of 15 million makes it common for people of varying descent to carry Dutch identification. As a result, the Netherlands had seen an increase in the number of forged and counterfeit government documents and faced the challenge of issuing highly secure documents for the citizens of the Netherlands. Enschede/SDU by, the Dutch security printer managing the production of a high security passport and **National ID card** for the Dutch Government, required personalisation equipment with the capacity to incorporate high security features on the printed documents.

Solution

A polycarbonate page inserted within the passport booklet is laser engraved with the recipient's data and photo.

The passport books are automatically fed through the Datacard Passport Personalisation System in a single pass, making the centralized production easier to manage.

Privacy Statement 15

Datacard South Pacific Pty Ltd seeks to comply with Australian Privacy Legislation, as it relates to selling and providing Datacard products and services to our customers. For further details, or to obtain a copy of our privacy policy, please phone: 03 9535 0300.



The benefits of Datacard's stand-alone laser engraving system provided the unsurpassed security for visual personalization.

The production speed and security features of the Datacard Passport Personalisation System are unparalleled.

There are distinct differences between an identity card and a utility card such as divers licence.

Lithuanian Personal Documentation Issuance System



Requirements

Implement a centralised issuance system, with 100 decentralized data capture centers, to issue personal documentation including passport, **national ID** and driver's license - The integration of the new system required a seamless transition with no interruption to the production of the former document issuance system.

Solution

The data is captured at 100 local issuing offices using a standard office set-up comprising of servers, personal computers, scanners, printers, network switch equipment, and standard software.

The data is transferred to a centralised database.

Depending on the format and design required, the ID documents are issued from a centralised production site using Datacard[®] DCL30 and Datacard[®] DPL40 laser engraving systems.

Customised application software ensures the execution, accounting, and control of producing, issuing and replacing personal documents.

The Story

Confronted with quality issues regarding the current paper laminated ID documents, the Government agency for Lithuania issued a tender requesting a solution for the **issuance of ID documents** that would modify, extend, or replace the current automated personal documentation issuing system (ADIS). The solution, based on the collection of decentralised data from 100 locations throughout Lithuania, allowed the documents to be issued from multiple centralized locations.



In addition, the implementation of the new system required a seamless transition with no interruption on the operation of the former document issuance system (ADIS).

Secure ID Documents

Giesecke & Devrient were appointed by the government to manage the project using Datacard's laser engraving systems to issue several personal documents planned over the next three years:

1,000,000 Passports of the Republic of Lithuania 10,000 Service passports 10,000 Foreigners' passports 1,500,000 Identity cards for the Republic of Lithuania 450,000 Driving licenses

All personal documents issued will be in conformity with the European Union standards and ICAO recommendations.

Switzerland Passport Project







Requirements

The Government of Switzerland faced the challenge of issuing a highly secure passport document for their citizens. Orell Füssli needed to manage the production of a high security passport and required personalization equipment with the capacity to incorporate high security features on the printed documents.

Solution

A polycarbonate page inserted within the passport booklet is laser engraved with the recipient's data and photo.

The passport books are automatically fed through the Datacard[®] DPL4000 Passport Personalization System in a single pass, making the centralized production easier to manage.

Datacard's automated laser engraving system provided unsurpassed security for visual personalization required by the government.

The Story

The Swiss Government began issuing newly designed passports in January, 2003 to the citizens of Switzerland. Orell Füssli is the security printer responsible for providing the printing and all works according to general contracting for this project. The highly secure passport is personalized by Bundesamt für Bauten and Logistik using the Datacard[®] DPL4000 Passport Personalization System which features Datacard's proprietary laser engraving technology.

The Swiss government took steps to introduce new and more secure passport technology to counter the growth of forged and counterfeit identity documents.



Thailand Ministry of Interior National ID Plan

Overview

- CUSTOMER: The Thailand Ministry of Interior issues approximately eight to ten million national ID cards on an annual basis. The national ID card will provide its citizens identification, proof of citizenship, register to vote or for military duty, the ability to open bank accounts and other basic functions.
- CHALLENGE: Present the Ministry of Interior a proposal for Datacard[®] card
 printers to produce plastic ID cards. The printers must offer security features
 including a smart chip, stand up to extreme weather-related conditions, allow
 for central and remote capture and be available to meet a short deployment
 window.
- SOLUTION: Thailand's Ministry of Interior chose Datacard® MagnaTM
 Platinum Series card printers due to their reliability and security features. The cards will feature full-color photos, text, **magnetic stripes and smart card chips.**

Datacard Government Services Provides Printer Solution for the Thailand Ministry of Interior

The Thailand Ministry of Interior is rolling out phase two of its national ID plan. The national ID plan involves issuing eight to ten million national IDs to its citizens 15 years or older at both central and remote locations. The plan calls for 1,077 registration centers across the country that will provide instant issuance of the ID card.

The **national ID program** is a high-profile program that was heavily pursued by multiple competitors. Thailand government officials managing the program are seasoned identity professionals who expect reliability, quality and value.

Thailand's government officials chose the Datacard Magna Platinum Series card printer, owing to the printer's security features, durability and flexibility. The printers will be distributed through Datacard's authorized distributor in Thailand, Data Products Toppan Forms Ltd., based in Bangkok, over a three-month period.



History

The national ID plan consists of two phases. Phase one began in 1996 with the Ministry of Interior purchasing Datacard[®] ImageCard[®] III card printers to issue national ID cards to its citizens at 211 registration centers across the country. At that time, officials planned to develop a decentralized database through which government offices would have demographic information about its citizens available.

Phase two of the national ID plan, starting in December 2003, will include distribution of over 1,000 Magna Platinum card printers to both central and remote locations for the issuance of national ID cards. Phase two is expected to last 10 years.



State of Michoacán, Mexico Driver License Program

Requirements

The state of Michoacán in Mexico needed a solution to issue approximately 250,000 driver licenses per year to its' state residents. The program would have to encompass 52 offices throughout the state with the capability to instantly issue the driver's license from each local office.

Solution

- Data is captured at local issuer office using a Datacard[®] MRAC 1500 camera, signature pad and fingerprint scanner.
- Using Datacard[®] ViaNet[®] software, data is securely transferred to a centralized database through dedicated TCP-IP lines.
- Driver licenses are issued from one of the 52 local offices using the Datacard[®] ImageCard[®] MagnaTM 2L printers.
- The card features color photos, text and signature. An additional topcoat is applied for added security.
- The fingerprint is used to retrieve the individual data and verify the identity of a driver requesting a renewal.



The Story

The state of Michoacán, Mexico needed a solution to issue approximately 250,000 driver licenses per year to its state residents. The critical requirement was to securely issue driver licenses, which include color photo with a signature and fingerprint identification scheme. The program would have to encompass the 52 issuing offices, throughout the state, with the capability to instantly issue the driver licenses from each local office. Furthermore, the data collected at the local sites would need to be securely transmitted to the centralized database to facilitate renewals of driver licenses.

Card Issuance Production includes a fingerprint – this is identity

The data collection, which consists of a **photo, signature and fingerprint**, is captured at one of the 52 data collection points located throughout the state of Michoacán.

The platform is a Windows[®] 2000 server using a SQL 2000 database. The data is securely transferred to a centralized database to build a digital image reference and to verify identity.

Once the data is confirmed, the full color driver's license is instantly issued on the Datacard[®] MagnaTM 2L which applies an in-line holographic topcoat, to provide added durability and security.

The combination of the ViaNet software and the MagnaTM class printers provide the capability to capture the identity information at a local level, verify and merge with information from the central database and produce secure driver licenses in a matter of minutes.

The program also provides the state of Michoacán the tools to manage the database in order to easily retrieve data and verify the identity to facilitate reissuance of driver licenses.



Singapore Driver's License Program



Requirements

The Government of Singapore required a driver's license program to replace the former paper based license with an automated plastic card issuance process.

Solution

- The Traffic Police sends renewal forms to license holders. These applicants can bring their form and photo to any Post Office or Traffic Police headquarters to renew their license. New drivers or drivers obtaining a new class of license must submit their application form and photo at a test center.
- Data is uploaded to the host Traffic Police Computerised System (TCS).
 TCS transfers the driver licenses records of to the PhotoCard Driving License System (PDLS).
- The photos are scanned and merged with the records from TCS, creating a print file.
- The driver licenses are produced on the Datacard® 9000 Series card issuance system from a centralized site.
- The 9000 Series system uses a front and back Barcode Module to capture a pre-printed card inventory number and a license number, creating a verification record.



The Story

Since the 1960's, Singapore has been issuing a paper driver's license showing the license ID number, name, address, details of classes valid for driving and an expiry date. All Singapore citizens and permanent residents will use this new license. The renewal forms for the new driver's license are sent out six weeks before the license expires. Once the applicant has submitted the appropriate form and photo, a onetime license fee of \$50 is applied to process the data and proceed with the issuance of the new license.

The Latest Card Technology Available

The 9000 Series system's capability to produce cards at high speed in a fully automated process; from personalisation and printing to delivery of cards completely inline; met all the requirements for a centralized production site. The 9000 series system prints, delivers and verifies cards at a rate of 600 cards per hour. In addition, the option to upgrade the system for future needs and full local support were compelling reasons for selecting the Datacard system.

The unique **feature of the Barcode Module** allowed the system to read the preprinted card inventory number, match with the license number, and create a record to be uploaded to the TCS host creating an online database that enables police officers to check the authenticity of any license when necessary.





Saskatchewan Digitised Driver's License

Requirements

Issue approximately 750,000 driver's licenses to the residents of Saskatchewan, Canada.

Solution

- Data is captured at local issuer office using a digital camera, signature pad and personal computer.
- Data is transferred to a centralised database.
- Driver's licenses are issued from a centralized production site using the Datacard[®] ImageCard[®] IV.
- The cards include color photos and text with an integrated holographic topcoat for added security.
- A machine-readable barcode is printed on the card, which stores the Personal Identification Number (PIN) in order to retrieve the driver's data.
- The Datacard[®] UltraForm[®] mailer processes the cards using the barcode read look-up capability to match and affix the card to a personalized letter, sealed and franked ready for mailing.

The Story

Saskatchewan Government Insurance, a Crown Corporation owned by the provincial government, administers the compulsory auto insurance program as well as providing all driver and vehicle registration services. Saskatchewan Government Insurance handles 750,000 driver license transactions annually. The requirement to issue a secure driver license, which includes a color photo with a data reference bar code in an efficient manner, is critical.

Data Collection

The data collection station, which consists of a photo capture system and signature pad, is located throughout the province including remote locations. The driver information is retrieved on-line from the master database using a personal identification number (PIN) to access the information. After the photo and signature are captured, the complete data file is transferred to a database at the Head Office for centralized production of driver licenses.



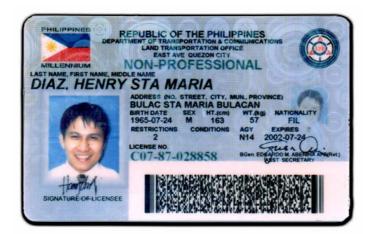
Card Issuance Production

The card production is handled by a Datacard[®] DACSTM Print server environment, which queues new print requests and manages the output to multiple Datacard[®] ImageCard[®] IV desktop printers.

The system can accommodate single print requests as well as manage unattended batch print runs of up to 1,750 cards without user intervention.

The card design includes a color photo with text and a machine-readable barcode. For added security, a protective topcoat with an integrated hologram is applied to the card. The newly printed cards are transferred to the Datacard UltraForm Mailer and automated in-line card issuance process. Using the machine-readable barcode, the driver's data is retrieved from a database to print a personalized letter. The driver license is then affixed to the letter ready for mailing.

The Philippines Instant Issuance Driver's License Program



Requirements

The Land Transportation Office of the Philippine Government wanted to reduce the 3 to 9 months time line required for the processing of the national driver's license. In addition, the option to add security features to the card would be an added benefit for the government.



Solution

- Omega Computer Corp., the Datacard distributor in the Philippines, developed a decentralized driver license issuance solution to reduce turnaround time for card issuance.
- While utilizing the existing installations of the Datacard ImageCard[®] II/II+ & ImageCard[®] III, Datacard introduced ImageCard[®] IV to produce the full color cards including a high-security holographic topcoat.
- The cards are issued at the local Land Transportation Offices and delivered to the driver in 15 minutes.

The Story

Since 1984, the Land Transportation Office (LTO) of the Philippine Government has issued driver licenses that are laminated in a pouch. In 1994, Omega Computer Corp., the Datacard distributor in the Philippines, introduced Datacard's ImageCard[®] product line and changed the substrate of the card to PVC.

The cards were still issued from a centralized location at the LTO head office in Quezon City. Due to the centralised processing of the driver licenses, turnaround time was as long as nine months. This was considered too long.

Innovative Custom Solutions

In the year 2000 Omega Computer Corp. developed a decentralized driver license issuance program. In the initial phase, ImageCard II & III systems were installed in the most critical high volume locations of the LTO. Then, ImageCard IV systems were installed in more locations. Over 160 sites are expected to offer instant issuance driver licenses using Datacard ImageCard printers by June 2002. The results are phenomenal. Driver licenses are issued and delivered to drivers in 15 minutes or less.

There is limited space at some of the Land Transportation Offices making it difficult to add an area for driver license issuance. Omega Computer Corp. is now installing Kiosks at shopping malls to test whether this environment will be an effective solution for driver's license renewals.



A.2.4 Other Government Solutions Reference List

Datacard has successfully implemented solutions for the following countries.

National ID Programs

The Americas	Asia Pacific	Europe/Middle East/Africa
Bolivia	Bahrain	Cyprus
Costa Rica	Brunei (smart card)	Ivory Coast
Dominican Republic	Japan	Lithuania
Netherlands Antilles	Malaysia	Malta
Panama	Maldives	Mauritania
	Republic of Korea	Netherlands (laser engraved)
	Thailand	Oman (smart card)
		Seychelles
		United Arab Emirates (smart
		card)



Driver's License Applications

The Americas	Asia Pacific	Europe/Middle
		East/Africa
Argentina	Australia	Iceland
−1 Mendoza (smart	−15 Victoria	Lesotho
card)	−16 South Australia	Liechtenstein
−2 Santa Cruz	−17 West Australia	Lithuania
Canada	17a Tasmania	Seychelles
-3 British Columbia	China	Slovakia
–4 New Brunswick	−18 Fujian Province	Spain
−5 Newfoundland	–19 Guangxi	Switzerland
−6 Ontario	Province India	Tunisia
–7 Quebec	-20 Bangalore	Ukraine
–8 Saskatchewan	–21 Bombay	United Arab Emirates
Colombia	–22 Chandigart	United Kingdom -
Dominican Republic	(smart card)	Northern Ireland
Ecuador - Quito	−23 Delhi	Zambia
Haiti	New Zealand	
Mexico - Mexico City D.F.	Singapore	
Netherlands Antilles		
Philippines - LTO - Driver		
License		
United States		
–9 Alabama		
−10 Delaware		
−11 Florida		
-12 New Mexico		
−13 North Carolina		
-14 Pennsylvania		
U.S. Virgin Islands		



Government Employee ID

The Americas	Asia Pacific	Europe/Middle
		East/Africa
Grenada - Airport	Philippines	Israel - (smart card)
Employee ID	Singapore - MOD	Oman - Ministry of Labor
United States		Spain - TGSS ID
−24 Department of		Syria
Energy		
−25 TWIC (pilot)		
−26 United States		
Postal Service		
−27 Virginia		
Department of		
Transportation		

Immigration/Border Crossing Applications

The Americas	Asia Pacific	Europe/Middle
		East/Africa
Argentina - Foreign	Malaysia - Work Permit	Netherlands - Immigration
Citizen Resident ID	ID	ID - (smart card)
Costa Rica - Alien	Singapore - Ministry of	Ireland - Garda National
Worker Permit ID	Labor - Work Permit	Immigration Bureau
Mexico - Alien Card	ID	Israël - Border Crossing
(smart card)		ID
United States -		Italy - Immigration ID
Department of State -		Sweden - Refugee ID
INSPASS		United Kingdom - ARC
		Alien Card (smart card)



Law Enforcement Applications

The Americas	Asia Pacific	Europe/Middle
		East/Africa
Canada - Firearms	Hong Kong - Police ID	Israël - Police ID
Acquisition ID	Philippines - Criminal	Mauritius - Police ID
Chili - Police ID	Clearance Card	South Africa - National
United States	New Zealand	Police ID
−28 Federal Bureau of	-30 Firearms License	Turkey
Prisons	-31 Police ID	
−29 Department of		
Corrections for		
- Illinois		
- Indiana		
- Minnesota		
- Ohio		
- Texas		



Social Services and Electronic Benefits Applications

The Americas	Asia Pacific	Europe/Middle
		East/Africa
Belize - Social Security	China - Social Security	Russia Federation
Canada - New Brunswick	–49 ChangChun	Spain - Social Security
- Social Security	–50 Changsha	
Honduras - Social	-51 Guangdong	
Security	–52 Heilongjiang	
Mexico - Liconsa - EBT	–53 Wushi	
Puerto Rico - EBT		
United States		
-32 Arkansas		
-33 California		
–34 Louisiana		
-35 Maine		
–36 Maryland		
-37 Massachusetts		
–38 Missouri		
−39 New Jersey		
–40 New York		
-41 Ohio (smart card)		
–42 Oklahoma		
–43 Pennsylvania		
–44 Rhode Island		
–45 Wisconsin		
–46 Wyoming (smart		
card)		
–47 Health Passport		
Project (smart card)		
–48 North East		
Coalition		



Transit ID

The Americas	Asia Pacific	Europe/Middle East/Africa
Canada - Toronto Transit	Japan - Motor Boat	France - smart tachograph
Commission	Licenses	solution
Chili		Italy - Public Transport
		Netherlands - Dutch
		Railways, Dutch
		Transportation
		Spain - smart tachograph
		solution



Other Applications

The Americas	Asia Pacific	Europe/Middle
		East/Africa
Argentina - Perfectura	Bahrain	Austria
Navel Coast Guard	China	Egypt - Military ID
Belize	–58 Dongguan	Finland - Army ID
Canada - Quebec Health	Temporary Resident	France - Health Card
ID	Card	(smart card)
Chile - Military ID	–59 Guangzhou	Ichkeria
(Army, Air Force,	Temporary Resident	Ireland
Navy)	Card	Mauritius - Ministry of
Dominican Republic -	–60 Pay TV	Health
Voter ID, MVR	-61 Yunan Provincial	Netherlands
Ecuador - Military ID	-61 a 10,000,000 smart	−64 Ministry of Justice
El Salvador - Gun	credit cards for	- Refugee ID, Alien ID
Registration Card	Industrial Commercial	–65 Ministry of
Haiti - Taxpayer ID	Bank of China	Foreign Affairs -
Jamaica		Diplomat ID
−54 Healthcare ID	Health Insurance ID	–66 Ministry of
−55 Voter ID	India	Defense - Veterans ID,
Mexico	–62 Military ID	Military ID (smart
–56 Access Control,	–63 Bhabha Automic	card)
Finance Ministry	Research Center	Pakistan - Telecom
(smart card)	Japan - Social Insurance	Russia Federation
−57 Voter ID	Philippines - Armed	Slovenia - Healthcare ID
Peru – Army, Navy ID	Forces - Military ID	South Africa - House of
Puerto Rico - Health Card	Singapore - Military ID	Parliament ID
(smart card)	Sri Lanka - Port	Spain
	Authority	–67 Guardia Civil ID
	Taiwan - Healthcare Card	–68 Healthcard Card
	Thailand	Sweden
		Turkey - Taxpayer ID
		Ukraine - Ministry of
		Interior ID
		United Kingdom
		–69 British Army,
		Navy ID
		-70 Inland Revenue -
		Work Permit Card