RADIO SPECTRUM AND TECHNICAL STANDARDS ADVISORY COMMITTEE

Proposed Revision to HKCA 1081 Performance Specification for Radiocommunications Apparatus Operating in the 6 GHz Band for Wireless Local Area Network

Purpose

This paper proposes the adoption of the following revised HKCA specification:

HKCA 1081 Performance Specification for Issue 2 Radiocommunications Apparatus Operating in the 6 GHz Band for Wireless Local Area Network

Background

- 2. The Class Licence for 6 GHz Device ("Class Licence")¹ issued by the Communications Authority ("CA") in April 2022 stipulates the terms and conditions under which a person is licensed to establish, maintain, possess, use, deal in the course of trade or business in and demonstrate, with a view to sale in the course of trade or business, of a radio station operating in the 5.945 6.425 GHz band for Wireless Local Area Network ("WLAN") ("6 GHz Device"). The Class Licence stipulates that 6 GHz Device shall comply with the relevant regulations, including the technical and evaluation requirements as specified in HKCA 1081.
- 3. HKCA 1081 Issue 1² makes reference to HKCA 2001. Following the amendment of section 32D of the Telecommunications Ordinance (Cap. 106) in June 2022 to focus on regulating the telecommunications functions of equipment and devices and leaving other functions of such equipment and devices (e.g. electrical and other safety specifications and standards) to be regulated by other legislation, relevant electrical safety requirements in HKCA 1081 should

¹ The Class Licence for 6 GHz Device is available at:

https://www.coms-auth.hk/filemanager/common/licensing/Class Licence for 6 GHz Device (ENG).pdf

² HKCA 1081 Issue 1 is available at: https://www.ofca.gov.hk/filemanager/ofca/en/content 401/hkca1081.pdf

be removed accordingly.

- 4. HKCA 1084 sets out the radiation safety requirements for wireless devices operating in close proximity (up to 20 cm) to human, such as 6 GHz Devices on mobile phones.
- 5. The Class Licence stipulates the technical criteria for 6 GHz Device, including the frequency band of 5925 6425 MHz, among others. In accordance with the CA statement on the Class Licence issued on 29 April 2022³, the 5925 5945 MHz band is indeed reserved as a guard band. For the sake of clarity, it is considered that this guard band should be indicated in the revised HKCA1081.
- 6. HKCA 1081 makes reference to ETSI EN 303 687 for the technical and evaluation requirements, and ETSI EN 303 687 defines two categories of 6 GHz Device, namely Low Power Indoor ("LPI") and Very Low Power ("VLP") with respective technical requirements imposed. For example, an LPI access point is not battery powered while a VLP device is portable, etc. It is proposed to clarify in the revised HKCA 1081 that a 6 GHz Device shall operate under the equipment categories as defined in ETSI EN 303 687.

Proposed Revision to HKCA 1081

- 7. In view of the above considerations, it is proposed that HKCA 1081 be revised as follows
 - (a) remove the electrical safety requirements;
 - (b) clarify that the 5.925 5.945 GHz band is reserved as a guard band, and update the operating frequency band of 6 GHz Devices to 5.945 6.425 GHz accordingly; and
 - (c) clarify that 6 GHz Devices shall operate under the equipment categories (LPI and VLP) as defined in ETSI EN 303 687.

The proposed revised HKCA 1081 is attached at **Annex**.

Certification Requirement

8. 6 GHz WLAN access point device is classified under the

The CA statement on the Class Licence is available at: https://www.coms-auth.hk/filemanager/statement/en/upload/591/ca_statement_6GHzDevices.pdf

Compulsory Certification Scheme of the Hong Kong Telecommunications Equipment Evaluation and Certification ("HKTEC") Scheme. Such device must be certified before it can be used in Hong Kong. 6 GHz WLAN client device is classified under the Voluntary Certification Scheme of the HKTEC Scheme. Certification of 6 GHz WLAN client device is on a voluntary basis, but manufacturers, suppliers and dealers must ensure that their devices comply with the requirements as specified in HKCA 1081 even if they do not apply for certification.

World Trade Organisation ("WTO") Notification

9. As the proposed revised HKCA 1081 is based on open standards, notification to the WTO is not required.

Recommendation

10. It is recommended that the proposed revised HKCA 1081 be submitted to CA for adoption.

Advice Sought

11. Members are invited to offer comments on the recommendation above.

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