

For discussion on  
5 December 2017

## **Legislative Council Panel on Security**

### **New Smart Hong Kong Identity Card**

#### **Introduction**

This paper briefs Members on the new form of smart Hong Kong identity card (HKIC), and the territory-wide identity card replacement exercise.

#### **Background**

2. In 2015, we secured the support of the Panel on Security (Panel) to implement the Next Generation Smart Identity Card System (SMARTICS-2) to address the obsolescence of hardware and software of the existing Smart Identity Card System (SMARTICS), to cater for possible new business needs, and to introduce the new smart HKICs, so as to avoid the emergence of a large number of damaged or defective HKICs in a short period of time, at the same time enhancing the security features of HKICs as well as improving the card durability and upgrading the chip technology. The Panel noted that the Administration planned to launch a one-off territory-wide identity card replacement exercise from 2018 to 2022 to replace existing smart HKICs with new smart HKICs for all HKIC holders. Subsequently, the Finance Committee (FC) approved on 15 May 2015 a new funding commitment to implement the project. The Immigration Department (ImmD) is conducting the system development of SMARTICS-2.

#### **New Smart HKIC**

3. Same as the existing smart HKICs, the new form of smart HKICs will continue to be grouped under two streams, namely, Permanent Identity Cards and Identity Cards. They can be further divided into seven card types, as follows –

- (a) Permanent Identity Card (aged 18 or over)
- (b) Permanent Identity Card (aged 11-17)
- (c) Permanent Identity Card (aged below 11)
- (d) Identity Card (aged 18 or over)
- (e) Identity Card (aged 11-17)
- (f) Overseas Permanent Identity Card (aged 11 or over)
- (g) Overseas Permanent Identity Card (aged below 11)

4. ImmD has recently completed the design of the form and security features of new smart HKIC. At the meeting of the Executive Council on 21 November 2017, the Council ADVISED and the Chief Executive ORDERED that the new form of HKIC, at **Annex A**, be approved. In gist, the form of new smart HKIC is similar to the existing one. The size of the new smart HKIC and printed data items on the card will be the same as those on the existing smart HKIC. As ImmD will take the opportunity to introduce a number of new state of the art security features, some adjustments on the card face of the new smart HKIC will be made on the basis of the existing smart HKIC, including the introduction of a more complex background with multi-pattern (like fine-lines and guilloches) and specific colour printing features (such as rainbow printing and optical variable ink), and other sophisticated security designs such as the inclusion of a portrait of a second smaller photograph of the cardholder by the patent security feature of “Stereo Laser Image”, transparent hologram with wave and three-dimensional effect, see-through window with personalised data printed therein, full-colour image under ultra-violet light, etc., to ensure a strong protection against photo substitution and counterfeiting. More details of the security features are elaborated at **Annex B**.

#### **Territory-wide identity card replacement exercise**

5. The territory-wide identity card replacement exercise will begin in the fourth quarter of 2018 when all smart HKIC holders will be invited by phases, i.e. the call-up programme, to have their existing smart HKICs replaced at the dedicated smart identity card replacement centres (SIDCCs). The Secretary for Security will make orders under section 7B of Registration of Persons Ordinance (Cap 177, ROPO) to implement the call-up programme. Same as the last territory-wide identity card replacement exercise conducted from 2003 to 2007, nine SIDCCs will be set up across the territory in this identity card replacement exercise. It is estimated that the number of smart HKICs to be replaced in the upcoming replacement exercise would be about 8.8 million (compared with 6.8 million in the last exercise), and, subject to actual progress, the exercise will last until 2022.

6. Same as the last identity card replacement exercise, the one in next year will begin by first replacing the smart HKICs of members of the Immigration Service, police officers, and labour inspectors, allowing them to get familiar with the new smart HKIC for execution of their duties. Also same as the last identity card replacement exercise, presidents and members of the Executive Council and the Legislative Council (LegCo), and principal officials of the Administration<sup>1</sup> will also be invited to replace their HKICs first, with a view to enabling ImmD to review the workflow of identity card replacement and details of the system operation, before rolling out the programme to all

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<sup>1</sup> Principal officials of the Administration refer to those government officials who are appointed pursuant to a nomination under Article 48(5) of the Basic Law.

Hong Kong residents. Other smart HKIC holders will then be called up to have their smart HKICs replaced by phases in accordance with their year of birth. The sequence of the call-up programme will be based on relevant factors such as the replacement sequence of the last exercise and the travel pattern of different age groups. Generally, age groups which had their smart HKICs replaced earlier in the last replacement exercise (who happened to have a higher travel frequency) will be called up earlier.

7. According to section 7B(4) of ROPO, cardholders who are absent from Hong Kong (such as those residing in the Mainland or overseas) at the time when the respective age group is called up for identity card replacement can apply for an identity card within 30 days of their return to Hong Kong, without being regarded as contravening the Orders requiring persons of the respective age group to replace their identity cards in SIDCCs made by the Secretary for Security under section 7B of ROPO.

### **Improvements in the replacement exercise**

8. In view of the changes in demographics of Hong Kong, and to make it more convenient to the public in particular the needy groups, ImmD will adopt facilitation measures in the upcoming card replacement exercise, including –

- (a) “Dual-Track-Parallel-Run” approach in the call-up programme;
- (b) on-site identity card replacement service at residential care homes (RCHs) for the elderly persons and persons with disabilities (PWD);
- (c) better use of information technology; and
- (d) other administrative measures.

#### “Dual-Track-Parallel-Run” approach in the call-up programme

9. In addition to calling up persons to have their smart HKICs replaced by phases in accordance with their year of birth, a second track will be introduced for persons aged 65 or above (with the year of birth in 1954 or before). They will be allowed to replace their HKICs at any point of time in the specified period, which will run in parallel with those who are below the age of 65 (with the year of birth in 1955 or after) (as mentioned in paragraph 6 above) in the call-up programme, without further breakdown on age groups. The elderly population is expanding, as the population over 65 years old has increased drastically over the years from 810 000 (12% of the total population) in 2003, to 1.27 million (17% of the total population) in 2018. The “Dual-Track-Parallel-Run”

approach will facilitate the respective age groups in the first track and the elderly groups in the second track to replace their HKICs together in the same trip to SIDCCs.

#### On-site identity card replacement service at RCHs

10. Facilitation will be given to PWDs and elderly persons residing in RCHs<sup>2</sup> by providing them with on-site identity card replacement service. Officers of ImmD will visit RCHs to provide those PWDs and elderly persons residing there a choice to have their HKICs replaced on-site, saving their need to travel to SIDCCs. Subject to subsequent detailed legal and on-site technical feasibility study, the proposed target group is preliminarily estimated to be around 140 000 at about 1 000 RCHs during the replacement exercise.

11. For elderly persons and PWDs who live in the community with low mobility due to their physical attributes, singleton elders and elders living in rural areas, etc., ImmD will provide other facilitation measures, such as providing help-through services in SIDCCs and arranging special time slots for group visits organised by non-governmental organisations (NGOs), etc. ImmD will work with the Social Welfare Department in coordinating with NGOs on the detailed arrangements. Meanwhile, the existing arrangement for issuing Certificate of Exemption pursuant to regulation 25(e) of the ROPR<sup>3</sup> to those who are unable to replace their identity cards in person remains unchanged.

#### Better use of information technology

12. Riding on the implementation of SMARTICS-2, ImmD will also make better use of technology to enhance convenience and efficiency in the upcoming territory-wide identity card replacement exercise. For example, appointment booking for card replacement and form-prefilling can be made on the Internet or through an application on mobile phones or devices. Self-service registration kiosks and self-service collection kiosks will also be introduced to provide more convenient services to the public.

13. Apart from development of the computer system, ImmD is also drawing up a

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<sup>2</sup> These include RCHs under relevant laws, such as the Residential Care Homes (Elderly Persons) Ordinance (Chapter 459) and Residential Care Homes (Persons with Disabilities) Ordinance (Chapter 613). Details of the scope will be drawn up before the relevant legal order underpinning the call-up programme is introduced.

<sup>3</sup> Under regulation 25(e) of the ROPR, the aged, the blind or the infirm who satisfy a registration officer that their personal attendance for registration of HKICs will injure their health or the health of others are not required to register or apply for the issue or renewal of an identity card. They can instead apply for a Certificate of Exemption with the Commissioner of Registration (i.e. ImmD), which is issued free of charge.

comprehensive publicity plan to introduce the form of new smart HKIC (including the various security features) in order to enhance the public's understanding of the new HKIC. Before the commencement of the territory-wide identity card replacement exercise, ImmD will, through various channels, inform the public of the details and concrete arrangements of the identity card replacement exercise, so that the public are aware of the timing of identity card replacement of the respective age groups, addresses of SIDCCs, means of appointment booking, and various new initiatives (including "dual-track-parallel-run" in the call-up programme and on-site identity card replacement service at RCHs) and information technology applications (e.g. applications in mobile phones or devices, self-service registration kiosks and self-service collection kiosks, etc).

### **Inclusion of two card face data items in the card face data compartment in the chip of HKIC**

14. Currently, a smart HKIC holder can opt to use various non-immigration applications under the Multi-application Smart Identity Card (MASC) scheme co-ordinated by the Office of the Government Chief Information Officer (OGCIO). At present, non-immigration applications of HKIC under MASC include a personal e-certificate (e-Cert)<sup>4</sup>, the library card service of the Leisure and Cultural Services Department (LCSD), the Electronic Health Record Sharing System (eHRSS), and the eHealth System (Subsidies) of the Food and Health Bureau (FHB).

15. For the purpose of MASC, five data items are currently stored in the Card Face Data (CFD) compartment, which is separated from the immigration compartment (containing data accessible by ImmD only), of the chip of smart HKIC, namely – HKIC number, English name, Chinese name, date of birth and date of issue. Upon consultation with bureaux and departments, OGCIO proposed to include digital photograph<sup>5</sup> and sex in the CFD compartment in the chip of HKIC in response to proposals from the Financial Services and the Treasury Bureau (FSTB) and FHB. FSTB proposed to include a digital photograph in the CFD compartment. This would allow flexibility for financial institutions to assess the costs and benefits of adopting technology more widely so as to provide secure and efficient services to their customers. For instance, banks could utilise facial recognition solutions to help verify whether the smart HKIC presented is genuine and the person presenting the card is the holder. FHB has proposed to include the sex entry in the CFD compartment with a view to eliminating the current need of manual input by healthcare providers, thus facilitating

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<sup>4</sup> At present, e-Certs can be carried in a number of storage means, e.g. smart HKIC, contact smart card, USB file card and USB secure token.

<sup>5</sup> Except for HKICs of applicants under the age of 11 years, as there is no photograph on the card face of their HKICs.

the use of eHRSS and eHealth System (Subsidies) services, avoiding entry errors and improving efficiency.

16. Before introducing any new non-immigration applications of the HKIC, the Administration will consult the relevant LegCo panels, and, depending on the situation, consider the need for legislative exercise. In the light of this, ImmD will arrange to lock the access right to the two aforementioned data items when they are stored in the CFD compartment of the chip of HKIC. OGCIO will be responsible for granting the access right of the two data items, after proper consultation with the relevant LegCo panels on the new or enhanced non-immigration applications by the relevant bureaux.

17. Separately, noting that the limitation of accessing the e-Cert stored in the chip of HKIC (i.e. requiring a personal computer and card reader for use) does not tie in with the technological advancement and changing user preference towards mobile phones and devices, OGCIO will not provide for the choice for a cardholder to store an e-Cert in the new smart HKIC. On the other hand, OGCIO will implement the electronic identity (eID) initiative, the application of which does not require HKIC, to facilitate smart city development.

### **Advice Sought**

18. Members are invited to take note of the content of this paper.

**Security Bureau**  
**November 2017**



## Form of New Smart Hong Kong Identity Card

### Permanent Identity Card (PIC)

i) For persons of the age of 18 or over (adult PIC)

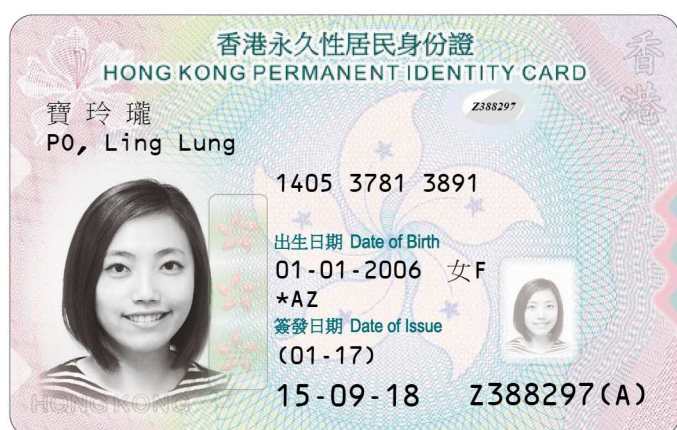


(Front)



(Back)

ii) For persons of the age of 11 to 17 (juvenile PIC)



(Front)



(Back)

iii) For persons under the age of 11 (minor PIC)



(Front)



(Back)



## Identity Card (IC)

- i) For persons of the age of 18 or over (adult IC)



(Front)



(Back)

- ii) For persons of the age of 11 to 17 (juvenile IC)



(Front)



(Back)



## Overseas Permanent Identity Card (OPIC)

- i) For persons residing overseas and of the age of 11 or over (adult / juvenile OPIC)



(Front)



(Back)

- ii) For persons residing overseas who are under the age of 11 (minor OPIC)



(Front)



(Back)

Note:

- A combination of the latest security features has been incorporated into the form of new smart HKICs.

**B** More details of the security features are elaborated at Annex B.

- Similar to the existing arrangement, slightly different colour scheme will be used on new “Identity Cards” as compared with “Permanent Identity Cards”.
- For “Overseas Permanent Identity Card” (OPIC), a label of “ISSUED OVERSEAS” will be pre-printed on the front side of the card.

# Security Features on the New Smart Hong Kong Identity Card



1. Hologram with Wave and 3D Effect



2. Tactile Relief



3. Ink with optically variable properties



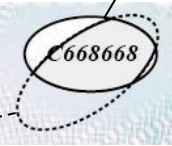
4. Rainbow printing



5. See-through window

Front opening

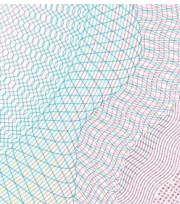
Back opening



2. Tactile Relief



6. Multi-pattern background



7. Stereo Laser Image (SLI) with portrait





Security Features on the New Smart Hong Kong Identity Card

8. Full-colour Image under UV



9. Microprinted text

