

Telecommunications Regulatory Affairs Advisory Committee

Minutes of the Twentieth Meeting Held on Thursday, 16 December 2020 at 2:30 p.m. in OFCA Conference Room, 20/F Wu Chung House

Members Present

In Person

Miss Elaine Hui	Office of the Communications Authority ("OFCA") ("Secretary")
Mr Kevin Chu	Hong Kong Telecommunications (HKT) Limited / PCCW-HKT Telephone Limited and Hong Kong Telecommunications (HKT) Limited / PCCW Global (HK) Limited ("HKT")
Mr YC Pun	HKC Network Limited

Web Conference Access

Mr Sanda Cheuk	OFCA ("Chairman")
Ms Teresa Au Yeung	Consumer Council ("CC")
Mr Alex Wong	Communications Association of Hong Kong ("CAHK")
Ir Wilson Kwok	The Hong Kong Institution of Engineers ("HKIE")
Ir Ben Li	The Institution of Engineering and Technology Hong Kong ("IETHK")
Mr Francis Fong	Hong Kong Information Technology Federation ("HKITF")
Mr Henry Lee	21 ViaNet Group Limited
Ms Sarah Hui	China Mobile Hong Kong Company Limited ("CMHK")
Mr Karson Ng	China Telecom Global Limited

Ms Sarah Zhang	China Unicom (Hong Kong) Operations Limited
Mr Sutton Cheung	ComNet Telecom (HK) Limited (“ComNet”)
Mr Eric Wong	Easy Tone Network Limited
Mr Richard Leung	Hong Kong Broadband Network Limited / HKBN Enterprise Solutions Limited / HKBN Enterprise Solutions HK Limited (“HKBN”)
Mr Larry Lee	Hong Kong Cable Television Limited
Miss Katherine Kwok	HGC Global Communications Limited
Ms Juliana Wong	Hutchison Telephone Company Limited / Genius Brand Limited
Mr Patrick Ng	NTT Com Asia Limited (“NTT”)
Mr T L Or	SmarTone Mobile Communications Limited / SmarTone Communications Limited (“SmarTone”)
Miss Edith Wong	Towngas Telecommunications Fixed Network Limited
Mr Eric Cheung	TraxComm Limited
Mr Charles Yip	Village Telephone Limited
Mr Haining Hu	Vodafone Enterprise Hong Kong Limited
Mr Kent Cheung	External fixed carrier / unified carrier (external fixed services) licensees as a group
Mr T S Sze	Services-based operators (SBOs) as a group
Mr Henry Wang	Localised wireless broadband service / public radiocommunications service / wireless Internet of things licensees as a group
Mr Y T Kan	Hong Kong Police Force (“HKPF”)
Dr Justin Chuang	Ad personam
Dr Patrick Tsie	Ad personam

In Attendance

In Person

Mr Kingsley Yeung	OFCA
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Mr T S Chew	OFCA
Mr Sidney Tsan	OFCA
Mr Wilson Lee	OFCA
Mr Andrew Lo	OFCA
Ms Kaitlyn Ng	OFCA
Ms Natalie Pang	OFCA

Web Conference Access

Ir Alan Chan	HKIE
Mr Bruce Chan	IETHK
Mr Alex Cheng	CMHK
Mr Kenneth Kwok	ComNet
Mr Eric Lee	SmarTone
Mr Alan Choi	SmarTone
Mr K H Yip	LWBS / PRS / WIoT licensees as a group
Mr Tommy Tang	HKPF
Ms Linda Yu	OFCA
Mr K K Sin	OFCA
Mr Desmond Young	OFCA
Dr Gary Shiu	OFCA
Mr S Lee	OFCA
Mr Tony Yip	OFCA
Mr Raymond Ho	OFCA
Mr Michael Chan	OFCA
Ms Vera Chung	OFCA

Members Absent with Apologies

Ms Jackie Ip	Equinix Hong Kong Limited
Mr James Lam	External telecommunications service operators as a group

The Chairman welcomed all Members for participation in the work of TRAAC for the new term of 2020 – 2022, and joining this meeting either in person or via web conference access. The Chairman introduced the new faces and gave a brief explanation of the role of TRAAC.

Item 1 Confirmation of Minutes of Last Meeting

2. The Chairman said that the draft minutes of the 19th meeting had been circulated to Members for comment on 11 June 2020. As no further comment had been received, the minutes of the 19th meeting were confirmed without amendment.

Item 2 Matters Arising

3. The Secretary reported that after taking into account the industry's views on the revised proposal to streamline the regulatory arrangements for filing and publication of interconnection agreements presented at the last TRAAC meeting, the revised proposal was finalised and submitted to the Communications Authority ("CA") for approval. The relevant Statement of the CA and the revised waiver were published on CA's website on 15 December 2020 for implementation.

4. The Secretary also reported that with CA's approval, circular letters were issued to inform the relevant licensees of the amendments made to the licence conditions to streamline the regulatory arrangements for filing and publication of tariffs as discussed at the last TRAAC meeting. The updated Guidelines on Publication of Tariff were published on CA's website on 26 August 2020.

5. In regard to the Subsidy Scheme for Encouraging Early Deployment of 5G discussed at the last TRAAC meeting, the Secretary updated Members that the deadline for application had been extended for six months to 31 May 2021 to encourage more public and private organisations in different sectors to submit applications.

Item 3 Proposed Creation of a New Licence for the Provision of Private Localised Wireless Broadband System (TRAAC Paper No. 4/2020)

6. Mr Desmond Young gave a presentation on OFCA's proposal to create a new licence for the provision private localised wireless broadband systems ("LWBS (Private) Licence").

7. Ir Alan Chan asked whether there would be any measures to prevent holders of the LWBS (Private) Licences from providing public services in the boundary areas near to the Mainland. He also suggested expanding the maximum network coverage area from 1km² to 2km² and lowering of the base station fee by 50%. Mr Desmond Young replied that the service area(s) would be specified in the schedule of the LWBS (Private) Licence and provision of public services would be prohibited under the licence. As regards the size of the network coverage area, by making reference to the sizes of developments like Cyberport and Tseung Kwan O Industrial Estate, Mr Young explained that 1km² should be sufficient for a typical private network. Regarding the base station fee, it was set based on the cost recovery principle. As the procedures for approval would be the same as those for base stations established under the existing Localised Wireless Broadband Service Licence ("LWBS Licence"), the same fee level was proposed.

8. Mr Francis Fong asked about the timeline planned for introducing the new licence considering that devices supporting the mmWave spectrum might not be widely available. The Chairman explained that following the release of mmWave spectrum and creation of the existing LWBS Licence in 2019, OFCA had received enquiries from companies and other organisations on setting up small scale 5G systems for internal use, demonstrating a demand for these private systems. The LWBS (Private) Licence was proposed with the scope of operations, licence conditions and licence fees tailored for such small scale operations.

9. Dr Justin Chuang supported the proposal and OFCA's proactive work in creating the LWBS (Private) Licence. He asked whether

multiple systems at different locations would require the application of several licences if the aggregate coverage area was no more than 1km². Mr Desmond Young replied that a single licence would suffice so long as the aggregate network coverage would not exceed the specified limit of coverage.

10. Dr Patrick Tsie supported creation of the new licence to facilitate private use of 5G applications using the mmWave spectrum though he considered that it would take time for the mmWave ecosystem to evolve.

11. Mr Henry Wang shared the experience of the Airport Authority (“AA”) as the first LWBS Licensee, noting that availability of mmWave devices should not be an obstacle for the industrial / business type of 5G applications. He asked whether applicants of the LWBS (Private) Licence would be allowed to operate private 5G networks at the airport. Ms Linda Yu replied that the 400 MHz of shared spectrum was for assignment on geographically shared and first-come-first-served basis. It would unlikely be viable for multiple licensees to coexist in the same location using the same set of frequencies due to radio interference issue.

12. Mr Kevin Chu asked whether the licensing regime of the LWBS (Private) Licence could be simplified by putting it under the LWBS Licence with further categorisation by size of the coverage area, or under the class licence regime. Ms Linda Yu explained that with reference to the experience of overseas economies such as the UK and Japan, a separate LWBS (Private) Licence would provide the flexibility to cater for different operational needs of various users. The Secretary supplemented that the LWBS (Private) Licence could be regarded as a subset of the LWBS Licence for applicants with variation of needs.

13. Mr Eric Lee asked about the definition of private use and the consequences in case of breach by licensees in using the LWBS (Private) Licence for non-private purposes. The Chairman explained the licensees would be restricted to setting up systems for internal use within their organisations but not any third party. OFCA would consider providing more information in this regard in the guidelines for application of the new licence upon its creation. The Secretary added that the

licensees would be subject to sanctions pursuant to the Telecommunications Ordinance for any breach of the licence conditions.

14. The Chairman invited Members to provide further comments on the proposed creation of the LWBS (Private) Licence, if any, within two weeks. Subject to the comments from Members, OFCA would finalise the proposal for consideration by the CA.

Item 4 Review of the Billing and Metering Integrity Scheme (TRAAC Paper No. 5/2020)

15. Dr Gary Shiu gave a presentation on the review of the Billing and Metering Integrity Scheme (“BMIS”) with OFCA’s proposal to abolish BMIS starting from January 2021 (“BMIS Proposal”).

16. Mr Kevin Chu welcomed the BMIS Proposal and encouraged OFCA to continue looking for similar opportunities to streamline various regulatory measures, if any, so as to reduce the compliance cost of the industry. He also sought clarifications on the way forward with regard to the reporting arrangement under BMIS after its abolition. Dr Gary Shiu replied that OFCA planned to terminate the existing reporting requirement under BMIS with immediate effect if it was decided to adopt the BMIS Proposal.

17. Ir Alan Chan enquired whether OFCA would consider setting up a dedicated team for 12 months as a transitional arrangement to handle related issues such as consumer complaints before the final abolition of BMIS. Mr Kingsley Yeung replied that it might be unnecessary to set up the transitional arrangement since any consumer complaints or issues received by OFCA concerning operators’ billing and metering accuracy would continue to be handled by the existing measures, including the licence condition on billing and metering accuracy as well as the Code of Practice in Relation to Billing Information and Payment Collection for Telecommunications Services (“Existing Measures”), which were more comprehensive and effective than BMIS.

18. Ms Terese Au Yeung commented that from consumer protection angle, she had no objection to the BMIS Proposal given that there appeared to be no consumer detriment which might result from the BMIS Proposal in the light of the change in the telecommunications services market landscape, as well as the availability of the Existing Measures which had a wider scope than BMIS. Mr Charles Yip also supported the BMIS Proposal as the BMIS was initially set up with focus on voice-based services back in early 2000s while the focus of the markets had been shifted towards data-based services nowadays. He also agreed that the Existing Measures would suffice in safeguarding consumers' interest.

19. The Chairman invited Members to provide further comments on the BMIS Proposal, if any, within two weeks. Subject to the comments from Members, OFCA would finalise the decision on the matter.

Item 5 Facilitating Measures for the Development of 5G (TRAAC Paper No. 6/2020)

20. Mr K K Sin introduced the facilitating measures that were adopted for the development of 5G in Hong Kong.

Resolving the Problem of the 5G Restriction Zone in Tai Po

21. Mr Francis Fong welcomed the measures of resolving the 5G restriction zone problem in Tai Po, and enquired whether the time needed for the relocation of the pre-existent satellite earth stations operating at 3.4 – 3.7 GHz band for telemetry, tracking and control (“TT&C facilities”) from Tai Po to the Chung Hom Kok Teleport (the “Teleport”) could be shortened from 4 years to say 2 years. Mr K K Sin explained that relocation of the TT&C facilities would involve complicated works and procedures, including system design of the new TT&C station, seeking approval of the proposed civil works from the relevant Government departments, implementation of the approved civil works (i.e. site formation and construction of new buildings), procurement of satellite equipment from overseas vendors, installation and testing of new satellite

antennas and radio equipment on site as well as installation of the underground facilities (i.e. water/drainage pipes, electrical cables and optical fibre cables). As such, the lead time of about 4 years required for completing the relocation project by the satellite operators was considered reasonable.

22. In response to Mr Francis Fong's comment that relocation of all TT&C facilities operating at the 3.4 – 3.7 GHz band from Tai Po to Chung Hom Kok would result in loss of site diversity and power outage at Chung Hom Kok area would disrupt satellite services of the operators concerned, the Secretary clarified that only those TT&C facilities operating in the 3.4 – 3.7 GHz band affected by 5G radio base stations ("RBSs") operating in the 3.4 – 3.6 GHz band ("3.5 GHz band") would be relocated to the Teleport, while the satellite facilities operating in the other frequency bands would remain in Tai Po. Mr K K Sin said that given the electricity supply in Hong Kong had been very reliable in general, there should be low risk of prolonged outage of electricity supply in the satellite earth stations. Furthermore, it was a general practice that satellite operators would equip with the backup power supplies to ensure normal operation of their earth station facilities even when the mains power supply was disrupted. The Chairman added that it would promote reliability and continuity of satellite network infrastructure if satellite operators would have a second site at the Teleport for diversity of their operation, given that most of the existing satellite facilities were established in Tai Po.

23. Mr Fong further asked whether compatibility problem between satellite services and mobile services would reappear in Tai Po when new radio spectrum was to be released in future for 5G services. Mr T S Chew said that mobile network operators ("MNOs") might use suitable new frequency bands or refarm their existing 2G/3G/4G spectrum to provide 5G services in Tai Po in order to overcome the compatibility problem. The Chairman supplemented that OFCA would as always engage discussions with the stakeholders in future when the use of new spectrum identified for mobile services would affect existing uses such as satellite services.

24. Mr Kevin Chu welcomed the measures to remove the 5G restriction zone in Tai Po area so that MNOs could use the 3.5 GHz band in the area. Mr Chu said that MNOs should not bear the cost for the satellite operators to relocate their affected TT&C facilities from Tai Po to the Teleport, and asked who would finance the relocation project. The Chairman replied that the relocation project would be financed by the satellite operators themselves according to a special arrangement for land allocation to the operators concerned to facilitate their relocation.

Use of Government Premises for Network Rollout

25. Mr Kevin Chu commented that some of the 1 000 Government premises under the Pilot Scheme were not suitable for MNOs to install their RBSs, while some other suitable Government premises were not available. Mr Chu considered that it would be helpful to the MNOs' 5G network rollout if the lead time for processing applications to use the relevant Government premises could be further reduced. In response, Mr K K Sin said many venues under the scheme had not yet been inspected by MNOs and it might be premature to conclude that they were not suitable. At present, around 150 Government venues (out of a total of about 1,000 venues covered under the Pilot Scheme) had been inspected by MNOs which had in turn submitted applications for installation of RBSs at 130 of them. Besides, more Government venues would be made available in future under a "demand-led" model initiated by the Government in the 2019 Policy Address. The combination of the streamlined approach adopted under the Pilot Scheme with the "demand-led" model should hopefully address MNOs' demand for use of Government premises for installation of RBSs.

Subsidy Scheme to Support Upgrading of Satellite Master Antenna Television ("SMATV") Systems

26. Mr Kevin Chu asked whether there was any remaining balance from the fund that MNOs had contributed to the subsidy scheme to support upgrading of SMATV systems, and if so, when would the refund be arranged. Mr T S Chew said that OFCA had so far received about 1 000 applications for subsidy to upgrade the SMATV systems, and that

the unused balance of the fund would be returned to the four MNOs in early 2021 after OFCA had completed processing all the relevant applications.

Subsidy Scheme to Extend Fibre-based Networks to Remote Areas

27. In response to Mr Francis Fong's question on the last-mile connections at remote villages in Hong Kong, Mr Andrew Lo said that under the tender of the subsidy scheme to encourage fixed network operators ("FNOs") to roll out high-speed network within the villages concerned, one of the criteria used for selecting the FNO to conduct a project was whether the FNO would commit to providing high-speed broadband services at the villages concerned. In fact, the two selected FNOs had made additional service commitments to provide high-speed broadband services (up to 1 Gbps or above) to many villages. Mr Lo further added that the selected FNOs were required to open up at least half of the capacity of the subsidised network facilities under the subsidy scheme for use by other FNOs for free, in order to encourage competitive supply of broadband services to the villages concerned.

28. Mr Charles Yip advised that Village Telephone Limited ("VTL") had been working hard to deploy its optical fibre network to provide fixed broadband services to the villages in Hong Kong. At present, VTL had access to over hundreds of villages and would open up the last-mile of its fibre-based network for access by any FNOs to provide high-speed broadband services of up to 1 Gbps to end users in the villages. The Chairman said that by the time the projects under the subsidy scheme were completed, there should be end-to-end broadband services delivered to the individual end users of the remote villages covered by the subsidy scheme.

Item 6 Any Other Business

29. Mr Richard Leung followed up on the progress of legislative proposal to protect underground telecommunications infrastructure. The Chairman said that according to the latest progress, the Government

aimed to table the amendment bill to the Legislative Council next year to give effect to the proposal. Mr K K Sin said that as part of the legislative proposal, guidelines would be prepared to set out appropriate works procedures and protection measures. The industry would be consulted on the draft guidelines in due course.

30. The Chairman said that the next TRAAC meeting would tentatively be scheduled in the second quarter of 2021. Members would be informed of the meeting arrangement nearer the time.

31. There being no other business, the meeting was adjourned at 4:55 p.m.

**Office of the Communications Authority
January 2021**