

**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)**



## 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 Base Station (BS) and Repeater equipment for use in the Public Mobile Communications Services based on Evolved Universal Terrestrial Radio Access (E-UTRA) Frequency Division Duplex (FDD). It is a condition of the licence for the public mobile communications 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 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 obtained from OFCA’s website at <http://www.ofca.gov.hk>. Enquiries about this specification can be directed to -

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## AMENDMENT TABLE

Item	Issue No.	Paragraph	Description
1.	Issue 1 May 2011	All	First Release
2.	Issue 2 July 2023	Foreword	Editorial changes
3.	Issue 2 July 2023	2	Addition of the paired band 703 – 738 MHz / 758 – 793 MHz
4.	Issue 2 July 2023	3, 5	Updating the titles of standards under reference

## **CONTENT**

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## 1. SCOPE

This specification sets out the performance and evaluation requirements for Base Station and Repeater Equipment (hereafter referred to as “the equipment”) for use in the Public Mobile Communications Services employing Evolved Universal Terrestrial Radio Access (E-UTRA) Frequency Division Duplex (FDD).

## 2. OPERATING FREQUENCIES

The frequency bands for the equipment are as follows -

	<b>Downlink (Base Station Transmit)</b>	<b>Uplink (Base Station Receive)</b>
<b>Paired Band</b>	758 - 793 MHz	703 - 738 MHz
	925 - 960 MHz	880 - 915 MHz
	1805 - 1880 MHz	1710 - 1785 MHz
	2110 - 2170 MHz	1920 - 1980 MHz
	2620 - 2690 MHz	2500 - 2570 MHz

## 3. TECHNICAL REQUIREMENTS

The equipment shall meet the technical requirements as specified in the following standards published by the European Telecommunications Standards Institute (ETSI) -

- (a) EN 301 908-1      IMT cellular networks; Harmonised Standard for access to radio spectrum; Part 1: Introduction and common requirements

AND

### For Base Station Equipment

- (b) EN 301 908-14      IMT cellular networks; Harmonised Standard for access to radio spectrum; Part 14: Evolved Universal Terrestrial Radio Access (E-UTRA) Base Stations (BS)

### For Repeater Equipment

- (c) EN 301 908-15      IMT cellular networks; Harmonised Standard for access to radio spectrum; Part 15: Evolved Universal Terrestrial Radio Access (E-UTRA FDD) Repeaters

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

The equipment shall comply with the operating frequencies and technical requirements as specified in clauses 2 and 3 respectively. Compliance of the equipment 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 for access to radio spectrum; Part 1: Introduction and common requirements, published by the ETSI
- (b) EN 301 908-14 IMT cellular networks; Harmonised Standard for access to radio spectrum; Part 14: Evolved Universal Terrestrial Radio Access (E-UTRA) Base Stations (BS), published by the ETSI
- (c) EN 301 908-15 IMT cellular networks; Harmonised Standard for access to radio spectrum; Part 15: Evolved Universal Terrestrial Radio Access (E-UTRA FDD) Repeaters, published by the ETSI

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