# 立法會 Legislative Council

LC Paper No. CB(1)1269/18-19 (These minutes have been seen by the Administration)

Ref: CB1/PL/ITB

#### Panel on Information Technology and Broadcasting

## Minutes of meeting held on Tuesday, 16 April 2019, at 11:35 am in Conference Room 3 of the Legislative Council Complex

**Members present**: Dr Hon Elizabeth QUAT, BBS, JP (Chairman)

Hon Charles Peter MOK, JP (Deputy Chairman)

Hon James TO Kun-sun

Hon WONG Ting-kwong, GBS, JP Hon CHAN Kin-por, GBS, JP

Hon Mrs Regina IP LAU Suk-yee, GBS, JP

Hon Claudia MO

Hon YIU Si-wing, BBS Hon CHAN Chi-chuen

Ir Dr Hon LO Wai-kwok, SBS, MH, JP

Hon Alvin YEUNG Hon CHU Hoi-dick Hon YUNG Hoi-yan Hon CHAN Chun-ying Hon HUI Chi-fung

Members absent : Hon Paul TSE Wai-chun, JP

Hon MA Fung-kwok, SBS, JP

Hon CHUNG Kwok-pan

**Member attending**: Hon SHIU Ka-fai

Public officers attending

: Agenda item V

Innovation and Technology Bureau

Mr Nicholas YANG Wei-hsiung, GBS, JP Secretary for Innovation and Technology

Mr Davey CHUNG Pui-hong, JP

Deputy Secretary for Innovation and Technology (2)

Mr Victor LAM Wai-kiu, JP

Government Chief Information Officer

Mr Tony WONG Chi-kwong, JP

Assistant Government Chief Information Officer

(Industry Development)

**Clerk in attendance** 

: Mr Daniel SIN

Chief Council Secretary (1)6

**Staff in attendance** 

: Ms Mandy LI

Senior Council Secretary (1)6

Mr Patrick CHOI

Council Secretary (1)6

Miss Yolanda CHEUK Legislative Assistant (1)6

Ms Yvonna HO

Clerical Assistant (1)6

Action

#### I. Confirmation of minutes

(LC Paper No. CB(1)882/18-19

-- Minutes of meeting held on

12 November 2018

LC Paper No. CB(1)838/18-19

-- Minutes of meeting held on

18 February 2019)

The minutes of the meetings held on 12 November 2018 and 18 February 2019 were confirmed.

#### II. Information paper(s) issued since the last meeting

(LC Paper No. CB(1)691/18-19(01)

Submission dated 10 March 2019 from Hon IP Kinyuen on IT Innovation Lab in Secondary Schools (Chinese version only)

LC Paper No. CB(1)747/18-19(01)

Submission dated 12 March 2019 from a member of the public expressing views on the regulation of election advertisements published through the Internet (including social media) (Chinese version only)

LC Paper No. CB(1)850/18-19(01)

-- Administration's response to the submission dated 12 March 2019 from a member of the public (Chinese version only) [LC Paper No. CB(1)747/18-19(01)])

2. <u>Members</u> noted that the above paper(s) had been issued for the Panel's information.

#### III. Date of next meeting and items for discussion

(LC Paper No. CB(1)876/18-19(01)

-- List of outstanding items

for discussion

LC Paper No. CB(1)876/18-19(02)

-- List of follow-up actions)

#### Regular meeting on 10 May 2019

3. <u>Members</u> noted that the next regular Panel meeting would be held on Friday, 10 May 2019 at 10:45 am to discuss the following items:

- (a) Progress of the Electronic Identity ("eID") project;
- (b) Assignment of spectrum for fifth generation mobile ("5G") services; and
- (c) Update on the Review of the Control of Obscene and Indecent Articles Ordinance (Cap. 390).

# IV. Proposed visit in connection with the "IT Innovation Lab in Secondary Schools" initiative

- 4. <u>The Chairman</u> said that, the Panel discussed the Administration's proposed initiative on "IT Innovation Lab in Secondary Schools" under the Enriched IT Programme in Secondary Schools ("EITP"), at the Panel meeting held on 11 March 2019. <u>The Chairman</u> invited members' views on whether the Panel should conduct a visit to the Lok Sin Tong Yu Kan Hing Secondary School on Thursday, 2 May 2019. <u>The Chairman</u> said that the visit would enable members to have a better understanding of the implementation of EITP, including information technology ("IT") related extra-curricular activities organized by secondary schools.
- 5. <u>The Chairman</u> also sought members' views on whether the visit should be open to non-Panel Members. <u>Members</u> had no objection to the proposed visit and the related arrangements.

# V. Update on Smart City Development

(LC Paper No. CB(1)876/18-19(03) -- Administration's paper on Update on Smart City Development

LC Paper No. CB(1)876/18-19(04)

-- Paper on smart city development prepared by the Legislative Council Secretariat (Updated background brief))

#### Briefing by the Administration

6. At the invitation of the Chairman, <u>Secretary for Innovation and Technology</u> ("S for IT") briefed members on the latest position of smart city

development. Details of the briefing were given in the Administration's paper (LC Paper No. CB(1)876/18-19(03)).

#### Discussion

Implementation of electronic identity system

- 7. Mr CHAN Chun-ying noted that the Office of the Government Chief Information Officer ("OGCIO") had awarded the contracts for the development of the eID system in end-February 2019. Upon completion of the design of eID's Application Programming Interface ("API") in the second half of 2019, OGCIO would provide the relevant technical information to interested public organizations and private companies for their consideration in adopting eID in their online services. Mr CHAN asked whether and when the Administration would engage private organizations to participate in the development of APIs as a means to promote the popularization and adoption of eID.
- 8. <u>Government Chief Information Officer</u> ("GCIO") responded that the Administration would provide interested organizations with the relevant technical information of APIs in the third quarter of 2019. OGCIO would also make available the testing environment before the end of 2019 and invite interested organizations to participate in the testing of using eID via the related APIs in their online services.
- 9. Mr CHAN Chun-ying said that according to media reports, the eID system would allow a person's biometric features such as facial characteristics to be used for authentication through mobile applications. Personal biometric information could be stored in new identity cards which were now being issued by phases to all eligible residents in Hong Kong. The eID system was expected to come into operation in mid-2020 while the territory-wide smart identity card replacement exercise would continue until 2022. Mr CHAN queried whether holders of existing smart identity card could register and obtain their eID before they received their new identity cards.
- 10. <u>S for IT</u> clarified that eID was not an electronic version of smart identity card. The objective of eID was to provide a single digital identity and authentication for a Hong Kong resident to login and conduct online transactions. Either new or existing smart identity cards could be used for eID registration and usage.
- 11. <u>Ms YUNG Hoi-yan</u> commented that the data stored in the eID system should be used for big data analytics purposes to improve social welfare services. She asked about the initial scope of eID applications, including whether the eID

system would support other public services such as medical services, transportation and library services, etc.

12. S for IT responded that eID could be understood as a common key for digital identity authentication for Hong Kong residents to access various government and commercial electronic services in a simple and secure manner. OGCIO was coordinating with bureaux/departments ("B/Ds") on setting the timetable and details of eID adoption in e-government services. It was expected that eID would be adopted in 26 e-government services upon its launch in mid-2020. Most e-government services (over 110) would accept user login using eID by mid-2021. S for IT added that eID could be used in financial services applications such as Know-Your-Customer Utilities to enable more effective compliance financial institutions and companies by with regulators' requirements. OGCIO would offer sandbox by the end of 2019 for testing of APIs for eID adoption.

#### Multi-functional Smart Lampposts Pilot Scheme

- 13. Mr CHAN Chun-ying noted that OCGIO, in collaboration with the Highways Department, would replace and install 52 smart lampposts in selected road sections in Kwun Tong/Kai Tak Development Area while working with five government departments (including Transport Department ("TD"), Tourism Commission, Environmental Protection Department, Hong Kong Observatory and Lands Department) to develop major functions and applications of smart lampposts. Mr CHAN asked whether the data to be collected by these smart lampposts could be used by the Hong Kong Police Force for law enforcement purposes.
- 14. The Deputy Chairman noted that a research team at the Chinese University of Hong Kong had invented an efficient linear network coding to help improve the network transmission of smart lampposts. He asked whether and how the smart devices on the lampposts would collect various types of city data to meet the operational needs of various government departments, such as law enforcement. S for IT advised that the Administration would consult the Office of the Privacy Commissioner for Personal Data, Hong Kong timely on whether the data to be collected by smart lampposts could be used for supporting law enforcement.
- 15. <u>Ir Dr LO Wai-kwok</u> expressed concerns about the different paces of B/Ds in promoting smart city development. He commented that Hong Kong lagged behind many other cities in shifting to light-emitting diode ("LED") lamps in public lighting systems. By contrast, LED lamps had already been widely adopted in vehicles. <u>S for IT</u> explained that the major consideration for

wider installation of LED lights was the maturity of related power technology. He anticipated that LED lamps would progressively be installed in public lighting systems, and in smart lampposts as they were more energy-efficient.

#### Smart Government Innovation Lab

- 16. <u>The Chairman</u>, <u>the Deputy Chairman</u> and <u>Mr Alvin YEUNG</u> commended OGCIO for its successful efforts in showcasing to the public the eID registration process and the smart lamppost at the International ICT Expo held in April 2019. They requested the Administration to invite Members to similar events in future. <u>GCIO</u> agreed.
- 17. The Deputy Chairman further commented that the experience gained from the Expo would provide a reference to the Administration for introducing the newly established Smart Government Innovation Lab ("Smart Lab") in Cyberport. He requested the Administration to adopt an open approach in enabling the industry to help government departments adopt IT to improve public services, thereby creating more business opportunities for local innovation and technology ("I&T") start-ups.
- 18. GCIO advised that OGCIO would set up a dedicated webpage for Smart Lab setting out the issues facing different public services and would invite interested parties to submit technology solutions and product suggestions. Trials and technology testing for proposals that fulfilled the needs of departments would be arranged in collaboration with relevant departments. Meanwhile, OGCIO would organize technology forums for industry players to share their technology solutions. The first technology forum would be held in June 2019 and it would be organized on a quarterly basis in future. S for IT said that the Smart Lab was expected to create more business opportunities for local start-ups and small and medium enterprises ("SMEs").

#### Pro-innovation Government procurement policy

- 19. The Deputy Chairman noted that the Administration had introduced a pro-innovation government procurement policy starting from April 2019. He asked the Administration to step up publicity efforts by arranging more briefing sessions and enhance exchange with the industry, and dissemination of procurement information, to facilitate the participation of the industry in government procurement.
- 20. <u>S for IT</u> replied that the Smart Lab set up in April this year would help facilitate the procurement and use of I&T products and solutions from local start-ups and SMEs by government departments. In parallel, the Government

adopted in April 2019 a pro-innovation procurement policy under which technical aspects would be given heavier weighting in tender assessment vis-avis the price. <u>GCIO</u> added that OGCIO would step up efforts in promoting the new government procurement policy to the IT sector.

Next generation government cloud infrastructure and big data analytics platform

- 21. Mr Alvin YEUNG noted that the big data analytics platform would run on the next generation government cloud infrastructure ("GovCloud") to facilitate B/Ds take forward more big data analytics projects. He sought details on the implementation progress of GovCloud, including whether B/Ds were willing to adopt GovCloud, how the Innovation and Technology Bureau ("I&TB") would assist B/Ds in using the new platform and its target to require all B/Ds to make use of GovCloud.
- 22. <u>S for IT</u> and <u>GCIO</u> advised that B/Ds were encouraged to use GovCloud when developing new systems or revamping existing systems wherever possible. <u>S for IT</u> said that GovCloud would adopt a hybrid cloud design. Apart from implementing the secure and reliable "private cloud", OGCIO would also make use of "public cloud" services which were highly flexible, elastic, and able to expand the system hosting capacity as and when required, and in compliance with security requirements. The new platform could help B/Ds reduce the development and maintenance costs of IT systems.
- 23. GCIO added that GovCloud would provide cloud infrastructure services for use by B/Ds. The 260 e-Government services and application systems under various B/Ds currently running on the existing central cloud platforms would be progressively migrated to the new platform when it came into operation in the third quarter of 2020. Moreover, OGCIO would introduce artificial intelligence and chatbot functions to the GovHK portal in 2019 to facilitate searching of and access to e-Government services by the public. The 1823 call centre would also pilot this year the use of chatbot to handle public enquiries.

Preparation for the arrival of fifth generation mobile network

24. <u>Ir Dr LO Wai-kwok</u> noted that individual overseas and Mainland cities had introduced various measures, such as building networks to conduct 5G trials, to prepare for the arrival of the 5G network era. He enquired about the Administration's plan to promote 5G developments in Hong Kong, including spectrum assignments, measures to help telecommunications service operators install base stations for 5G networks, etc.

- 25. <u>S for IT</u> advised that facilitating measures had been put in place to promote 5G development and smart city applications. For example, telecommunications operators could install microcell antennas in smart lampposts to support 5G telecommunications services. As the technical standards for telecommunications networks for the provision of 5G services had yet to be finalized, the Administration would keep in view the latest market development.
- 26. <u>Mrs Regina IP</u> queried whether the future demand for 5G spectrum would likely be substantial, and asked how 5G technology would be applied for daily applications. She also expressed concerns on the progress of 5G development in Hong Kong as compared to the Mainland.
- 27. <u>S for IT</u> said that 5G technology would facilitate the development in Internet of Things ("IoT"). In general, 5G technology would significantly improve the bandwidth, capacity and reliability of cellular broadband than 4G technology. It would revolutionize mobile user experience by its technical capabilities of high speed, high capacity, high reliability, massive connectivity, and low latency. 5G technology would be faster than 4G and a huge number of devices would be able to connect to the network simultaneously. Since IoT applications typically involved collection of substantial amount of data from a large number of devices and sensors, 5G would be an ideal choice for IoT networking.
- 28. <u>S for IT</u> further advised that 5G development needed to be supported by spectrum in both high and low frequency bands. Spectrum in the high frequency bands could carry a large volume of information while spectrum of low frequency bands could be transmitted over a longer distance. The latter would also improve energy efficiency. In response to Mrs Regina IP's further enquiry, <u>S for IT</u> replied that the level of data usage in Hong Kong was high when compared to other Asian cities. While global technical standards for 5G technologies had not yet been established, Hong Kong was geared up for the commercial launch of 5G services and applications.

#### Open data

29. <u>Mr YIU Si-wing</u> expressed concerns about the shortfall of parking spaces in the territory. To keep motorists informed of real-time parking vacancies near their destinations and to combat illegal parking, <u>Mr YIU</u> suggested that the Administration should share real-time parking vacancy information (including all car parks managed by TD) with the public. In particular, <u>Mr YIU</u> requested the Administration to disseminate real-time parking information of busy districts such as Avenue of Stars at Tsim Shui Tsui

to facilitate motorists find parking spaces.

- 30. <u>GCIO</u> advised that TD had been promoting the opening up of the operational data by public transport operators to facilitate commuting and trip planning. TD was expected to disseminate real-time car parking information and parking vacancy data of government car parks by mid-2019. Moreover, the new on-street parking meters to be installed starting from 2019-2020 would provide real-time information to assist motorists in finding vacant parking spaces. As regards the parking vacancy information in Tsim Sha Tsui, <u>GCIO</u> said that OGCIO would convey this to TD for further exploration on whether real-time data of more private car parks in the district could be released to the public.
- 31. <u>Ms YUNG Hoi-yan</u> enquired whether the Administration would introduce pilot intelligent traffic signal system or provide underground car parks with a view to alleviating the traffic congestion in roads and tunnels. <u>Ms YUNG</u> also asked how the Administration would enhance collaboration among various B/Ds to foster the development of a Smart Government.
- 32. The Chairman said that the industry expected dissemination of more real-time public transport data and information. While TD was still liaising with the public transport operators and encouraging them to open up the operational data including real-time parking vacancy information, the Chairman suggested the Administration should consider introducing legislation to give a definition of the open data, and require public and private organizations to release their data similar to the open data policy of the United States.
- 33. <u>S for IT</u> advised that the Transport and Housing Bureau and TD had been actively discussing with the relevant public transport operators, including franchised bus companies, MTR Corporation Limited, etc., about opening up such data. The responses of relevant operators so far were positive. In particular, New World First Bus Services Limited and Citybus Limited had agreed to open up their real-time arrival information.
- 34. <u>Mr YIU Si-wing</u> pointed out that, in Mainland cities, information on locations and usage of public toilets at major tourist spots was open up for use by the public. He asked whether the Administration would adopt similar measures, particularly those with relatively high usage rates. <u>Mr YIU</u> also asked the Administration to consider collecting data relating to overall occupancy rate of public toilets and conducting a scientific analysis so as to facilitate manpower arrangements for performing cleansing work.

35. <u>S for IT</u> responded that the "Smart City Blueprint for Hong Kong" ("the Blueprint") covered more than 70 initiatives which were closely related to people's livelihood. Progress had been made in a number of areas. He would consider Mr YIU's suggestions when developing the next phase of the Blueprint. <u>GCIO</u> added that information about locations of public toilets was currently available as open data. He would further explore with the Food and Environmental Hygiene Department on this front.

#### Support for start-up enterprises

- 36. The Chairman relayed the concerns of the industry regarding the lack of appropriate scenarios for testing their products or services, in addition to obtaining the relevant licences under the existing regimes. She noted that the Hong Kong Science Park ("Science Park") was a laboratory where innovative technologies were tested and applied but the platform was mainly provided for The Chairman asked the Administration to enterprises in the Science Park. consider expanding the scope of development of the Lok Ma Chau Loop and the Science Park in order to provide testing scenarios for start-ups. The Chairman further said that the industry in general welcomed the exemption of e-sports venues from the licence requirement under the Amusement Game Centres Ordinance (Cap. 435), and commended the Home Affairs Bureau and OGCIO for adopting a one-stop approach in helping e-sports venue operators obtain necessary licences from various B/Ds. In the light of industry feedback and operational experience, the Chairman considered that the Administration should strengthen collaboration among various sectors in implementing smart city projects, such as by providing start-ups with one-stop assistance in testing their products in the Science Park or introducing sandboxes to facilitate testing and launching their products.
- 37. <u>S for IT</u> reiterated that good progress had been made in various initiatives under the Blueprint. For example, OGCIO was now pushing ahead three smart city infrastructure projects. <u>S for IT</u> agreed that the implementation of various measures in the Blueprint could be further expedited. However, it generally would take longer time for the Administration to coordinate with B/Ds in providing one-stop service for the industry.
- 38. <u>S for IT</u> further said that the exemption of e-sports venues from the amusement game centre licence requirement was an example of the Administration's determination and efforts to review legislation and regulations that might impede I&T and economic development in Hong Kong. As regards the development of sandboxes for start-ups, <u>S for IT</u> explained that sandboxes were only applicable to regulated activities using financial technology. That said, I&TB would continue to coordinate with B/Ds and monitor various smart

city initiatives through policy innovation and breakthrough. In addition, the Steering Committee on Innovation and Technology chaired by the Chief Executive held regular meetings to review the development and progress of I&T and smart city initiatives.

## V. Any other business

39. There being no other business, the meeting ended at 12:30 pm.

Council Business Division 1 <u>Legislative Council Secretariat</u> 16 July 2019