RADIO SPECTRUM AND TECHNICAL STANDARDS ADVISORY COMMITTEE

Minutes of the Twenty-eighth Meeting held at 2:30 p.m., Wednesday, 21 June 2023 in Conference Room 2020, 20/F Wu Chung House, Wan Chai

Present

Mr T S Chew Chairman (OFCA staff)

Mr Desmond Chan Representative of Hong Kong Broadband Network

Limited / HKBN Enterprise Solutions Limited / HKBN

Enterprise Solutions HK Limited

Mr Henry C H Chan Representative of Hutchison Telephone Company

Limited

Mr Henry H W Chan Representative of Independent Commission Against

Corruption

Ir John Chan Representative of the Hong Kong Institution of Engineers

Mr S P Chan Ad Personam

Mr Samuel Chau Representative of ComNet Telecom (HK) Limited Ms C K Chu Representative of Radio Television Hong Kong

Mr K L Ho Representative of the Local Industry Associations as a

group

Mr T Y Hui Representative of Localised Wireless Broadband Service

(LWBS) / Pubic Radiocommunications Service (PRS) / Wireless Internet of Things (WIoT) Licensees as a group

Mr S M Ko Representative of Metro Broadcast Corporation Limited

Mr Garry Kum Representative of Television Broadcasts Limited

Mr Allan Kwan Representative of PCCW Media Limited / HK Television

Entertainment Company Limited

Mr Alex Lai Representative of Hong Kong Cable Television Limited /

Fantastic Television Limited

Mr Voller Lam Representative of HGC Global Communications Limited

Mr W T Lam Representative of Hong Kong Productivity Council Mr Dennis Lau Representative of SmarTone Communications Limited /

SmarTone Mobile Communications Limited

Ms Irene Lau Representative of Localised Wireless Broadband Service

(LWBS) / Pubic Radiocommunications Service (PRS) / Wireless Internet of Things (WIoT) Licensees as a group

Dr K C Lee Representative of Local Certification Bodies as a group Mr Michael Lee Representative of EU ICT Council in Hong Kong and

Macau

Dr Tony Lee Representative of the Institution of Engineering and

Technology Hong Kong

Mr George Mak Representative of Consumer Council

Mr W K Shiu Representative of the Hong Kong Police Force

Mr Johnny Siu Representative of Amateur Radio Societies as a group Mr Jing Su Representative of APT Satellite Company Limited Representative of Asia Satellite Telecommunications

Company Limited

Mr Frank Xie Representative of China Mobile Hong Kong Company

Limited

Mr Sheldon Yau Representative of Hong Kong Telecommunications

(HKT) Limited / PCCW-HKT Telephone Limited and Hong Kong Telecommunications (HKT) Limited / PCCW Global (HK) Limited / Genius Brand Limited Representative of Television Broadcasts Limited

Mr Man Yuen Representative of Television Broadcasts Limited
Dr Rui Zhang Representative of Asia Satellite Telecommunications

Company Limited

Mr C H Chan Secretary (OFCA staff)

Absent with Apologies

Ms Alice Au Representative of Carrier Licensees not providing

Domestic Retail Fixed Services as a group

Prof Lin Dai Ad Personam

Mr H C Hung Representative of Unified Carrier (External Fixed

Services) Licensees as a group

Mr Paul Lam Representative of Hong Kong Commercial Broadcasting

Company Limited

Mr Kin Hei Lau Representative of Civil Aviation Department

Mr Kin Ho Lau Representative of Services-based Operators (MVNO and

ETS Operators only) Licensees as a group

Mr Tony Tsang Representative of VNET Group Limited

In Attendance

Mr Tony Yip **OFCA** staff Mr Charles Chow OFCA staff Dr Yvonne Lee **OFCA** staff Mr Roger Chan OFCA staff Mr Kenneth Cheung **OFCA** staff Mr Gary Lam OFCA staff Mr Brian Lee **OFCA** staff Mr Gordon Lei OFCA staff Mr Patrick Leung **OFCA** staff Mr Ray Ng **OFCA** staff Mr Jack Yip **OFCA** staff **Observers**

Mr Y H Chan Representative of Asia Satellite Telecommunications

Company Limited

Mr C H Chek Representative of the Hongkong Electric Company

Limited

Mr K N Cheuk Representative of Hong Kong LNG Terminal Limited Representative of China Mobile Hong Kong Company

Limited

Mr C O Ho Representative of the Hongkong Electric Company

Limited

Mr Terrance Lai Representative of CLP Power Hong Kong Limited

Mr Leo Ng Representative of Castle Peak Power Company Limited

Ms Sharon Shi Representative of APT Satellite Company Limited

Agenda Item 1: Matters Arising

Minutes of the 27th SSAC meeting

1. <u>The Secretary</u> reported that OFCA had not received any comment from Members on the draft minutes of the last SSAC meeting. Subsequently, the minutes were confirmed and published on the OFCA website in January 2023.

Item 3 of the 27th SSAC meeting (Proposed Revocation of HKTA 1053 and HKTA 1054 Performance Specifications for Base Station, Repeater and Mobile Station Equipment for Use in the Third Generation (3G) Mobile Communications Services Employing CDMA2000 Spread Spectrum)

2. <u>The Secretary</u> reported that OFCA had not received any comment from Members on the proposed revocation of the specifications HKTA 1053 and HKTA 1054 covering CDMA2000 equipment. Subsequently, these two specifications were revoked and removed from the OFCA website in February 2023.

<u>Item 4 of the 27th SSAC Meeting (Proposed Revision to HKCA Specifications related to Broadcasting Services)</u>

3. The Secretary reported that OFCA had not received any comment from Members on the proposed revision to the specifications HKCA 1102, HKCA 1104, HKCA 1105 and HKCA 1108 related to broadcasting systems. Subsequently, these revised specifications were adopted and published on the OFCA website in February 2023.

<u>Agenda Item 2</u>: Review of Charging Scheme for Spectrum Utilization Fee for Spectrum Assigned Administratively (SSAC Paper No. 1/2023)

- 4. Mr Brian Lee presented SSAC Paper No. 1/2023 introducing the review of the charging scheme for spectrum utilization fee ("SUF") for spectrum assigned administratively ("Review"). The Review, covering the frequency bands subject to payment of SUF and the levels of SUF, should be conducted every five years, with the first Review to be performed in 2023. After analysing the occupancies and the anticipated demands for frequency bands allocated for fixed links, electronic news gathering / outside broadcast links and satellite uplinks, the frequency bands subject to payment of SUF were identified and found to be identical to the six frequency bands specified in the relevant order ("designated frequency bands"). Three methods were proposed for deriving the SUF levels, which were Method 1: Adjusting with the Composite Consumer Price Indices; Method 2: Performing a comprehensive Least Cost Alternative ("LCA") analysis; and Method 3: Maintaining the prevailing SUF levels.
- 5. In response to the enquiries from Mr Terrance Lai and Mr Henry C H Chan, Dr Yvonne Lee reported the occupancies of the designated frequency bands, in which all of them reached or exceeded the occupancy threshold of 75%. The Chairman added that both the occupancies and the anticipated demands of the frequency bands were considered, according to the congestion criteria adopted in the joint statement issued in 2011². Mr Dennis Lau then asked whether a designated frequency band could be excluded from the levy of SUF if its occupancy fell below 75% in subsequent years. The Chairman said that a designated frequency band should be subject to SUF in the next five years regardless of any changes in its occupancy level. However, if the band is not classified as a designated frequency band in the next Review, no more levy of SUF was required.
- 6. Mr Terrance Lai expressed his wish to reduce the SUF levels. The Chairman said that both Method 1 and the preliminary estimation in Method 2 showed an increase in spectrum value over the past five years, both leading to increase in SUF levels, and there seemed to be no ground for reduction. Considering that the full levy of SUF had been imposed for about one year only and the previous consultant recommended to monitor the impact of spectrum usage for at least three to four years from a change in pricing, Method 3 was therefore included as an option.

¹ The relevant order is <u>Telecommunications (Designation of Frequency Bands Subject to Payment of Spectrum</u> Utilization Fee) Order (Cap. 106Y).

² The joint statement is available at www.coms-auth.hk/filemanager/common/ta20110923.pdf.

- 7. In response to the enquiry from Mr Desmond Chan, the Chairman said that no legislative process was expected if the designated frequency bands and SUF levels were remained unchanged.
- 8. <u>Dr Rui Zhang</u> and <u>Mr Jing Su</u> supported Method 3 among the three methods. <u>Mr Jing Su</u> shared that other administrations such as China and Australia had reduced the SUF levels in order to attract international service providers. He emphasised the importance of maintaining the current low SUF levels in Hong Kong which reinforced the competitiveness of the business environment. <u>The Chairman</u> thanked Mr Jing Su for his sharing and invited him to provide the SUF levels in other administrations for OFCA's information.

[Post-meeting note: Mr Jing Su shared with OFCA some documents related to SUF in China and Australia via email on 26 June 2023.]

- 9. In response to Mr Henry C H Chan's enquiry on LCA, Mr Brian Lee elaborated on the various alternatives evaluated in the consultancy study in 2009³. The study analysed the cost components for the individual alternatives and concluded that using higher and uncongested frequencies was the LCA. The Chairman added that the cost of the LCA was calculated based on the assumption that one additional hop was required due to the use of a higher frequency link, and the costs incurred in acquiring/operating extra equipment and using an additional hilltop site. Mr Henry C H Chan added that latest technologies should also be considered when performing the LCA analysis. The Chairman concurred with Mr Chan's view.
- 10. After some discussions, Members agreed that Method 3 should be the most desirable option. The Chairman invited Members to provide further comments, if any, by 12 July 2023.

Agenda Item 3: Hong Kong's Positions on Agenda Items for World Radiocommunication Conference 2023 (SSAC Paper No. 2/2023)

- 11. Mr Roger Chan and Mr Kenneth Cheung presented SSAC Paper No. 2/2023, which introduced Hong Kong's positions on the agenda items of the World Radiocommunication Conference 2023 ("WRC-23") to be held in Dubai, the United Arab Emirates from 20 November to 15 December 2023.
- 12. For WRC-23 agenda item 9.1 Topic b, Mr Johnny Siu pointed out that

³ The consultancy study report is available at www.ofca.gov.hk/filemanager/ofca/common/reports/consultancy/rp20101126.pdf.

the 1240 - 1300 MHz band was not allocated to amateur service and was being used by some other radiocommunications services in Hong Kong. He commented that OFCA could consider allocating this band to amateur service in Hong Kong when the existing services in this band were no longer in use.

13. In response to an enquiry from Mr Henry C H Chan on WRC-23 agenda item 1.2, Mr Tony Yip said that China was considering using the 6425 – 7125 MHz band for International Mobile Telecommunications ("IMT"). In the second session of the Conference Preparatory Meeting for WRC-23 ("CPM23-2"), China supported the identification of the 7025 – 7125 MHz band for IMT globally and proposed to extend the identification of the 6425 – 7025 MHz band ("6 GHz band") for IMT to Region 3 in addition to Region 1. However, the proposal was not adopted in CPM23-2. Mr Tony Yip added that China would continue to pursue the identification of the 6 GHz band for IMT in Region 3 in WRC-23. Mr Y H Chan opined that Hong Kong's position regarding the 6 GHz band might remain neutral as the identification of this band for IMT would only be considered for Region 1 under WRC-23 agenda item 1.2. The Chairman echoed that OFCA would closely monitor the development of the 6425 – 7125 MHz band in different economies.

[Post-meeting notes: On 28 June 2023, the Ministry of Industry and Information Technology announced that the 6425 – 7125 MHz band would be allocated for IMT in China with effect from 1 July 2023. For details, please refer to footnote CHN45 of 《中華人民共和國無線電頻率劃分規定》at https://www.miit.gov.cn/cms_files/filemanager/1226211233/attach/20236/d1dc19424d5a4cfe90d631adeee8dd58.pdf.

On 18 July 2023, the Secretary for Commerce and Economic Development and the Communications Authority jointly launched a public consultation on arrangements for assignment of 400 MHz of spectrum in the 6570 – 6770 MHz and 6925 – 7125 MHz bands for the provision of public mobile services, and the methods for setting the related spectrum utilisation fee. The consultation paper is available at

https://www.coms-auth.hk/filemanager/en/content_711/cp20230718.pdf.]

14. <u>The Chairman</u> invited Members to provide further comments, if any, by 12 July 2023. He added that Members who would like to join the Chinese delegation to attend WRC-23 should provide their proposed list of participants to the Secretary for coordination by OFCA.

Agenda Item 4: Proposed Revision to HKCA 1056 and HKCA 1057 Performance Specifications for Base Station, Repeater and User Equipment for Use in Public Mobile Communications Services based on Evolved Universal Terrestrial Radio Access (E-UTRA) Frequency Division Duplex (FDD) (SSAC Paper No. 3/2023)

- 15. Mr Gary Lam presented SSAC Paper No. 3/2023 which proposed the revision of the specifications HKCA 1056 and HKCA 1057 covering E-UTRA FDD base station/repeater equipment and user equipment respectively to include the 700 MHz band, i.e. 703 738 MHz paired with 758 793 MHz.
- 16. <u>The Chairman</u> invited Members to provide comments on the proposed revised specifications HKCA 1056 and HKCA 1057, if any, by 12 July 2023.

Agenda Item 5: Any Other Business

17. There being no other business, the meeting was adjourned at 4:10 p.m. The date of the next meeting was scheduled to be held in January 2024 after WRC-23.

Office of the Communications Authority July 2023