

RADIO SPECTRUM AND TECHNICAL STANDARDS
ADVISORY COMMITTEE

Minutes of the Sixth Meeting
held at 2:30 p.m., Thursday, 16 January 2014
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 Raymond Chan	Representative of Hong Kong Cable Television 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 Eric Fan	Representative of local industry associations as a group
Mr Ben Ho	Representative of Local Certification Bodies as a group
Mr H C Hung	Representative of Reach Networks Hong Kong 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 Jimmy Lee	Representative of Telstra International HK Limited and Telstra International Limited
Mr Michael Lee	Representative of EU ICT Council in Hong Kong and Macau
Mr Kenneth Ng	Representative of New World Telecommunications Limited
Ms P Y Ngai	Ad Personam
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 Leslie 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 S T Yiu	Representative of Phoenix U Radio Limited
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 Carlson Chu	Representative of PCCW Media Limited
Mr Simon Heung	Representative of Digital Broadcasting Corporation Hong Kong Limited
Mr Clifford Ho	Representative of Towngas Telecommunications Fixed Network 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 Paul Lam	Representative of Hong Kong Commercial Broadcasting Company Limited
Mr K K Luk	Representative of HKC Network Limited

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
Mr Eric Fung	OFCA staff

Observer

Mr Y H Chan	Representative of Asia Satellite Telecommunications Company Limited
Mr W L Ho	Representative of amateur radio societies as a group
Mr Kelvin Hong	Representative of Hong Kong Broadband Network Limited
Dr Victor Hung	Representative of Consumer Council
Mr Kan Y T Kan	Representative of the Hong Kong Police Force
Mr Peng Li	Representative of APT Satellite

Agenda Item 1: Matters Arising from the Previous Meeting

Item 1 of the 5th SSAC Meeting (matters arising - revision to HKCA 1008 performance specification for low power radio microphones, including associated receiving equipment)

1. The Secretary reported that OFCA had received no further comment on the proposed revised specification HKCA 1008, which was issued to Members by circulation after the last meeting. Accordingly, the specification HKCA 1008 had been adopted and posted on OFCA's website.

Item 6 of the 5th SSAC Meeting (proposed new performance specifications for ground-based equipment for voice and data communications for the VHF aeronautical mobile service)

2. The Secretary reported that OFCA had received no further comment on the proposed new specifications HKCA 1066 and HKCA 1067 after the last meeting. Accordingly, the specifications HKCA 1066 and HKCA 1067 had been adopted and posted on OFCA's website.

Agenda Item 2: WRC-15 Agenda Item on Suitable Frequency Ranges for IMT services (SSAC Paper 1/2014)

3. Ms Annie Lo introduced SSAC Paper 1/2014 that introduced the suitable frequency ranges for IMT services in relation to agenda item 1.1 of the World Radiocommunication Conference 2015 (WRC-15).

4. Mr Adam Wong asked whether information regarding IMT frequencies deployed/to be deployed in Mainland was available. The Secretary

agreed that the relevant information would be provided after meeting.

[Post-meeting note: Members may refer to the notices published by the Ministry of Industry and Information Technology (MIIT) available at the links below for information about the Mainland IMT frequencies –

*<http://www.miit.gov.cn/n11293472/n11293832/n11293907/n11368223/14857991.html>
<http://wgj.miit.gov.cn/n11293472/n11295310/n11297382/11977806.html>]*

5. The Chairman said that this paper aimed to update Members on the development of ITU studies regarding spectrum identified for IMT services before WRC-15, and invite Member views this subject. OFCA would seriously consider views of Members in formulating the Hong Kong position, and in liaison with Mainland authorities on WRC issues.

6. Mr Michael Lee said that development of IMT equipment operating in the 1.4 GHz band and the 3 GHz band (i.e. C-band) was relatively mature. IMT operation in the 1.4 GHz band would be in FDD mode. The 1.4 GHz band might also be used for supplementary downlink applications on top of the existing IMT downlink bands (e.g. the 1.8 GHz band or the 2.6 GHz band) to increase the downlink capacity. Mr P H Ma said that the suitability of the 3.3 – 3.4 GHz and 3.6 – 4.2 GHz bands for IMT were still under study in the ITU Joint Task Group 4-5-6-7. He asked for members' view on potential equipment support at these bands. Mr Michael Lee said that development of IMT equipment was relatively mature in a portion of the C-band (3.4 – 3.6 GHz), with anticipated strengthened equipment support for other portions of the C-band (3.3 – 3.4 GHz and 3.6 – 4.2 GHz) in the coming three years. Mr Adam Wong said that a portion of the 3.4 – 3.6 GHz band had been opened up for IMT operation in TDD mode in some countries and equipment was available. He opined that allocation of C-band spectrum for IMT should be considered taking into account the compatibility of IMT service with C-band fixed-satellite service (FSS).

[Post-meeting note: Mr Adam Wong advised Members that according to the report of the Global mobile Suppliers Association (GSA), 15 models of TDD LTE devices operating in bands 42 and 43 (i.e. the 3500 MHz band) are available (http://www.gsacom.com/news/gsa_398.php).]

7. The Chairman pointed out that the 3.6 – 4.2 GHz band was also allocated for FSS downlink and compatibility between FSS and mobile service had to be considered. Ms Vicky Wong said that according to the ITU studies, including those conducted by the JTG, outdoor IMT operation was not

compatible with FSS operation in the downlink, and to date the JTG still maintained this conclusion. She pointed out that the 3.6 – 4.2 GHz band was being heavily used for FSS downlink in the Asia Pacific region, including Hong Kong. Allocation of spectrum in this band for IMT would adversely affect FSS. Ms Vicky Wong observed that at ITU meetings China had expressed that it was not in favour of identifying the 3.6 – 4.2 GHz band as an IMT band. Mr H C Hung said that a series of compatibility studies conducted in 2007 had concluded that FSS and mobile service in the 3.4 – 4.2 GHz band could not co-exist. Mr Y H Chan said that, in Region 3, 3.6 – 4.2 GHz band was still being heavily used for FSS rather than for IMT services. For the 4.5 – 4.8 GHz band, Mr Y H Chan pointed out that this band was also the planned FSS band under the ITU Radio Regulations.

8. Ms Angel Kwan said that in line with the position of the International Civil Aviation Organization (ICAO), CAD opposed any new allocation in frequency bands which had been allocated to services related to aeronautical safety, including the aeronautical radionavigation service, for IMT. She asked that ICAO's position, which had been submitted to OFCA, be taken into account when formulating the Hong Kong position.

9. The Chairman welcomed further comments from Members on the paper within two weeks, i.e. by 30 January 2014.

Agenda Item 3: Proposed Spectrum Release Plan for 2014-16 (SSAC Paper 2/2014)

10. Mr C H Chan introduced SSAC Paper 2/2014 that proposed the updates on the Spectrum Release Plan ("SRP") for its coming release covering the period 2014-2016.

11. Mr Leslie Wong asked whether there was any update on the 700 MHz band. The Chairman said that the 700 MHz band was being used for television broadcasting. Spectrum in this band might only be available after the Analogue Switch-Off (ASO).¹ The Chairman pointed out further that coordination with the Mainland was essential because there were many high power TV

¹ The Government announced on 22 June 2011 that the working target for switching off analogue television services (analogue switch-off or ASO) would be deferred from end 2012 to end 2015 (<http://www.cedb.gov.hk/ctb/eng/press/2011/pr22062011.htm>).

transposers in operation in the Mainland. For the time being, the 700 MHz band was not included in the list of available bands to be released.

12. The Chairman welcomed comments from Members on the proposed updates on the SRP within two weeks, i.e. by 30 January 2014.

Agenda Item 4: Proposed Use of E-band (71-76 GHz/81-86 GHz) for Digital Fixed Links (SSAC Paper 3/2014)

13. Mr L H Ting introduced SSAC Paper 3/2014 that introduced the proposed use of the E-band, i.e. the 71-76 GHz / 81-86 GHz bands, for digital fixed links in Hong Kong.

14. The Chairman welcomed views from Members to facilitate OFCA's consideration to open up the E-band for digital fixed links and to develop the relevant regulatory framework. In particular he would wish to know the views of the industry on aspects like industry demand, sharing and coordination arrangements, licensing, etc.

15. The Secretary said that in the UK, the operators followed a registration scheme for the use of E-band channels. Assignments registered by an operator at an earlier date had a higher priority in respect of interference protection. Yet there might be a problem that operators might stock up unused spectrum. In Sweden, operators preferred exclusive use of the E-band spectrum to shared use. Mr Michael Lee agreed to provide updated information about the assignment status of E-band in Sweden.

[Post-meeting note: Mr Michael Lee advised Members that they may refer to the statement <http://www.pts.se/sv/Bransch/Radio/Auktioner/Ansokan-70-och-80-GHz--banden> published by the Swedish Post and Telecom Authority (PTS) on 12 December 2013. Basically, the Swedish industry was not in favour of assigning the 70/80GHz spectrum through auction.]

16. The Chairman invited comments from Members on the proposed use of the E-band for digital fixed links within two weeks, i.e. by 30 January 2014.

Agenda Item 5: Performance Specification for Digital Fixed Link Equipment Operating in the 11 GHz Band (SSAC Paper 4/2014)

17. Mr Warren Kwok introduced SSAC Paper 4/2014 that proposed the adoption of a new technical standard, HKCA 1068, for digital fixed link equipment operating in the 11 GHz band.

18. The Chairman said that publication of the specification would facilitate the certification of 11 GHz fixed link equipment, as certification of such equipment in the past was based on type-acceptance arrangement without any open specification published.

19. The Chairman invited comments from Members on the new specification HKCA 1068 within two weeks, i.e. by 30 January 2014.

Agenda Item 6: Performance Specification for On-site Radio Paging Equipment (SSAC Paper 5/2014)

20. Mr Kent Yu introduced SSAC Paper 5/2014 that proposed the adoption of a new technical standard, HKCA 1069, for on-site radio paging equipment.

21. The Chairman said that publication of the specification would facilitate the certification of on-site radio paging equipment, as certification of such equipment in the past also followed the type-acceptance arrangement mentioned above. Since there is a coming trend of equipment replacement for this type of equipment, it is timely to publish the proposed HKCA specification.

22. The Chairman invited comments from Members on the new specification HKCA 1069 within two weeks, i.e. by 30 January 2014.

Agenda Item 7: Revisions to Standardization Guides HKCA 3201, HKCA 3202 and HKCA 3203 (SSAC Paper 6/2014)

23. Mr Warren Kwok introduced SSAC Paper 6/2014 that proposed the adoption of the following revised Standardization Guides –

- (a) HKCA 3201 - General Procedure for Setting Telecommunications Standards and Related Policies;

- (b) HKCA 3202 - Classification of Standards Related to Public Telecommunications Services; and
- (c) HKCA 3203 - General Principles and Scope of Standardisation for Public Telecommunications Services

24. The Chairman said that consequential amendments to these standardization guides were required upon the establishment of CA/OFCA and the SSAC.

25. The Chairman invited comments from Members on the revised Standardization Guides HKCA 3201, HKCA 3202 and HKCA 3203 within two weeks, i.e. by 30 January 2014.

Agenda Item 8: Any Other Business

26. There being no other business, the meeting adjourned at 3:45 p.m.

**Office of the Communications Authority
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