

LC Paper No. CB(4)251/16-17

(These minutes have been seen by the Administration)

Ref: CB4/PL/ITB/1

Panel on Information Technology and Broadcasting

Minutes of meeting on Monday, 14 November 2016, at 2:30 pm in Conference Room 3 of the Legislative Council Complex

Members present	: Dr Hon Elizabeth QUAT, JP (Chairman) Hon Charles Peter MOK, JP (Deputy Chairman) Hon James TO Kun-sun Hon Tommy CHEUNG Yu-yan, GBS, JP Hon Tommy CHEUNG Yu-yan, GBS, JP Hon Jeffrey LAM Kin-fung, GBS, JP Hon WONG Ting-kwong, SBS, JP Hon Starry LEE Wai-king, SBS, JP Hon Starry LEE Wai-king, SBS, JP Dr Hon Priscilla LEUNG Mei-fun, SBS, JP Hon Paul TSE Wai-chun, 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 YIU Si-wing, BBS Hon MA Fung-kwok, SBS, JP Hon CHAN Chi-chuen Hon CHAN Han-pan, JP
	Hon CHAN Chi-chuen

	- 2 -
	Hon Martin LIAO Cheung-kong, SBS, JP Dr Hon CHIANG Lai-wan, JP Hon CHUNG Kwok-pan Hon Alvin YEUNG Hon Andrew WAN Siu-kin Hon Jimmy NG Wing-ka, JP Hon HO Kai-ming Hon Holden CHOW Ho-ding Hon SHIU Ka-chun
	Hon Wilson OR Chong-shing, MH Hon YUNG Hoi-yan Hon CHAN Chun-ying
	Hon Tanya CHAN Hon HUI Chi-fung Hon KWONG Chun-yu Hon Jeremy TAM Man-ho Hon Nathan LAW Kwun-chung
Members absent :	Hon LEUNG Yiu-chung Hon Abraham SHEK Lai-him, GBS, JP Hon WONG Kwok-kin, SBS, JP Hon Mrs Regina IP LAU Suk-yee, GBS, JP Hon Kenneth LEUNG Hon KWOK Wai-keung Hon IP Kin-yuen Ir Dr Hon LO Wai-kwok, SBS, MH, JP Hon CHU Hoi-dick Hon LUK Chung-hung Hon Kenneth LAU Ip-keung, MH, JP Dr Hon YIU Chung-yim Dr Hon LAU Siu-lai
Public officers : attending	Agenda item IV 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

Miss Donna CHAN Assistant Government Chief Information Officer (Governance and Resources)

Agenda item V

Commerce and Economic Development Bureau

Miss Susie HO, JP Permanent Secretary for Commerce and Economic Development (Communications and Creative Industries)

Ms Julina CHAN, JP Deputy Secretary for Commerce and Economic Development (Communications and Creative Industries)

Mr Edward TO Principal Assistant Secretary for Commerce and Economic Development (Communications and Creative Industries)A

Office of the Communications Authority

Mr Sammy LI Chief Telecommunications Engineer (Development)

- Clerk in attendance : Mr Daniel SIN Chief Council Secretary (4)3
- **Staff in attendance** : Mr Ambrose LEUNG Senior Council Secretary (4)3

- 4 -

Ms Anki NG Council Secretary (4)3

Miss Mandy LAM Legislative Assistant (4)3

I. Confirmation of minutes of meeting

(LC Paper No. CB(4)70/16-17	Minutes of meeting held on
	18 October 2016)

The minutes of the meeting held on 18 October 2016 were confirmed.

II. Information paper issued since the last meeting

(LC Paper No. CB(4)22/16-17(01)	Administration's letter to t			to the		
		Chairman and the press relea			s release	
		on	ap	plicatior	n by	Digital
		Broa	adc	asting	Cor	poration
		Hon	ng	Kong	Limit	ed for
		term	nina	tion	of	Sound
		Broa	adc	asting Li	cence	

- LC Paper No. CB(4)36/16-17(01) -- Hon Christopher CHEUNG Wah-fung's letter dated 26 October 2016 on withdrawal of membership (Chinese version only)
- LC Paper No. CB(4)104/16-17(01) -- Hon Charles Peter MOK's letter dated 28 October 2016 on proposing items for discussion by the Panel (Chinese version only)

LC Paper No. CB(4)80/16-17(01)	 Administration's letter to the Chairman and the press release on application by Metro Broadcast Corporation Limited for termination of Sound Broadcasting Licence concerning Digital Audio Broadcasting
LC Paper No. CB(4)85/16-17(01)	 Prof Hon Joseph LEE Kok- long's letter dated 7 November 2016 on withdrawal of membership (Chinese version only)
LC Paper No. CB(4)94/16-17(01)	 Hon LAU Kwok-fan's letter dated 8 November 2016 on withdrawal of membership (Chinese version only)
LC Paper No. CB(4)101/16-17(01)	 Hon CHEUNG Kwok-kwan's letter dated 9 November 2016 on withdrawal of membership (Chinese version only)
LC Paper No. CB(4)115/16-17(01)	 Dr Hon Junius HO Kwan-yiu's letter dated 9 November 2016 on withdrawal of membership (Chinese version only)
LC Paper No. CB(4)115/16-17(02)	 Hon LEUNG Che-cheung's letter dated 10 November 2016 on withdrawal of membership (Chinese version only)
LC Paper No. CB(4)115/16-17(03)	 Hon LAM Cheuk-ting's letter dated 11 November 2016 on withdrawal of membership (Chinese version only)

LC Paper No. CB(4)118/16-17(01)	 Hon CHAN	Ha	k-kan's letter
	dated 11 No	ovem	ber 2016 on
	withdrawal	of	membership
	(Chinese ver	sion	only))

2. <u>Members</u> 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)58/16-17(01)	 List of outstanding items for discussion
LC Paper No. CB(4)58/16-17(02)	 List of follow-up actions)

Regular meeting on 12 December 2016

3. <u>Members</u> noted that the next regular Panel meeting would be held on Monday, 12 December 2016 at 2:30 pm to discuss the following items:

- (a) Overview of the manpower situation of creative industries; and
- (b) Update on information security.

IV. Capital Works Reserve Fund Head 710 Computerization Subhead A007GX (Block Allocation) – New administrative computer systems

(LC Paper No. CB(4)58/16-17(03) -- Administration's paper on Capital Works Reserve Fund Computerization Head 710 Subhead A007GX (Block Allocation) New administrative computer systems

LC Paper No. CB(4)58/16-17(04)

-- Paper on Capital Works Reserve Fund Head 710 Computerization Subhead A007GX (Block Allocation) -New administrative computer systems prepared by the Legislative Council Secretariat (Updated background brief))

Presentation by the Administration

4. At the invitation of the Chairman, <u>Under Secretary for Innovation and</u> <u>Technology</u> ("US for IT") briefed members on the 2017-2018 funding requirement for the implementation of computerization projects under the Capital Works Reserve Fund ("CWRF") Head 710 Computerization Subhead A007GX ("Block Allocation") – New administrative computer systems. <u>US for IT</u> sought members' support for the proposed Block Allocation of \$990 million, which was the same as the provision for 2016-2017. Details of the funding requirement, breakdown of the expenditure items and new projects to be funded by the Block Allocation were set out in the Administration's paper (LC Paper No. CB(4)58/16-17(03)).

Discussion

Funding requirement for 2017-2018

5. <u>The Chairman</u> reminded members of the requirements of Rule 83A and Rule 84 of the Rules of Procedure of the Legislative Council on disclosure of direct or indirect pecuniary interests relating to the funding proposals under discussion at the meeting before they spoke on the item.

6. <u>Mr Charles Peter MOK</u> expressed support for the proposal. He also expressed concern about the relatively low adoption rate and less advanced cloud technologies of the Government Cloud Platform ("GovCloud"), which was a private cloud service. He enquired about measures to be taken to increase the adoption rate and technological advancement of GovCloud. <u>Government Chief Information Officer</u> ("GCIO") advised that GovCloud had been launched since December 2013. The Office of the Government Chief Information Officer ("OGCIO") had since adopted a scalable cloud design to re-provision the e-Government Infrastructure Service platform which currently hosted around 160 e-Government services.

7. <u>GCIO</u> supplemented that to enhance procurement efficiency and pave way for promoting the adoption of public cloud services, OGCIO had issued guidelines to encourage Bureaux/Departments ("B/Ds") to use public cloud service when no sensitive information was involved in delivering the relevant Government services. To ensure security of information technology ("IT") systems and data, OGCIO had also recently issued guidelines reiterating that B/Ds should either use public cloud service or Government private cloud service for development or revamping of their e-services. <u>Mr Charles Peter MOK</u> urged the Administration to increase support on using public cloud service.

8. Noting that the Administration had referred to the use of big data analytics to facilitate the public in accessing government information and services in paragraph 7(b) of its paper (LC Paper No. CB(4)58/16-17(03)), <u>Mr WU Chi-wai</u> enquired about the Administration's target, policy and strategy for the development and application of big data. He also enquired about the Administration's strategy and blueprint for conducting and coordinating system technology refresh of various B/Ds, and ensuring that new features and functionality of advanced technology could be used by B/Ds.

9. On public sector information and big data application, <u>US for IT</u> advised that with the advancement of information and communications technology ("ICT"), more and more application developers were making use of public sector data and information to develop innovative applications ("apps"). The Government would continue to release free data and information in digital formats and would develop more application programming interfaces to facilitate their re-use. On ensuring that new features and functionality of advanced technology could be used by B/Ds, <u>Deputy Government Chief Information Officer (Infrastructure and Operations)</u> ("DGCIO") advised that workshops were conducted regularly by OGCIO to update B/Ds on the availability of new hardware and software in the market, and guidelines were issued to B/Ds for conducting regular software upgrade. Through procurement under the Standing Offer Agreement ("SOA") for ICT products, B/Ds were supplied with updated versions of software and hardware for daily operational use.

10. Referring to paragraph 7(c)(iii) of the Administration's paper (LC Paper No. CB(4)58/16-17(03)) on Enhancement of Client Information System for Central Referral of Rehabilitation Services – Disabled Pre-schoolers Sub-system and Child Protection Registry of the Social Welfare Department ("SWD"), <u>Dr Fernando CHEUNG</u> enquired whether computer system(s) could be improved to identify high-risk children who needed protection from abuse and to facilitate follow-up work by SWD. <u>Assistant Government Chief Information Officer (Governance and Resources)</u> ("AGCIO") advised that according to SWD, the project sought to improve the existing service of Child Protection Registry by allowing the input of

more detailed family background information for easy identification of high-risk children who were potentially at risk of abuse. <u>DGCIO</u> supplemented that with the provision of more family background information of the children concerned, the time and difficulty for identification of those children could be reduced.

11. <u>Mr LEUNG Kwok-hung</u> expressed concern about touting activities and abuse of leisure facilities under the Leisure and Cultural Services Department ("LCSD"), and enquired whether arrangements could be made through the Enhancement of Facility Booking Features of Leisure Link System ("LLS") of LCSD to curb these activities. <u>AGCIO</u> advised that OGCIO had approved an improvement project under LLS to curb touting activities and the tentative completion date would be the fourth quarter of 2017. <u>DGCIO</u> supplemented that all facility sessions that were cancelled through the Internet would only be released at a designated time for public to rebook via the LLS booking counters, the Internet, self-service kiosks and telephone on a first-come-first-served basis. The policy to curb touting activities and abuse of facilities would be decided and implemented by LCSD.

12. <u>The Chairman</u> expressed concern about the number and nature of computerization projects relating to the development of Hong Kong into a Smart City and requested the Administration to provide the names of such projects to be initiated in 2017-2018. The Administration undertook to provide the information.

(*Post meeting note*: The Administration's written response was circulated to members vide LC Paper No. CB(4)264/16-17(01) on 7 December 2016.)

Cyber and system security

13. Noting that regular security risk assessments and audits on IT systems were conducted by various B/Ds for compliance with IT security policies and effective implementation of preventive measures against security threats and cyber attacks on Government's IT systems, <u>Ms YUNG Hoi-yan</u> enquired whether a unified security system was/would be available against security threats faced by B/Ds, for example, whether a security system could be installed in GovCloud to protect the information stored therein. She further enquired about measures taken by the Administration to receive public views on big data application and whether any analysis was made on the views received.

14. <u>DGCIO</u> advised that OGCIO supported the operation of the Government's central management and coordination frameworks by way of overseeing and steering the implementation of the IT security standards and measures of B/Ds. OGCIO had taken proactive steps in combating threats related to IT security and cyber attacks, for example, by installing firewalls, implementing protective

measures against ransomware (a malicious software that cyber criminals used to encrypt the files stored on the infected computer devices, and victims were required to pay a ransom to decrypt them), spams, and computer virus, etc. in the central infrastructure. Individual B/Ds might also install additional protective devices to protect their systems and information. <u>DGCIO</u> added that B/Ds were also advised to conduct security risk assessment of and audit on their computer systems at least every two years as a preventive measure to reduce the risk of being hacked due to software vulnerabilities.

15. On big data application, <u>DGCIO</u> advised that views on big data application were collected and received by the relevant B/Ds. The Government would make use of mobile technology and big data analytics to facilitate the public to access government information and services, and enhance public services through better planning by B/Ds. Examples of new projects applying cloud technology and big data included the "Pilot Cloud Development Platform for Big Data Analytics Model" to be implemented by OGCIO.

16. Noting that the Immunization Record System ("IRS") under the Clinical Information Management System of the Department of Health ("DH") was hacked in August 2016 and the hackers intruded into over 16 000 temporary files, <u>Mr</u> <u>CHAN Chun-ying</u> expressed concern over the lack of projects to be initiated in 2017-2018 for improving the security measures of IRS and enquired about measures to be taken by the Administration to prevent further hacking activities into these type of systems. Referring to the report issued by the Hong Kong Computer Emergency Response Team Coordination Centre ("HKCERT") on the number of hacking incidents into local servers per quarter year, <u>Mr CHAN</u> enquired about the time interval of which the Administration would review the reliability of its system security measures, and the security risk level of the Government computer systems when compared to those systems used by other private institutions, for example, banks.

17. <u>DGCIO</u> advised that IRS was an existing system under DH which was being maintained and improved on the department's own financial resources. OGCIO had been in close contact with DH on the hacking incident to improve system security. For example, DH was advised to store patients' data on the Government intranet instead of in its own external server. <u>DGCIO</u> supplemented that system security measures were monitored daily by the Government and the security risk level of the Government computer systems was not high as indicated in, for example, the reports on ransomware by Kaspersky Lab and Symantec Corporation in 2016. If B/Ds suspected that they were being or had been attacked by ransomware, they should immediately report the incident to OGCIO for assistance. The security risk level of the Government computer systems was comparable to that of banks.

New projects to be initiated in 2017-2018

18. <u>Mr CHAN Chi-chuen</u> enquired about the number of computerization projects costing over \$10 million each under separate subheads of CWRF Head 710 approved by the Finance Committee ("FC") in 2016-2017. Referring to Annex C of the Administration's paper (LC Paper No. CB(4)58/16-17(03)) on new projects to be initiated in 2017-2018, <u>Mr CHAN</u> also enquired about the difference in computer system upgrade and technology refresh, and whether B/Ds had initiated the system upgrades and technology refresh projects on their own initiatives or at OGCIO's request. He further enquired about the reasons for the differences in project estimates for different B/Ds to upgrade their systems, and whether there was any limit on the cash flow granted for such purpose.

19. <u>DGCIO</u> advised that there were about seven to eight projects costing over \$10 million each under separate subheads of CWRF Head 710 approved by FC in 2016-2017. The number of projects might be different each year, depending on the projects to be initiated by different B/Ds. On system upgrade and technology refresh, <u>DGCIO</u> advised that guidelines had been issued for B/Ds to follow, for example, enhanced features had been included in the revamped GovHK portal (www.gov.hk) to make it more visually appealing and easier to use. The new design particularly targeted mobile device users by introducing enhancements like responsive design and other user-friendly features to enhance the browsing experience of users. It reduced the need to perform horizontal scrolling and hence assisted users in browsing GovHK and searching for information.

20. On the reasons for the differences in project estimates for different B/Ds to upgrade their systems, <u>DGCIO</u> advised that some B/Ds needed to upgrade not only the software of their websites but also the hardware, such as servers, etc. which accounted for the differences. Certain assessment criteria were set by OGCIO for the funding required by B/Ds to upgrade and refresh their computer systems. At the request of Mr CHAN Chi-chuen, the Administration undertook to provide the dates and scopes of the Efficiency Unit's previous projects under the Block Allocation to revamp/develop departmental websites.

(*Post meeting note*: The Administration's written response was circulated to members vide LC Paper No. CB(4)264/16-17(01) on 7 December 2016.)

Project performance

21. <u>Dr KWOK Ka-ki</u> expressed concern about the performance and the results of the projects funded under the Block Allocation, and enquired about measures to improve the international ranking of Hong Kong as a well-developed regional ICT

hub. He also enquired about the rationale in support of the proposed project items number 150 and 155 in Annex C of the Administration's paper (LC Paper No. CB(4)58/16-17(03)), i.e. funding required by the Transport Department for upgrade of transport-related information systems on Lantau Island.

22. <u>GCIO</u> advised that the relevant B/Ds would submit a Post Implementation Departmental Return ("PIDR") to OGCIO six months after the implementation of the relevant project detailing whether project objectives were met and the results and effects of implementation of the project, etc. On performance indicators, in the past five years, all projects funded under the block allocation had been completed within budget, 96.6-99.2% of projects had met the agreed specifications and 96.6-97.9% of projects had achieved intended benefits.

23. <u>DGCIO</u> supplemented that Hong Kong's e-Government services compared well globally. For example, in 2013-2014, Hong Kong ranked third worldwide in Digital Governance in Municipalities Worldwide published by the e-Governance Institute of National Centre for Public Performance of Rutgers, the State University of New Jersey in Newark. Hong Kong also ranked third in the Asia-Pacific Region in the Global Innovation Index Report 2016 as published by the European Institute of Business Administration, and ranked first in the Asia-Pacific Region in the CloudReadiness Index issued by the Asia Cloud Computing Association. As regards project items number 150 and 155 in Annex C of the Administration's paper, DGCIO advised that they were estimated funding requirements only and not approved funding items. Dr KWOK Ka-ki requested the Administration to include in their paper to FC statistics and information in support of the two relevant proposed project items. The Chairman indicated that OGCIO was only the technical adviser, and business policy and specific requirements would have to be discussed with the concerned B/Ds directly or in relevant panels.

24. Noting that the percentage of projects completed on schedule in 2015 as indicated in the 159 PIDRs was only about 62.9%, <u>Mr CHAN Han-pan</u> enquired about measures to be taken by the Administration to improve project performance and operational efficiency for delivering and installing new computer equipment for B/Ds. He also enquired about measures to be taken to ensure that both computer software and hardware used by B/Ds were updated versions and models, and whether there was deployment of funds for urgent or higher priority projects under the proposed block allocation.

25. <u>GCIO</u> advised that the reasons for the delay in completing the projects included delay in finalizing user requirements and procurement, etc. To enhance efficiency for delivery of computer equipment and ensure their versions and models were updated, B/Ds were encouraged to procure the products under the SOA for ICT products. There was deployment of funds for urgent or higher priority projects under

the proposed block allocation for B/Ds which had urgent projects for implementation. <u>DGCIO</u> supplemented that the average time period for delivering new computer sets to B/Ds was about three months.

Other issues

26. Noting that Singapore announced in October 2016 that over 143 000 civil servants would use a new Facebook Workplace Collaboration Platform for communication, <u>Mr Charles Peter MOK</u> expressed concern about the use of outdated systems such as Lotus Notes by B/Ds and enquired whether the Administration would adopt a more secure and advanced system for the use of B/Ds. <u>The Chairman</u> shared a similar concern. <u>GCIO</u> advised that OGCIO had been regularly reviewing the needs and resources of B/Ds for using new computer systems, for example, the application of big data in the decision-making process was a recent development. OGCIO would continue to initiate the use of new systems as appropriate at suitable stages of development.

Summing up

27. <u>The Chairman</u> concluded that the Panel supported in principle the proposed Block Allocation for endorsement by the Public Works Subcommittee.

V. An update on the implementation of Digital Terrestrial Television Broadcasting

- (LC Paper No. CB(4)58/16-17(05) -- Administration's paper on an update on the implementation of digital terrestrial television broadcasting
 - LC Paper No. CB(4)58/16-17(06) -- Paper on the progress of the implementation of digital terrestrial television broadcasting in Hong Kong (Updated background brief))

Presentation by the Administration

28. At the invitation of the Chairman, <u>Permanent Secretary for Commerce and</u> <u>Economic Development (Communications and Creative Industries) ("PSCED")</u> updated the Panel on the latest progress of the implementation of the digital terrestrial television ("DTT") service.

Discussion

Sports, arts and cultural programmes

29. Noting the public comments that there were insufficient sports, arts and cultural programmes broadcast by DTT service providers, <u>Mr MA Fung-kwok</u> asked how the Administration would encourage service providers to offer more such programmes to meet public expectations. <u>PSCED</u> advised that similar requests for increasing sports, arts and cultural programmes were often received during public consultations conducted by the Communications Authority ("CA") when considering renewal of or applications for domestic free television ("TV") programme service licences. The Administration and CA would give due regard to public views in considering the appropriate conditions to be imposed in the licences. <u>PSCED</u> added that, notwithstanding the need to address public expectations, the choice of TV programmes for broadcast by the licensees would be a commercial decision taking into account market conditions.

30. As regards arts and cultural programmes, <u>PSCED</u> supplemented that quite a high proportion of programmes broadcast by Radio Television Hong Kong ("RTHK") were under those categories. She said that such arts and cultural programmes provided through RTHK's DTT channels would enrich as service developed.

Progress in handling application for domestic free television programme service licences

31. Mr MA Fung-kwok enquired about the progress of the Administration's processing of applications for domestic free TV programme service licences. PSCED advised that currently there were three applications for domestic free TV programme service licences under processing, namely, the applications from Hong Kong Television Network Limited ("HKTV"), Forever Top (Asia) Limited ("Forever Top"), and Phoenix Hong Kong Television Limited ("Phoenix TV"). Regarding the application from HKTV, PSCED explained that the Chief Executive in Council ("CE in Council") had, in end September 2016, accepted CA's recommendations to allow more time for the applicant to submit the required information to CA to facilitate consideration of the licence application. Meanwhile, CA was also processing the application from Forever Top, and had just completed a six-week consultation on the application from Phoenix TV. CA would continue to process the application from Phoenix TV according to the Broadcasting Ordinance (Cap. 562) and the established procedures before submitting recommendations to CE in Council for decision.

32. <u>Mr CHAN Chi-chuen</u> shared the concern about the lack of progress in the Administration's processing of the applications for domestic free TV programme service licence. In particular, <u>Mr CHAN</u> noted that CA had asked HKTV to provide further supplementary information. <u>Mr CHAN</u> said that according to the applicant, there was no further information or documentation to be provided and the applicant claimed that the Administration was trying to delay the granting of licence by administrative means. <u>Mr CHAN</u> enquired whether CA had indicated to HKTV the consequence of not providing sufficient information to CA. He also asked when the Administration would expect a decision to be reached on HKTV's licence application.

33. <u>PSCED</u> reiterated that CA was seeking the required information from HKTV and CE in Council had reminded HKTV to provide such information to CA. <u>PSCED</u> supplemented that the handling of domestic free TV programme service licence application was an interactive process. The Administration had no reason to delay the granting of licence if sufficient information was provided.

Analogue switch-off

34. <u>Mr MA Fung-kwok</u> noted that some 400 000 households were still using analogue TV broadcasting service. He enquired about the reasons for these viewers not to switch to DTT service and whether they would still be able to switch to DTT service by 2020 when analogue TV broadcasting service would be switched-off.

35. <u>PSCED</u> responded that the number of households still receiving analogue TV broadcasting services had been on the decrease since 2007. A few years ago, when analogue TV sets were still available in the market, some consumers had bought analogue TV sets which were still being used. <u>PSCED</u> advised that analogue TV sets could normally last at least six to seven years, and these TV sets were expected to be phased out gradually in the coming few years. <u>PSCED</u> also noted that according to experience, broadcasting mega sports events such as the Olympic Games and World Cup programmes would attract more people to switch to digital TV sets. This would help speed up the switching process. A review on the target analogue switch-off date would be conducted in 2017-2018.

36. <u>Mr Charles Peter MOK</u> commented that the Administration might have underestimated the operating times for analogue TV sets. He surmised that there could still be a large number of analogue TV sets in use by the target analogue switch-off date. <u>Mr MOK</u> said that same people in the community might have difficulties in replacing their analogue TV sets with digital TV sets. He asked whether the Administration would offer assistance or subsidies to those disadvantaged groups if they could satisfy certain criteria, so as to enable them to switch to DTT service. <u>Mr MOK</u> considered that such measures would not incur too much cost but would enable the recipients to have access to a wider range of information available through DTT services.

37. <u>PSCED</u> commented that apart from purchasing new digital TV sets, viewers could also install TV set-top boxes to receive DTT programmes. She said that the price of digital set-top boxes had dropped significantly and had become more affordable. <u>PSCED</u> said that other factors affecting the target analogue switch-off date included people living in tenement buildings without an owners' corporation to coordinate the upgrading of communal aerial reception equipment for receiving DTT programmes. <u>PSCED</u> said that the Administration would review the situation in 2017-2018, and would formulate plans for implementing analogue switch-off.

38. <u>Mr Charles Peter MOK</u> expressed concerned about the delay in analogue switch-off, as this would result in delaying valuable spectrum's availability for high demand mobile telecommunication applications. Hong Kong might also miss the opportunity for leading the development of 5G telecommunication technology.

39. <u>PSCED</u> acknowledged that coordination with the Mainland authorities on the analogue switch-off date was a key issue to be addressed. <u>PSCED</u> said that the International Telecommunication Union had recommended that the spectrum in the 700 MHz band would be suitable for mobile telecommunications. The Administration's target was to implement the analogue switch-off in 2020 in coordination with the Mainland.

Coverage of Digital Terrestrial Television service

40. Noting that DTT coverage had reached 99% of the population, <u>Mr HUI</u> <u>Chi-fung</u> said that many households on the Hong Kong Island had experienced poor reception of TV signals. He asked whether the Administration would work with the DTT service providers to improve transmission facilities for enhancing signal reception quality and extending DTT coverage.

41. <u>Chief Telecommunications Engineer (Development)</u> ("CTE(D)") of the Office of the Communications Authority ("OFCA") said that Hong Kong compared favourably with many other areas in the world by achieving a DTT coverage of 99% of the population. He said that it was very difficult technically and extremely costly for a broadcasting network to achieve a 100% coverage. It was understandable that DTT reception in certain spots in the territory might be unsatisfactory because of remoteness or other reasons. <u>CTE(D)</u> said that the Administration would continue to explore with TV service providers whether alternative technically feasible and cost-effective measures were available to

further improve DTT coverage. <u>CTE(D)</u> supplemented that upon receipt of complaints about DTT reception, OFCA would deploy technical staff to investigate the situation and tender technical advice to complainants where appropriate. In most cases, considerable improvement of signal reception could be achieved.

42. <u>The Chairman</u> requested the Administration to provide information on the geographical areas where DTT service could not cover, including the number of households being affected and whether the Administration had any plans to extend coverage to such areas. The Administration was also requested to indicate whether it had explored any measures to improve signal reception quality in these areas and if so, the constraints and resources that might be involved. The Administration undertook to provide the requested information.

Admin

43. <u>PSCED</u> said that given the difficult terrain of Hong Kong, it was inevitable that some areas might not be covered by DTT service. Improving coverage through construction of transmission or reception facilities might not be feasible as suitable land sites for equipment installation would be difficult to identify. She added that local TV stations, which installed and owned the transmission facilities, might be reluctant to invest in more equipment and facilities for the benefit of a small group of viewers. Indeed there were cases whereby local residents had installed reception facilities with their own resources.

VI. Any other business

44. There being no other business, the meeting ended at 4:05 pm.

Council Business Division 4 Legislative Council Secretariat 7 December 2016