

立法會
Legislative Council

LC Paper No. CB(4)515/16-17
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by the Administration)

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Panel on Information Technology and Broadcasting

Minutes of meeting
on Monday, 12 December 2016, at 2:30 pm
in Conference Room 3 of the Legislative Council Complex

Members present : Hon Charles Peter MOK, JP (Deputy Chairman)
Hon James TO Kun-sun
Hon Tommy CHEUNG Yu-yan, GBS, JP
Hon Jeffrey LAM Kin-fung, GBS, JP
Hon WONG Ting-kwong, SBS, JP
Dr Hon Priscilla LEUNG Mei-fun, SBS, JP
Hon Paul TSE Wai-chun, JP
Hon LEUNG Kwok-hung
Hon Claudia MO
Hon Michael TIEN Puk-sun, BBS, JP
Hon Steven HO Chun-yin, BBS
Hon WU Chi-wai, MH
Hon CHAN Chi-chuen
Hon Dennis KWOK Wing-hang
Dr Hon Fernando CHEUNG Chiu-hung
Hon Martin LIAO Cheung-kong, SBS, JP
Dr Hon CHIANG Lai-wan, JP
Ir Dr Hon LO Wai-kwok, SBS, MH, JP
Hon CHUNG Kwok-pan
Hon Alvin YEUNG
Hon YUNG Hoi-yan
Hon CHAN Chun-ying
Hon Nathan LAW Kwun-chung
Dr Hon YIU Chung-yim

Members absent : Dr Hon Elizabeth QUAT, JP (Chairman)
Hon Starry LEE Wai-king, SBS, JP
Hon Mrs Regina IP LAU Suk-ye, GBS, JP
Hon MA Fung-kwok, SBS, JP
Hon CHAN Han-pan, JP
Hon CHU Hoi-dick
Hon Tanya CHAN
Hon HUI Chi-fung

Public officers attending : Agenda item IV

Commerce and Economic Development Bureau

Mr Jerry LIU
Head of Create Hong Kong

Ms Fiona LAM
Assistant Head of Create Hong Kong (1)

Mr Patrick LEE
Principal Assistant Secretary for Commerce and
Economic Development (Communications and
Creative Industries) B

Agenda item V

Innovation and Technology Bureau

Dr David CHUNG, JP
Under Secretary for Innovation and Technology

Ir Allen YEUNG, JP
Government Chief Information Officer

Mr Victor LAM, JP
Deputy Government Chief Information Officer
(Infrastructure and Operations)

Mr Ricky CHONG
Principal Assistant Secretary for Innovation and
Technology

Mr Tony WONG
Assistant Government Chief Information Officer
(Cyber Security and Standards)

Clerk in attendance : Mr Daniel SIN
Chief Council Secretary (4)3

Staff in attendance : Mr Ambrose LEUNG
Senior Council Secretary (4)3

Ms Anki NG
Council Secretary (4)3

Miss Mandy LAM
Legislative Assistant (4)3

Action

The Deputy Chairman took over the chair in the absence of the Chairman who was unable to attend the meeting.

I. Confirmation of minutes of meeting

(LC Paper No. CB(4)251/16-17 -- Minutes of meeting held on
14 November 2016)

2. The minutes of the meeting held on 14 November 2016 were confirmed.

II. Information papers issued since the last meeting

(LC Paper No. CB(4)127/16-17(01) -- Hon IP Kin-yuen's letter
dated 14 November 2016
on withdrawal of
membership (Chinese
version only)

- LC Paper No. CB(4)155/16-17(01) -- Dr Hon Helena WONG Pik-wan's letter dated 18 November 2016 on withdrawal of membership (Chinese version only)
- LC Paper No. CB(4)155/16-17(02) -- Hon Andrew WAN Siu-kin's letter dated 18 November 2016 on withdrawal of membership (Chinese version only)
- LC Paper No. CB(4)155/16-17(03) -- Hon Jeremy TAM Man-ho's letter dated 18 November 2016 on withdrawal of membership (Chinese version only)
- LC Paper No. CB(4)164/16-17(01) -- Hon SHIU Ka-chun's letter dated 18 November 2016 on withdrawal of membership (Chinese version only)
- LC Paper No. CB(4)161/16-17(01) -- Dr Hon KWOK Ka-ki's letter dated 21 November 2016 on withdrawal of membership (Chinese version only)
- LC Paper No. CB(4)173/16-17(01) -- Dr Hon LAU Siu-lai's letter dated 23 November 2016 on withdrawal of membership (Chinese version only)
- LC Paper No. CB(4)183/16-17(01) -- Hon Kenneth LEUNG's letter dated 24 November 2016 on withdrawal of membership (Chinese version only)

- LC Paper No. CB(4)183/16-17(02) -- Hon KWONG Chun-yu's letter dated 24 November 2016 on withdrawal of membership (Chinese version only)
- LC Paper No. CB(4)187/16-17(01) -- Submission from a member of the public received on 24 November 2016 regarding views on mobile television service licence (Chinese version only)
- LC Paper No. CB(4)211/16-17(01) -- Hon Jimmy NG Wing-ka's letter dated 29 November 2016 on withdrawal of membership (Chinese version only)
- LC Paper No. CB(4)227/16-17(01) -- Hon Holden CHOW Ho-ding's letter dated 30 November 2016 on withdrawal of membership (Chinese version only)
- LC Paper No. CB(4)219/16-17(01) -- Hon CHAN Kin-por's letter dated 1 December 2016 on withdrawal of membership (Chinese version only)
- LC Paper No. CB(4)237/16-17(01) -- Hon Abraham SHEK Lai-him's letter dated 2 December 2016 on withdrawal of membership (English version only)
- LC Paper No. CB(4)227/16-17(02) -- Hon YIU Si-wing's letter dated 2 December 2016 on withdrawal of membership (Chinese version only)

- LC Paper No. CB(4)248/16-17(01) -- Hon Kenneth LAU Ip-keung's letter dated 5 December 2016 on withdrawal of membership (Chinese version only)
- LC Paper No. CB(4)249/16-17(01) -- Joint letter from Hon WONG Kwok-kin, Hon Alice MAK Mei-kuen, Hon KWOK Wai-keung, Hon HO Kai-ming and Hon LUK Chung-hung dated 5 December 2016 on withdrawal of membership (Chinese version only)
- LC Paper No. CB(4)267/16-17(01) -- Hon LEUNG Yiu-chung's letter dated 6 December 2016 on withdrawal of membership (Chinese version only)
- LC Paper No. CB(4)283/16-17(01) -- Hon Wilson OR Chong-shing's letter dated 8 December 2016 on withdrawal of membership (Chinese version only)
- LC Paper No. CB(4)308/16-17(01) -- Joint submission from members of the public dated 9 December 2016 expressing views on information security (Chinese version only)

3. Members noted that the above papers had been issued for the Panel's information.

III. Date of next meeting and items for discussion

- (LC Paper No. CB(4)246/16-17(01) -- List of outstanding items for discussion

LC Paper No. CB(4)246/16-17(02) -- List of follow-up actions)

Regular meeting on 9 January 2017

4. Members noted that the next regular Panel meeting would be held on Monday, 9 January 2017 at 2:30 pm to discuss the following items:
- (a) Update on the work of Create Hong Kong; and
 - (b) Update on the work of Cyberport in nurturing the Information and Communications Technology Ecosystem in Hong Kong.

IV. Overview of the manpower situation of creative industries

(LC Paper No. CB(4)246/16-17(03) -- Administration's paper on overview of the manpower situation of creative industries)

Presentation by the Administration

5. At the invitation of the Deputy Chairman, Head of Create Hong Kong ("Head of CreateHK") briefed members on the overview of the manpower situation of creative industries. Details of the briefing were set out in the paper provided by the Administration (LC Paper No. CB(4)246/16-17(03)).

Discussion

On-the-job training for creative industries practitioners

6. Mr Michael TIEN commented that creative talents did not necessarily have high academic qualifications. He suggested that the Administration should expand Vocational Training Council's ("VTC") programmes to address the manpower needs of creative industries. Mr TIEN asked if the Commerce and Economic Development Bureau ("CEDB") would collaborate with the Education Bureau to provide on-the-job training programmes to nurture creative talents. Head of CreateHK said that there were institutions offering programmes related to creative industries, such as the sub-degree programmes offered by the Hong Kong Design Institute under VTC. The Administration would explore with the industry on the feasibility to provide on-the-job training programmes to nurture more creative talents for Hong Kong.

7. The Deputy Chairman asked if the Administration would consider applications from organizations for funding to provide on-the-job training programmes in the creative industry sector. Head of CreateHK replied that applications for projects under \$10 million could be submitted under the CreateSmart Initiative ("CSI").

8. Mr CHAN Chun-ying observed that many of the practitioners in creative industries were young people. He asked if the Administration could provide statistics on the age distribution of those employed in the sector. Mr CHAN also enquired whether the Administration or employers would provide on-the-job training to young new recruits who did not have adequate academic qualification or work experience in creative industries.

9. Head of CreateHK said that the survey completed by CreateHK in 2016 on the manpower demand of creative industries ("the Manpower Demand Survey") did not cover age distribution among those employed in the sector. He added that feedback from local tertiary education institutions indicated that many graduates chose to work in the fields of their studies and many young people were engaged in employment in various creative industries. As regards the provision of on-the-job training for young recruits, Head of CreateHK said that while employers would primarily look for employees with relevant work experience, internship programmes were provided under CSI and the Film Development Fund ("FDF") to enable graduates to gain vocational experience in the creative industries.

Support for creative industries

10. Noting that practitioners in creative industries might be more prepared to set up their own business, and that a large number of these businesses were small and medium enterprises ("SMEs"), Mr CHAN Chun-ying asked, apart from funding support under FDF, CSI, Design Incubation Programme and Fashion Incubation Programme, whether other measures would be offered to help these new business set-ups to obtain financing. Head of CreateHK explained that under CSI, successful applicants, being partners with the Government, should not obtain any commercial benefit from the programme. CreateHK therefore would not be in a position to arrange financing service for SMEs under CSI. However, financing schemes to support start-up companies were available from other parties such as the Innovation and Technology Commission and Cyberport.

11. Mr CHAN Chi-chuen said that most graduates of film and television programmes received low average salaries. He asked if the Administration would provide support especially for graduates working in the television sector. Head of CreateHK said that graduates of film and television programmes were often working on more than one job at a time, and receiving additional income.

12. Mr CHAN Chi-chuen said that while the Government had provided support to the film-production sector, relatively less assistance was available for the television sector. Mr CHAN asked how the Administration would support that sector. Head of CreateHK said that the Administration and the Film Development Council had provided a range of support for film projects. The Administration would likewise maintain contacts with relevant organizations in the television sector to offer support as appropriate.

13. The Deputy Chairman commented that the Administration should not treat television programme production any different from films as the boundary between the two was becoming less clear cut. He suggested that the Administration should consider providing support under FDF to the television production sector.

14. Mr Nathan LAW asked if the Administration had taken an overview of the development of live streaming in Hong Kong. He said that live streaming was a new operating mode in the distribution of creative productions and was widely adopted for live broadcast of online competitions. Mr LAW asked whether the Administration would implement measures including training, manpower planning and other policy measures to support this new industry. He also asked if the Administration had taken initiatives to foster cooperation among stakeholders and provide the necessary facilitation at policy level.

15. Head of CreateHK commented that the skills set required for live streaming should be similar to other distribution modes and practitioners would have the necessary training. As regards the development in live streaming of online competitions, Head of CreateHK said that there was a preliminary dialogue with the Home Affairs Bureau as to whether online competition would be regarded as a sport initiative.

Manpower situation in different creative industry sectors

16. Ms YUNG Hoi-yan noted that the number of persons engaged by the music sector had decreased from 2 870 in 2013 to 2 820 in 2014, and the projected vacancies in the music sector was less than 10. On the other hand, the number of establishments in the music sector had increased steadily from 1 160 in 2012 to 1 270 in 2014. Ms YUNG asked whether the small number of

projected vacancies reflected a manpower saturation in the music sector, and whether the decreasing number of people engaged in the music sector reflected that the curriculum and training programmes in music were not up-to-date and did not attract new students.

17. Head of CreateHK supplemented that the statistics presented in the Administration's paper (LC Paper No. CB(4)246/16-17(03)) were compiled by the Census and Statistics Department and were restricted to the popular music sector. The data reflected the fact that many young graduates in the popular music sector tended to set up their own business rather than working as employees; and the number of people engaged in these business set-ups was usually small. As a result, the number of establishments in the music sector increased while the number of employees levelled or even decreased in recent years.

18. Ir Dr LO Wai-kwok commented that according to his understanding, the number of persons employed in the architecture sector should be more than that indicated in Annex 1 of the Administration's paper (LC Paper No. CB(4)246/16-17(03)). He asked about the definition of persons engaged in "Architecture" in the paper. Head of CreateHK explained that the relevant employment data included architects, draftsman and other technical personnel employed in architectural firms.

19. Ir Dr LO Wai-kwok noted that there were more graduates in the digital entertainment, film and television and music sectors than the projected number of vacancies available. He asked whether the statistics reflected high unemployment in these sectors. Head of CreateHK replied that some of the graduates of creative industries-related programmes might have chosen a career in a related field. For example, a graduate in digital entertainment might find employment in advertising. Head of CreateHK added that about half of the graduates in creative industries-related programmes at sub-degree levels were likely to continue their studies in undergraduate programmes rather than entering the employment market.

20. Dr YIU Chung-yim requested the Administration to provide a breakdown of the projected manpower requirements of 227 200 for creative industries in 2022 as shown in the Report on Manpower Projection to 2022 published by the Labour and Welfare Bureau in April 2015 by the eight creative sectors. Head of CreateHK agreed to provide the breakdown separately if available.

Admin

21. Dr CHIANG Lai-wan requested the Administration to provide information on the number of students enrolled in local post-secondary education institution programmes in creative industries in 2015-2016 who

Admin received subsidy funded by the first-year-first-degree scheme of the University Grants Committee. Head of CreateHK undertook to provide the information separately.

22. Dr CHIANG Lai-wan noted that the projected manpower requirements for creative industries would be 227 200 in 2022. However, the number of persons engaged by the eight creative sectors under the purview of CreateHK was 135 320 in 2015. Dr CHIANG also pointed out that creative industries were projected to generate some 6 000 vacancies of which about two-thirds would be creative positions. She asked whether the manpower demand could be satisfied by 2022, and whether the Administration had liaised with relevant institutions to expand the programmes to train more people in creative industries.

23. In response to Dr CHIANG Lai-wan's query, Head of CreateHK quoted an example that in 2014, the number of vacancies in creative industries was 3 270, whereas the number of graduates of local full-time creative industries-related programmes at sub-degree and undergraduate levels in 2014/2015 was 7 802. Excluding some of the sub-degree graduates who would continue to undergo further studies at degree level, the number of graduates who had entered the employment market should be able to fill the vacancies in creative industries in that period.

24. Mr LEUNG Kwok-hung noted that design, digital entertainment and film and television were the top three creative sectors with the largest number of projected creative vacancies. He commented that the Administration should expand the relevant programmes at undergraduate levels so as to increase the supply of talents in these sectors.

25. Head of CreateHK said that the Education Bureau had launched the Study Subsidy Scheme for Designated Professions which subsidized students to pursue designated programmes in selected disciplines. Currently, there were 250 subsidized places available every year for creative industries-related programmes.

Admin 26. Mr CHUNG Kwok-pan requested the Administration to provide information on the number of creative vacancies available for the fashion design industry within the design sector as shown in the Manpower Demand Survey. Head of CreateHK undertook to provide the information separately.

V. Update on information security

- (LC Paper No. CB(4)246/16-17(04) -- Administration's paper on update on information security
- LC Paper No. CB(4)246/16-17(05) -- Paper on information security prepared by the Legislative Council Secretariat (Updated background brief))

Presentation by the Administration

27. At the invitation of the Deputy Chairman, Under Secretary for Innovation and Technology ("US for IT") briefed members on the latest progress and development of the Government's information security programmes. Details of the briefing were set out in the paper provided by the Administration (LC Paper No. CB(4)246/16-17(04)).

Discussion

Public education and awareness

28. Noting the frequent occurrence of cyber security incidents in recent years, Mr Michael TIEN expressed concern about public awareness of and education on cyber security risks. He enquired about promotional measures taken by the Administration to raise public attention on cyber security risks in addition to the arrangement of awareness training sessions and seminars on cyber security.

29. Government Chief Information Officer ("GCIO") advised that apart from organizing seminars, the Administration had also disseminated information on the latest cyber security threats, such as ransomware attacks, to small and medium enterprises ("SMEs") and the general public through the Cyber Security Information Portal (www.cybersecurity.hk), newspapers and electronic media. In addition, related advice and risk mitigation measures including a "Beware of Malware Infection" infographics were also provided to offer relevant security tips for public reference. The Administration also produced a learning module entitled "Protect Yourself against Ransomware" to introduce proper preventive and responsive measures with a view to reminding the public to take necessary precautions against ransomware attacks. Mr Michael TIEN suggested the Administration to make better use of the social media in raising public

awareness on information security, such as inviting well-known public figures who had been victims of cyber security attacks to launch promotional videos for public reference.

30. Ir Dr LO Wai-kwok expressed concern about the public's ability to identify phishing websites and malware, and the measures taken by the Administration to enhance information security awareness of the public, in particular on websites claiming to be those of the banking sector in Hong Kong. Those websites collected personal data and financial information of the public through access to such websites. GCIO remarked that according to the Threat Horizon 2016 Report and the Symantec 2016 Internet Security Threat Report, over one million pieces of new malware were generated every day. Therefore, raising public awareness of the security measures available for protecting their information systems and data assets was of vital importance.

31. GCIO advised that the Office of the Government Chief Information Officer ("OGCIO") would continue to work closely with the Hong Kong Computer Emergency Response Team Coordination Centre ("HKCERT") and the industry to share information on security threats and vulnerabilities through various channels, including websites, newspapers, electronic media, mobile applications, public events and thematic talks. To allow general users, SMEs and schools to receive the most updated security information, OGCIO had continually enriched the contents on the thematic Cyber Security Information Portal, e.g. featuring public events on information security, expert advice, information security stories contributed by professional organizations, etc., to provide practical tips and suggest useful tools for the public to protect their computer equipment and websites. These measures would provide support for SMEs and the public (including the youth) to take necessary precautions against malware attacks. In addition, OGCIO would further work with the Hong Kong Internet Registration Corporation Limited (the administrator of ".hk" Internet domain names) to promote the use of Domain Name System Security Extensions to improve the trustworthiness of ".hk" websites.

32. Deputy Government Chief Information Officer (Infrastructure and Operations) ("DGCIO") supplemented that OGCIO had organized seminars, workshops and solution showcases for information technology ("IT") staff and users to enhance their awareness of the latest security vulnerabilities and update their knowledge of information security technology. In addition, the "Technology Voucher Programme" launched by the Innovation and Technology Commission would enable SMEs to adopt technological services and solutions, including IT to enhance cyber security. OGCIO had also collaborated with the industry and different organizations to launch various publicity and education activities, including thematic seminars, radio programmes, distribution of

information leaflets, etc., to remind businesses to strengthen cyber security measures and protect their information systems as well as data assets.

Measures taken by the Government to enhance cyber security

33. The Deputy Chairman enquired whether the Administration had implemented specific measures against malware, such as issuing information security guidelines, to safeguard communications of regulated industries with their customers through respective regulatory authorities such as the Hong Kong Monetary Authority and the Independent Insurance Authority. US for IT said that the Administration would consider, for example, promoting further adoption of IT to assist banks in identifying and verifying the identities of clients.

34. The Deputy Chairman expressed concerns about shortage of information and communications technology ("ICT") manpower, in particular information security staff. He enquired about the measures to be taken by the Administration to enhance training for development of ICT manpower. GCIO advised that with corporations adopting more advanced technologies like big data, cloud computing and Internet of Things and the development of Hong Kong into a smart city, a high demand for ICT manpower was envisaged. OGCIO had been liaising with local universities and tertiary institutions on providing relevant education programmes for students and ICT staff. It also engaged in discussions with the ICT industry on providing more internship to encourage students and graduates to choose ICT as their career.

35. On certification of information security professionals, DGCIO supplemented that the total number of individuals who were Certified Information Systems Security Professionals ("CISSP"), Certified Information System Auditors ("CISA") and Certified Information Security Managers ("CISM") had been on the increase from 4 093 in 2015 to 4 229 in 2016. OGCIO would continue to co-ordinate with information security professional bodies with a view to providing more professional courses and recognition for the development of ICT manpower. At the same time, OGCIO had also provided professional training and recognition to staff of Government bureaux and departments ("B/Ds") to certify their knowledge in information security. In 2015, 219 staff from B/Ds obtained information security certifications, and the figure of 2016 up to October had increased to 261. The Deputy Chairman suggested that the Administration should conduct relevant manpower surveys on ICT industries at appropriate stages to enable the Government to gain better understanding of the ICT manpower demand.

36. Noting some recent information security incidents in B/Ds, the Deputy Chairman enquired about the causes of such incidents and measures taken by the Administration to tackle cyber attacks within the Government. GCIO advised that from January to October 2016, three B/Ds were affected by malware attacks and the relevant staff had approached OGCIO for assistance. All these incidents involved clicking of attachments that contained malware, which triggered the infection. OGCIO performed regular malware scans and would continue to explore the latest technologies, such as big data analytics, to improve network monitoring and malware detection for making prompt response and strengthening precautionary measures.

37. DGCIO supplemented that over 90% of the emails sent to B/Ds which were of malicious nature were caught by firewalls implemented at the central email gateway which helped ensure the safe and normal operation of the Government's information and network systems. When an email with malware was detected within a B/D, OGCIO would conduct a thorough check with all other B/Ds which had received similar emails, with a view to removing all the infected emails. OGCIO also reminded users in all B/Ds to abide by the Government's information security policies and guidelines, and to take appropriate precautionary measures in handling their emails and protecting government systems and data assets.

Information and cyber security landscape

38. Referring to the statistics on technology crimes and security incidents in the Annex to the Administration's paper (LC Paper No. CB(4)246/16-17(04)), in particular phishing websites which constituted about one-third of the computer security incidents handled by HKCERT in 2016, Ms YUNG Hoi-yan enquired about mitigation measures taken or mechanisms to be implemented by the Administration, such as arranging for immediate removal of the concerned websites from the Internet.

39. GCIO advised that when phishing websites were identified, the public should report to the Police for investigation, including whether those were local or overseas websites. The Cyber Security and Technology Crime Bureau ("CSTCB") of the Hong Kong Police Force ("HKPF") was responsible for a wide range of duties in tackling cyber-crimes, including strengthening cooperation with local and overseas stakeholders and law enforcement agencies to counter prevalent technology crimes and cyber threats. CSTCB had established procedures and mechanisms to combat cyber-crimes, including tackling local and overseas phishing websites.

Category of victims identified in security incidents

40. In response to Ms YUNG Hoi-yan's enquiry about the "category of victims" referred to as "unclassified (Internet users were unreachable directly)" in Table (b) of the breakdown of security incidents handled by HKCERT in 2015 (which was provided by the Administration as supplementary information after the meeting of the Panel on Information Technology and Broadcasting held on 14 March 2016), DGCIO advised that some of the security incidents handled by HKCERT did not arise from receiving victims' reports but were identified by HKCERT through self-initiated investigations, which could make prevention and future handling of those incidents more effective. Contact details of the victims would not be available in some of those incidents, and the category of victims was therefore unclassified. Nevertheless, the nature of those incidents, such as hacking or phishing, would be available. DGCIO added that in some cases, even if the Internet Protocol addresses of the victims were available, it might not be possible to trace the exact location of the victims, in particular if the victims were corporate entities.

VI. Any other business

41. There being no other business, the meeting ended at 4:19 pm.