MYKAD: THE GOVERNMENT MULTIPURPOSE CARD

By: Ir. Osman Khan, Information Technology Special Interest Group

The Government Multipurpose Card (GMPC) project is part of the Multimedia Super Corridor (MSC) initiative. This project is one of seven flagship applications that is being deployed by the Malaysian Government to attract leading edge technology development to Malaysia. A GMPC pilot project has been launched in the MSC-KL area and a nationwide deployment of the GMPC is in effect.

The key technologies employed to deliver the GMPC system are the smart card microprocessor chip and biometrics technology. The main challenge is to devise a new system and a process redesign that not only accommodate various security aspects but also caters to the incorporation of multiple applications from different government agencies and private sectors in a single card. As there was no other similar system deployed in other parts of the world, the Malaysian Government had to devise and develop all the systems, procedures and methodology necessary to achieve the target of issuing a smart card based national Government Multipurpose Card.

GMPC IS MYKAD

The word "My" stands for Malaysia's Internet country designation code as well as the English word "My" meaning personal ownership, whilst the word "Kad" is a acronym of "Kad Akuan Diri" (Personal Identification Card) as well as "Kad Aplikasi Digital" (Digital Application Card) and as a Bahasa Malaysia word, it also means "card".

MYKAD: GOVERNMENT MULTIPURPOSE CARD

GMPC is the initiative of the Malaysian Government in providing the public with added convenience on a single smart card. Unlike any other card in the world, the GMPC incorporates a host of government and private sector applications in a single card. Moreover, the GMPC is also able to accommodate new expansions in the future.

The GMPC represents the first step for Malaysians to an incredible transformation in their lives—in the way they work, communicate and do business. In the future, whether using a computer terminal, ATM machine, kiosk, telephone or other data communication devices, the GMPC will become the common key to the information highway and other new business methods and processes that will be developed, including that of the other MSC flagship applications.

The Malaysian Government smart card employs state of the art technology that incorporates multiple layers of security features. These features include card authentication using symmetric key cryptography, a multi-application operating system with firewalls and a secure chip platform.

OBJECTIVES

- To provide government and payment applications and other future applications on a single card.
- To provide enhanced customer service and improve the ease for Malaysians to conduct routine transactions with the government and private companies.

GOVERNMENT AGENCIES

The GMPC is a collaboration of five government agencies namely:

- the National Registration Department (NRD) as the lead agency,
- the Road Transport Department (RTD),
- the Royal Malaysian Police (RMP),
- the Ministry of Health (MOH), and
- the Immigration Department (IMM).

The GMPC project has also received cooperation from:

- Kementerian Dalam Negeri
- Bank Negara Malaysia
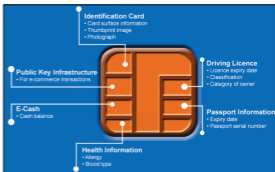- Jabatan Akauntan Negara Malaysia

Figure 1: Some of the information stored in the MyKad chip

- Jabatan Audit Negara
- Jabatan Perdana Menteri
- Pejabat Pegawai Keselamatan Kerajaan, Jabatan Perdana Menteri
- Unit Pemodenan Tadbiran dan Perancangan Pengurusan Malaysia
- Kementerian Penerangan
- Kementerian Tenaga, Komunikasi dan Multimedia
- Jabatan Peguam Negara
- Unit Perancangan Ekonomi
- Kementerian Kewangan
- Jabatan Perkhidmatan Awam
- Multimedia Development Corporation

MYKAD APPLICATIONS

MyKad replaces the two most important official documents namely the identification card and driving license with four other applications.

IDENTIFICATION CARD

MyKad, with its enhanced security features using chip and biometrics identification technology, replaces the plastic card-based National Identification Card. Seen as the anchor application of MyKad, the identification card number is expected to serve as the secure access key to other applications and systems.

DRIVING LICENSE

MyKad replaces the paper-based laminated cards and functions as a regular driving license. MyKad facilitates enforcement by providing enforcement officers with up-to-date driving records. The users for this application are the JPJ enforcement officers and the Traffic Police of PDRM.

PASSPORT INFORMATION

MyKad supplements the Malaysian International Passport to facilitate efficient exit and re-entry at Malaysian Immigration check points.

Figure 2: A Mobile Card Acceptance Device (Mobile CAD) and a Key Ring Reader

It is to be noted that MyKad does not replace the passport, since it is still required as the official entry and exit document when traveling overseas.

MEDICAL INFORMATION

The technology of MyKad will improve diagnosis and care in emergency and general care situations. Basic and critical medical information is stored in the chip.

E-CASH

MyKad facilitates payment of small purchases where the E-cash service accepted. This enhances the efficiency and service quality of public and commercial payment transactions.

PUBLIC KEY INFRASTRUCTURE (PKI)

The PKI in MyKad enable users to conduct secured e-commerce and transactions using a digital certificate over networks such as the Internet. Authenticity and integrity of data is protected and the data inaccessible to anyone but the rightful owner of the MyKad.

Information contained in the chip can be accessed using a Key Ring Reader or a Mobile Card Acceptance Device (Mobile CAD).

HOW TO APPLY

A Government Service Centre (GSC) is a one-stop service centre for all transactions and services pertaining

to MyKad. Applicants can apply for the card at any GSC. The data captured at the GSC will be transmitted to the National Registration Department headquarters before being sent for personalisation and card production. Once personalised, the completed MyKad will be sent to the designated GSC to be collected by the applicant.

The services offered by the GSCs are for the following MyKad-related transactions:

- Application of MyKad
- Replacement of MyKad
- Renewal of driving license
- Update of applicant's information on the card
- Upload passport information
- Payment and update of summons

ELIGIBILITY

You are eligible to apply if you are a citizen of Malaysia or a Permanent Resident aged 12 years and above.

SUPPORTING DOCUMENTS

- National Identification Card and Driving License (if available).
- Child's Birth Certificate and National Identification Card of either father, mother or sponsor for a 12 year old's application.
- Machine Readable Passport (if available) to upload Passport information into MyKad.

Figure 3: MyKad Application Process

For further information, you can check the NRD's website at: http://www.jpn.gov.my/

APPLICATION PROCESS
Three Easy Steps to obtain your MyKad:
1. Get a queue ticket at the counter. Wait for your number to be called.
2. Verify your information and thumbprint and pay the fee at the processing counter.
3. Capture your photo and get your receipt at the camera counter. ■