

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)



OFTA



電訊管理局

~~**TELECOMMUNICATIONS AUTHORITY**~~
~~**HONG KONG**~~

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 Telecommunications Authority (TCA) 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 Telecommunications Authority (OFTCA) operates a Hong Kong Telecommunications Equipment Evaluation and Certification (HKTEC) Scheme. Details of the HKTEC Scheme can be found in the information note OFTCA 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 OFTCA I 401.
4. The TCA may amend any part of this specification as and when ~~he~~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 TCA shall be final.
6. The HKTCA specifications and information notes issued by the TCA can be obtained from OFTCA’s website at <http://www.ofcca.gov.hk>. Enquiries about this specification can be directed to -

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

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

AMENDMENT TABLE

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

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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 -

	Downlink (Base Station Transmit)	Uplink (Base Station Receive)
Paired Band	<u>758 - 793 MHz</u>	<u>703 - 738 MHz</u>
	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 ~~Electromagnetic compatibility and Radio spectrum Matters (ERM); Base Stations (BS), Repeaters and User Equipment (UE) for IMT-2000 Third Generation cellular networks; Harmonised Standard for access to radio spectrum; Part 1: Harmonized EN for IMT-2000; iIntroduction and common requirements, covering the essential requirements of article 3.2 of the R&TTE Directive~~

AND

For Base Station Equipment

- (b) EN 301 908-14 ~~Electromagnetic compatibility and Radio spectrum Matters (ERM); Base Stations (BS), Repeaters and User Equipment (UE) for IMT-2000 Third Generation cellular networks; Harmonised Standard for access to radio spectrum; Part 14: Harmonized EN for IMT-2000; Evolved Universal Terrestrial Radio Access (E-UTRA)~~

~~Base Stations (BS) covering the essential requirements of article 3.2 of the R&TTE Directive~~

For Repeater Equipment

- (c) EN 301 908-15 ~~Electromagnetic compatibility and Radio spectrum Matters (ERM); Base Stations (BS), Repeaters and User Equipment (UE) for IMT-2000 Third-Generation cellular networks; Harmonised Standard for access to radio spectrum; Part 15: Harmonized EN for IMT-2000, Evolved Universal Terrestrial Radio Access (E-UTRA) (FDD) Repeaters) covering the essential requirements of article 3.2 of the R&TTE Directive~~

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 ~~Electromagnetic compatibility and Radio spectrum Matters (ERM); Base Stations (BS), Repeaters and User Equipment (UE) for IMT-2000 Third-Generation cellular networks; Harmonised Standard for access to radio spectrum; Part 1: Harmonized EN for IMT-2000, i~~Introduction and common requirements, ~~covering the essential requirements of article 3.2 of the R&TTE Directive~~, published by the ETSI
- (b) EN 301 908-14 ~~Electromagnetic compatibility and Radio spectrum Matters (ERM); Base Stations (BS), Repeaters and User Equipment (UE) for IMT-2000 Third-Generation cellular networks; Harmonised Standard for access to radio spectrum; Part 14: Harmonized EN for IMT-2000, Evolved Universal Terrestrial Radio Access (E-UTRA) Base Stations (BS) covering the essential requirements of article 3.2 of the R&TTE Directive~~, published by the ETSI
- (c) EN 301 908-15 ~~Electromagnetic compatibility and Radio spectrum Matters (ERM); Base Stations (BS), Repeaters and User Equipment (UE) for IMT-2000 Third-Generation cellular networks; Harmonised Standard for access to radio spectrum; Part 15: Harmonized EN for IMT-2000, Evolved Universal Terrestrial Radio Access (E-UTRA) (FDD) Repeaters) covering the essential requirements of article 3.2 of the R&TTE Directive~~, published by the ETSI

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