For discussion
on 5 March 2019

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Legislative Council Panel on Security

Next Generation Electronic Passport

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Introduction

      This paper briefs Members on the latest progress of the Next Generation Electronic Passport System ("the e-Passport-2 system") and the Immigration Department ("ImmD")'s plan to issue the Next Generation Electronic Passport ("the new e-Passport").

Background

2.   In May 2015, the Government secured the support of the Legislative Council ("LegCo") Panel on Security to implement the e-Passport-2 system in order to address the obsolescence of hardware and software of the present e-Passport system, cope with the increasing demands of passport application, and enhance the efficiency of application and issuance process for Hong Kong Special Administrative Region Passport ("HKSAR Passport") and travel documents. Upon the LegCo Finance Committee's approval of a new funding commitment to implement the e-Passport-2 system in May 2016, the Government commenced the development of the e-Passport-2 system.

The new e-Passport-2 system

3.   Developed in 2005 and commissioned in 2007, the existing e-Passport system is becoming obsolete. Implementation of the e-Passport-2 system will avoid the risk of large-scale system failure which can lead to serious disruption of critical public service (e.g. suspension of application processing and production of HKSAR Passports). The new system will also be compatible with ImmD's current Information Technology Infrastructure, ensuring its smooth and efficient communication with the other mission-critical computer systems of ImmD.

4.   In addition, the e-Passport-2 system will utilise the latest technologies to issue passports with high quality and security at a higher

efficiency.   The new travel document personalisation machine under the e-Passport-2 system will have a higher throughput compared with the existing one.   It can personalise about 300 passports per hour, more than double of the existing hourly throughput.   There will also be new enhancements under the e-Passport-2 system making the passport application and collection more user-friendly and convenient, as detailed in paragraph 10 below.

The new e-Passport

5.   The current e-Passport was introduced in February 2007, in compliance with the standard for biometric passports (or e-passport) promulgated by the International Civil Aviation Organisation ("ICAO"). The ICAO recommends that passport issuing authorities should introduce changes to passport designs and security features every ten years. Taking the opportunity of the development of the e-Passport-2 system, ImmD will issue a new e-Passport with upgraded security features, which will gradually replace the existing e-Passports.   The new e-Passport will continue to be in compliance with the standard of the ICAO.   The security features of the new e-Passport are enhanced with up-to-date technologies in the market to uphold the security, integrity and global interoperability of the HKSAR Passport, thereby maintaining confidence of overseas authorities to allow HKSAR Passport holders visa-free access to their country or region.

6.   The cover of the new e-Passport remains the same.   Digital data including holder's personal data and facial image are stored in the contactless chip embedded in the back cover of the passport.

7.   The bio-data page of the new e-Passport is made of polycarbonate. On the artwork design, the Golden Bauhinia Square is the main theme of the bio-data page.   New tactile relief features (including the regional emblem, butterfly and bauhinia) as well as new micro-printing are added. Under ultra-violet ("UV") light, the Tsing Ma Bridge image becomes visible.   To further enhance the security, a secondary portrait of the holder is laser engraved onto the transparent window.

8.   On the observation page, new colour letter screen image of the holder is introduced.   A new multi-colour tones visa pages, i.e. red, green, orange and blue, are adopted.   With the introduction of new full colour UV printing technology, a night view of the northern part of Hong Kong Island becomes visible under UV light.   New fanning effects are

also introduced to the new e-Passport.   Illustration of new designs and security features of new e-Passport is at **Annex**.

Application and collection of the new e-Passport

9.   The existing version of HKSAR Passports will remain valid until their expiry. There is no need for holders of valid HKSAR Passports to apply for the new e-Passport before the expiry of their current passports. Upon implementation of the e-Passport-2 system, ImmD will issue the new e-Passport to eligible applicants.   The eligibility criteria for HKSAR Passport application remain unchanged.

10.   To provide more user-friendly and convenient services to the public, several new measures will be introduced under the e-Passport-2 system to improve the passport application and collection procedures, including –

(a)   electronic submission of application for HKSAR Passport will be extended to Hong Kong Permanent Identity Card ("HKPIC") holders aged below 11 for passport replacement[1];

(b)   electronic submission of application for HKSAR Passport will be extended from web-based platform to the mobile platform via the Immigration Department Mobile Application;

(c)   applicants may pre-fill the application form upon appointment booking;

(d)   self-service submission kiosks will be upgraded to provide self-service photo-taking function.   Applicants may choose to take photo for passport application on-the-spot using self-service submission kiosks; and

(e)   self-service collection kiosks will be introduced to provide more flexibility and allow eligible applicants to collect their HKSAR Passports at their convenience.

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[1]   At present, online application is applicable to valid HKPIC holders aged 11 or above who are able to collect the passports in person.

Implementation timetable

11.   The e-Passport 2 system will be rolled out in two phases.   The e-Passport-2 core system will be implemented and the new e-Passport issued from the second quarter of 2019.   Self-service collection kiosks will come into operation from the third quarter of 2019.

12.   ImmD will issue a press release announcing the issuance of the new e-Passport nearer the time.   The department will also arrange briefing for parties concerned (including local consulates and airlines, etc.) in Hong Kong.

Advice Sought

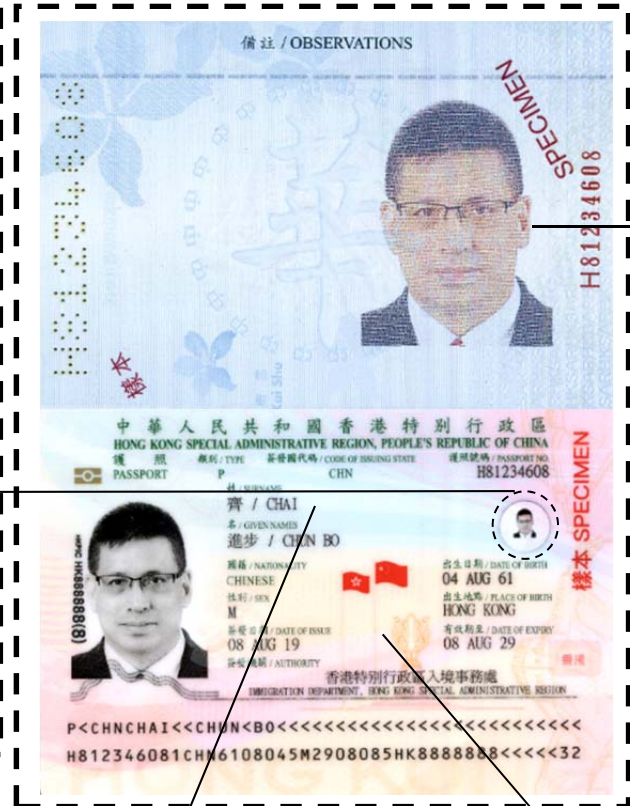13.   Members are invited to take note of the content of this paper.

Security Bureau
Immigration Department
February 2019

Security Features of the Next Generation Electronic Passport

(Back of data page)

(Front of data page)

6. Colour letter screen portrait on observations page

1. Micro-printing

5. Full colour UV printing bio-data page under UV light

2. Transparent window laser engraved portrait

3. Tactile relief

4. New background design

(Visa Pages)

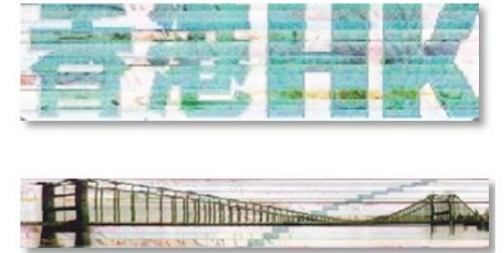**1. Multi-colour tones visa pages**

3. Fanning effects

2. Full colour UV printing visa pages under UV light