RADIO SPECTRUM AND TECHNICAL STANDARDS ADVISORY COMMITTEE

Proposed technical standard for digital fixed link equipment operating in the 26 GHz frequency band

Purpose

This paper proposes the adoption of technical standard "HKCA 1063 Issue 1 : Performance specification for digital fixed link equipment operating in the 26 GHz frequency band".

Background

2. At the first Radio Spectrum and Technical Standards Advisory committee (SSAC) meeting held in June 2012, OFCA proposed a channelling plan for fixed links operating in the 24.5 - 26.5 GHz band (the "26 GHz frequency band"). The proposed channelling plan was subsequently approved by the Communications Authority in August 2012. To ensure interference-free operation, an appropriate technical standard for fixed link equipment operating in this frequency band needs to be adopted.

Proposed HKCA 1063 Issue 1

3. ETSI¹ has published ETSI EN 302 $217-2-2^2$ which covers the technical requirements for digital fixed link equipment operating at various frequency bands, including the 26 GHz frequency band. Having considered the technical requirements and test procedures in the ETSI standard, it is recommended that ETSI EN 302 217-2-2 be adopted in the proposed HKCA 1063 Issue 1.

¹ European Telecommunications Standards Institute (ETSI) is an independent, non-profit, standardization organization in the telecommunications industry (equipment makers and network operators).

² ETSI EN 302 217-2-2 entitles "Fixed Radio Systems; Characteristics and requirements for point-to-point equipment and antennas; Part 2-2: Digital systems operating in frequency bands where frequency co-ordination is applied; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive"

WTO notification

4. As the proposed HKCA 1063 Issue 1 is based on open standards, notification to the World Trade Organisation (WTO) is not necessary.

Recommendation

5. It is recommended that HKCA 1063 Issue 1 attached in the Annex be adopted by the CA.

Advice sought

6. Members are invited to give comment on the recommendation above.

Office of the Communications Authority December 2012

Annex

HKCA 1063 ISSUE 1 [Date]

[DRAFT]

PERFORMANCE SPECIFICATION FOR

DIGITAL FIXED LINK EQUIPMENT

OPERATING IN THE

26 GHz FREQUENCY BAND



FOREWORD

- 1. This specification is prescribed under section 32D of the Telecommunications Ordinance (Cap 106) ("the Ordinance") to set out the technical and evaluation requirements for fixed link equipment operating in frequency range 24.5 GHz – 26.5 GHz (the 26 GHz frequency band). Radiocommunications apparatus falling into the scope of this specification shall meet the stipulated requirements.
- 2. Under the Ordinance, the possession or use of any radiocommunications apparatus or any apparatus emitting radio frequency energy must be covered by an appropriate licence issued by the Communications Authority (CA) with the exception of those specifically exempted from licensing under the Ordinance, such as those covered by the Telecommunications (Telecommunications Apparatus) (Exemption from Licensing) Order.
- 3. At present, the Office of the Communications Authority (OFCA) operates a Hong Kong Telecommunications Equipment Evaluation and Certification (HKTEC) Scheme. Details of the HKTEC Scheme can be found in the information note OFCA I 421. Under the Scheme, suppliers or manufacturers of the radiocommunications apparatus may apply for certification of their apparatus against this specification. The application procedures for certification of radiocommunications apparatus can be found in the information note OFCA I 401. A prescribed label may be affixed to the equipment which has been certified. Details of the labelling arrangement can be found in the Standardisation Guide HKCA 3211.
- 4. The CA may amend any part of this specification as and when it deems necessary.
- 5. In case of doubt about the interpretation of this specification, the methods of carrying out the test and the validity of statements made by the equipment manufacturers or suppliers about the equipment, the decision of the CA shall be final.
- 6. The HKCA specifications and information notes issued by the CA can be downloaded from OFCA's website at http://www.ofca.gov.hk. Enquiries about this specification may be directed to:

Senior Telecommunications Engineer, Standards Section Office of the Communications Authority, 29/F Wu Chung House, 213 Queen's Road East, Wanchai, Hong Kong.

Fax : +852 2838 5004 Email : standards@ofca.gov.hk

CONTENTS

- 1 Scope of specification
- 2 General characteristics
- 3 Technical requirements
- 4 Test methods
- 5 Reference

1. SCOPE OF SPECIFICATION

This Specification specifies the minimum performance requirements for terrestrial digital fixed link equipment operating in the 26 GHz frequency band.

2. GENERAL CHARACTERISTICS

2.1 Frequency Range

The equipment shall operate in the frequency range 24.5 GHz – 26.5 GHz.

2. 2 Channel Arrangements

The equipment shall operate in accordance with the channel arrangements specified in ITU-R Recommendation F.748-4 "F.748 : Radio-frequency arrangements for systems of the fixed service operating in the 25, 26 and 28 GHz bands".

3. TECHNICAL REQUIREMENTS

The technical requirements of the equipment shall be in accordance with ETSI EN 302 217-2-2 "Fixed Radio Systems; Characteristics and requirements for point-to-point equipment and antennas; Part 2-2: Digital systems operating in frequency bands where frequency co-ordination is applied; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive".

4. TEST METHODS

Compliance of the equipment with the technical requirements shall be evaluated in accordance with the procedures specified in the respective standards published by ETSI as given in clause 3.

5. **REFERENCE**

- (a) ETSI EN 302 217-2-2 "Fixed Radio Systems; Characteristics and requirements for point-to-point equipment and antennas; Part 2-2: Digital systems operating in frequency bands where frequency co-ordination is applied; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive"
 - (b) ITU-R Recommendation F.748-4 "F.748 : Radio-frequency arrangements for systems of the fixed service operating in the 25, 26 and 28 GHz bands"

- END -