

立法會
Legislative Council

LC Paper No. CB(1)1079/20-21
(These minutes have been seen
by the Administration)

Ref : CB1/PL/ITB

Panel on Information Technology and Broadcasting

Minutes of meeting
held on Monday, 19 April 2021, at 4:30 pm
in Conference Room 3 of the Legislative Council Complex

Members present : Dr Hon Junius HO Kwan-yiu, JP (Chairman)
Hon CHAN Kin-por, GBS, JP (Deputy Chairman)
Hon WONG Ting-kwong, GBS, JP
Hon MA Fung-kwok, GBS, JP
Hon CHAN Han-pan, BBS, JP
Hon Elizabeth QUAT, BBS, JP
Hon Martin LIAO Cheung-kong, GBS, JP
Ir Dr Hon LO Wai-kwok, SBS, MH, JP
Hon SHIU Ka-fai, JP
Hon YUNG Hoi-yan, JP

Members absent : Hon Michael TIEN Puk-sun, BBS, JP
Hon CHUNG Kwok-pan

Public attending officers : Agenda item IV

Commerce and Economic Development Bureau

Mr Clement LEUNG, JP
Permanent Secretary for Commerce and Economic
Development (Communications and Creative
Industries)

Miss Grace KWOK

Deputy Secretary for Commerce and Economic
Development (Communications and Creative
Industries) (Support Services)

Mr Tony YIP

Principal Assistant Secretary for Commerce and
Economic Development (Communications and
Creative Industries) (Support Services)

Office of the Communications Authority

Mr Chaucer LEUNG, JP

Director-General of Communications

Mr Sanda CHEUK

Deputy Director-General (Telecommunications)

Agenda item V

Commerce and Economic Development Bureau

Mr Clement LEUNG, JP

Permanent Secretary for Commerce and Economic
Development (Communications and Creative
Industries)

Mr Johann WONG, JP

Deputy Secretary for Commerce and Economic
Development (Communications and Creative
Industries)

Mr Keith GIANG

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

Office of the Communications Authority

Mr Chaucer LEUNG, JP

Director-General of Communications

Mr Sanda CHEUK

Deputy Director-General (Telecommunications)

Clerk in attendance : Mr Daniel SIN
Chief Council Secretary (1)6

Staff in attendance : Ms Mandy LI
Senior Council Secretary (1)6

Mr Patrick CHOI
Council Secretary (1)6

Miss Yolanda CHEUK
Legislative Assistant (1)6

Action

I. Confirmation of minutes of meeting

(LC Paper No. CB(1)735/20-21 -- Minutes of the meeting by
videoconferencing held on
8 February 2021)

The minutes of the meeting by videoconferencing held on 8 February 2021 were confirmed.

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

2. Members noted that no information paper had been issued since the last meeting.

III. Date of next meeting and items for discussion

(LC Paper No. CB(1)779/20-21(01) -- List of outstanding items for
discussion

LC Paper No. CB(1)779/20-21(02) -- List of follow-up actions)

Regular meeting on 10 May 2021

3. Members noted that the next regular Panel meeting would be held on Monday, 10 May 2021 at 2:30 pm to discuss the following items:

- (a) Information security; and
- (b) Annual work progress of Cyberport.

Proposed visit to Cyberport

4. The Chairman said that at the invitation of the Administration, the Panel would conduct a visit to Cyberport, which was tentatively scheduled for Tuesday, 4 May 2021, from 10:00 am to 12:30 pm. The Chairman said that the Secretariat would issue a notice after the meeting inviting members to join the visit. Members had no objection to the proposed visit and the related arrangements.

(Post-meeting note: Members were informed of the relevant arrangements vide LC Paper No. CB(1)811/20-21 on 20 April 2021.)

5. The Chairman said that the policies relating to innovation and technology straddled across the purview of various Panels, such as Panel on Commerce and Industry and Panel on Food Safety and Environmental Hygiene. In light of members' concerns about whether the development potential of the border areas could be fully realized so as to alleviate the land shortage problem, the Chairman suggested that a joint-Panel visit should be arranged to better understand the development of the Hong Kong-Shenzhen Innovation and Technology Park in the Lok Ma Chau Loop, the construction of the proposed columbarium, crematorium and funeral facilities within the Sandy Ridge Cemetery, and large-scale treatment facilities situated in the New Territories North near the border including the North East New Territories landfill. The Chairman said that he would explore with relevant Panel Chairmen on the detailed arrangements. The Deputy Chairman agreed with the Chairman's suggestion.

Special meeting on 25 May 2021

6. Members noted that a special meeting of the Panel would be held on Tuesday, 25 May 2021, from 2:30 pm to 5:30 pm to discuss issues related to the Governance and Management of Radio Television Hong Kong Review Report. The Chairman said that the newly appointed Director of Broadcasting had taken office in March 2021. As the performance of Radio Television Hong Kong ("RTHK") had raised public concerns, the Chairman said that there would be sufficient time for thorough discussion at the special meeting on various matters related to the governance and management of RTHK.

IV. Implementation of the proposed measures under the Review of Telecommunications Regulatory Framework

(LC Paper No. CB(1)779/20-21(03) -- Administration's paper on implementation of the proposed measures under the review of telecommunications regulatory framework

LC Paper No. CB(1)779/20-21(04) -- Paper on the review of telecommunications regulatory framework prepared by the Legislative Council Secretariat (Updated background brief)

Briefing by the Administration

7. At the invitation of the Chairman, Permanent Secretary for Commerce and Economic Development (Communications and Creative Industries) ("PS(CCI)") briefed members on the background of the Administration's proposal to introduce a bill into the Legislative Council to amend relevant provisions of the Telecommunications Ordinance (Cap. 106) to implement the measures proposed in the Review of Telecommunications Regulatory Framework ("the Review"). PS(CCI) advised that the proposed measures, which aimed at embracing the arrival of the fifth generation mobile telecommunications ("5G") and Internet of Things ("IoT") technologies and trade facilitation, were relatively technical in nature and did not involve substantial telecommunications policy change. The Administration hoped that the scrutiny of the bill could be completed within this legislative session. Principal Assistant Secretary for Commerce and Economic Development (Communications and Creative Industries) (Support Services) then introduced the details of the proposals to members as set out in the Administration's paper (LC Paper No. CB(1)779/20-21(03)).

(Post-meeting note: A soft copy of the PowerPoint presentation materials (Chinese version only) was circulated to members vide LC Paper No. CB(1)781/20-21(01) on 20 April 2021.)

Discussion

Protection of underground telecommunications infrastructure

8. Ms Elizabeth QUAT supported the proposed legislative amendments. She said that protection of underground telecommunications infrastructure was important, but she doubted whether the proposed penalties had sufficient

deterrence against malicious attempts to interrupt telecommunications services.

9. PS(CCI) replied that the legislative intent of the current proposal was to enhance the existing protection of underground telecommunications infrastructure by creating certain criminal offences against any person who did not take reasonable measures to protect or even caused damage to underground telecommunications facilities when carrying out works. Other malicious damage to telecommunications facilities might amount to violation of more serious criminal offences under Cap. 106 and other ordinances related to criminal damage and damage of telecommunications installation with intent..

10. Ir Dr LO Wai-kwok commented that any damage to infrastructural facilities or software disruptions to utilities could have serious implications to the proper functioning of society. The Administration should evaluate the relevant risks thoroughly and take necessary precautionary measures. Mr SHIU Ka-fai enquired the number of reported cases of damage to underground telecommunications lines, and the current penalties for such offences.

11. Director-General of Communications ("DGC") replied that the number of cases reported to the Highways Department concerning damage to underground telecommunications lines ranged from a few to over 20 each year. He added that the actual number of cases might be higher as telecommunications operators tended not to report minor cases to the authorities. PS(CCI) advised that, at present, it was not a criminal offence if a person failed to take reasonable measures to protect or caused damage to underground telecommunications facilities; he or she might however be subject to civil claims. PS(CCI) added that in drafting the amendments to Cap. 106 and setting the proposed levels of penalty, the Administration had drawn reference to the existing statutory protection on other underground infrastructure in Hong Kong, including those for electricity supply lines and gas pipes. The Administration considered that the proposed legislative measures should not be unfamiliar to or constitute additional burden on the construction sector which had been observing other similar statutory requirements all along.

Simplifying the issue of non-carrier licences

12. Ms Elizabeth QUAT supported the Administration's proposal to simplify the issue of non-carrier licences ("NCLs"). Mr WONG Ting-kwong sought clarification on the difference between carrier licences and NCLs. Noting that there could be numerous potential applications of 5G services in future, he asked whether it would be necessary to obtain a separate licence for each of these applications.

13. DGC explained that according to Cap. 106, no person should establish or maintain any means of telecommunications without a licence. The main difference between carrier licences and NCLs was the scope of telecommunications services they regulated. Carrier licences were issued for the establishment or maintenance of telecommunications networks for carrying communications to or from various locations of the territory covering all types of fixed and/or mobile services including transmission of voice, data, video, etc. NCLs were more restrictive in terms of geographical coverage, scope, scale or customer base of the service. For example, an NCL issued for the provision of radio paging service only authorized the licensee to provide the specified paging service. The licence conditions of NCLs were less stringent than those of carrier licences, and the licence fees would commensurate with the services covered by NCLs and were considerably lower than those of carrier licences.

14. Mr WONG Ting-kwong noted that many companies engaging in innovation and technologies were small and medium enterprises ("SMEs"). If the scope of the proposed NCL framework was too narrow, many of the products and services to be developed by these companies would not be covered. Although SMEs could resort to using carrier licences, the high licence fees involved would not be favourable to their operation. Mr WONG enquired whether the Administration would adopt a more flexible scope for the proposed NCLs so as to strike a balance between regulating new applications of telecommunications services and maintaining a good business environment for SMEs.

15. PS(CCI) responded that given the rapid technological advancement, the Administration would, after consulting the trade, define the scope of the proposed NCLs in broader terms so that they could suitably cover new products and services that might emerge in future.

16. The Deputy Chairman supported in principle the proposed legislative amendments and asked whether the Administration had consulted holders of carrier licences on the legislative proposals. Ms Elizabeth QUAT enquired about the eligibility, application and vetting procedures, processing time for applications, and any cap on the number of NCLs that could be held by a licensee.

17. PS(CCI) and DGC explained that the proposed NCLs were designed for promoting 5G and IoT development. The licence conditions should be more flexible than those for carrier licences. By streamlining the existing mechanism of issuing NCLs, Secretary for Commerce and Economic Development ("SCED") would by notice published in the Gazette specify new types of NCLs. Service providers could obtain licences for emerging innovative services with lower fees, simplified application process, and shorter processing time. The

licence conditions would also be less stringent and more specific for the services to be licensed.

18. DGC advised that while holders of carrier licences were permitted to establish telecommunications networks for provision of different types of public telecommunications services, services provided under a proposed NCL would be more restricted. PS(CCI) added that for example, the Airport Authority Hong Kong might apply for an NCL to operate an autonomous vehicle system within the airport only. Holder of a carrier licence, on the other hand, were allowed to provide territory-wide telecommunications services. The Administration had reassured mobile network operators ("MNOs") that the proposed NCLs would not affect their business operations.

19. As regards the eligibility for NCLs, DGC said that any company, including current holders of carrier licences, fulfilling the specified conditions to be determined by SCED, could apply for NCLs. In the application, the applicants should specify the scope of service proposed to be provided, company structure, financial capability, etc. for consideration by the Office of the Communications Authority ("OFCA"). Unless there was constraint on supply of the relevant spectrum for providing the service to be licensed, the Administration would not set a cap on the number of the licences to be issued.

20. The Chairman enquired about the licence fees of existing NCLs, and asked whether the fees for the proposed NCLs would be specified in the bill when it was to be introduced into the Legislative Council. Ms Elizabeth QUAT raised a similar enquiry.

21. DGC advised that the licence fee for a carrier licence (for the provision of local fixed services and/or mobile services) was prescribed in the Telecommunications (Carrier Licences) Regulation (Cap. 106V) and the current level of the fixed fee component was \$1 million per year. The corresponding fees for NCLs would be published by the Communications Authority ("CA") and commensurate with the scope of the service. CA would determine the fee level of the proposed NCLs on a cost-recovery basis and with reference to the existing fee structure of similar licences. For example, the fixed fee component of the annual licence fee for a Wireless Internet of Things Licence or a Localised Wireless Broadband Service Licence was \$100,000.

22. The Chairman asked whether an NCL was required for installing closed-circuit television ("CCTV") surveillance systems. DGC replied that depending on the scope of the services provided, an operator might need to possess an NCL for the provision of CCTV services

Disclosing anonymous customer data for research purposes

23. Ms Elizabeth QUAT expressed disappointment at the slow progress of the Administration's facilitation of telecommunications operators' disclosure of anonymous customer data to the public. She commented that as data would be anonymized before disclosure, people's personal information would be protected. Ms QUAT indicated that Cap. 106 should be amended to allow operators to disclose anonymous customer data for research purposes. She also suggested that the Administration should consult the trade on how to facilitate the use of anonymous data for the development of smart city. The Chairman concurred with Ms QUAT's suggestions.

24. PS(CCI) responded that the proposal of facilitating the sharing of anonymous customer data held by telecommunications operators was not included in the current legislative exercise as the subject matter had not been put forward for discussion by the general public in the earlier public consultation. The Administration noted the concerns of members of public on privacy protection and considered that such concerns should be well-addressed before taking forward the proposal. Moreover, as the data were owned by telecommunications operators, thorough consultation with the trade would be required. The Administration could engage the innovation and technology sector, stakeholders interested in using such anonymous customers data and telecommunications operators to explore whether and how the proposal could be taken forward in due course.

Improving the appeal mechanism under Cap. 106

25. Mr WONG Ting-kwong sought clarification from the Administration on whether the proposed expansion of the appeal mechanism under Cap. 106 would allow CA to dispense with the statutory requirement for certain licences under Cap. 106. PS(CCI) explained that the proposed legislation sought to expand the appeal mechanism under Cap. 106 to cover suspension and/or revocation of certificate of competency and authority to operate for operating personnel; and cancellation, withdrawal or suspension of licence, permit, permission or consent granted.

Coverage of the fifth generation mobile telecommunications services

26. Noting that the latest 5G coverage in Hong Kong had reached over 90% of the population, whereas the coverage of 5G networks in some core business districts or areas with high pedestrian flow had even reached 99%, Mr SHIU Ka-fai enquired when 5G coverage would reach 99% or more of the population.

27. PS(CCI) responded that the progress of 5G service development was satisfactory considering that it had only been launched in Hong Kong for about a year. He added that past experience suggested that the development of a new generation of mobile telecommunications technologies would usually start from densely-populated areas and then expanded gradually to other districts across the territory, but it would take a longer period of time to extend the network coverage significantly above 90% of the population. According to a recent report released by a survey organization, Hong Kong and South Korea topped the world in terms of 5G coverage.

Installation of radio base stations on street furniture

28. The Chairman informed members that four MNOs had responded to the Panel's invitation for views on the development of 5G mobile services in Hong Kong via their submissions (vide paragraphs 14 to 17 and Appendix II in LC Paper No. CB(1)779/20-21(06)). He mentioned that one of the MNOs' concerns was the need for more locations, including street furniture, for the installation of radio base stations ("RBSs"). He sought the Administration's response to MNOs' comments.

29. PS(CCI) advised that OFCA and the Innovation and Technology Bureau had been conducting tests for the installation of RBSs on street furniture, including sheltered bus stops, public payphone kiosks and smart lampposts. He added that the installation of RBS had to be supported by the provision of electricity supply for the telecommunications installation and connection to the telecommunications network. Precautionary measures against vandalism and necessary land application procedures would also be necessary.

Minimizing excavation works

30. Ir Dr LO Wai-kyok said that the proposed measures to protect underground telecommunications infrastructure reflected a lack of coordination in the past between the Government and utility companies on the installation of underground facilities. Noting the problem of frequent damage to underground facilities caused by excavation works, the Administration introduced common utility tunnels ("CUTs") in some new development areas to house electricity supply lines, telecommunications cables, water pipes, etc., in a coordinated manner. Commending that CUTs were convenient for maintenance, repair and upgrade, and could minimize the disturbance to road and pedestrian users caused by excavation works, Ir Dr LO recommended that the use of CUTs should be promulgated throughout all departments and become a policy.

31. PS(CCI) advised that for works carried out on streets, the Highways Department would facilitate permit holders to coordinate among themselves regarding conflicting works in the vicinity, with the objective of minimizing the need for repeated road opening. Holders of excavation permits were also required by the Highways Department to, inter alia, make all reasonable efforts to draw reference to relevant utility record plans from utility companies to prevent damage to existing underground facilities. PS(CCI) agreed that the plans should be restricted for security reasons, but they would serve as useful reference for companies carrying out road works. For this reason, operators should keep a full set of their updated underground facility plans.

32. The Chairman asked which provisions required companies to submit excavation plans for co-ordination and to whom the plans should be submitted. DGC replied that OFCA had issued guidance notes to network operators on co-ordination of proposed excavation works with a view to minimizing the number of road works. Operators wishing to carry out excavation works should submit works plans to OFCA. With the information available from OFCA, other operators planning to carry out works in the same area and period would co-ordinate among themselves on the submission of works plans. The co-ordinated excavation works plans could then be submitted to the management system of the Highways Department for further handling.

33. In response to the Chairman's enquiry, PS(CCI) explained that the appeal mechanism under Cap. 106 would provide a review channel for telecommunications operators or other affected parties aggrieved by certain regulatory decisions of CA.

Conclusion

34. The Chairman concluded that the Panel supported in general the Administration's proposal to introduce a bill to amend relevant provisions of Cap. 106.

V. Spectrum assignment for the provision of public mobile telecommunications services

(LC Paper No. CB(1)779/20-21(05) -- Administration's paper on spectrum assignment for the provision of public mobile telecommunications services

LC Paper No. CB(1)779/20-21(06) -- Paper on spectrum assignment for the provision of telecommunications services prepared by the Legislative Council Secretariat (Background brief)

Briefing by the Administration

35. At the invitation of the Chairman, PS(CCI) and Deputy Director-General (Telecommunications) briefed members on the spectrum assignment plans for a number of frequency bands for the provision of public mobile telecommunications services. PS(CCI) advised that in order to meet the needs of various 5G applications in terms of speed, capacity and coverage, the Administration planned to table the relevant subsidiary legislation for consideration of the Legislative Council within this legislative session, before conducting an auction by the end of 2021 to assign/re-assign spectrum in the low- and mid-frequency bands. Under the technology neutral principle, assignees would be free to continue deploying the spectrum for existing services, or refarm it for the provision of more advanced generation of public mobile services such as 5G. Details of the spectrum assignment plans were set out in the Administration's paper (LC Paper No. CB(1)779/20-21(05)).

(Post-meeting note: A soft copy of the PowerPoint presentation materials (Chinese version only) was circulated to members vide LC Paper No. CB(1)781/20-21(02) on 20 April 2021.)

Discussion

Guiding principle in spectrum management and auction prices

36. The Chairman asked how the Administration decided which spectrum was to be assigned administratively and which using a market-based approach. Ms Elizabeth QUAT queried why the spectrum auction scheduled for the fourth quarter of 2021 could not be conducted earlier.

37. PS(CCI) advised that according to the Spectrum Policy Framework promulgated in 2007, a market-based approach in spectrum management would be adopted wherever CA considered that there were likely to be competing demands for the spectrum concerned, in order to realizing the spectrum's full economic value. In view of the ample supply of spectrum in the 26 GHz and 28 GHz bands, the spectrum in the bands would be assigned administratively, and assignees would be required to pay spectrum utilization fee for their use only if 75% or more of the spectrum within the 26 GHz and 28 GHz bands was

occupied. To ensure proper use of the spectrum, applicants would have to justify their applications for assignment by specifying their intended scope of service and implementation plan for deployment of the spectrum concerned for approval by CA.

38. As regards the timing for conducting the auction, DGC explained that the Administration would have to amend the relevant regulations subject to negative vetting, and further time would be required for completing the administrative procedures for the spectrum auction.

39. The Chairman enquired what the expected auction reserve prices would be. Ms Elizabeth QUAT said that telecommunications operators had raised concern on wide auction bid increments leading to high transaction prices. She commented that the transaction prices should reflect the values of the auctioned frequency bands without being excessively high, so as to avoid driving up the prices of 5G services to be borne by end-users. She hoped that the Administration could take note of the trade's views.

40. PS(CCI) responded that, in line with established practice, SCED would take into account all relevant factors and determine the auction reserve prices nearer the time of auction, taking into account the value of the spectrum and the reserve prices and final transaction prices in previous auctions. The auction reserve prices would be set at levels to reflect the minimum base value of the spectrum for the purpose of kick-starting the competitive bidding process. Having taken the telecommunications operators' views into consideration, the Administration had set comparatively low auction reserve prices and narrowed the bid increments in its auctions of spectrum in the 3.3 GHz, 3.5 GHz and 4.9 GHz bands in 2019. Such measures were welcomed by the operators and the successful bidders considered that the final transaction prices had reflected the reasonable market prices of the spectrum. The Administration would follow the same arrangement in the coming auction.

High-speed broadband services in remote areas

41. Ms Elizabeth QUAT noted that 5G coverage in Hong Kong had reached over 90% of the population. She asked how the coverage was measured. DGC explained that 5G coverage in percentage of population measured the proportion of population whose habitual residence was covered by 5G networks; for example, where 5G networks could reach a building, then all the residents in that building were considered to be covered by 5G services. Of the 10% of the population that was not yet covered by 5G services, most were residing in remote rural areas.

42. Ms Elizabeth QUAT commented that the Subsidy Scheme to Extend Fibre-based Networks to Villages in Remote Areas ("the Subsidy Scheme") had been in operation for more than two years but had not been effective in significantly improving the network services of residents of villages in remote areas. Many of the existing networks within the villages were copper-based. Some villagers had considered switching to 5G mobile services instead of using fibre-based networks for Internet access when 5G networks would extensively cover remote areas. Ms QUAT enquired whether the villagers could expect to do so, or it would be impracticable to extend 5G networks to reach the remaining 10% of the population.

43. PS(CCI) responded that it would take extra efforts to expand 5G coverage beyond 90% of the population, mainly because of the sparseness of the remaining 10% of the population and the hilly terrain of Hong Kong. One of the Administration's approaches was to allocate more spectrum to provide mobile telecommunications services. For example, some spectrum, such as those in the lower frequency bands previously used for television broadcasting, had good radio propagation characteristics, and might, after refarming for telecommunications services, serve the needs of the community in remote areas. This would allow residents in remote areas to access the Internet through mobile telecommunications services.

44. Ms Elizabeth QUAT and the Chairman queried whether telecommunications operators had the incentive to build 5G networks in remote villages just to serve a small number of customers. Ms QUAT asked what the Administration would do to make sure the operators who were assigned spectrum would provide 5G mobile services to the households currently outside 5G coverage. The Chairman and Ms QUAT asked, for areas where fibre-based networks reached the village entrances, whether the Administration would consider requiring or encouraging MNOs participating in the coming spectrum auction to install facilities, such as radio relay equipment or RBSs, so that village dwellers who could not establish fibre-based connection from village entrances to their homes would still be able to access the Internet through mobile services. The Chairman also suggested the Administration to consider setting up antenna poles in rural areas onto which different MNOs could install RBSs on a shared basis.

45. DGC responded that both the Subsidy Scheme and the spectrum assignment plans were parts of the Administration's approaches to facilitate the provision of high-speed broadband services in remote areas of Hong Kong. To encourage telecommunications operators to extend their mobile networks to remote areas, suitable Government premises had been identified so that operators could set up RBSs in these premises with nominal rental charges.

46. PS(CCI) added that the proposed subsidiary legislation should focus on specifying the particulars of the frequency bands to be auctioned. While special conditions were occasionally included in auction documents, it might not be appropriate to impose very specific requirements pertaining to individual villages. The issues affecting mobile network coverage or installation of RBSs might differ from village to village. Some of the issues might be related to land lease matters, whereas others might involve technical difficulties, and some would be beyond telecommunications operators' responsibility. Operators had an interest commercially to expand their networks as widely as possible. The Administration had also been liaising with stakeholders to resolve the obstacles faced by the villages on a case-by-case basis, and would take into account members' views in the preparation for the auction.

Access to premises for installing radio base stations

47. Ms Elizabeth QUAT asked if section 14 of Cap. 106, which was related to the placement and maintenance of telecommunications and radiocommunications installations on any premises if there were no alternative methods to lay the network, applied to MNOs as well as fixed network operators.

48. PS(CCI) advised that, according to section 14(1A), any licensee authorized by CA, including MNOs, might place and maintain a radiocommunications installation on any land for the purpose of providing a radiocommunications service to a public place, and enter any such land for the purpose of inspecting it. CA had previously granted authorization for operators to place such installations in government- and privately-owned tunnels. PS(CCI) added that under certain circumstances where the statutory provision was invoked, CA would specify an interim fee to be payable by the licensee to the person having a lawful interest in the land concerned; and the fee might need to be determined by arbitration. Owing to the complexity of the procedures involved, telecommunications operators were not keen to invoke that provision to install telecommunications facilities.

One-stop service to facilitate the installation of radio base stations

49. Ms Elizabeth QUAT commented that out of the premises on government or private land which were suitable for installing RBSs, those that had not commenced the installation at this stage were likely to be difficult cases, which might require assistance from the Government in obtaining certain works approvals and/or connecting to electricity supply. She enquired whether the Administration could provide coordinated inter-departmental support to operators in the form of one-stop service.

50. DGC responded that following the launch of a pilot scheme to facilitate the installation of RBSs at about 1 000 suitable government premises under a streamlined procedure, the Administration had further adopted a "demand-led" model with a view to opening up more government premises suitable for MNOs to install RBSs. Having consulted the industry, the Administration was consolidating a list of suggested premises and seeking the consent of the relevant departments for the use of these premises for installation of RBS. The list of premises would then be made available to MNOs for application.

3.5 GHz band restriction zone in Tai Po

51. Ms Elizabeth QUAT noted that the Administration expected the issues related to the restriction zone in Tai Po to be resolved in four years and MNOs might make use of other frequency bands to provide 5G services in the restriction zone in the meantime. She enquired the implication of the restriction zone on the quality of 5G services in Tai Po and whether there were any changes to the proposed plan.

52. PS(CCI) and DGC clarified that the restriction zone in Tai Po only regulated the use of the 3.5 GHz band, but not other bands suitable for providing 5G services. The Administration was aware that many MNOs had made use of other frequency bands, in particular the 2.1 GHz band, for providing 5G services in the district. Although the restriction had, to a certain extent, limited the enhancement of network capacity of 5G services using the 3.5 GHz band in the district, the overall user experience of 5G users in Tai Po had been on par with that in other districts, because the number of 5G users was still small at present and there was enough 5G network capacity provided with the use of other frequency bands.

53. DGC added that when the 600 MHz, 700 MHz and 4.9 GHz bands to be released in the upcoming auction came into operation in the near future, 5G networks in the territory would be further enhanced. As more and more subscribers upgraded to 5G services, MNOs could also re-farm more existing spectrum currently used for 2G/3G/4G services to provide 5G services. In the long term, the Administration expected that the issues related to the restriction zone in Tai Po would be removed when the two satellite earth stations in Tai Po were relocated to the Chung Hom Kok Teleport.

Slow progress in the roll out of 5G networks

54. Ms Elizabeth QUAT commented that MNOs had been slow in launching 5G mobile services into the market. She asked whether it was due to a lack of spectrum supply. The Chairman relayed the concerns of some subscribers of 5G mobile services that they could only connect to 4G networks at certain locations.

He suggested that the Administration should introduce incentives or regulatory measures as appropriate to require licensed 5G network providers to establish 5G networks even when their 4G networks still had spare capacity.

55. PS(CCI) said that spectrum supply was sufficient, while the pace of launching 5G mobile services into the market depends on MNO's commercial considerations. He added that the progress of network roll-out was satisfactory so far, with more 5G-supported applications and low- to mid-range phones entering the market this year. To encourage early deployment of 5G technologies across trades and industries, the Administration had launched a subsidy scheme under the Anti-Epidemic Fund to provide funding support up to 50% of the costs to projects deploying 5G technologies. PS(CCI) hoped that this could set an example for the wider application of 5G in the commercial sector.

Conclusion

56. The Chairman concluded that the Panel supported the Administration's spectrum assignment plans and the relevant subsidiary legislation exercise.

VI. Any other business

57. There being no other business, the meeting ended at 6:28 pm.