

Statement of the Communications Authority

Creation of a Class Licence for Regulating the Use of and Trade in 60 GHz Devices under Section 7B(2) of the Telecommunications Ordinance (Chapter 106)

6 January 2017

INTRODUCTION

On 5 August 2016, the Communications Authority (“CA”) published a consultation paper entitled “Creation of a Class Licence for Regulating the Use of and Trade in 60 GHz Devices under Section 7B(2) of the Telecommunications Ordinance (Chapter 106)” (the “Consultation Paper”)¹. The CA proposed in the Consultation Paper to create a class licence to regulate the use of and trade in radiocommunications equipment operating in the 57 – 66 GHz band (“60 GHz Devices”) in Hong Kong, in light of recent deployment of 57 – 66 GHz band (“the 60 GHz band”) for short-range applications in other jurisdictions. The CA invited interested parties to comment on its proposal. A Gazette notice was published on the same day announcing the issue of the Consultation Paper. One submission² was received from the Wi-Fi Alliance at the close of the consultation period on 2 September 2016.

RELEVANT STATUTORY PROVISIONS

2. Pursuant to section 7B(2) of the Telecommunications Ordinance (Cap. 106) (“TO”), the CA may create a class licence for telecommunications networks, systems, installations or services. Pursuant to section 7B(6) of the TO, the CA shall publish a class licence in the Gazette specifying –

- (a) the telecommunications networks, systems, installations or services that eligible persons may supply or use;
- (b) the conditions of the class licence; and

¹ The Consultation Paper is available at:
http://www.coms-auth.hk/filemanager/en/content_711/cp20160805_e.pdf

² The submission is available at:
http://www.coms-auth.hk/en/policies_regulations/consultations/completed/index_id_376.html

- (c) the qualification that a person is required to possess before he is eligible to be licensed under the class licence.

THE RECEIVED SUBMISSION AND CA'S RESPONSE

The Submission Received

3. The Wi-Fi Alliance supported the CA's proposal of creating a class licence to cover the use of and trade in 60 GHz Devices. As regards the power limit, the Wi-Fi Alliance considered that the maximum power of 40 dBm as specified in the proposed class licence (Appendix 1 to the Consultation Paper) and the draft specification HKCA 1074 entitled "Performance Specification for Radiocommunications Apparatus Operating in the 60 GHz Band" (Appendix 2 to the Consultation Paper) was the appropriate limit for indoor use only. It pointed out that the rules of the Federal Communications Commission ("FCC") of the United States specified a power limit of 82 dBm for fixed point-to-point transmitters located outdoors. In addition, the FCC had adopted rules to extend the operating frequency band from 57 – 64 GHz to 57 – 71 GHz. Drawing reference from the FCC rules, the Wi-Fi Alliance requested the CA to consider increasing the power limit to 82 dBm for certain outdoor applications to facilitate longer-distance communications in the 60 GHz band, such as mobile network backhaul, and to consider extending the operating frequency band of 60 GHz Devices from 57 – 66 GHz to 57 – 71 GHz.

4. The Wi-Fi Alliance also proposed that the CA should permit voluntary certification of 60 GHz Devices in order to lay the foundation for a new market to flourish as the Wi-Fi device market had.

CA's Response

5. As specified in condition 4.3 of the proposed class licence, the licensee shall not use the 60 GHz Device to provide a public telecommunications service. The power level of 82 dBm as proposed by the Wi-Fi Alliance is however essential for mobile network backhaul applications relating to the provision of public telecommunications services. Moreover, such proposed high power level is used to support long distance outdoor communications and is not suitable for use on an unprotected and uncoordinated basis in the densely populated environment of Hong Kong. For these reasons, the CA considers that Wi-Fi Alliance's proposal for increasing the power limit to be imposed under the proposed class licence is not justified and cannot be acceded to.

6. As regards the operating frequency band, the prevailing industry standards covering consumer-type 60 GHz Devices are the WiGig³ and the WirelessHD⁴ standards as explained in the Consultation Paper. Both standards specify an operating frequency band of 57 – 66 GHz intended primarily for consumer electronic applications. In the United States, with the newly adopted FCC rules, a wider frequency band would facilitate the deployment of point-to-point links for mobile network backhaul. However, such applications which pertain to the provision of public telecommunications services are not covered by the proposed class licence. In view of the above considerations, the CA considers that there is no need to extend the operating frequency band and Wi-Fi Alliance's proposal to extend the operating frequency band is not justified and cannot be acceded to.

7. Regarding the certification requirement, as discussed at the meeting of the Radio Spectrum and Technical Standards Advisory Committee on 2 June 2016, compliance to the draft specification HKCA 1074 entitled "Proposed Performance Specification for Radiocommunications Apparatus Operating in the 60 GHz Band"⁵ would be classified under the Voluntary Certification Scheme of the Hong Kong Telecommunications Equipment Evaluation and Certification Scheme⁶. For the avoidance of doubt, suppliers, manufacturers and dealers shall ensure that their equipment comply with the specification HKCA 1074 irrespective of whether they would apply for the voluntary certification.

THE CA'S DECISION

8. In light of the outcome of the consultation, and in anticipation of the growing supply of 60 GHz Devices from overseas vendors, the CA

³ WiGig is a standard developed by the former Wireless Gigabit Alliance (which was subsumed by the Wi-Fi Alliance in March 2013) serving to extend Wi-Fi capability to support multiple gigabit data rate applications.

⁴ WirelessHD is a standard owned by Silicon Image (a manufacturer of integrated electronic products based in the United States) for wireless transmission of high definition video content for consumer products.

⁵ The relevant SSAC Paper is available at:
http://www.ofca.gov.hk/filemanager/ofca/en/content_751/SSAC_Paper_5_2016.pdf

⁶ Under the Hong Kong Telecommunications Equipment Evaluation and Certification Scheme, prescribed certification bodies have been accredited to carry out certification of telecommunications equipment to confirm the compliance of such equipment with the relevant technical specifications prescribed by the CA, i.e. the HKCA specifications. Telecommunication equipment is classified under either the Voluntary Certification Scheme ("VCS") or the Compulsory Certification Scheme ("CCS"). Equipment falling under the VCS can be marketed or used without prior certification. Equipment falling under the CCS must be certified before it can be marketed or used.

considers that the creation of the proposed class licence would be beneficial to both the consumers and the industry in facilitating the use and trading of 60 GHz Devices in Hong Kong. On the basis of the above considerations, the CA decides to create the class licence as set out in Appendix 1 of the Consultation Paper with effect from the date of this statement.

9. To implement the CA's decision, the Office of the Communications Authority ("OFCA") has published the class licence for 60 GHz Devices in the Gazette in accordance with section 7B(6) of the TO and adopted the specification HKCA 1074 today. For public access, the class licence is available on the CA's website (<http://www.coms-auth.hk/en/licensing/telecommunications/class/index.html>) and the specification HKCA 1074 is available on OFCA's website (http://www.ofca.gov.hk/en/industry_focus/telecommunications/standards/hkca/radio_equipment_specifications/index.html).

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