

RADIO SPECTRUM AND TECHNICAL STANDARDS
ADVISORY COMMITTEE

Minutes of the Fifth Meeting
held at 2:30 p.m., Thursday, 12 September 2013
in Conference Room 2020, Wu Chung House, Wanchai

Present

Mr T F So	Chairman (OFCA staff)
Mr Desmond Chan	Representative of Wharf T&T Limited
Ms Diana Chan	Representative of the Hong Kong Police Force
Mr Henry Chan	Representative of Hutchison Telephone Company Limited and Hutchison Global Communications Limited
Mr Y C Chan	Representative of Television Broadcasts Limited and TVB Pay Vision Limited
Mr Eric Chau	Representative of TraxComm Limited
Mr Alex Cheng	Representative of China Mobile Hong Kong Company Limited and China Mobile Hong Kong Corporation Limited
Dr Lawrence Cheung	Representative of Hong Kong Productivity Council
Mr Carlson Chu	Representative of PCCW Media Limited
Mr Clifford Ho	Representative of Towngas Telecommunications Fixed Network Limited
Mr Dickson Ip	Representative of ComNet Telecom (HK) Limited
Ms Angel Kwan	Representative of Civil Aviation Department
Mr Cyrus Lai	Representative of SmarTone Communications Limited/SmarTone Mobile Communications Limited
Mr Paul Lam	Representative of Hong Kong Commercial Broadcasting Company Limited
Mr S H Lam	Representative of Reach Networks Hong Kong Limited
Mr Michael Lee	Representative of EU ICT Council in Hong Kong and Macau (guest speaker)
Ms P Y Ngai	Ad Personam
Mr Ken Sit	Representative of Local Certification Bodies as a group
Mr Johnny Siu	Representative of amateur radio societies as a group
Dr K F Tsang	Representative of the Institution of Engineering and Technology Hong Kong

Mr Y F Tsui	Representative of Independent Commission against Corruption
Mr Adam Wong	Representative of Hong Kong Telecommunications (HKT) Limited, PCCW-HKT Telephone Limited and Hong Kong
Mr Chris Wong	Representative of CSL Limited
Dr Simon Wong	Representative of Independent Commission against Corruption
Ms Vicky Wong	Representative of Asia Satellite Telecommunications Company Limited and External FTNS / Fixed Carrier / Unified Carrier (External Fixed Services) Licensees as a group
Mr L H Ting	Secretary (OFCA staff)

Absent with Apologies

Mr Kenneth Chan	Representative of services-based operators (MVNO and ETS operators only) as a group
Mr Brian Cheng	Representative of Consumer Council
Mr Johnny Cheung	Representative of New World Telecommunications Limited
Mr Eric Fan	Representative of local industry associations as a group
Mr Simon Heung	Representative of Digital Broadcasting Corporation Hong Kong Limited
Mr Wai Ho	Representative of Asia Television Limited
Mr S M Ko	Representative of Metro Broadcast Corporation Limited
Mr Francis Kwok	Representative of Radio Television Hong Kong
Mr Jimmy Lee	Representative of Telstra International HK Limited and Telstra International Limited
Mr K K Luk	Representative of HKC Network Limited
Mr S T Yiu	Representative of Phoenix U Radio Limited

Guest Speaker

Mr Simon Seow	Representative of Ericsson Limited
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In Attendance

Mr P H Ma	OFCA staff
Mr Warren Kwok	OFCA staff
Mr K K Wong	OFCA staff

Ms Annie Lo	OFCA staff
Mr C H Chan	OFCA staff
Mr Kent Yu	OFCA staff

Observer

Dr Bernard Fong	Representative of the Hong Kong Institution of Engineers
Mr Joe Guan	Representative of GSM Association
Mr W L Ho	Representative of amateur radio societies as a group
Mr Kelvin Hong	Representative of Hong Kong Broadband Network Limited
Mr Dennis Wong	Representative of Hong Kong Cable Television Limited

Agenda Item 1: Matters Arising from the Previous Meeting

Item 4 of the 4th SSAC Meeting (proposed new performance specification for multi-standard radio (MSR) base station)

1. The Secretary reported that OFCA had received no further comment on the proposed new specification HKCA 1065 after the last meeting. Accordingly, the new specification HKCA 1065 had been adopted and posted on web.

Item 5 of the 4th SSAC Meeting (proposed revision to HKCA 1039 performance specification)

2. The Secretary reported that OFCA had received no further comment on the proposed revised specification HKCA 1039 after the last meeting. Accordingly, the revised specification HKCA 1039 had been adopted and posted on web.

Item 7 of the 4th SSAC Meeting (revision to HKCA 1008 performance specification for low power radio microphones, including associated receiving equipment)

3. The Secretary reported that OFCA had received Members' comments after the last meeting, requesting consideration of other applicable regional/national standards for wireless microphones, together with the European harmonised standards originally proposed, for incorporation into HKCA 1008.

Having studied the technical requirements for wireless microphones as specified in FCC Code of Federal Regulations (CFR) Part 84.861(d) and (e), OFCA considered it appropriate for incorporation into HKCA 1008. OFCA would circulate the revised draft specification HKCA 1008 to Members for comment after this meeting. If no further comments from Members were received within two weeks, i.e. by 25 September 2013, proposal would be made for the revised specification HKCA 1008 to be adopted.

Agenda Item 2: Microwave Backhaul for Small Cell

4. Mr Simon Seow introduced the use of several frequency bands for the backhaul of outdoor small cells. These bands included the 5.8 GHz, 6-42 GHz, 60 GHz and 70/80 GHz bands. The typical deployment scenarios (line-of-sight (LOS) and non-line-of-sight (NLOS)) and licensing regime of some overseas administrations were introduced.

5. Mr Michael Lee introduced the channel arrangement of the 77-76 GHz / 81-86 GHz frequency bands (i.e. E-band) as specified in the ITU-R recommendation, and the regulatory regimes on the use of E-band as small cell backhaul in several countries. He pointed out that the US, the UK and Australia had allocated the E-band for backhaul applications. In general, these countries adopted a “light licensing” approach similar to the class licensing regime in Hong Kong. Mr Lee further introduced the proposed hybrid assignment approach in Sweden that involved block licensing through an auction and granting of individual licence on a hop-by-hop basis.

6. In response to Mr P H Ma, Mr Michael Lee said that the Swedish Post and Telecom Authority (PTS) proposed to grant block licences for using seven E-band frequency blocks through an auction process. The auction was scheduled to be conducted in end 2013. However, the Swedish mobile operators preferred the granting of individual hop-by-hop licences to allow more flexible use of the E-band frequencies. The issue was still under discussion in Sweden.

7. Mr Adam Wong opined that, in addition to allocating the E-band spectrum for backhaul applications, OFCA should coordinate with various

Government departments to formulate a more efficient application procedure for the use of government or non-government sites for setting up small cells with E-band backhaul. The Chairman said that OFCA had implemented the One-stop Application Procedure since 2009, which streamlined the application procedure for roof-top and indoor mobile base stations. For the use of other government facilities such as lamp posts, coordination with other government departments (e.g. Transport Department) would be required accordingly. [*Post-meeting note offered by Mr Adam Wong: One-stop Application Procedure requires operators to meet the requirements of OFCA's non-ionising radiation (NIR), as well as other requirements of Lands Department, Town Planning Department and Building Department. From the perspective of Building Department, operators shall either follow the requirements of Minor Works or institute a full building plan submission. Any installation protruding from the external building wall or on the cantilever structure is excluded from Minor Works Regime, and the small cells with E-band backhaul equipment installation may fall in this category, implying that formal submission to Building Department will be required in every case.*]

8. The Chairman asked whether in other countries EMC analysis would first be conducted before the administrations granted approval to the operators for using the E-band frequencies. Mr Michael Lee confirmed EMC analysis was conducted by the overseas telecommunications administrations. In the US, EMC analysis could be conducted online based on information on a central database.

9. The Chairman welcomed comments from Members regarding the allocation of E-band for backhaul applications and the concerned licensing regime.

Agenda Item 3: World Radiocommunication Conference 2015 (SSAC Paper 11/2013)

10. Ms Annie Lo introduced SSAC Paper 11/2013 that gave an overview of the World Radiocommunication Conference 2015 (WRC-15), including its agenda items and the corresponding positions of the Asia Pacific Telecommunity and some international organisations, such as International Civil Aviation Organisation (ICAO), for which Civil Aviation Department had rendered support. She also briefed Members on three agenda items that were considered relatively significant

from the perspective of OFCA.

11. Ms Vicky Wong said that some WRC-15 agenda items, being items 1.5, 1.6, 1.8, 7 and 9.1.2, were related to satellite service. She considered these items as significant ones in the Hong Kong position. The Chairman said that views of the satellite industry were welcomed and would be duly considered when formulating the Hong Kong position.

12. The Chairman said that regarding WRC-15 agenda item 1.1, the mobile operators might be interested to note that the ITU-R Joint Task Group meeting of October 2013 might identify some candidate IMT bands. Mr Adam Wong said that concerning WRC-15 agenda item 1.2, the mobile operators would like to explore the possibility of using the frequency band 694-790 MHz for mobile service. The Chairman pointed out that WRC-15 agenda item 1.2 was relevant to Region 1 only. The deployment of such band for mobile or broadcasting applications was a local issue not of particular relevance to WRC. [***Post-meeting note offered by Mr Adam Wong: Joint letter from CTOs of most MNOs has been sent to OFCA requesting it to publish the roadmap with industry participation for the release of digital dividend spectrum band 686-806 MHz in Hong Kong.***]

13. Regarding WRC-15 agenda item 1.4, Mr Johnny Siu said that the amateur radio societies supported the proposed allocation of the 5 MHz band for amateur service. Mr Johnny Siu added that as the 5 MHz band had a transmission range of up to a few hundred kilometres, coordination with the Mainland was necessary. Mr P H Ma said that OFCA would discuss with the Ministry of Industry and Information Technology (MIIT) when formulating the Hong Kong Positions, taking into account the views of the amateur societies.

14. The Chairman welcomed comments from Members on the agenda items of WRC-15 within two weeks, i.e. any comment should be submitted to the Secretary by 25 September 2013.

Agenda Item 4: Overview of 60 GHz Multiple Gigabit Wireless Systems (SSAC Paper 12/2013)

15. Mr C H Chan introduced SSAC Paper 12/2013 that gave an overview on the overseas development of Multiple Gigabit Wireless Systems (MGWS) operating in the 60 GHz band.

16. The Chairman said that if 60 GHz MGWS products, like Wi-Fi products, were commonly available on the global market for public use, there would also be a demand for its similar use in Hong Kong. To allow the use of 60 GHz MGWS products in Hong Kong, the band planning and regulatory framework (e.g. class licence or exemption from licensing) would need to be critically considered. He welcomed comments from Members on these issues.

17. Mr Michael Lee said that the applications of 60 GHz MGWS were similar to the Wi-Fi applications in the ISM bands. He suggested that consideration be given to designating the 60 GHz band for ISM applications. Mr L H Ting said that licence might still be required for the use of ISM equipment, and the class licence approach might be appropriate if 60 GHz MGWS was bundled with Wi-Fi equipment.

18. The Chairman invited comments from Members on issues concerning 60 GHz MGWS within two weeks, i.e. any comment should be submitted to the Secretary by 25 September 2013.

Agenda Item 5: EMC Requirements for Electrical and Electronic Apparatus (SSAC Paper 13/2013)

19. Mr Warren Kwok introduced SSAC Paper 13/2013 that gave an overview of electromagnetic compatibility (EMC) requirements for electrical and electronic apparatus in Hong Kong, drawing reference to the Telecommunications (Control of Interference) Regulation (Cap 106B), and the related CISPR standards.

20. Mr Cyrus Lai said that there were incidents of LED panels causing interference to mobile base stations. He considered that the current control in Cap 106B was not adequate to protect the telecommunications services. The Chairman said that Cap 106B made reference to the CISPR standards that were international standards commonly adopted worldwide. The CISPR standards were regularly

updated and Cap 106B was also being amended with a view to keeping our regulatory requirements closely in line with the international standards development. The Chairman pointed out that compliance with the CISPR standard was a common requirement for market entry of any product internationally. Having said that, he welcomed comments of the industry on this subject.

21. Dr Lawrence Cheung said that an LED panel might consist of large number of LED lighting units. Testing of a single lighting unit and of the panel as a whole might give very different electromagnetic radiation levels. The Chairman said that, in order to assess the total level of interference signals, the LED panel was tested as a whole in accordance with the relevant CISPR standard. In response to Dr Lawrence Cheung's enquiry about the EMC requirement for hybrid electric vehicles, Mr Warren Kwok said that the relevant CISPR standard covered the EMC requirements of electric vehicles, including vehicles with hybrid propulsion systems.

22. The Chairman welcomed comments from Members on the EMC requirements of electrical and electronic apparatus within two weeks, i.e. any comment should be submitted to the Secretary by 25 September 2013.

Agenda Item 6: Proposed New Performance Specification for Ground-based Equipment for Voice and Data Communications for the VHF Aeronautical Mobile Service (SSAC Paper 14/2013)

23. Mr Warren Kwok introduced SSAC Paper 14/2013 that proposed the adoption of two new technical standards for radio equipment used in air-ground communications between aircraft and ground stations, HKCA 1066 and HKCA 1067.

24. Ms Angel Kwan thanked OFCA for consulting CAD on the draft technical equipment standards relating to VHF aeronautical mobile service. She welcomed the inclusion of the relevant ICAO requirements in the proposed new HKCA specifications and supported the OFCA's draft technical standards HKCA 1066 and HKCA 1067.

25. The Chairman invited comments from Members on the new specifications HKCA 1066 and HKCA 1067 within two weeks, i.e. any comment should be submitted to the Secretary by 25 September 2013.

Agenda Item 7: Any Other Business

26. There being no other business, the meeting adjourned at 5:15 p.m.

**Office of the Communications Authority
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