

HKCA 1077  
ISSUE 1  
NOVEMBER 2016

**PERFORMANCE SPECIFICATION FOR  
MOBILE COMMUNICATIONS  
ONBOARD AIRCRAFT SYSTEM**



## **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 mobile communications onboard aircraft (MCA) system. 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](mailto:standards@ofca.gov.hk)

## AMENDMENT TABLE

Item	Issue No.	Paragraph	Description
1.	Issue 1 November 2016	All	First Release

## **CONTENT**

1. Scope of Specification
2. Operating Frequencies
3. Technical Requirements
4. Evaluation Requirements
5. Reference

## **1. SCOPE OF SPECIFICATION**

This specification sets out the minimum performance requirements for mobile communications onboard aircraft (MCA) system which comprises Onboard Base Transceiver Station (OBTS) and Network Control Unit (NCU) (hereafter collectively referred to as “the equipment”).

## **2. OPERATING FREQUENCIES**

- 2.1 The equipment shall comply with the frequency bands specified in EN 302 480 V2.1.1 or later version, titled “Mobile Communication On Board Aircraft (MCOBA) systems; Harmonised Standard covering the essential requirements of article 3.2 of the Radio Equipment Directive 2014/53/EU” published by the European Telecommunications Standards Institute (ETSI).

## **3. TECHNICAL REQUIREMENTS**

- 3.1 The equipment shall meet the technical requirements as specified in the standard EN 302 480 V2.1.1, or later version.
- 3.2 For the OBTS, it shall also meet the technical requirements of HKCA 1020, HKCA 1043 or HKCA 1056 issued by the Communications Authority, in accordance with the radio interface standard (i.e. GSM, UTRA FDD or E-UTRA FDD) of the OBTS.

## **4. EVALUATION REQUIREMENTS**

The equipment shall comply with the operating frequencies and the technical requirements as specified in clauses 2 and 3 respectively. Compliance of the equipment with the technical requirements specified in clause 3.1 shall be evaluated in accordance with the procedures specified in EN 302 480 V2.1.1 or later version published by ETSI. Compliance of the OBTS with the technical requirements shall be evaluated in accordance with HKCA 1020, HKCA 1043 or HKCA 1056 issued by the Communications Authority.

## **5. REFERENCE**

EN 302 480 V2.1.1 or later version titled as “Mobile Communication On Board Aircraft (MCOBA) systems; Harmonised Standard covering the essential requirements of article 3.2 of the Radio Equipment Directive 2014/53/EU”

HKCA 1020 “Performance Specification of the Base Station System (BSS) and Repeater Equipment for Use in the Public Mobile Communications Service Employing Global System for Mobile Communications (GSM) or

in the Personal Communications Service (PCS)”

HKCA 1043 “Performance Specification for Base Station and Repeater Equipment for Use in the Third Generation (3G) Mobile Communications Services Employing CDMA Direct Spread (UTRA FDD)”

HKCA 1056 “Performance Specification for Base Station and Repeater Equipment for Use in Public Mobile Communications Services based on Evolved Universal Terrestrial Radio Access (E-UTRA) Frequency Division Duplex (FDD)”

**- END -**