

HKCA 1065  
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**PERFORMANCE SPECIFICATION  
FOR MULTI-STANDARD RADIO (MSR)  
BASE STATION**



## 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 Evolved Universal Terrestrial Radio Access (E-UTRA), Universal Terrestrial Radio Access (UTRA) and Global System for Mobile communications (GSM) Multi-Standard Radio (MSR) Base Station (BS). It is a condition of the licence for public mobile radiocommunications services that radio 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 shall 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.
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 –

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## AMENDMENT TABLE

Item	Issue No.	Paragraph	Description
1.	Issue 1 June 2013	All	First Release
2.	Issue 2 November 2015	Paragraph 2	Addition of the unpaired band in 2300 – 2390 MHz for MSR base station.
3.	Issue 3 September 2017	Paragraph 3	Modified clause 3.2 on the requirement for MSR base station capable of being configured for operation at a single standard (i.e. E-UTRA, UTRA or GSM).

## **CONTENT**

1. SCOPE
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## 1. SCOPE

This specification sets out the minimum performance requirements for Evolved Universal Terrestrial Radio Access (E-UTRA), Universal Terrestrial Radio Access (UTRA) and Global System for Mobile communications (GSM) Multi-Standard Radio (MSR) Base Station (BS) Equipment (hereafter referred to as “the equipment”).

## 2. OPERATING FREQUENCIES

The frequency bands for the equipment are as follows –

<b>Paired Bands</b>	<b>BS Receive</b>	<b>BS Transmit</b>
	880 - 915 MHz	925 - 960 MHz
	1710 - 1785 MHz	1805 - 1880 MHz
	1920 - 1980 MHz	2110 - 2170 MHz
	2500 – 2570 MHz	2620 – 2690 MHz

  

<b>Unpaired Band</b>	<b>BS Receive and Transmit</b>
	2300 – 2390 MHz

## 3. TECHNICAL REQUIREMENTS

3.1 The equipment shall meet the technical requirements specified in all relevant standards published by the European Telecommunications Standards Institute (ETSI) as given in subparagraphs (a) to (b) below –

- (a) EN 301 908-1 “IMT cellular networks; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU; Part 1: Introduction and common requirements”
- (b) EN 301 908-18 “IMT cellular networks; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Part 18: E-UTRA, UTRA and GSM/EDGE Multi-Standard Radio (MSR) Base Station (BS)”.

3.2 In case that the MSR base station is capable of being configured for operation at a single standard (i.e. E-UTRA, UTRA or GSM), it shall comply with the HKCA performance specification relevant to the concerned standard or the respective single standard requirements stipulated in EN 301 908-18.

#### **4. EVALUATION REQUIREMENTS**

The equipment shall comply with the operating frequencies and technical requirements as specified in clauses 2 and 3. Compliance with the technical requirements shall be evaluated in accordance with the procedures specified in the respective ETSI standards as given in clause 3.

#### **5. REFERENCE**

- (a) EN 301 908-1 “IMT cellular networks; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU; Part 1: Introduction and common requirements” or later versions published by the ETSI
- (b) EN 301 908-18 “IMT cellular networks; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Part 18: E-UTRA, UTRA and GSM/EDGE Multi-Standard Radio (MSR) Base Station (BS)” or later versions published by the ETSI

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