

A REPORT ON NATIONAL IDENTITY CARD STUDY TOUR – MALAYSIA 7TH – 13TH JULY 2008

FOREWORD – We wish to express our special thanks to Private Sector Competitiveness project for funding the study tour on the National Identity Card System and the feasibility study. We also wish to thank the National Registration Department of Malaysia and Iris Corporation Malaysia for facilitating the tour.

INTRODUCTION

The Government of Lesotho's Vision 2020 identifies seven (7) pillars of development; democracy, National unity, peace, education and training, economic growth, management of the environment and advancement in technology.

The Government of Lesotho (GOL) is therefore committed to reduce poverty, accelerate economic growth and improve the welfare of the Basotho. Central to the GOL's efforts to achieve these ends is Private Sector Development (PSD), which will contribute equitable economic growth and expedited employment creation. Towards this end, the Government has requested the World Bank to finance a Private Sector Competitiveness Project (PSCP), with the key objective being to increase private sector participation in the economy by increasing its productivity and competitiveness.

The goal of the PSCP is to improve the business environment and reduce the costs of doing business; strengthen the linkages with the regional economy, especially South Africa; strengthen institutional support for employable skills and business management; and improve productivity at the firm level.

The PSC Project will also provide support to the Passport and Immigration Service (IPS) reform. The GOL regards IPS as an important element in creating an enabling environment in the expansion of Lesotho's private sector. The PSC Project will further

fund a feasibility study on the establishment of National Identification Card System (NICS) in Lesotho. The cost associated with the implementation of the NICS will be funded under the Lesotho Compact.

In order to equip itself for the implementation of the NICS, the Ministry of Home Affairs decided to undertake a study tour to Malaysia to learn about the Malaysian experience in this regard. Malaysia was chosen because it has established itself as a world leader in providing Electronic National Identification Card solution (Multipurpose card).

THE MALAYSIAN EXPERIENCE

OVERVIEW:

- As Malaysian community comprise different nationalities from China, India, Indonesia and Malaysia. The government of Malaysia was faced with a challenge of differentiating between its indigenous citizens and non-citizens of the same nationalities. As a result it could not plan and extend social benefits to its citizens hence the need for introduction of the National Identity System.
- The Malaysian National Identification Card System dates as far back as 1948, where the Identification Card was a basic paper until 1960, when a laminated paper was introduced. In 1996 the fourth Prime Minister of Malaysia Dr Mahathir Mohamad launched a multi - purpose smart card (msc) solution.
- In 2000, a project was piloted in the capital city, Kuala Lumpur starting with registration of the nation's biometrics with a view to determine who the citizens are/were. The first two years of piloting the project saw two million identification cards issued; the national roll-out covering all states was implemented between 2003-2006 issuing 18 million cards.

- It is important to note that prior the implementation of the smart ID Cards, the Government of Malaysia designed policies known as (Push and Pull Policies) that encourage its citizens to apply for the identification cards. Such policies included easier access to social grants and or benefits, and banking services for those who have cards. The Government also established procedures, guidelines and legal framework for the implementation of national ID system.

WHO IS ELIGIBLE FOR MALYSIAN ID CARD?

- A person has to be 12 years and above in order to qualify for a Malaysian ID Card. 12 years has been chosen because the biometric information from the thumb is clear and informative, while for a person below 12 years old; the thumb does not provide clear biometric information. Also one is of course eligible to get an Identification Card if they are citizens or permanent residents. One has to be either a citizen of Malaysia or a permanent resident.

CAN MALAYSIAN ID CARD BE UPDATED?

- The Malaysian Identification Card is designed in such a way that the information on the card can be updated on the chip. The holder's information can be updated on the basis of changes in residential address and occupation changes e.g. residential address and occupation. The validity of the card is ten (10) years. It is to allow those who did not update their data on the card during the ten (10) years period of validity to do so at the time of renewal as well as to change pictures since faces change over time. The card also accommodates new access to business services as the private sector develops.

SECURITY FEATURES

- The Malaysian ID Card does not allow for one individual to have more than one Identification Card. The technological

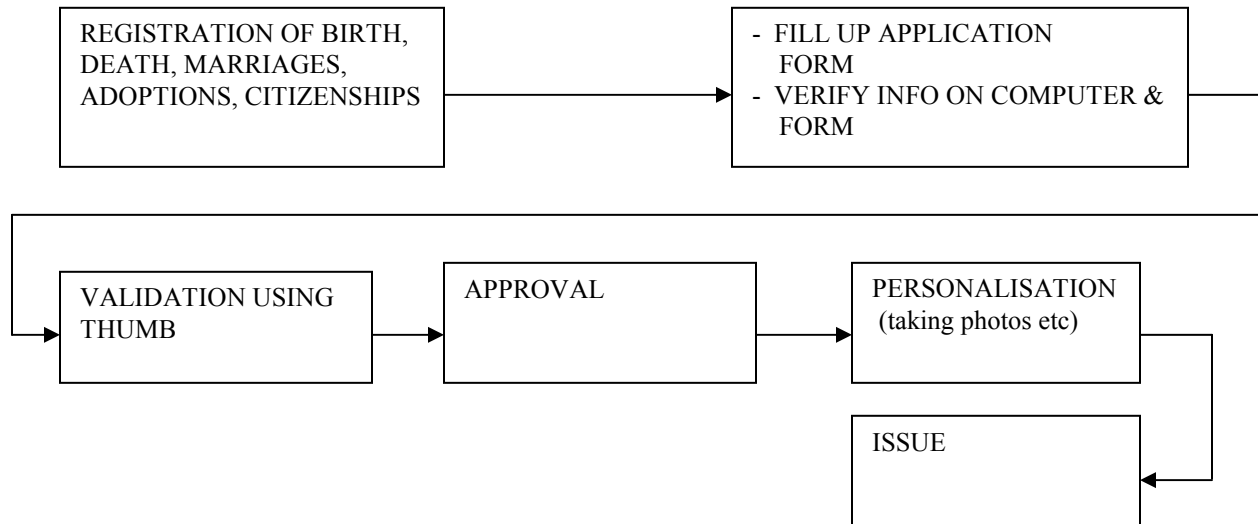
infrastructure used during registration and application does not provide room for manipulation. Since each individual his/her biometric (2 thumbs) Information taken, this also does not allow for duplicate records. A biometric is used as a key to opening one's information from the system.

- When applicants collect their Identification Cards from the National Registration Department, their fingerprints are live scanned, to ensure that only the owner of the Identification Card collects it. The biometric (thumb) reader is used to validate and verify the applicant. This system eradicates corruption and prevents people from denying that they obtained their ID Cards.
- A national ID number is made up of among other things the birth date, gender, place of birth and number of times an Identification Card has been issued to one person. The reason to show the number of times an Identification Card has been issued to one person was to try to eliminate possible fraudulent activities that may happen using Identification Card. A person is allowed to replace a card up to a maximum of four times; the fifth time an individual is handed to the police and credit bureau for investigation.

APPLICATION PROCEDURE

WORKFLOW CHART

REGISTRATION



It required of all citizens to register, hence by the time a person applies for an ID, his/her personal particulars are already with the National Registration Department.

It is important to mention that there are registration clerks responsible for only data capturing and validating at district level. All districts are linked electronically to the headquarters, hence captured data is speedily sent to headquarters from the districts, because ID are issued at headquarters. During the application the applicant may wish to indicate where he/she would like to collect his/her Identification Card. This enables the headquarters to dispatch an ID to appropriate place for collection.

For the first time applicant's ID is subsidized. In case of replacement an applicant pays full price. The system discourages people from losing their ID's through negligence.

The process takes ten (10) days for the first application, that is the applicant receives his/her Identification Card after ten (10) days of application. Replacements take one (1) day to process and issue since all information is already in the database. In this case only the thumb print validates the applicant's information. At this stage there is no filling of forms or paper work involved.

APPLICATION AND FUNCTIONALITY

The Malaysian is said to house ID houses 8 + 1 applications on chip with convenient access into electronic records, payments, mobile applications, health, business and retail services. The ID is named MYKAD and consists of the following applications. It also made up of a contact chip and a contactless chip :

(1) Identification Card

Identification card is the anchor application in Mykad and it is stored with information such as;-

- name
- address
- race
- citizenship
- religion (for muslims)
- coloured photograph
- minutiae fingerprints

Mykad incorporates minutiae fingerprints into the chip. The fingerprints verification and coloured photograph provides effective and accurate personal identification

(2) Health Information

Health information such as blood type, organ implants, chronic disease, allergies and details of next of kin are inserted into the Mykad chip. The storing of health information into the Mykad chip is available at the participating hospitals and clinics under the Government telehealth project. The health information is used to help doctors and paramedics to provide immediate treatment in case of emergencies.

(3) Driving Licence

Driving licence information such as license type, expiry date and owner category are stored in the chip. Driving licence is read using Mykad readers and kiosk. Renewal of driving licence in the Mykad.

(4) Passport Information

Passport information such as expiry date and passport serial number are stored in the Mykad chip for check in and out at Malaysian Immigration automated border control as well as other neighboring Asian countries. It does not replace the passport but only used at Malaysian borders at kioks without people queueing at counters and without filling forms.

(5) Transit Card

“Touch `n Go” is a contactless card pre-loaded with an electronic cash purse (more like visa card). “Touch `n Go” is used as a mode of payment because it is fast, easy and convenient as transactions are conducted without physical cash. This includes payments for:

- Highway toll gates
- Public transport (Railway Transit)
- Selected parking

Reloading "Touch 'n Go" is done at ATM machine that displays the "Touch 'n Go" logo.

(6) Public Key Infrastructure (PKI)

PKI application stores a digital certificate and private key into the Mykad chip. A digital certificate enables four electronic transactions such as:

- Authentication - No one can use someone else's card.
- Confidentiality - Sensitive data can be encrypted for privacy.
- Integrity - No third party can change any information.
- Non-repudiation - Digital signature provides legal proof.

Digital certificate can be used by people who qualify for social benefits to access goods at subsidized prices from the Kiosks and can also be used for online transactions. (It is some sort of a personal key).

(7) MEPS Cash

MEPS cash is an e-purse in Mykad. Before using MEPS cash, a person must load in the value into the Mykad chip. Loading and payment of MEPS cash is available at all participating banks and retailers that displays the MEPS cash logo.

(8) Frequent Travelers Card

Mykad serves a frequent travelers card for frequent travelers to neighbouring countries. The travelers just present their mykad at the border control counter.

BENEFITS DERIVED FROM MYKAD/ID

- The use of Mykad has clearly helped to improve customer services by reducing the time spent to register customers as well as verifying accurate and genuine data.
- In some places, residents using Mykad receive discounts on entrance fees eg Cinemas
- In some participating hotels, smart Identification Card improves operational efficiency and provide quick check-in through self service kiosk and automated machines. It cuts down on the time taken to type customers information thus minimizing unnecessary human errors.
- It has brought about automation and improved service delivery requiring an average time less than 40 seconds to access statements electronically as compared to queuing up. Service delivery is extended beyond existing office operational time.
- Some banks have used it for queue management in that mykad/smart Identification Card speeds up service delivery and reduces turnaround time in conducting daily banking transactions. A customer needs only to slot his/her mykad into the machine and choose the relevant accounts he/she needed to open. The teller can then pull up the relevant customer information and attend to him/her immediately without having to look for details.

CONCLUSION

The Malaysian Identification Card has changed the way Malaysians do business and interact with Government and private sector. It has definitely scored a huge success for information, communication and technology utilized in its design; it ensures that all data is accurate and resistant to any possible cloning. The "Public Key Infrastructure" in the ID with its digital signature feature enables secure-e-commerce transactions and expedites the process of verification for overall service delivery.

The Malaysian Identification Card is designed in such a way that it is flexible and can accommodate multiple retail transactions for business which would like to join the Mykad application, for example, it accommodates transactions like e-attendance clinic management, e-petrol, electronic driving license, micro finance and many more.

The Malaysian Mykad software and hardware is designed and produced by Image Retrieval and Identification System (IRIS). IRIS Pioneered the first electronic passport and ID in the world. They design and manufacture the chip that is inserted in the Mykad. They also design and manufacture kiosks and automated gates available are put at Immigration border controls and toll plazas for self servicing.

Malaysia is indeed a world leading class in a multiple smart identification, incorporating a host of government and private sector applications in a single card.

CHALLENGES

- Inter-agency coordination and commitment from stakeholders: Getting the entire stakeholders together was a serious challenge that needed all parties to understand the importance of the services that they will get and how cost effective it is to have one multipurpose card.
- Public perception/ acceptance of a 'smart' Identification Card: this was a serious challenge, everyone is expected to trust and use this Identification Card in order to make life easier, but at the same time the public has to accept it.
- Being the pioneer in introducing a public multi applications card: To Malaysia this was a process similar to a baby's development; they learnt from practice and mistakes, also it was a trial and error activity until they finally got it right and therefore the first in the world to introduce a 'smart' Identification Card.

- Requires complex and completely new infrastructures: Since Malaysia was the first to come up with the 'smart' Identification Card, this means there was nowhere they would get the equipment that is needed. This means they had to make this equipment (through IRIS), this was made specifically to address their situation and therefore this gave them all the knowledge on how to customize the products and equipment also the software. This was also a very costly exercise but with the help of the Government they were able to build up necessary ICT infrastructure.

- Security of card is a critical issue: Having to develop strategies that will ensure that the card is not forgeable and can only be used by one person to whom it was issued to a challenge that had to be addressed. That is when they decided that they will use the verification method of using a finger print on a reader wherever the person used the card. This helped as a security measure and as a way of eliminating fraud.

- Production Challenges: The National Registration Department of Malaysia initially got 10 huge equipment that produces about 10 thousand cards per day. This the Department only realized later that it was not cost effective as after the initial roll-out, four of those machines are now idle as the Department is now dealing with a smaller number of applications and replacements only.

- Use of Identification Card: People did not want to lose their Identification Card for fear of losing them because of the penalties and costs that come with replacement. This caused people to keep Identification Card as white elephants. In order to encourage people to use these IDs, the stakeholders developed policies that no services would be rendered unless an individual produced and Identification Card and verifying its legitimacy by using the finger print reader.

RECOMMENDATIONS

- We are aware that at the moment the (registration activities) personal information/data is scattered between Government ministries. In order for the government to know who its citizens are, we recommend a transfer of registration duties to the Ministry of Home Affairs to facilitate a build up and maintenance of a National database.
- Fast tracking review and amending and publication of the National Identification Card Act 2004.
- Development of policies and procedures that will lead to balance of “push and pull” and to ensure smooth implementation of the project.
- Introduction of e-passport alongside Identification Card project, because e-passport and a smart Identification Card can be used interchangeably in cross border movement, between RSA and Lesotho.
- We were really impressed with the Malaysian experience, infrastructure and process. If possible we would adopt their system. The hurdle would be that Malaysia is a very advanced country in terms of technology and infrastructure. It would be wise to learn how the African countries have dealt with implementation of this project therefore, a study tour is recommended to one of the African countries which have implemented the smart id and e-passport, to learn from the African perspective how these programmes were implemented.
- Piloting of the project to start with the civil servants and the private sector/and parastatal population.
- Inter-agency coordination and commitment from stakeholders: the smart card Identification Card involves a number of stakeholders; among others the financial sector, other government agencies that offer social benefits and the transport department. From the

Malaysian experience, we learn that getting the entire stakeholders together will be a serious challenge that will need all parties to understand the importance of the services that they will get and how cost effective it will be to have one multipurpose card. Commitment is very critical and trust between the implementing Ministry and the stakeholders. Continuous dialogues with stakeholders are also very important.

- Public perception/ acceptance of a 'smart' Identification Card: this is a serious challenge, everyone is expected to trust and use this Identification Card in order to make life easier, but at the same time the public has to accept it. A proper marketing strategy has to be done, which will specifically focus on getting a buy in from the public; it is known that a human being is resistant to change as it gets comfortable with routine, trying to change ones mindset takes a lot of hard work and convincing.
- ICT infrastructure: There is need to asses the type of infrastructure that we have and develop on it, fortunately for Lesotho, we do not have to start from scratch, there is already some infrastructure available. We also are fortunate that we can learn from the mistakes of others such as Malaysia, such that we will not have to go through the same problems they went through.
- Security of card is a critical issue: Strategies have to be developed in order to maximize on the security of the card. Policies and legal framework have to be in place to address security issues. This will help as a security measure and as a way of eliminating fraud.
- Production Challenges: From the lessons learnt in Malaysia, the advice was that there are already small desktop machines for Identification Card production that still can produce 300 cards/ hour and are cost effective(this were developed by IRIS). This equipment can still be used after the initial roll-out without having lost a lot of money in idle equipment.

Annexes:

List of delegates

List of questions that were addressed