立法會
Legislative Council

LC Paper No. CB(1)1241/18-19

Ref: CB1/PL/ITB

Report of the Panel on Information Technology and Broadcasting for submission to the Legislative Council

Purpose

This report which is made in accordance with Rule 77(14) of the Rules of Procedure of the Legislative Council ("LegCo") gives an account of the work of the Panel on Information Technology and Broadcasting ("the Panel") during the 2018-2019 legislative session.

The Panel

2.   The Panel was formed by a resolution passed by the Council on 8 July 1998 and as amended on 20 December 2000, 9 October 2002, 11 July 2007 and 2 July 2008, for the purpose of monitoring and examining Government policies and issues of public concern relating to information technology ("IT"), telecommunications, broadcasting, film services and creative industry. The terms of reference of the Panel are in **Appendix I**.

3.   The Panel comprises 18 members. Dr Hon Elizabeth QUAT and Hon Charles Peter MOK were elected Chairman and Deputy Chairman of the Panel respectively. The membership list of the Panel is in **Appendix II**.

Major work

INNOVATION AND TECHNOLOGY

Smart City Blueprint and infrastructure projects

4.   In the 2017 Policy Address, the Chief Executive reaffirmed the Administration's commitment "to developing Hong Kong into a smart city by using innovation and technology ("I&T") to enhance city management and improve people's livelihood". To support such development, the Administration would, by stages, implement key infrastructures including launching electronic

identity ("eID"), building the next generation government cloud infrastructure ("GovCloud") and big data analytics platform, installing multi-functional smart lampposts and promulgate open data policy.

Next generation government cloud infrastructure and big data analytics platform

5.	Members queried whether all bureaux and departments ("B/Ds") would make use of the platform.	The Administration advised that B/Ds were encouraged to use GovCloud when developing new systems or revamping existing systems wherever possible.	The 260 e-Government services and application systems currently running on the existing cloud platforms would be progressively migrated to the new platform when it came into operation in the third quarter of 2020.

Multi-functional smart lampposts

6.	Noting that the Administration would replace and install 52 smart lampposts in selected road sections, Panel members asked whether the data to be collected by these smart lampposts could be used by the Hong Kong Police Force for law enforcement purposes.	The Administration advised that it would consult the Office of the Privacy Commissioner for Personal Data ("PCPD") on whether the data to be collected by smart lampposts could be used for supporting law enforcement activities.

Electronic identity

7.	The Administration plans to provide an eID for all Hong Kong residents free of charge starting from mid-2020, so that they would be able to use a single digital identity and authentication to conduct online government and commercial transactions.	The Administration expects that the provision of eID would help foster the development of innovative online services in Hong Kong, and that eID would support digital signing with legal backing under the Electronic Transactions Ordinance (Cap. 553) for handling statutory documents and procedures.	Contracts for the development of the eID system have been awarded in end-February 2019.

Private sector participation in the development of electronic identity system

8.	Members pointed out that the industry was concerned about the opportunities for local companies to participate in the development of major information technology infrastructure projects.	They queried when and how the Administration would engage private organizations to participate in the development of Application Programming Interfaces ("APIs") related to the use of eID, and whether fees would be charged for their use by private organizations.

9.	The Administration informed the Panel that APIs and relevant technical information would be provided to interested public organizations and private companies in the third quarter of 2019 for their adoption in their online services as appropriate.	Whilst the Administration expected that more private organizations would make use of eID, any organization adopting eID was required to comply with the information security and related technical requirements as set out in the terms of use of eID.	As the development of APIs involved significant public resources, the Administration would consider whether fees would be charged for the use of APIs by private organizations.

Registering and using electronic identity

10.	Members expressed concerns that, by mid-2020 when the eID system was in operation, many people might still not have received their new smart identity cards ("ID Cards") with holders' biometric information that was needed for using the eID system.	Some other Panel members expressed concerns about whether residents could register their eIDs with older mobile phones or computers.

11.	The Administration clarified that each eID was a digital identity and either new or existing smart ID cards could be used with eID for registration and usage of online services.	Members of the public could still access online services using conventional methods even if they were not able to obtain an eID. The public could register their eIDs using tablets and other mobile devices.	The Administration would try to make the eID registration and operation platforms compatible with different models of mobile devices in use as far as possible.

Scope and range of government services that would use electronic identity

12.	Some members queried what public services would be supported by the eID system when it was launched, and by when eID would be adopted in all e-government services.	The Administration advised that 26 e-government services would adopt eID upon its launch in mid-2020.	Most of the 110 types of e-government services would accept user login using eID by mid-2021.	The remaining e-government services would adopt eID progressively by 2023 when the major upgrade of the relevant systems was completed.	By then, all e-government services would adopt eID as their only or primary access means.

Protection of personal data

13.	Some members expressed concerns about the security risk of the eID system.	They asked how the Administration would ensure that personal data would not be leaked through the eID system to other organizations or other jurisdictions outside Hong Kong.

14. The Administration advised that prevailing internationally recognized security technologies and standards would be adopted in the eID system for authentication of users' identity. Users' data would be encrypted and stored in government data centre facilities to protect the security of users' data. The Administration further explained that independent third parties, normally selected from audit firms with relevant experience in information security compliance audits, would be engaged to conduct privacy impact and information security risk assessments and audits to protect personal privacy and ensure system security.

15. Members queried whether eID users had a choice on the type and amount of personal information that might be disclosed when using the "e-ME" service[1] on the GovHK portal. The Administration explained that it would be up to eID holders to decide whether their personal data stored in "e-ME" could be provided for use by other government departments or private organizations. They could choose and determine the personal data to be transferred by indicating their preference in the user interface.

16. Some members commented that the Personal Data (Privacy) Ordinance (Cap. 486) was ineffective in protecting the public against leakage of personal data by public and private organizations in using the eID system. They asked if the Administration would consider amending Cap. 486 by imposing more stringent sanctions against data leakage. The Administration responded it had maintained communication with PCPD regarding the protection of personal data during the eID system development stages, and would strive to ensure the compliance with Cap. 486.

17. Some members expressed concerns on whether the eID system that relied on users' biometric features was secure. For example, they queried whether normal authentication software available in mobile phones might be able to distinguish between twins who had almost identical facial characteristics. The Administration explained that eID users could make use of other biometric identification features available in smartphones to authenticate their identities and access online services. For digital signing, eID users were required to register a full-version of eID in-person at designated self-service registration kiosks or service counters. The eID system would retrieve the data stored in the chip of the Hong Kong ID card and verify the user's identity again in order to complete the full-version eID registration. This would provide eID users with better protection.

---

[1] Users of electronic identity may set up e-ME accounts which store their personal data such as name, gender, Hong Kong identity card number, date of birth, residential address, contact telephone number, etc. Users may then complete Government e-forms using the data stored in their e-ME accounts without having to provide the personal information again.

Smart Government

18.   Making reference to the Hangzhou Citizen Center, Panel members asked if the Administration would implement similar one-stop service for the public and enterprises to access various government services. The Administration responded that it would build digital infrastructure to encourage wider use of eID in public e-services and to facilitate online transactions with the Government and the commercial sector using eID.

Smart Government Innovation Lab

19.   Some members asked the Administration to engage the I&T sector to help government departments adopt IT to improve public services, thereby creating more business opportunities for local start-ups.

20.   The Administration advised that the Office of the Government Chief Information Officer ("OGCIO") would set up a dedicated webpage setting out the problems facing different public services and inviting 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 forums would be held in June 2019 and would be organized on a quarterly basis in future. 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

21.   Members noted that the Administration had introduced a pro-innovation government procurement policy starting from April 2019. They asked the Administration to step up publicity efforts by arranging more briefing and exchange sessions with the industry, and to disseminate procurement information so as to facilitate the participation of the industry in government procurement.

22.   The Administration advised that the Smart Lab set up in April 2019 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-a-vis the price.

Open data policy

23.   Open data provide raw materials for technology research and city innovation, as well as facilitate the development of digital economy and smart

city. In the Smart City Blueprint released in December 2017, the Administration indicated that promoting the opening up of more data of the public and private organizations in digital formats would be one of the measures in implementing Smart Government in Hong Kong.

New open data policy and annual open data plans

24.　　At the Panel meeting held on 10 December 2018, the Administration briefed members on the new open data policy and implementation measures. Panel members generally supported the Administration's open data initiatives, and suggested that the Administration should open up non-sensitive government data by default. Some members suggested that the Administration should promote the opening up of more data (such as real-time public transport data and real-time parking vacancy information especially of busy locations), and facilitate data sharing among various sectors in a safe manner. Some other members asked if the Administration would issue standards and guidelines or introduce legislation for release of public data by B/Ds.

25.　　The Administration responded that B/Ds should, as a matter of principle, release their data for public use free of charge via the one-stop Public Sector Information ("PSI") portal (i.e. "data.gov.hk"). B/Ds were required to draw up annual open data plans which covered what data had been released in the PSI portal and datasets, and what data were to be released in the following three years. The public could provide feedback and suggestions on the types of data to be opened up.

26.　　B/Ds were also required to encourage public organizations (e.g. Insurance Authority, Hong Kong Examinations and Assessment Authority and Hospital Authority) and private enterprises to open up relevant data with high degree of public interest. The Administration, however, did not consider it more effective to legislate on the open data initiatives than the current approach.

Information Technology Innovation Lab in Secondary Schools

27.　　With an aim to lay a sound foundation in IT for young people in their secondary education and further solidify the supply of local IT and I&T talent in Hong Kong, the Administration proposed to provide funding support for about 500 publicly-funded secondary schools to set up IT Innovation Labs.

28.　　At its meeting on 11 March 2019, the Panel was briefed on the Administration's proposal to provide funding support for about 500 publicly-funded secondary schools to set up IT Innovation Labs. Panel members supported the IT Innovation Labs scheme as a means to strengthening popular science education and "Science, Technology, Engineering and Mathematics" ("STEM") education. The Panel passed a motion which called on the Administration to expeditiously expand the scheme to all primary schools in the

territory, in addition to secondary schools.

Funding support for secondary schools

29.   Some members suggested that funding support should be provided on a matching basis so that the recipient schools would have to contribute and commit to the initiative. However, the Administration explained that activities to be organized through the IT Innovation Labs were extra-curricular activities ("ECA") and participation was voluntary. The Administration considered it appropriate to provide the initial set-up and maintenance cost, and to encourage the private sector to participate in organizing the relevant activities so that the initiative would not take up too much of the schools' manpower resources.

30.   On the suggestion of extending the scheme to all primary schools, the Administration explained that the proposed initiative was not suitable to be applied in primary schools directly. The Administration would, however, consider whether another initiative could be introduced in primary schools at a later stage.

Support for schools and teachers

31.   Members enquired whether the Administration would formulate a long-term and holistic planning on promoting STEM and IT education, and urged the Administration to strengthen professional support for schools and teachers. The Administration responded that adequate resources would continue to be provided to facilitate schools in developing I&T education. Under the proposed scheme, secondary schools could flexibly deploy resources as appropriate to procure the necessary technical support and services according to their specific needs. Meanwhile, a one-stop support centre would be established to provide professional advice and technical support to schools.

32.   Some members expressed concerns about possible digital divide as some schools were not as resourceful and knowledgeable in promoting IT in education as others. They asked how the Administration would promote digital inclusion among schools. The Administration pointed out that all the 500 publicly-funded secondary schools might use the funding support under the IT Innovation Lab initiative according to their own needs. Furthermore, OGCIO would foster information and experience sharing among schools of different background and proficiency in IT matters. OGCIO would also assist schools in planning for IT activities that suited their needs.

Information security

Measures to strengthen information security management of enterprises

33.   In the light of the rising trend in information security incidents and

technology crime in Hong Kong, members discussed with the Administration the public education and publicity measures that should be implemented to raise the awareness of local enterprises on information security, and whether resources support should be provided for local SMEs to improve their security systems.

34.   Members noted that OGCIO had launched in September 2018 the first local cross-sector platform (Cybersechub.hk) under the Pilot Partnership Programme for Cyber Security Information Sharing ("Pilot Partnership Programme") to enhance Hong Kong's overall defence and resilience against cyber attacks.   Meanwhile, the Innovation and Technology Bureau was exploring with the Hong Kong Internet Registration Corporation Limited on how best to enhance technical support such as website vulnerability scanning for local organizations including SMEs with websites registered under the ".hk" domain.   Apart from engaging the Hong Kong Computer Emergency Response Team Coordination Centre ("HKCERT") [2] to publish useful guidelines for SMEs, etc., OGCIO would continue to disseminate the latest advice on handling security issues such as email frauds, malware, etc. through social and electronic media, and promote best security practices.

Measures to tackle cyber security threats in Government

35.   In tackling cyber security threats in government systems, members asked whether the Administration would engage hackers to test the robustness of their systems.   The Administration informed members that ethical hacking were conducted on its systems and, the security risks were being assessed on a regular basis.   Multiple layers of security measures, including firewalls, intrusion detection and prevention systems had been implemented.

Support for the technology sector and local enterprises

36.   Members had exchanged views with the Administration on the scope and objectives of the Pilot Partnership Programme and the support under the Technology Voucher Programme ("TVP").   The Administration highlighted that through the Cybersechub.hk platform under the Pilot Partnership Programme, participants could share information on cyber security threats, mitigation solutions, best practices, etc.   Members also noted that more and more SMEs had benefited from TVPs as they could use the financial support to procure technology services and solutions to improve productivity, upgrade or transform business processes and enhance information security.

---

[2]   Managed by the Hong Kong Productivity Council, the Hong Kong Computer Emergency Response Team Coordination Centre is the centre for coordination of computer security incident response for local enterprises and Internet Users.   Its missions are to facilitate information disseminating, provide advices on preventive measures against security threats and to promote information security awareness.

Other measures to promote information security

37.   Members were informed that the Administration had included experienced cyber security specialists in the first Talent List of Hong Kong[3], and had encouraged tertiary education institutions to offer more information security training courses in relevant disciplines to nurture more talents. To raise public awareness against cyber frauds, OGCIO, the Police Force and HKCERT organized a series of promotional activities to enhance the knowledge of information security and promote the correct attitude towards the use of the Internet for teachers and students. Meanwhile, a subcommittee under the Law Reform Commission of Hong Kong had commenced a study on cybercrime in January 2019.   The Constitutional and Mainland Affairs Bureau, in collaboration with PCPD, was reviewing the relevant provisions and penalties under Cap. 486, and would consider how the regulatory framework could be enhanced, in particular with respect to data breach notification.

Incident of personal data leakage

38.   On 24 October 2018, Cathay Pacific Airways Limited ("Cathay Pacific") announced an incident of leakage of passengers' personal data affecting approximately 9.4 million passengers globally. A joint meeting by the Panel, Panel on Constitutional Affairs and Panel on Security was held on 14 November 2018 to discuss the incident.

39.   Members were concerned that Cathay Pacific informed the Police and the public only months after it realized the breach. Cathay Pacific responded that it had taken quite some time in conducting scenario assessment, containment and remediation according to the company's internal procedure before contacting its passengers about the types of personal data that might have been affected.

40.   Members held the view that the level of penalty in the existing Personal Data (Privacy) Ordinance (Cap. 486) should be increased to deter delay in the disclosure of data breaches. The Administration explained that a review of Cap. 486 would be conducted shortly, and mandatory requirement for notification, the prosecution process as well as the penalty level would be among the areas to be reviewed.

41.   Some members demanded Cathay Pacific to compensate affected passengers financially, restore the company's goodwill and/or dissolve the management board to demonstrate accountability. Cathay Pacific responded

---

[3]   The Talent List of Hong Kong is drawn by the Government to attract high quality talents in an effective and focused manner to support Hong Kong's diversified economy. The List comprises 11 professions. Talents under the List are eligible for the immigration facilitation under the Quality Migrant Admission Scheme.

that affected customers could claim compensation from the company for any direct financial losses.

Cyberport

42.	The Cyberport is set up to support and promote the development of information and communications technology in Hong Kong. Cyberport plays an important role in promoting the development of the overall I&T ecosystem. The three tenets of Cyberport's public mission are: inspiring the next generation, nurturing the entrepreneurial spirit and leaping on global ambition. During the session, the Administration has briefed Panel members on the work of Cyberport.

Attracting overseas companies and talent to Cyberport

43.	Members queried whether the Easy Landing Scheme was attractive enough to encourage leading foreign enterprises to set up offices and research and development ("R&D") units in Cyberport. They suggested that the Administration should offer more favourable terms such as staff accommodation, education services for staff family members, and tax concessions. The Administration assured members that Cyberport offered other opportunities for multi-national corporations, including leading Internet enterprises and financial technology companies, to cooperate with other local start-ups at Cyberport. Furthermore, enhanced tax concession for qualifying R&D activities and the Technology Talent Admission Scheme would also help attract overseas talent to Hong Kong.

Management and financial position of Cyberport

44.	Members expressed concerns about Cyberport's financial position in the next few years, and queried whether further funding support from the Government would be provided to enable Cyberport to take forward the next phase of development. Members were informed that in addition to Government funding injection, Cyberport would examine other avenues (such as organizing local and regional competitions) to generate income to sustain Cyberport's operations and its public mission programmes.

E-sports

45.	Following the funding approval of Finance Committee ("FC") on 13 July 2018, the Administration had injected $100 million into Cyberport in 2018-2019 to promote the development of e-sports in Hong Kong. About half of the injection was to be used for converting the Cyberport Arcade into an e-sports and digital entertainment node, while the remaining $50 million was to be used for promoting the development of the e-sports industry. The dedicated e-sports venue was expected to be available in the second quarter of 2019 for

organizing e-sports competitions, events and training.

Development of e-sports

46.   The Administration informed the Panel that the dedicated e-sports venue in Cyberport would be open to e-sports organizations for staging small to medium-scale e-sports competitions and training sessions. The Administration expected that the dedicated venue would attract world-class e-sports events to be held in Hong Kong so as to build up an e-sports culture in the community.

47.   Members commented that the industry in general welcomed the exemption of e-sports venues from the licence requirements under the Amusement Game Centres Ordinance (Cap. 435), and the one-stop approach adopted by the Administration in helping e-sports venue operators obtain necessary licences from various B/Ds.

48.   Members asked the Administration to step up publicity on e-sports, particularly to correct certain public perception that, by promoting e-sports, the Administration was encouraging young people to indulge in playing computer games. The Administration informed members that organizing e-sports events would be a helpful way of projecting the correct image of e-sports to the community. Cyberport would organize seminars, talks and related activities to introduce and promote the industry and its related technologies as well as the business and employment opportunities offered.

49.   In response to members' enquiry, the Administration explained that the $50 million of the funding injection would be used to support e-sports events, training programmes in Hong Kong, participation in overseas e-sports events by local e-sports teams, and holding e-sports promotion fair, exhibitions and seminars/conferences. Cyberport would also provide resources to support or join the activities organized by various associations.

COMMUNICATIONS AND BROADCASTING

Digital terrestrial television broadcasting

50.   The Administration briefed members on the plan of switching off analogue television ("TV") services (analogue switch-off ("ASO")) in end-November 2020. Members noted that a total of 160 MHz of spectrum vacated after ASO could be deployed for indoor mobile services to relieve the congested indoor mobile hotspots and support the overall telecommunications services in Hong Kong.

Frequency coordination with the Mainland and consultation with the trade

51.   Members were aware that following ASO, spectrum would be vacated

and reassigned for other mobile telecommunications services. Members noted that, while coordination with Mainland authorities was necessary for the assignment of vacated spectrum, the release of 160 MHz of spectrum in the 600/700 MHz bands for indoor mobile services could proceed on its own.

Coverage of full digital terrestrial television broadcast

52. Members expressed concerns that there might still be pockets of area where people could not receive digital terrestrial television ("DTT") signals, and asked whether the DTT coverage would be extended to these areas. The Administration advised that continuous efforts were being made to improve the DTT coverage, and any member of the public could report TV signal coverage issues to the Administration for follow-up.

Preparation for the arrival of fifth generation mobile services

53. To prepare for the arrival of the fifth generation ("5G") mobile services era, the Administration announced on 13 December 2018 its decision on allocation, assignment arrangements and the related spectrum utilization fee ("SUF") for the spectrum in the 3.5 GHz band, 26 GHz and 28 GHz bands, 3.3 GHz and 4.9 GHz bands respectively. These additional bands in the spectrum were intended to be used for the deployment of public mobile services, including 5G mobile services.

54. The Administration had also put in place other measures to promote 5G development and to facilitate the early roll-out of network infrastructure. These included implementing a rural broadband subsidy scheme to provide financial incentives to telecommunications operators for extending fibre-based network to villages in remote locations in the New Territories and on the outlying islands, opening up suitable government premises for mobile network operators ("MNOs") to install radio base stations ("RBSs"), and releasing a total of 160 MHz of spectrum in the 600/700 MHz bands after ASO scheduled on 30 November 2020 for relieving the currently congested indoor mobile hotspots, such as MTR stations.

Opening up government premises for mobile network operators to install base stations

55. Compared to older technologies, the roll-out of 5G mobile services will involve installing larger number of RBSs. Members noted that the Administration had launched the Pilot Scheme for Installation of Radio Base Stations at Selected Government Venues ("the Pilot Scheme") in March 2019 to help MNOs cope with the challenge to put in place the infrastructure. Under the Pilot Scheme, the Administration would open up more than 1 000 suitable government premises for the installation of RBSs by MNOs through streamlined application processes. Members queried the level of fees charged by the

government premises, if any, the number of MNOs allowed to install RBSs at each government premises and the sector's response to the Pilot Scheme.

56.   The Administration explained that a one-off access fee of $70,000 and a nominal rental were chargeable for the use of each government premises for installation of RBSs. The number of operators who might be permitted to install RBSs at a government premises under the Pilot Scheme would vary according to the location and size of the premises under application.

Restriction zones for the deployment of 3.5 GHz band

57.   Panel members noted that the satellite earth stations in Tai Po and Stanley were currently using the 3.5 GHz band for the telemetry, tracking and control of satellites in orbit. To ensure that satellite services operated by these satellite earth stations could coexist with future 5G services, Communications Authority ("CA"), based on technical considerations, had set up restriction zones in Tai Po and Stanley to constrain the deployment of mobile base stations operating in the 3.5 GHz band in the area. Members asked how the 5G mobile services would be affected in the restriction zones at Tai Po and Stanley, and whether the Administration would consider relocating the earth stations from the restriction zones.

58.   The Administration advised that a working group had been formed to explore feasible technical arrangements for deployment of RBSs operating in the 3.5 GHz band within the restriction zones.[4] The working group had worked out a maximum permissible interference limit below which a RBS operating in the 3.5 GHz band would be allowed to be deployed within the restriction zones. On the other hand, MNOs might also offer 5G mobile services using other frequency bands, or offer mobile services using existing networks wherever 5G services could not be provided. The Administration would also keep the suggestion to relocate the earth stations under review.

Supportive measures for the provision of fifth generation mobile service

59.   Some members commented that the telecommunications sector was concerned about the high infrastructure costs associated with the provision of 5G mobile services, which had been characterized by its heavy demand on spectrum width and the larger number of RBSs required. Members suggested that the Administration should lower the spectrum auction reserve prices for the 3.5 GHz, 3.3 GHz and 4.9 GHz bands, and should introduce measures to facilitate MNOs in the installation of RBSs and provision of 5G services in MTR premises.

---

[4]   Office of the Communications Authority had set up a working group comprising representatives of mobile network operators, satellite operators, the Hong Kong Applied Science and Technology Research Institute and the Hong Kong Science Park.

60.   The Administration said that there were numerous spectrum bands that could be used for providing 5G services, including some 4 100 MHz of spectrum in the 26 GHz and 28 GHz bands which had been made available for assignment by administrative arrangements. As regards the spectrum in the 3.5 GHz, 3.3 GHz and 4.9 GHz bands, as there was competition for their use, the Administration would assign these bands using a market-based approach. The Administration added that the Pilot Scheme had served the purpose of relieving the industry's burden in installing RBSs, because the relevant fees were set at a level to recover the administrative costs only.

Access to premises for installation of radio base stations

61.   Some Panel members commented that the Administration should revise the current legislation to provide for conditions under which property owners would be required to allow MNOs to use the relevant premises to provide 5G service facilities. The Administration responded that, as in the case of fixed line networks, MNOs could apply to CA for authorization to place and maintain telecommunications facilities on any premises if the applicants could prove that there were no alternative method to lay the network otherwise. Some members commented that applying for authorization for each installation work was time-consuming and urged the Administration to review the relevant legislation and provide necessary support to the trade.

Introduction of fifth generation mobile service into the consumer market

62.   Members enquired about the expected time line, price and coverage of 5G mobile service in the consumer market at its launch. The Administration expected that 5G services would be available beginning from 2020, but the pricing was to be entirely determined by individual companies. As regards the coverage of 5G mobile services, the Administration advised that MNOs might offer other telecommunication services in less densely-populated areas using existing 2G, 3G or 4G networks.

63.   Members asked how the existing mobile services would be affected by the launch of 5G mobile services. The Administration said that while MNOs had the flexibility under their existing licences to refarm their spectrum, the launch of 5G mobile services would not preclude the continued use of other mobile services. The market seemed to have adopted a voluntary approach in attracting consumers to switch to the latest technology. Given that there were still many users of the 2G mobile services, the Administration did not have any plan to administratively cease 2G mobile service in Hong Kong.

64.   Following the discussion at the Panel, the Administration tabled the Telecommunications (Method for Determining Spectrum Utilization Fee) (Spectrum for Auction) Regulation, and the Telecommunications (Designation

of Frequency Bands subject to Payment of Spectrum Utilization Fee) (Amendment) Order 2019 in LegCo on 22 May 2019 to implement the decisions on the auctions and SUF arrangements in relation to the 3.5 GHz, 3.3 GHz and 4.9 GHz bands. Members supported the subsidiary legislation which will come into operation on 12 July 2019.

Introduction of a new fee component under unified carrier licences

65.   Since August 2008, a unified carrier licence ("UCL") regime has been introduced which allows licensees to establish telecommunications networks, circuits, and equipment to provide both fixed and mobile telecommunications services. To underpin the preparation for embracing the new era of Internet of Things ("IoT") and 5G mobile services, as well as various smart city applications in Hong Kong, on 1 December 2017, CA announced the creation of a new licensing regime for the provision of Wireless Internet of Things ("WIoT") platforms and services. Services to be authorized under this new WIoT licence would only support automated machine-to-machine type data communications.

66.   MNOs may provide WIoT service under a WIoT licence or using their UCLs subject to the licence conditions. The Administration proposed to amend the Telecommunications Ordinance (Cap. 106) to introduce a new fee component of WIoT device fee under UCL to align with that of the WIoT licence.

67.   As the number of WIoT devices was expected to increase sharply following the launch of 5G mobile services, members queried whether the Administration would consider removing or drastically reducing the WIoT licence fee or charging a fixed annual sum, as a gesture of encouraging 5G development. The Administration responded that, under the "user pays" principle, there was a need for the WIoT licence fees to be charged in order to recover the operating costs of administering the licensing and regulatory functions.

68.   The Secretary for Commerce and Economic Development made the Telecommunications (Carrier Licences) (Amendment) Regulation 2018 (L.N. 229) under section 7(2) of Cap. 106 to introduce a new fee component of $200 under UCL for each 100 WIoT devices connected by radiocommunications means to the network established and maintained by the licensee. The subsidiary legislation was gazetted on 23 November 2018 and came into operation on 31 January 2019.

Television and sound broadcasting regulatory system

69.   The Panel noted that the Administration has completed a review on the telecommunications regulatory framework ("the Review") under Phase Two of

the Review of the Broadcasting Ordinance (Cap. 562) and the Telecommunications Ordinance (Cap. 106). The Review aims to ensure that the laws and regulations in Hong Kong dovetail with the latest developments in technologies to pave the way for early adoption and provision of innovative services that arise with the advent of 5G technology. Members agreed that the current regulatory regime on telecommunications should be reviewed.

70.   Panel members were informed that the Review targeted certain aspects of the telecommunications regulatory framework arising from the imminent arrival of 5G services, such as to enhance protection of underground telecommunications infrastructure. The Administration would introduce measures to regulate telecommunications functions of devices in 5G and IoT era, and to protect underground telecommunications infrastructure.

71.   Some members were concerned whether the continued provision of the 4G services might interfere with the 5G services to be launched, and whether the Administration would put 5G standards and services under regulation of Cap. 106. The Administration advised that Hong Kong's telecommunications regulatory framework was technology-neutral, and CA was empowered under Cap. 106 to prescribe technical standards for the provision of 5G services. Initially, the 5G services would be complemented by the existing 4G infrastructure, but would likely evolve to standalone operation at a later stage of development.

Regulation of person-to-person telemarketing calls

72.   Person-to-person telemarketing calls ("P2P calls") refer to telephone calls involving real person interactions used as a marketing tool by businesses/trades to promote goods or services to customers/potential customers. In recent years, P2P calls have caused nuisance to many people, as most of these calls are made without prior consent of the recipients. The Panel held a joint meeting with the Panel on Commerce and Industry to discuss the major parameters of the Administration's proposed legislative framework for strengthening regulation of P2P calls and the associated control measures. In gist, the Administration proposed to put in place an "opt-out" arrangement for P2P calls, supported by a do-not-call ("DNC") register to be set up to allow phone users who do not wish to receive P2P calls to indicate so by registering their phone numbers with the register.

73.   While members generally supported the Administration's proposal to strengthen regulation of P2P calls by way of legislation, some members queried whether that the proposed regulatory measures would be effective in deterring unsolicited P2P calls, particularly when many of those calls were made outside Hong Kong. One member, Mr SHIU Ka-fai, alleged that most of the P2P telemarketing calls were initiated by companies which falsely claimed to be banks or other financial institutions.

74.   Members commented that the proposed measures would create hurdles to receivers as they would have to report such calls to the authorities for enforcement and be involved in subsequent prosecution process. Members also expressed concerns that the proposal would affect normal operations of many legitimate businesses where the companies would need to contact their customers or potential customers by telephone to promote or explain to them any products and services.

75.   Some members suggested that the Administration should provide free call-filtering application ("app") for the public who did not wish to receive unsolicited P2P telemarketing calls.

76.   The Administration acknowledged that there were limitations with the proposed legislation. However, there had been general support from the public and the Panel for regulating P2P calls by way of legislation. The Administration would consider refining the relevant statutory provisions in consultation with the relevant sectors as necessary. Other non-statutory measures such as enhancing public awareness of appropriate use of call-filtering apps would continue to be implemented in parallel.

77.   Some members asked whether the proposed legislation would cover business-to-business ("B2B") calls. The Administration explained that under the proposed regulatory framework, B2B calls were not distinguished from other P2P telemarketing calls, and it would not be practical to categorically exclude all business telephone numbers in DNC. It would be up to the individuals or companies to "opt-out" by registering their numbers with DNC if they did not wish to receive any unsolicited P2P telemarketing calls.

Staffing support for conducting the review on the telecommunications regulatory framework and for formulating legislative proposals to regulate person-to-person telemarketing calls

78.   To support of the work of the Commerce and Economic Development Bureau ("CEDB") to continue the Review and to formulate legislative proposals to regulate P2P calls, the Administration sought the Panel's support to the retention of two supernumerary directorate posts in the Communications and Creative Industries Branch of CEDB. The Panel supported the Administration's staffing proposal and the proposed retention of supernumerary directorate posts would be further discussed at FC.

New Broadcasting House of the Radio Television Hong Kong

79.   The Administration sought the support of the Panel for the creation of a permanent Deputy Director post in Radio Television Hong Kong ("RTHK"), to provide the necessary steer and supervision on matters relating to governance,

strategic planning, resource deployment and development of the new Broadcasting House ("BH") project. The Panel supported the proposal in principle, and the post was endorsed by the Establishment Subcommittee of FC on 28 May 2019 for FC's further deliberation.

Editorial independence in Radio Television Hong Kong

80.   Some members had expressed concerns on whether the filling of the Deputy Director post by an Administrative Officer would intensify the Administration's interference with RTHK's editorial independence. The Administration assured members that there was no question of the Deputy Director interfering with RTHK's editorial independence, as the post holder would be responsible for ensuring that RTHK's operations were in compliance with the Government's rules and regulations. Programme contents and editorial matters were under the purview of another deputy director.

Progress of the new Broadcasting House project

81.   Members queried the justification for creating the Deputy Director post as little progress had been made in the past five years in implementing the new BH project. The Administration explained that the Deputy Director post was also responsible for a host of administrative duties other than the new BH project. Over the past few years, RTHK and the Architectural Services Department ("ArchSD") had been discussing with interested departments on the prospect of sharing the use of the new BH. Once agreement on user requirements could be reached, ArchSD could proceed with the necessary technical work, and RTHK could carry out planning work.

Production of programmes similar to other market players'

82.   Members have discussed how RTHK could ensure that its services were cost effective and focus on those not being provided in the market. Some members raised a suggestion that RTHK should continue to broadcast cultural programmes and cover more local sports events, but terminate the news services and the Education Television ("ETV") programme. Some other members, however, commented that RTHK, as a public service broadcaster, should retain the function of providing news, similar to other public service broadcasters in many overseas jurisdictions.

83.   The Administration responded that the Education Bureau ("EDB"), which had the policy oversight of ETV and funded the programme, was reviewing the future development of ETV in the light of the observations and recommendations made in the Director of Audit's report.

84.   During the course of discussion on this issue, Mrs Regina IP and Mr CHAN Chun-ying jointly proposed a motion, which urged the

Administration to enhance the cost-effectiveness of RTHK's operation, including reviewing whether ETV service should continue, and to ensure that RTHK would make the best use of the most up-to-date information technologies to widen the coverage and broadcasting of local sports activities, so as to strengthen support to the local sports development. The motion was carried.

CREATIVE INDUSTRIES

Film Development Fund

85. The Film Development Fund ("FDF") was set up the in 1999 to provide funding support for projects conducive to the long-term and sustainable development of the local film industry. In her 2018 Policy Address, the Chief Executive announced that a one-off injection of $1 billion into FDF should be made to sustain the Administration's support for the development of the film industry. The Panel supported the proposed funding injection in principle. The Administration briefed the Panel on the findings of a consultancy study to review the operation and effectiveness of FDF.

Expanding the scope of Film Development Fund

86. Some members commented that the international market for post-production digital effects was competitive and the highly skilled creative labour force was mobile. Members suggested that the Administration should step up efforts to raise the competitiveness of the post-production sector, including promoting Hong Kong's post-production and special effects services.

87. Members asked if the Administration would consider expanding the scope of FDF to support short films in addition to those produced for theatrical release. The Administration explained that the current policy was to support the development of films as an industry, and that FDF would support local films intended for commercial theatrical release in Hong Kong. The Administration would explore with the industry to introduce a new "Short Film Production Scheme" which would provide targeted training in scriptwriting, shooting, presentation skills, etc. for production of short films of less than 60 minutes in length.

Nurturing film talent

88. Members commended that the First Feature Film Initiative ("FFFI") had been vital in identifying and grooming new talent, and had received positive response from the film industry and tertiary education sector as it had provided valuable opportunities for young talent who wished to join the film industry. The Administration responded that to enhance FFFI, experienced film-makers would be invited to provide training to the winning teams; the total number of winning teams would be doubled from three to a maximum of six, and the prize

for the Higher Education Institution Group and the Professional Group would be significantly increased.

Expanding new markets

89.   Members asked whether the Administration would encourage the distribution of local films outside Hong Kong. They also suggested that the Administration should identify new opportunities of collaboration with other markets along the Belt and Road such as Turkmenistan with a view to achieving synergy between the film industry and the tourism industry of Hong Kong and other places.

90.   The Administration informed members that it would continue to organize and participate in local film festivals in collaboration with the Hong Kong Economic and Trade Offices in the Mainland and overseas. Film elements would also be added to roadshows promoting Hong Kong's competitive edges. In addition, the Administration might also invite directors, cast members and crew members to participate in those festivals to exchange ideas with counterparts and meet with local audiences.

91.   The proposed funding injection into FDF was approved by LegCo on 16 May 2019 in the context of the passage of the Appropriation Bill.

Entertainment Special Effects (Fees) (Amendment) Regulation 2019

92.   During the current session, the Panel had discussed the Administration's proposal to revise the fees prescribed in the Entertainment Special Effects (Fees) Regulation (Cap. 560B) under the Entertainment Special Effects Ordinance (Cap. 560). The fees affected cover the licences and permits issued for the supply, use, conveyance and storage of special effects materials (especially pyrotechnic special effects materials), as well as for the assessments and licensing of special effects operators.

93.   Panel members expected that, as the film industry developed, the demand for special effects operators might increase and therefore the number of applications for special effects operator licences should increase. Some members asked if the Administration would consider lowering or freezing the licence fees as a measure to support the development of creative industries in Hong Kong and encourage young people to pursue a career in film production.

94.   The Administration stated that the "user pays" principle should be observed so that licensees should bear the cost of handling the licensing applications. The Administration further advised Panel members that the growth in the film industry would have little impact on the licensing authority's workload and the fee levels of licences prescribed in Cap. 560B is considered appropriate to reflect costs. The proposed fees adjustment would unlikely

disincentivize film producers from employing special effects or deter someone from pursuing a career in the film industry. The relevant licence fees could, however, be absorbed into the production budget of those film projects fully funded by FDF.

95.   The Entertainment Special Effects (Fees) (Amendment) Regulation 2019 was published in the gazette on 12 April 2019 and took effect on 1 July 2019.

CreateSmart Initiative

96.   CreateSmart Initiative ("CSI") was launched in 2009 as a dedicated fund to provide support for promoting the seven non-film sectors of creative industries in Hong Kong.[5] Over the years, a total of $2 billion had been injected into CSI.

Promotion of cross-sectoral collaborations

97.   Some members asked about the Administration's measures to encourage synergy between fashion, design, film and tourism industries in Hong Kong. They suggested that more activities in relation to Hong Kong's fashion or design industries could be organized at the district level to encourage community participation, and at the same time attract tourists with the local elements in them. Some members suggested that films subsidized by government funding should be required to engage talent from the local design industry.

98.   The Administration said that it had been coordinating with Hong Kong Design Centre and Tourism Commission in collaboration with the local communities to promote Hong Kong's creative industries and tourism; and it had long promoted cross-sectoral collaborations among the creative industries. The Administration undertook to explore the possibility of encouraging FDF applicants to engage local production designers.

Hong Kong Design Centre

99.   Established in 2001 by five design associations,[6] the Hong Kong Design Centre had been a close partner of the Administration in promoting design and related creative industries.

---

[5]   Creative industries in Hong Kong are broadly defined into eight sectors, namely, advertising, architecture, design, digital entertainment, film, printing and publishing, television and music.

[6]   Namely, the Hong Kong Designers Association, the Chartered Society of Designers, Hong Kong, the Hong Kong Interior Design Association, the Hong Kong Fashion Designers Association and the Hong Kong Federation of Design Association.

100.   Some members asked whether the Administration planned to further promote, especially among young people, the wider and strategic use of design thinking for innovation. The Administration explained that three activities such as summer camps were organized as pilot for around 1 000 school children last year. In view of the positive response, there had been a plan to increase the number of similar activities in the future, subject to the consolidated result of the first-year experience, and the response and availability of the target participants, namely the teachers and students of secondary and primary schools.

Control of Obscene and Indecent Articles Ordinance (Cap. 390)

101.   The Control of Obscene and Indecent Articles Ordinance (Cap. 390) was enacted in 1987 to provide for the establishment of the Obscene Articles Tribunal ("OAT") and to control articles which consist of or contain material that is obscene or indecent. The Panel had exchanged views with the Administration on the existing system and how the regulatory system should be improved.

Implementation of the Control of Obscene and Indecent Articles Ordinance

102.   Some members expressed concerns about OAT's classification of a set of translated Japanese novels as Class II article (i.e. indecent article) in July 2018 and queried how the Administration would prevent similar controversies from arising in the future. The Administration pointed out that the set of novels in question was displayed at a public book fair accessible to children and teenagers, and the organizer considered that appropriate measures needed to be taken in the light of the classification of the novels by OAT. A mechanism for review and appeal was in place to handle each case and to properly balance the interests of all sectors of society and to protect public morals.

103.   Some members questioned whether the Administration was trying to interfere with people's freedom of expression by censoring certain articles in the name of obscenity and indecency. The Administration informed Panel members that "obscenity" and "indecency" were relative concepts, and they should be considered in the context of the prevailing standards of the local community, the effect of an article as a whole, and the policy objective to protect youngsters and children from the effects of objectionable articles.

Adjudicator system

104.   Some members suggested that the number of adjudicators in OAT should be increased to widen its representation. Some members, on the other hand, queried how the Administration would prevent people with similar ethical values from dominating the panel of adjudicators.

105.　　The Administration responded that the Judiciary had considered it prudent to increase the size of adjudicators from 500 to 750 first and would continue to gauge the need for further adjustment.　A panel of adjudicators under OAT consisted of members of the general public, the composition of whom reflects the standards of morality, decency and propriety that were generally accepted by reasonable members of the community.　Suggestions to alter the composition and background of the adjudicators would run contrary to the policy intent, and would unlikely render the classification system more impartial.

106.　　The Judiciary did not agree that the adjudicator system should be replaced by a jury system because it would change the scope of the long-established jury system, drain judicial resources heavily, and significantly lengthen OAT hearing time.　Some jurors might not like to perform OAT functions.　Furthermore, replacing the adjudicator system with a jury system would likely increase the number of jurors required.

107.　　Some members asked whether the Administration would consider taking more proactive steps in regulating obscene and indecent contents published on the Internet.　The Administration responded that given the volume and nature of Internet contents, it would be infeasible to adopt the same approach as that for printed materials, DVD/CD, video games, etc.

The Administration's previous proposed legislative framework

108.　　The Panel enquired about the progress in taking forward the legislative amendments and administrative measures the Administration had proposed in 2015.　The Administration advised that further review was needed as to the way forward.　Given the divergent views and various concerns raised by members, the Chairman asked the Administration to consult members on the subject again after the review.

Other issues

109.　　During the session, the Panel also was consulted on the 2019-2020 funding proposal for implementing computerization projects under the Capital Works Reserve Fund Head 710 Computerization Subhead A007GX (Block Allocation) – New Administrative Computer Systems.

Meetings and visits

110.　　From October 2018 to July 2019, the Panel held a total of 14 meetings, including four joint meetings with other Panels.

111.　　The Panel together with the Panel on Commerce and Industry, the Panel on Economic Development and the Panel on Financial Affairs conducted a duty

visit to the major cities in the Yangtze River Delta Region from 21 to 24 April 2019.

112.   Panel members also conducted a visit to the Lok Sin Tong Yu Kan Hing Secondary School on 2 May 2019 to understand school-based IT learning through IT-related ECA.

Council Business Division 1
Legislative Council Secretariat
July 2019

Panel on Information Technology and Broadcasting

Terms of Reference

1. To monitor and examine Government policies and issues of public concern relating to information technology, telecommunications, broadcasting, film services and creative industry.

2. To provide a forum for the exchange and dissemination of views on the above policy matters.

3. To receive briefings and to formulate views on any major legislative or financial proposals in respect of the above policy areas prior to their formal introduction to the Council or Finance Committee.

4. To monitor and examine, to the extent it considers necessary, the above policy matters referred to it by a member of the Panel or by the House Committee.

5. To make reports to the Council or to the House Committee as required by the Rules of Procedure.

Panel on Information Technology and Broadcasting

Membership list for 2018-2019 session*

Chairman	Dr Hon Elizabeth QUAT, BBS, JP
Deputy Chairman	Hon Charles Peter MOK, JP
Members	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 Paul TSE Wai-chun, JP
	Hon Claudia MO
	Hon YIU Si-wing, BBS
	Hon MA Fung-kwok, SBS, JP
	Hon CHAN Chi-chuen
	Ir Dr Hon LO Wai-kwok, SBS, MH, JP
	Hon CHUNG Kwok-pan
	Hon Alvin YEUNG
	Hon CHU Hoi-dick
	Hon YUNG Hoi-yan, JP
	Hon CHAN Chun-ying, JP
	Hon HUI Chi-fung
	(Total : 18 members)
Clerk	Mr Daniel SIN
Legal Adviser	Miss Evelyn LEE

* Changes in membership are shown in Annex.

Panel on Information Technology and Broadcasting

Changes in membership

Member	Relevant date
Hon Tommy CHEUNG Yu-yan, GBS, JP	Up to 15 October 2018
Hon Jeffrey LAM Kin-fung, GBS, JP	Up to 15 October 2018
Hon Starry LEE Wai-king, SBS, JP	Up to 15 October 2018
Hon CHAN Han-pan, BBS, JP	Up to 15 October 2018
Hon LEUNG Che-cheung, SBS, MH, JP	Up to 15 October 2018
Hon Alice MAK Mei-kuen, BBS, JP	Up to 15 October 2018
Hon KWOK Wai-keung, JP	Up to 15 October 2018
Dr Hon Junius HO Kwan-yiu, JP	Up to 15 October 2018
Hon HO Kai-ming	Up to 15 October 2018
Hon Holden CHOW Ho-ding	Up to 15 October 2018
Hon Tony TSE Wai-chuen, BBS	Up to 15 October 2018
Hon Kenneth LAU Ip-keung, BBS, MH, JP	Up to 17 October 2018
Hon CHAN Hak-kan, BBS, JP	Up to 21 October 2018
Dr Hon Priscilla LEUNG Mei-fun, SBS, JP	Up to 21 October 2018
Hon SHIU Ka-fai, JP	Up to 21 October 2018
Hon LAU Kwok-fan, MH	Up to 21 October 2018
Hon Martin LIAO Cheung-kong, GBS, JP	Up to 20 January 2019
Hon Christopher CHEUNG Wah-fung, SBS, JP	Up to 22 January 2019