

Comments on Hong Kong Special Administration Region Identity Card

(Submitted by Dr LM Cheng, Smart Card Design Centre, City University of Hong Kong)

The scope of the project is to develop a new HKSAR ID card and a new supporting system. The requirements are 1) multiple applications for future expansion such as automatic clearance, checking of extension of stay, driving license, library card, PKI etc. and 2) fraud avoidance.

The concept itself is rather ambitious and pioneer. In the technical side, I have reservation on the lifetime of the smart card, security issue and justification for multiple applications. In the social implication side, I extracted some Frequently Asked Questions from some known reference for your information, which have different views to the HKID document and its supplement provided by the Security Bureau.

Life time – will not meet the 10 year requirements

Regarding the lifetime, my understood requirement is over 10 years. Currently, the most acceptable contact type smart card lifetime is around 3 years for normal frequently use in a humid country. The lifetime can be substantially reduced if the weather becomes dry when the static current possibility increases. ***Who will pay this additional bill if the card found physically damaged due to its inherited weakness?***

Security issue – smart card currently is not entirely secure

In theory, the smart card can be very secure but its security relies on the design effort and special protection features of the smart card. To my knowledge, the international approved, which is either endorsed by TNO (Netherlands) or DoD (USA), secured smart card is not yet widely available in the market. To that extend, the Malaysia established their own fab facilities for producing their own smart ID card to avoid any security risk. ***What will be the security measurement/standard imposed for card supplier to ensure that the card will not impose any national security risk?***

Multiple applications - ambitious but not practical

The request of using a more expensive multiple application card is to promote the IT activities, digital signature and e-commerce/banking/purse activities in the future. The concept is very aggressive but the implementation is extremely difficult because:

- 1) it is not a compulsory requirement
- 2) there are alternative cheaper solutions
- 3) overall administration, granting and defining of a protection common mechanism for multiple application file allocation can be a problem if it involves various government and private sectors
- 4) mixing of secured and non-secured data can be a potential security risk and
- 5) the future EMV Smart Card Payment Infrastructure compatibility cannot be easily resolved
- 6) the lost card percentage increases
- 7) no sharing of database will not maximize the IT benefits and will not promote effectiveness between government departments.

Is it the right thing for the HKSAR Government takes the lead in introducing compulsory multiple applications ID card and creates disturbance to the free market?

There are more frequently asked questions that may be interested for discussion:

1. Can ID cards help to control illegal immigration?

Yes and no. Most immigration authorities worldwide base their estimates on qualitative assessment. It became clear that the estimates for illegal immigrants were based on guesswork, the percentage of illegal immigrants who worked was based on guesswork, and the percentage of visitors who worked illegally came from a Departmental report that was based on guesswork

2. Do ID cards facilitate an increase in police powers?

Generally speaking, yes. A Privacy International survey of ID cards found claims of police abuse by way of the cards in virtually all countries. Most involved people being arbitrarily detained after failure to produce their card. Others involved beatings of juveniles or minorities. There were even instances of wholesale discrimination on the basis of data set out on the cards.

3. Do ID cards facilitate discrimination?

Yes. The success of ID cards as a means of fighting crime or illegal immigration will depend on a discriminatory checking procedure, which will target new immigrants.

4. What happens if an ID card is lost or stolen?

Virtually all countries with ID cards report that their loss or damage causes immense problems. Up to five per cent (this percentage increases if the ID is used for multiple purposes) of cards are lost, stolen or damaged each year, and the result can be denial of service and benefits, and - in the broadest sense - loss of identity and inconveniency.

5. What are the privacy implications of an ID card?

In short, the implications are profound. The existence of a person's life story in a hundred unrelated databases is one important condition that protects privacy. The bringing together of these separate information centers creates a major privacy vulnerability. Any multi-purpose national ID card has this effect.

6. Has any country rejected proposals for Smart ID cards?

The picture provided is misleading, i.e. two countries (Finland & Malaysia) accepted the use of Smart ID Card. Moreover, more countries rejected after a long investigation and consultation including France (the Motherland of Smart Card), UK, USA, Canada, Australia, New Zealand, Taiwan, Greece and Korea.

References:

- 1) <http://www.privacy.org/pi/activities/idcard/>
- 2) http://www.privacy.org/pi/activities/idcard/idcard_faq.html#6
- 3) <http://ccub.wlv.ac.uk/~c9479633/smrtid.html>